

# **BIM Object List**

IFC-SG Information Manual

For Final Deliverable Release

# Table of Contents

<b>SPATIAL CONTAINERS</b> .....	7
IfcBuilding .....	7
IfcBuildingStorey .....	8
IfcSite .....	8
IfcSpace .....	9
<b>ACMV ELEMENTS</b> .....	12
IfcActuator .....	12
IfcAirTerminal .....	12
IfcCableCarrierSegment .....	16
IfcChiller .....	17
IfcCompressor .....	17
IfcCondenser .....	18
IfcCoolingTower .....	18
IfcCovering .....	18
IfcDamper .....	19
IfcDistributionChamberElement .....	21
IfcDuctFitting .....	21
IfcDuctSegment .....	22
IfcFan .....	24
IfcFilter .....	26
IfcFlowMeter .....	27
IfcPipeFitting .....	27
IfcPipeSegment .....	29
IfcProtectiveDevice .....	31
IfcPump .....	31
IfcSensor .....	33
IfcSolarDevice .....	34
IfcStackTerminal .....	34
IfcTank .....	35
IfcTransportElement .....	35
IfcUnitaryEquipment .....	36
IfcValve .....	38
IfcWasteTerminal .....	39
<b>ARCHITECTURAL ELEMENTS</b> .....	39
IfcActuator .....	39

IfcBeam.....	40
IfcBuildingElementProxy .....	42
IfcChimney.....	69
IfcCivilElement.....	70
IfcColumn.....	72
IfcCovering .....	75
IfcCurtainWall.....	86
IfcDiscreteAccessory.....	88
IfcDoor.....	92
IfcElectricMotor.....	109
IfcFooting.....	109
IfcFurniture.....	109
IfcGeographicElement.....	119
IfcGrid.....	128
IfcJunctionBox.....	128
IfcMember.....	129
IfcMotorConnection.....	130
IfcOpeningElement .....	131
IfcPile .....	133
IfcPlate .....	133
IfcProject.....	134
IfcRailing .....	135
IfcRamp .....	139
IfcRampFlight .....	141
IfcRoof .....	142
IfcShadingDevice.....	144
IfcSlab.....	150
IfcStair .....	158
IfcStairFlight .....	162
IfcSystemFurnitureElement.....	164
IfcTransportElement .....	164
IfcUnitaryControlElement .....	170
IfcWall.....	170
IfcWasteTerminal .....	183
IfcWindow .....	183
<b>ELECTRICAL ELEMENTS.....</b>	<b>187</b>
IfcAirTerminal .....	187

IfcAlarm.....	187
IfcAudioVisualAppliance .....	189
IfcCableCarrierSegment.....	190
IfcCableFitting.....	192
IfcCableSegment.....	193
IfcCommunicationsAppliance .....	194
IfcDamper .....	195
IfcDiscreteAccessory.....	196
IfcDistributionChamberElement .....	197
IfcElectricAppliance.....	198
IfcElectricDistributionBoard.....	202
IfcElectricFlowStorageDevice.....	202
IfcElectricGenerator .....	203
IfcFlowInstrument .....	204
IfcLightFixture.....	205
IfcOutlet.....	205
IfcProtectiveDevice.....	206
IfcProtectiveDeviceTrippingUnit.....	207
IfcSensor.....	207
IfcSolarDevice .....	210
IfcSwitchingDevice .....	210
IfcTransformer .....	211
IfcUnitaryControlElement .....	212
<b>EXTERNAL WORKS ELEMENTS .....</b>	<b>216</b>
IfcCivilElement.....	216
IfcGeographicElement.....	217
<b>FIRE PROTECTION ELEMENTS .....</b>	<b>234</b>
IfcFireSuppressionTerminal.....	234
IfcPipeSegment .....	235
IfcPump.....	236
IfcTank .....	237
IfcValve.....	238
<b>MECHANICAL ELEMENTS .....</b>	<b>239</b>
IfcFan.....	239
IfcPump.....	239
IfcSolarDevice .....	239
IfcTransportElement .....	239

<b>PLUMBING ELEMENTS</b> .....	240
IfcBoiler.....	240
IfcBuildingElementProxy .....	241
IfcBurner.....	243
IfcCoolingTower .....	243
IfcCovering .....	244
IfcDiscreteAccessory.....	246
IfcDistributionChamberElement.....	247
IfcEngine.....	251
IfcFilter.....	251
IfcFireSuppressionTerminal.....	252
IfcFlowInstrument .....	253
IfcFlowMeter.....	253
IfcGeographicElement.....	255
IfcHeatExchanger.....	255
IfcInterceptor.....	256
IfcPipeFitting .....	257
IfcPipeSegment .....	262
IfcPump.....	272
IfcRailing .....	273
IfcSanitaryTerminal.....	274
IfcSensor.....	280
IfcSolarDevice .....	281
IfcStackTerminal .....	281
IfcTank.....	282
IfcValve.....	290
IfcWasteTerminal.....	300
<b>STRUCTURAL ELEMENTS</b> .....	303
IfcBeam.....	303
IfcBuildingElementProxy .....	306
IfcColumn.....	307
IfcFooting.....	311
IfcPile .....	313
IfcRailing .....	316
IfcReinforcingBar.....	317
IfcSlab.....	317
IfcStair .....	320

IfcWall.....	321
<b>SPATIAL CONTAINERS .....</b>	<b>Error! Bookmark not defined.</b>
IfcBuilding .....	<b>Error! Bookmark not defined.</b>
IfcBuildingStorey .....	<b>Error! Bookmark not defined.</b>
IfcSite .....	<b>Error! Bookmark not defined.</b>
IfcSpace .....	<b>Error! Bookmark not defined.</b>
<b>List of Identified Systems .....</b>	<b>323</b>
IfcBuildingSystem.....	323
IfcDistributionSystem.....	332

# SPATIAL CONTAINERS

## IfcBuilding

### Building

Ifc4 Entity	IfcBuilding			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ifc Project Manager	Floor Manager	Project Information	N.A
PredefinedType	N.A			
ObjectType	N.A			
Attributes	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	N.A	Agricultural   Open Space and Others		
	BuildingAddress	N.A		
IFC4 Predefined PropertySet	<b>Pset_BuildingCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GrossPlannedArea (m2)	Area	N.A	
	SprinklerProtectionAutomatic	Boolean	TRUE   FALSE	
	OccupancyType	Label	N.A	
YearOfConstruction	Label	N.A		
IFC4 UserDefined PropertySet	<b>SGPset_Building</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ProjectDevelopmentType	Label	Agricultural   Open Space and Others   Factory   Special Facility   Underground facility   Other residential   Civic & Community Institution 1   Office   Commercial/Institution   Student Hostel   Maisonette   Nursing Home   Welfare Home   Home For The Spastic   Workers Dormitory   Shop   Petrol Station   High Containment Facility   Auditorium   Theatre	
	ConstructionPhase	Label	A and A   Partial Reconstruction   Conservation   Temporary Development   New Development   Existing   Extension   Redevelopment   Alteration	
	WindowToWallRatio	Real	N.A	
	ShadingCoefficient_North	Real	N.A	
	ShadingCoefficient_East	Real	N.A	
	ShadingCoefficient_South	Real	N.A	
	ShadingCoefficient_West	Real	N.A	
	ShadingCoefficient_NorthEast	Real	N.A	
	ShadingCoefficient_NorthWest	Real	N.A	
	ShadingCoefficient_SouthEast	Real	N.A	
	ShadingCoefficient_SouthWest	Real	N.A	
	ETTV	Real	Sample Value(s): 50 W/m2	
	RETV (W/m2)	Label	Sample Value(s): 25 W/m2	
	LightningProtectionClass	Label	N.A	
	WindowToWallRatio_North	Real	N.A	
	WindowToWallRatio_East	Real	N.A	
	WindowToWallRatio_South	Real	N.A	
	WindowToWallRatio_West	Real	N.A	
	WindowToWallRatio_NorthEast	Real	N.A	
	WindowToWallRatio_NorthWest	Real	N.A	
	WindowToWallRatio_SouthEast	Real	N.A	
	WindowToWallRatio_SouthWest	Real	N.A	
	OwnerBuiltOwnerStay	Boolean	TRUE   FALSE	
	ExtendedCapacityShortStay	Boolean	TRUE   FALSE	
	DrainageBoundary	Label	Northern   Southern	
	PurposeGroup	Label	I   II   III   IV   V   VI   VII   VIII	
	ConservationProgramme	Boolean	TRUE   FALSE	
	OrdinaryHazardGroup	Integer	N.A	
	<b>SGPset_WorkControlCommon</b>			

	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>WorkDayDuration (hr)</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	WorkDayDuration (hr)	Label	N.A
IFC4 UserDefined Property Name	Data Type	Sample Property Values					
WorkDayDuration (hr)	Label	N.A					
IFC-SG Classification System	<b>01 IFC-SG Site and Building Classification</b>						

## IfcBuildingStorey

### Building Storey

Ifc4 Entity	IfcBuildingStorey																								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Storey</td> <td>Floor</td> <td>Levels</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Storey	Floor	Levels	N.A																
ArchiCad	OpenBuildings	Revit	Tekla																						
Storey	Floor	Levels	N.A																						
PredefinedType	N.A																								
ObjectType	N.A																								
Attributes	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Road   1st Storey</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	Road   1st Storey																				
Attributes	Sample Attribute Values																								
Name	Road   1st Storey																								
IFC4 Predefined PropertySet	<p><b>Pset_BuildingStoreyCommon</b></p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AboveGround</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>SprinklerProtectionAutomatic</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>EntranceLevel</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	AboveGround	Boolean	TRUE   FALSE	SprinklerProtectionAutomatic	Boolean	TRUE   FALSE	EntranceLevel	Boolean	TRUE   FALSE												
IFC4 Predefined Property Name	Data Type	Sample Property Values																							
AboveGround	Boolean	TRUE   FALSE																							
SprinklerProtectionAutomatic	Boolean	TRUE   FALSE																							
EntranceLevel	Boolean	TRUE   FALSE																							
IFC4 UserDefined PropertySet	<p><b>SGPset_BuildingStorey</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>HasActivityGeneratingUse</td> <td>Boolean</td> <td>N.A</td> </tr> <tr> <td>PurposeGroup</td> <td>Label</td> <td>I   II   III   IV   V   VI   VII   VIII</td> </tr> <tr> <td>RefugeFloor</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>GroundLevel</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>OccupancyType</td> <td>Label</td> <td>Market</td> </tr> <tr> <td>TypicalFloor</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>AlternateLiftHomingFloor</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	HasActivityGeneratingUse	Boolean	N.A	PurposeGroup	Label	I   II   III   IV   V   VI   VII   VIII	RefugeFloor	Boolean	TRUE   FALSE	GroundLevel	Boolean	TRUE   FALSE	OccupancyType	Label	Market	TypicalFloor	Boolean	TRUE   FALSE	AlternateLiftHomingFloor	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values																							
HasActivityGeneratingUse	Boolean	N.A																							
PurposeGroup	Label	I   II   III   IV   V   VI   VII   VIII																							
RefugeFloor	Boolean	TRUE   FALSE																							
GroundLevel	Boolean	TRUE   FALSE																							
OccupancyType	Label	Market																							
TypicalFloor	Boolean	TRUE   FALSE																							
AlternateLiftHomingFloor	Boolean	TRUE   FALSE																							

## IfcSite

### Site

Ifc4 Entity	IfcSite									
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Ifc Project Manager</td> <td>Floor Manager</td> <td>Project Information</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Ifc Project Manager	Floor Manager	Project Information	N.A	
ArchiCad	OpenBuildings	Revit	Tekla							
Ifc Project Manager	Floor Manager	Project Information	N.A							
PredefinedType	N.A									
ObjectType	N.A									
Attributes	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>N.A</td> <td>Agricultural   Open Space and Others</td> </tr> <tr> <td>RefElevation</td> <td>N.A</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	N.A	Agricultural   Open Space and Others	RefElevation	N.A			
Attributes	Sample Attribute Values									
N.A	Agricultural   Open Space and Others									
RefElevation	N.A									
IFC4 Predefined PropertySet	<p><b>Pset_SiteCommon</b></p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FloorAreaRatio</td> <td>Real</td> <td>N.A</td> </tr> <tr> <td>TotalArea (m2)</td> <td>Area</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	FloorAreaRatio	Real	N.A	TotalArea (m2)	Area	N.A
IFC4 Predefined Property Name	Data Type	Sample Property Values								
FloorAreaRatio	Real	N.A								
TotalArea (m2)	Area	N.A								
IFC4 UserDefined PropertySet	<b>SGPset_Site</b>									



IFC4 UserDefined Property Name	Data Type	Sample Property Values
ProjectDevelopmentType	Label	Agricultural   Open Space and Others   Factory   Special Facility   Underground facility   Civic & Community Institution 1   Other residential   Office   Student Hostel   Maisonette   Nursing Home   Welfare Home   Home For The Spastic   Workers Dormitory   Shop   Petrol Station   High Containment Facility   Auditorium   Theatre   Place of Worship
ConstructionPhase	Label	Redevelopment
Extg_GrossPlotRatio	Label	N.A
GIS_LandUse	Label	N.A
Condition	Label	Soft Ground   Firm Ground
RainfallIntensity	Real	N.A
RunoffCoefficient	Label	N.A
WithNightLighting	Boolean	TRUE

## IfcSpace

### Room

Ifc4 Entity	IfcSpace			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Zone	Space	Rooms	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Space</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SpaceName	Label	AC Ledge   Hotel Guest Room	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	

### ACCESSORYLOT

Ifc4 Entity	IfcSpace			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Zone	Space	Massing	N.A
PredefinedType	USERDEFINED			
ObjectType	ACCESSORYLOT			
IFC4 UserDefined PropertySet	<b>SGPset_AccessoryLot</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AccessoryLotArea (m2)	Area	16	
	AccessoryLotNumber	Label	MK03-A0055K	
	GeocodeID	Label	254XCJFLKJSNEJK	
	AppurtenantTo	Label	MK03-U017049L	
	IsVoid	Boolean	TRUE   FALSE	
	VoidArea (m2)	Area	0	
	ParcelType	Label	Accessory	
	SVYFileNumber	Label	0226-1985	
	LotStatus	Label	Live Sample Value(s): Provisional	
	OldFormatLotNumber	Label	MK03-1A1847/U59	
	HouseNumber	Label	38D	
	StreetName_StreetCode	Label	JALAN MAT JAMBOL(MAJ01M)	
	LevelNumber	Label	01	
	UnitNumber	Label	05	
	BuildingName_Source	Label	ISLAND VIEW (URA)	
	PostalCode	Label	119522	
PlanNumber	Label	CPST6626		
AreaDescription	Label	INCLUDES ACCESSORY VOID OF 0 SQ M		
TypicalFloor	Boolean	TRUE   FALSE		

## AREA\_GFA

Ifc4 Entity	IfcSpace			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Zone	Space	Areas	N.A
PredefinedType	USERDEFINED			
ObjectType	AREA_GFA			
IFC4 UserDefined PropertySet	<b>SGPset_SpaceArea_GFA</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	DetailedUse	Label	Cafe	

## Area

Ifc4 Entity	IfcSpace			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Zone	Space	Areas	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_SpaceDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Area (m2)	Area	N.A	

## AREA\_CONNECTIVITY

Ifc4 Entity	IfcSpace			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Zone	Space	Areas	N.A
PredefinedType	USERDEFINED			
ObjectType	AREA_CONNECTIVITY			
IFC4 UserDefined PropertySet	<b>SGPset_SpaceArea_Connectivity</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConnectivityType	Label	To input with values for submission	

## AREA\_LANDSCAPE

Ifc4 Entity	IfcSpace			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Zone	Space	Areas	N.A
PredefinedType	USERDEFINED			
ObjectType	AREA_LANDSCAPE			
IFC4 UserDefined PropertySet	<b>SGPset_SpaceArea_Landscape</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SoftscapeType	Label	To input with values for submission	
IFC-SG Classification System	<b>03 IFC-SG Area Classification</b>			

## AREA\_UNIT

Ifc4 Entity	IfcSpace			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Zone	Space	Areas	N.A
PredefinedType	USERDEFINED			
ObjectType	AREA_UNIT			
IFC4 UserDefined PropertySet	<b>SGPset_SpaceArea_Unit</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	UnitNumber	Label	To input with values for submission	

## COMMONPROPERTY

Ifc4 Entity	IfcSpace			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Zone	Space	Massing	N.A
PredefinedType	USERDEFINED			
ObjectType	COMMONPROPERTY			
IFC4 UserDefined PropertySet	<b>SGPset_CommonProperty</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	CommonArea (m2)	Area	320	
	GeocodeID	Label	254XCJFLKJSNEJK	
TypicalFloor	Boolean	TRUE   FALSE		

## STRATALOT

Ifc4 Entity	IfcSpace			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Zone	Space	Massing	N.A
PredefinedType	USERDEFINED			
ObjectType	STRATALOT			
IFC4 UserDefined PropertySet	<b>SGPset_StrataLot</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	StrataLotArea (m2)	Area	318	
	StrataLotNumber	Label	MK03-U017049L	
	GeocodeID	Label	254XCJFLKJSNEJK	
	IsVoid	Boolean	TRUE   FALSE	
	VoidArea (m2)	Area	1	
	ParcelType	Label	Strata	
	SVYFileNumber	Label	0226-1985	
	LotStatus	Label	Live Sample Value(s): Provisional	
	OldFormatLotNumber	Label	MK03-1847/U59	
	HouseNumber	Label	38D	
	StreetName_StreetCode	Label	JALAN MAT JAMBOL(MAJ01M)	
	LevelNumber	Label	01	
	UnitNumber	Label	05	
	BuildingName_Source	Label	ISLAND VIEW (URA)	
	PostalCode	Label	119522	
PlanNumber	Label	CPST6626		
ResidingOnLandLot	Label	MK03-01847M		
AreaDescription	Label	INCLUDES STRATA VOID OF 1 SQ M		
TypicalFloor	Boolean	TRUE   FALSE		

## IfcActuator

## Electric Actuator

Ifc4 Entity	IfcActuator			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Mechanical Equipment	Mechanical Equipment	N.A
PredefinedType	ELECTRICACTIONATOR			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ActuatorTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Application	Label	FIRESMOKEDAMPERACTUATOR	

## IfcAirTerminal

## Air Diffuser

Ifc4 Entity	IfcAirTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	DIFFUSER			
ObjectType	N.A			

## Air Intake Louvre

Ifc4 Entity	IfcAirTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	LOUVRE			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_AirTerminalOccurrence</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AirflowType	Label	SUPPLYAIR	

## Air Terminal

Ifc4 Entity	IfcAirTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_AirTerminalOccurrence</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AirflowType	Label	EXHAUSTAIR	
IFC4 UserDefined PropertySet	<b>SGPset_AirTerminal</b>			

IFC4 UserDefined Property Name	Data Type	Sample Property Values
ReplacementAir	Boolean	TRUE   FALSE

## Air Vent

Ifc4 Entity	IfcAirTerminal								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Terminal</td> <td>Air Terminal</td> <td>Air Terminals</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Terminal	Air Terminal	Air Terminals	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Terminal	Air Terminal	Air Terminals	N.A						
PredefinedType	Need not specify								
ObjectType	N.A								

## Diffuser

Ifc4 Entity	IfcAirTerminal								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Terminal</td> <td>Air Terminal</td> <td>Air Terminals</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Terminal	Air Terminal	Air Terminals	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Terminal	Air Terminal	Air Terminals	N.A						
PredefinedType	DIFFUSER								
ObjectType	N.A								
IFC4 UserDefined PropertySet	<b>SGPset_AirTerminal</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Combustible</td> <td>Boolean</td> <td>FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Combustible	Boolean	FALSE		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
Combustible	Boolean	FALSE							

## Exhaust Air Grille

Ifc4 Entity	IfcAirTerminal								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Terminal</td> <td>Air Terminal</td> <td>Air Terminals</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Terminal	Air Terminal	Air Terminals	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Terminal	Air Terminal	Air Terminals	N.A						
PredefinedType	GRILLE								
ObjectType	N.A								
IFC4 Predefined PropertySet	<b>Pset_AirTerminalOccurrence</b> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AirflowType</td> <td>Label</td> <td>EXHAUSTAIR</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	AirflowType	Label	EXHAUSTAIR		
IFC4 Predefined Property Name	Data Type	Sample Property Values							
AirflowType	Label	EXHAUSTAIR							

## Exhaust Air Louvre

Ifc4 Entity	IfcAirTerminal								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Terminal</td> <td>Air Terminal</td> <td>Air Terminals</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Terminal	Air Terminal	Air Terminals	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Terminal	Air Terminal	Air Terminals	N.A						
PredefinedType	LOUVRE								
ObjectType	N.A								
IFC4 Predefined PropertySet	<b>Pset_AirTerminalOccurrence</b> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AirflowType</td> <td>Label</td> <td>EXHAUSTAIR</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	AirflowType	Label	EXHAUSTAIR		
IFC4 Predefined Property Name	Data Type	Sample Property Values							
AirflowType	Label	EXHAUSTAIR							

## Fresh Air Inlet

Ifc4 Entity	IfcAirTerminal
-------------	----------------

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Grille

Ifc4 Entity	IfcAirTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	GRILLE			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		
IFC4 UserDefined PropertySet	<b>SGPset_AirTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	FALSE	

## Louvre

Ifc4 Entity	IfcAirTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	LOUVRE			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_AirTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	FALSE	

## Mechanical Ventilation

Ifc4 Entity	IfcAirTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Duct Systems	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_AirTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	SS 532 Code of practice for the storage of flammable liquids   NFPA 55 Compressed Gases and Cryogenic Fluids Code	

## Register

Ifc4 Entity	IfcAirTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A

PredefinedType	REGISTER						
ObjectType	N.A						
IFC4 Predefined PropertySet	<b>Pset_AirTerminalOccurrence</b>						
	<table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AirflowType</td> <td>Label</td> <td>SUPPLYAIR</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	AirflowType	Label	SUPPLYAIR
	IFC4 Predefined Property Name	Data Type	Sample Property Values				
AirflowType	Label	SUPPLYAIR					
IFC4 UserDefined PropertySet	<b>SGPset_AirTerminal</b>						
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>SmokeVentilationActivated</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	SmokeVentilationActivated	Boolean	TRUE   FALSE
	IFC4 UserDefined Property Name	Data Type	Sample Property Values				
SmokeVentilationActivated	Boolean	TRUE   FALSE					

## Return Air Grille

Ifc4 Entity	IfcAirTerminal								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Terminal</td> <td>Air Terminal</td> <td>Air Terminals</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Terminal	Air Terminal	Air Terminals	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Terminal	Air Terminal	Air Terminals	N.A						
PredefinedType	GRILLE								
ObjectType	N.A								
IFC4 Predefined PropertySet	<b>Pset_AirTerminalOccurrence</b>								
	<table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AirflowType</td> <td>Label</td> <td>RETURNAIR</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	AirflowType	Label	RETURNAIR		
	IFC4 Predefined Property Name	Data Type	Sample Property Values						
AirflowType	Label	RETURNAIR							

## Secondary Air Intake

Ifc4 Entity	IfcAirTerminal									
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Terminal</td> <td>Air Terminal</td> <td>Air Terminals</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Terminal	Air Terminal	Air Terminals	N.A	
	ArchiCad	OpenBuildings	Revit	Tekla						
Terminal	Air Terminal	Air Terminals	N.A							
PredefinedType	Need not specify									
ObjectType	N.A									
IFC4 UserDefined PropertySet	<b>SGPset_AirTerminal</b>									
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AirTreatmentDevice</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>OneDirectionFlap</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	AirTreatmentDevice	Boolean	TRUE   FALSE	OneDirectionFlap	Boolean	TRUE   FALSE
	IFC4 UserDefined Property Name	Data Type	Sample Property Values							
AirTreatmentDevice	Boolean	TRUE   FALSE								
OneDirectionFlap	Boolean	TRUE   FALSE								

## Smoke Vent

Ifc4 Entity	IfcAirTerminal									
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Terminal</td> <td>Air Terminal</td> <td>Air Terminals</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Terminal	Air Terminal	Air Terminals	N.A	
	ArchiCad	OpenBuildings	Revit	Tekla						
Terminal	Air Terminal	Air Terminals	N.A							
PredefinedType	DIFFUSER									
ObjectType	N.A									
IFC4 UserDefined PropertySet	<b>SGPset_AirTerminal</b>									
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AutomaticallyActivated</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>AirTerminalOperationType</td> <td>Label</td> <td>OPENABLE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	AutomaticallyActivated	Boolean	TRUE   FALSE	AirTerminalOperationType	Label	OPENABLE
	IFC4 UserDefined Property Name	Data Type	Sample Property Values							
AutomaticallyActivated	Boolean	TRUE   FALSE								
AirTerminalOperationType	Label	OPENABLE								

## Supply Air Diffuser

Ifc4 Entity	IfcAirTerminal
-------------	----------------

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	DIFFUSER			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_AirTerminalOccurrence</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AirflowType	Label	SUPPLYAIR	
IFC4 UserDefined PropertySet	<b>SGPset_AirTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SmokeVentilationActivated	Boolean	TRUE   FALSE	

## Supply Air Louvre

Ifc4 Entity	IfcAirTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	LOUVRE			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_AirTerminalOccurrence</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AirflowType	Label	SUPPLYAIR	

## Ventilation Opening

Ifc4 Entity	IfcAirTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	

## Ventilation Terminal

Ifc4 Entity	IfcAirTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## IfcCableCarrierSegment

### Cable Carrier Segment

Ifc4 Entity	IfcCableCarrierSegment
Proposed BIM Representation	



	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Duct</td> <td>Duct</td> <td>Ducts</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Duct	Duct	Ducts	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Duct	Duct	Ducts	N.A						
PredefinedType	Need not specify								
ObjectType	N.A								
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	N.A				
Attributes	Sample Attribute Values								
Name	N.A								
IFC4 UserDefined PropertySet	<b>SGPset_CableCarrierSegment</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	FireRating (hr)	Label	N.A		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
FireRating (hr)	Label	N.A							

## IfcChiller

### Chiller Unit

Ifc4 Entity	IfcChiller															
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Flow Equipment	Equipment	Mechanical Equipment	N.A							
ArchiCad	OpenBuildings	Revit	Tekla													
Flow Equipment	Equipment	Mechanical Equipment	N.A													
PredefinedType	Need not specify															
ObjectType	N.A															
IFC4 UserDefined PropertySet	<b>SGPset_Chiller</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ModelName</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>SoundPressureLevel (dBA)</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>SoundPowerLevel (dBA)</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>FlammableRefrigerant</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ModelName	Boolean	TRUE   FALSE	SoundPressureLevel (dBA)	Label	N.A	SoundPowerLevel (dBA)	Label	N.A	FlammableRefrigerant	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values														
ModelName	Boolean	TRUE   FALSE														
SoundPressureLevel (dBA)	Label	N.A														
SoundPowerLevel (dBA)	Label	N.A														
FlammableRefrigerant	Boolean	TRUE   FALSE														

### Mechanical Equipment - Chiller

Ifc4 Entity	IfcChiller								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Mechanical Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Mechanical Equipment	Mechanical Equipment	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Object	Mechanical Equipment	Mechanical Equipment	N.A						
PredefinedType	Need not specify								
ObjectType	N.A								

## IfcCompressor

### Air Compressor

Ifc4 Entity	IfcCompressor									
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Mechanical Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Mechanical Equipment	Mechanical Equipment	N.A	
ArchiCad	OpenBuildings	Revit	Tekla							
Object	Mechanical Equipment	Mechanical Equipment	N.A							
PredefinedType	Need not specify									
ObjectType	N.A									
IFC4 UserDefined PropertySet	<b>SGPset_Compressor</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AirDryer</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>AirCooler</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	AirDryer	Boolean	TRUE   FALSE	AirCooler	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values								
AirDryer	Boolean	TRUE   FALSE								
AirCooler	Boolean	TRUE   FALSE								

## IfcCondenser

### Air Condensing Unit

Ifc4 Entity	IfcCondenser								
Proposed BIM Representation	<table border="1"><thead><tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr></thead><tbody><tr><td>Flow Equipment</td><td>Equipment</td><td>Mechanical Equipment</td><td>N.A</td></tr></tbody></table>	ArchiCad	OpenBuildings	Revit	Tekla	Flow Equipment	Equipment	Mechanical Equipment	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Flow Equipment	Equipment	Mechanical Equipment	N.A						
PredefinedType	Need not specify								
ObjectType	N.A								
IFC4 UserDefined PropertySet	<b>SGPset_Condenser</b> <table border="1"><thead><tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr></thead><tbody><tr><td>UnitCount</td><td>Integer</td><td>N.A</td></tr></tbody></table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	UnitCount	Integer	N.A		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
UnitCount	Integer	N.A							

### VRV Unit

Ifc4 Entity	IfcCondenser												
Proposed BIM Representation	<table border="1"><thead><tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr></thead><tbody><tr><td>Flow Equipment</td><td>Equipment</td><td>Mechanical Equipment</td><td>N.A</td></tr></tbody></table>	ArchiCad	OpenBuildings	Revit	Tekla	Flow Equipment	Equipment	Mechanical Equipment	N.A				
ArchiCad	OpenBuildings	Revit	Tekla										
Flow Equipment	Equipment	Mechanical Equipment	N.A										
PredefinedType	Need not specify												
ObjectType	N.A												
IFC4 UserDefined PropertySet	<b>SGPset_Condenser</b> <table border="1"><thead><tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr></thead><tbody><tr><td>ModelName</td><td>Boolean</td><td>TRUE   FALSE</td></tr><tr><td>SoundPressureLevel (dBA)</td><td>Label</td><td>N.A</td></tr><tr><td>SoundPowerLevel (dBA)</td><td>Label</td><td>N.A</td></tr></tbody></table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ModelName	Boolean	TRUE   FALSE	SoundPressureLevel (dBA)	Label	N.A	SoundPowerLevel (dBA)	Label	N.A
IFC4 UserDefined Property Name	Data Type	Sample Property Values											
ModelName	Boolean	TRUE   FALSE											
SoundPressureLevel (dBA)	Label	N.A											
SoundPowerLevel (dBA)	Label	N.A											

## IfcCoolingTower

### Cooling Tower

Ifc4 Entity	IfcCoolingTower												
Proposed BIM Representation	<table border="1"><thead><tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr></thead><tbody><tr><td>Flow Equipment</td><td>Equipment</td><td>Mechanical Equipment</td><td>N.A</td></tr></tbody></table>	ArchiCad	OpenBuildings	Revit	Tekla	Flow Equipment	Equipment	Mechanical Equipment	N.A				
ArchiCad	OpenBuildings	Revit	Tekla										
Flow Equipment	Equipment	Mechanical Equipment	N.A										
PredefinedType	Need not specify												
ObjectType	N.A												
IFC4 UserDefined PropertySet	<b>SGPset_CoolingTower</b> <table border="1"><thead><tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr></thead><tbody><tr><td>ModelName</td><td>Boolean</td><td>TRUE   FALSE</td></tr><tr><td>SoundPressureLevel (dBA)</td><td>Label</td><td>N.A</td></tr><tr><td>SoundPowerLevel (dBA)</td><td>Label</td><td>N.A</td></tr></tbody></table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ModelName	Boolean	TRUE   FALSE	SoundPressureLevel (dBA)	Label	N.A	SoundPowerLevel (dBA)	Label	N.A
IFC4 UserDefined Property Name	Data Type	Sample Property Values											
ModelName	Boolean	TRUE   FALSE											
SoundPressureLevel (dBA)	Label	N.A											
SoundPowerLevel (dBA)	Label	N.A											

## IfcCovering

### Inspection Opening

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Covering	Slab	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	INSPECTIONOPENING			

## PWCS Inspection Chamber Cover

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Covering	Slab	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	PWCSINSPECTIONCHAMBERCOVER			
IFC4 UserDefined PropertySet	<b>SGPset Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Watertight	Boolean	TRUE   FALSE	
	ExternalReference	Label	SS 30 Manhole tops and surface-box tops	

## IfcDamper

### Fire Damper

Ifc4 Entity	IfcDamper			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Duct Accessories	N.A
PredefinedType	FIRE DAMPER			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_DamperTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Operation	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Damper</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	
	ExternalReference	Label	NFPA 55 Compressed Gases and Cryogenic Fluids Code   SS 333 Specification for fire dampers	
AirChangePerHour	Label	Sample Value(s): 4		

### Fire Damper Insulation

Ifc4 Entity	IfcDamper			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Duct Accessories	N.A
PredefinedType	FIRE DAMPER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Damper</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Insulation_FireResistanceRating (hr)	Label	N.A	

## Fire Smoke Damper

Ifc4 Entity	IfcDamper			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Duct Accessories	N.A
PredefinedType	FIRESMOKEDAMPER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Damper</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	SS 333 Specification for fire dampers	
	FireRating (hr)	Label	N.A	

## Fume Hood Exhaust

Ifc4 Entity	IfcDamper			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	FUMEHOODEXHAUST			
ObjectType	N.A			

## Motorized Fire Damper

Ifc4 Entity	IfcDamper			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Duct Accessories	N.A
PredefinedType	FIREMOTOR			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_DamperTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Operation	Label	AUTOMATIC	

## Pollution Control Equipment Exhaust

Ifc4 Entity	IfcDamper			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Smoke Damper

Ifc4 Entity	IfcDamper			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Duct Accessories	N.A
PredefinedType	SMOKEDAMPER			
ObjectType	N.A			

## PWCS Inspection Chamber

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	PWCSINSPECTIONCHAMBER			

## PWCS Manhole

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	PWCSMANHOLE			

## Pipe Trench

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	TRENCH			
ObjectType	N.A			

## Sump

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	SUMP			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_DistributionChamberElementDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Diameter (mm)	Length	N.A	

## Duct Fitting

Ifc4 Entity	IfcDuctFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Duct Fitting	Duct Accessory	Duct Fittings	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Metal		

IFC4 UserDefined PropertySet	<b>SGPset_DuctFitting</b>		
	IFC4 UserDefined Property Name	Data Type	Sample Property Values
	FireRating (hr)	Label	N.A
	Combustible	Boolean	FALSE
	ExternalReference	Label	BS 476 Part 5 Method of Test for Ignitability

## Duct Fitting

Ifc4 Entity	IfcDuctFitting			
Proposed BIM Representation	ArchiCad	OpenBuildings	Revit	Tekla
	Duct Fitting	Duct Accessory	Duct Fittings	N.A
PredefinedType	ENTRY			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_DuctFitting</b>			
	IFC4 UserDefined Property Name	Data Type	Sample Property Values	
	SamplingPort	Boolean	TRUE   FALSE	

## Prefabricated Duct Fitting

Ifc4 Entity	IfcDuctFitting			
Proposed BIM Representation	ArchiCad	OpenBuildings	Revit	Tekla
	Duct Fitting	Duct Accessory	Duct Fittings	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_DuctFitting</b>			
	IFC4 UserDefined Property Name	Data Type	Sample Property Values	
	ConstructionMethod	Label	Prefabricated	
	Pre-insulated	Boolean	TRUE   FALSE	

## IfcDuctSegment

### Duct Covering

Ifc4 Entity	IfcDuctSegment			
Proposed BIM Representation	ArchiCad	OpenBuildings	Revit	Tekla
	Duct	Duct	Ducts	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_DuctSegment</b>			
	IFC4 UserDefined Property Name	Data Type	Sample Property Values	
	Insulation_FlameSpreadClass	Label	Sample Value(s): Class 0	
	Insulation_Combustible	Boolean	FALSE	

### Duct Segment

Ifc4 Entity	IfcDuctSegment			
Proposed BIM Representation	ArchiCad	OpenBuildings	Revit	Tekla
	Duct	Duct	Ducts	N.A

PredefinedType	Need not specify		
ObjectType	N.A		
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>
	Name	Steel	
IFC4 Predefined PropertySet	<b>Pset_DuctSegmentOccurrence</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	HasLiner	Boolean	TRUE   FALSE
IFC4 UserDefined PropertySet	<b>SGPset_DuctSegment</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Combustible	Boolean	FALSE   TRUE   FALSE
	FireRating (hr)	Label	N.A
	FlameSpreadClass	Label	Sample Value(s): Class 0
	ExternalReference	Label	BS 476 Part 24 Method for determination of the fire resistance of ventilation ducts

## Exhaust Air Duct

Ifc4 Entity	IfcDuctSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Duct	Duct	Ducts	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Flexible Duct

Ifc4 Entity	IfcDuctSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flexible Duct	Flexible Duct	Flex Ducts	N.A
PredefinedType	FLEXIBLESEGMENT			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_DuctSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	BS 476 Part 5 Method of Test for Ignitability	

## Prefabricated Duct Segment

Ifc4 Entity	IfcDuctSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Duct	Duct	Ducts	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_DuctSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Prefabricated	
	Pre-insulated	Boolean	TRUE   FALSE	

# Ventilation Duct

Ifc4 Entity	IfcDuctSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Duct	Duct	Ducts	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Heavy Gauge Steel   Galvanised Steel		
IFC4 Predefined PropertySet	<b>Pset_DuctSegmentOccurrence</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	HasLiner	Boolean	TRUE   FALSE	
IFC4 UserDefined PropertySet	<b>SGPset_DuctSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	EngineeredSmokeControlSystem	Boolean	TRUE   FALSE	
	FireRating (hr)	Label	N.A	

## IfcFan

### Exhaust Air Fan

Ifc4 Entity	IfcFan			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Mechanical Equipment	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		
IFC4 Predefined PropertySet	<b>Pset_FanOccurrence</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ApplicationOfFan	Label	EXHAUSTAIR	
	<b>Pset_FanTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	OperationalCriteria (hr)	Real	N.A	
	OperationTemperatureRange (C)	Real	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Fan</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ModelName	Boolean	TRUE   FALSE	
	SoundPressureLevel (dBA)	Label	N.A	
	SoundPowerLevel (dBA)	Label	N.A	
	AirChangePerHour	Label	Sample Value(s): 20	
	FireAlarmActivated	Boolean	TRUE   FALSE	
	MassFlowRate (kg/s)	Label	Sample Value(s): 175 kg/s	
Standby	Boolean	TRUE   FALSE		

### Exhaust Air Outlet

Ifc4 Entity	IfcFan
-------------	--------



Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Mechanical Equipment	Air Terminals	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Fan</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AirChangePerHour	Label	N.A	

## Fan

Ifc4 Entity	IfcFan			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Mechanical Equipment	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Fan</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AirChangePerHour	Label	N.A	
	Standby	Boolean	TRUE   FALSE	
Duty	Boolean	TRUE   FALSE		

## Fresh Air Fan

Ifc4 Entity	IfcFan			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Mechanical Equipment	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_FanOccurrence</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ApplicationOfFan	Label	SUPPLYAIR	
	<b>Pset_FanTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	OperationalCriteria (hr)	Real	N.A	
OperationTemperatureRange (C)	Real	N.A		
IFC4 UserDefined PropertySet	<b>SGPset_Fan</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AirChangePerHour	Label	Sample Value(s): 4	
	FireAlarmActivated	Boolean	TRUE   FALSE	
Standby	Boolean	TRUE   FALSE		

## Jet Fan

Ifc4 Entity	IfcFan			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Mechanical Equipment	Mechanical Equipment	N.A

PredefinedType	Need not specify		
ObjectType	N.A		
IFC4 Predefined PropertySet	<b>Pset_FanOccurrence</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	ApplicationOfFan	Label	EXHAUSTAIR
	FanMountingType	Label	SUSPENDED
	<b>Pset_FanTypeCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
OperationalCriteria (hr)	Real	N.A	
OperationTemperatureRange (C)	Real	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_FanPHistory</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	DischargeVelocity	Real	Sample Value(s): 0.2m/s
	<b>SGPset_Fan</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	AirChangePerHour	Label	Sample Value(s): 12

## Supply Air Fan

Ifc4 Entity	IfcFan			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Mechanical Equipment	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_FanOccurrence</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ApplicationOfFan	Label	SUPPLYAIR	
IFC4 UserDefined PropertySet	<b>SGPset_Fan</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AirChangePerHour	Label	Sample Value(s): 10	
	<b>SGPset_FanPHistory</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	DischargeVelocity	Real	Sample Value(s): 5 m/s	

## IfcFilter

### Dust Filtration System

Ifc4 Entity	IfcFilter			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	AIRPARTICLEFILTER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Filter</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AirFlowRate (m3/h)	Label	Sample Value(s): 2000 m3/h	
	TwoStageDustFilterSystem	Boolean	TRUE   FALSE	
	WaterScrubberSystem	Boolean	TRUE   FALSE	

ExternalReference	Label	ASHRAE 52.2 Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size   ISO 16890-1 Air filters for general ventilation
MinimumEfficiencyReportingValue	Integer	Sample Value(s): 11
RelativeHumidity	Real	Sample Value(s): 60

## Odour Filtration System

Ifc4 Entity	IfcFilter								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Flow Equipment	Equipment	Mechanical Equipment	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Flow Equipment	Equipment	Mechanical Equipment	N.A						
PredefinedType	ODORFILTER								
ObjectType	N.A								

## Waste-air Separator

Ifc4 Entity	IfcFilter								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Flow Equipment	Equipment	Mechanical Equipment	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Flow Equipment	Equipment	Mechanical Equipment	N.A						
PredefinedType	USERDEFINED								
ObjectType	WASTEAIRSEPARATOR								
IFC4 UserDefined PropertySet	<p><b>SGPset_Filter</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ErosionResistant</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ErosionResistant	Boolean	TRUE   FALSE		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
ErosionResistant	Boolean	TRUE   FALSE							

## IfcFlowMeter

### Mass Flow Meter

Ifc4 Entity	IfcFlowMeter								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Pipe Accessory</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe In-line Flow Device	Pipe Accessory	Pipe Accessories	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe In-line Flow Device	Pipe Accessory	Pipe Accessories	N.A						
PredefinedType	USERDEFINED								
ObjectType	MASSFLOWMETER								

## IfcPipeFitting

### Bend

Ifc4 Entity	IfcPipeFitting								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>Pipe Accessory</td> <td>Pipe Fittings</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A						
PredefinedType	BEND								
ObjectType	N.A								
IFC4 UserDefined PropertySet	<p><b>SGPset_PipeFitting</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>NominalDiameter (mm)</td> <td>Length</td> <td>Sample Value(s): 500 mm</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	NominalDiameter (mm)	Length	Sample Value(s): 500 mm		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
NominalDiameter (mm)	Length	Sample Value(s): 500 mm							

## Flange Adaptor

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	USERDEFINED			
ObjectType	FLANGEADAPTOR			

## Pipe Branch

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	JUNCTION			
ObjectType	N.A			

## Pipe Fitting

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 UserDefined PropertySet	<b>SGPset_PipeFitting</b>			
	<b>IFC4 UserDefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	Thickness (mm)		Length	Sample Value(s): 8 mm
	PWCS_VolumeOfWastePerDay (L)		Label	Sample Value(s): 15000 L
NominalDiameter (mm)		Length	Sample Value(s): 500 mm	

## Pipe Silencer

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	PIPESILENCER			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	

## Pitot Tube

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A

PredefinedType	USERDEFINED
ObjectType	PITOT

## Venturi Pipe

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	USERDEFINED			
ObjectType	VENTURI			

## IfcPipeSegment

### Air Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 Predefined PropertySet	<b>Pset_PipeSegmentTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	NominalDiameter (mm)	Length	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Thickness (mm)	Length	Sample Value(s): 8 mm	

### Compressed Air Tubes

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	

### Conveyance Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			

Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name	N.A		
IFC4 Predefined PropertySet	<b>Pset_PipeSegmentTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	NominalDiameter (mm)	Length	N.A	
	OuterDiameter (mm)	Length	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Thickness (mm)	Length	Sample Value(s): 8 mm	
	PWCS_VolumeOfWastePerDay (L)	Label	Sample Value(s): 15000 L	
	CorrosionResistant	Boolean	TRUE   FALSE	

## Exhaust Air Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name	N.A		
IFC4 Predefined PropertySet	<b>Pset_PipeSegmentTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	NominalDiameter (mm)	Length	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Thickness (mm)	Length	Sample Value(s): 8 mm	

## Pipe Segment

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			

## Temporary Storage Section

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name	N.A		

IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Thickness (mm)	Length	Sample Value(s): 8 mm

## Waste Conveyance Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		
IFC4 Predefined PropertySet	<b>Pset_PipeSegmentTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	OuterDiameter (mm)	Length	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Thickness (mm)	Length	Sample Value(s): 8 mm	

## IfcProtectiveDevice

### Fused Switch

Ifc4 Entity	IfcProtectiveDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	N.A	N.A	Electrical Fixtures	N.A
PredefinedType	FUSEDISCONNECTOR			
ObjectType	N.A			

## IfcPump

### Aerator Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	AERATOR			

### Ejector Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	ENDSUCTION			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Pump</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	StartStopPerHour	Integer	Sample Value(s): 10	
	Standby	Boolean	TRUE   FALSE	

## Fuel Transfer Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Jet Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	JET			

## Mechanical Equipment - Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Pump</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	InflowRate (m3/s)	Volumetric FlowRate	N.A	
	Duty	Boolean	TRUE   FALSE	
	Standby	Boolean	TRUE   FALSE	
	DischargeRate (m3/s)	Volumetric FlowRate	N.A	
	InternalPassageDiameter (mm)	Length	N.A	
SinglePhase	Boolean	TRUE   FALSE		



EarthFaultProtection	Boolean	TRUE   FALSE
OverloadProtection	Boolean	TRUE   FALSE
StandbyGenerator	Boolean	TRUE   FALSE
BackupPowerSource	Boolean	TRUE   FALSE
Capacity (L)	Label	N.A

## Submersible Drainage Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	SUBMERSIBLEPUMP			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Pump</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	StartStopPerHour	Integer	Sample Value(s): 10	
	Standby	Boolean	TRUE   FALSE	

## Vacuum Exhauster

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	VACUUMEXHAUSTER			
IFC4 UserDefined PropertySet	<b>SGPset_Pump</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	IE2 IEC Standards and Classification	

## IfcSensor

### Air Impurities

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Electrical Sensor	N.A
PredefinedType	USERDEFINED			
ObjectType	AIRIMPURITIESSENSOR			
IFC4 UserDefined PropertySet	<b>SGPset_Sensor</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AI_AmmoniaAndAmmonium (mg/Nm3)	Label	N.A	
	AI_Antimony (mg/Nm3)	Label	N.A	
	AI_Arsenic (mg/Nm3)	Label	N.A	
	AI_Benzene (mg/Nm3)	Label	N.A	
	AI_Cadmium (mg/Nm3)	Label	N.A	
	AI_CarbonMonoxide (mg/Nm3)	Label	N.A	
	AI_Chlorine (mg/Nm3)	Label	N.A	
	AI_Copper (mg/Nm3)	Label	N.A	
	AI_DioxinsAndFurans (TEQ/Nm3)	Label	N.A	
AI_EthyleneOxide (mg/Nm3)	Label	N.A		

Al_FluorineAndHydrofluoricAcid (mg/Nm3)	Label	N.A
Al_Formaldehyde (mg/Nm3)	Label	N.A
Al_HydrogenChloride (mg/Nm3)	Label	N.A
Al_HydrogenSulphide (mg/Nm3)	Label	N.A
Al_Lead (mg/Nm3)	Label	N.A
Al_Mercury (mg/Nm3)	Label	N.A
Al_OxidesOfNitrogen (mg/Nm3)	Label	N.A
Al_ParticiulateSubstances (mg/Nm3)	Label	N.A
Al_StyreneMonomer (mg/Nm3)	Label	N.A
Al_SulphurDioxide (mg/Nm3)	Label	N.A
Al_SulphurTrioxideAndAcidGases (mg/Nm3)	Label	N.A
Al_SulphurTrioxideOrSulphuricAcidMist (mg/Nm3)	Label	N.A
Al_VinylChlorideMonomer (mg/Nm3)	Label	N.A

## IfcSolarDevice

### Solar Panel

Ifc4 Entity	IfcSolarDevice								
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Model Element</td><td>Equipment</td><td>Electrical Equipment</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Equipment	Electrical Equipment	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Model Element	Equipment	Electrical Equipment	N.A						
PredefinedType	SOLARPANEL								
ObjectType	N.A								

## IfcStackTerminal

### Discharge Stack Terminal

Ifc4 Entity	IfcStackTerminal								
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Pipe Fitting</td><td>Pipe Accessory</td><td>Pipe Fittings</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A						
PredefinedType	Need not specify								
ObjectType	N.A								

### Mosquito-proof Net

Ifc4 Entity	IfcStackTerminal												
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Pipe Fitting</td><td>Pipe Accessory</td><td>Pipe Fittings</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A				
ArchiCad	OpenBuildings	Revit	Tekla										
Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A										
PredefinedType	USERDEFINED												
ObjectType	MOSQUITONET												
Material	<table border="1"> <thead> <tr><th>Attributes</th><th>Sample Attribute Values</th></tr> </thead> <tbody> <tr><td>Name</td><td>N.A</td></tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	N.A								
Attributes	Sample Attribute Values												
Name	N.A												
IFC4 UserDefined PropertySet	<p><b>SGPset_StackTerminal</b></p> <table border="1"> <thead> <tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr> </thead> <tbody> <tr><td>AirParticleFilterType</td><td>Label</td><td>COARSEMETALSCREEN</td></tr> <tr><td>ApertureSize (mm)</td><td>Length</td><td>N.A</td></tr> <tr><td>CorrosionResistant</td><td>Boolean</td><td>TRUE   FALSE</td></tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	AirParticleFilterType	Label	COARSEMETALSCREEN	ApertureSize (mm)	Length	N.A	CorrosionResistant	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values											
AirParticleFilterType	Label	COARSEMETALSCREEN											
ApertureSize (mm)	Length	N.A											
CorrosionResistant	Boolean	TRUE   FALSE											

## Air Receiver Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	AIRRECEIVER			

## Refuse Handling Equipment

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	REFUSEHANDLINGEQUIPMENT			
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	NominalCapacity	Real	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	EquipmentType	Label	RORO Compactor	
	CompactionRatio	Label	N.A	

## Bin Lifter

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	BINLIFTER			

## Escalator

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	ESCALATOR			
ObjectType	N.A			

## Goods Lift

Ifc4 Entity	IfcTransportElement			
-------------	---------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	GOODSLIFT			

## Platform Lift

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	PLATFORMLIFT			
IFC4 UserDefined PropertySet	<b>SGPset_TransportElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	

## Wheelchair Stair Lift

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	WHEELCHAIRSTAIRLIFT			

## IfcUnitaryEquipment

### Air Conditioning Unit

Ifc4 Entity	IfcUnitaryEquipment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	AIRCONDITIONINGUNIT			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_UnitaryEquipment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ModelName	Boolean	TRUE   FALSE	
	SoundPressureLevel (dBA)	Label	N.A	
	SoundPowerLevel (dBA)	Label	N.A	
	FlammableRefrigerant	Boolean	TRUE   FALSE	
AirChangePerHour	Label	N.A		

### Air Handling Unit

Ifc4 Entity	IfcUnitaryEquipment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A

PredefinedType	AIRHANDLER		
ObjectType	N.A		
IFC4 UserDefined PropertySet	<b>SGPset_UnitaryEquipment</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	ModelName	Boolean	TRUE   FALSE
	SoundPressureLevel (dBA)	Label	N.A
	SoundPowerLevel (dBA)	Label	N.A
AirFlowRate (m3/h)	Label	Sample Value(s): 15000	

## Fan Coil Unit

Ifc4 Entity	IfcUnitaryEquipment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	FANCOILUNIT			

## Mechanical Equipment - Unitary Equipment

Ifc4 Entity	IfcUnitaryEquipment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Rooftop Unit

Ifc4 Entity	IfcUnitaryEquipment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	ROOFTOPUNIT			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_UnitaryEquipment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ModelName	Boolean	TRUE   FALSE	
	SoundPressureLevel (dBA)	Label	N.A	
	SoundPowerLevel (dBA)	Label	N.A	

## Split System

Ifc4 Entity	IfcUnitaryEquipment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	SPLITSYSTEM			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_UnitaryEquipment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	

	FlammableRefrigerant	Boolean	TRUE   FALSE
	R32Refrigerant	Boolean	TRUE   FALSE

## IfcValve

### Air Intake Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	AIRINTAKEVALVE			
IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	PneumaticActuated	Boolean	TRUE   FALSE	
	ElectricallyActuated	Boolean	TRUE   FALSE	
	WithAirFilterSilencer	Boolean	TRUE   FALSE	
	AirTight	Boolean	TRUE   FALSE	
	WithCompressedAirFilter	Boolean	TRUE   FALSE	

### Discharge Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	DISCHARGE			
IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	PneumaticActuated	Boolean	TRUE   FALSE	
	ElectricallyActuated	Boolean	TRUE   FALSE	
	AirTight	Boolean	TRUE   FALSE	
	NormallyClosed	Boolean	TRUE   FALSE	
	OpeningDiameter (mm)	Length	Sample Value(s): 450 mm	
	WithCompressedAirFilter	Boolean	TRUE   FALSE	

### Isolating Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	ISOLATING			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	WithPositionSensor	Boolean	TRUE   FALSE	

## Main Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	ISOLATING			
ObjectType	N.A			

## Non-return Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	CHECK			
ObjectType	N.A			

## Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## IfcWasteTerminal

### Waste Flow Diverter

Ifc4 Entity	IfcWasteTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	WASTEDIVERTER			
IFC4 UserDefined PropertySet	<b>SGPset_WasteTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Material_WasteFlowDiverterValve	Label	N.A	

## ARCHITECTURAL ELEMENTS

### IfcActuator

### Hydraulic Jack

Ifc4 Entity	IfcActuator			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A

PredefinedType	HYDRAULICACTUATOR		
ObjectType	N.A		
IFC4 UserDefined PropertySet	<b>SGPset_Actuator</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	RamLength (mm)	Length	N.A
	BearingLength (mm)	Length	N.A
	HydraulicType	Label	Indirect Acting   Direct Acting
	RamLength	Length	N.A
	BearingLength	Length	N.A

## Ram

Ifc4 Entity	IfcActuator			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	HYDRAULICACTUATOR			
ObjectType	N.A			

## IfcBeam

### Beam

Ifc4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Beam
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Wood   Timber   Concrete   Engineered Timber   Brick   Reinforced Concrete		
IFC4 Predefined PropertySet	<b>Pset_BeamCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	New   Existing	
	FireRating (hr)	Label	N.A	
	FireRating	Label	N.A	
	IsExternal	Boolean	TRUE   TRUE   FALSE	
IFC4 UserDefined PropertySet	<b>SGPset_Beam</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	FALSE   TRUE   FALSE	

### Cast-in-situ Beam

Ifc4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Concrete Beam
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Beam</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	



	ConstructionMethod	Label	Cast-in-situ
	<b>SGPset_BeamReinforcement</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	PrefabricatedReinforcementCage	Boolean	TRUE   FALSE

## Floor Beam

Ifc4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Beam
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_BeamCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	LoadBearing	Boolean	TRUE   FALSE	

## Joist

Ifc4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Beam
PredefinedType	JOIST			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Timber		
IFC4 Predefined PropertySet	<b>Pset_BeamCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Existing	

## Precast Beam

Ifc4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Concrete Beam
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Beam</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Precast	
	MechanicalConnectionType	Label	Telescopic beam connector   Column shoes Sample Value(s): Delta beam   Lotus-root connection system   Slim floor system   Grouted sleeves   Spiral Connector	

## Prefabricated Beam

Ifc4 Entity	IfcBeam		
-------------	---------	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Concrete Beam
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Beam</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Prefabricated	
	MechanicalConnectionType	Label	Telescopic beam connector Sample Value(s): Grouted Sleeves   Spiral Connector   Column shoes	
	Accreditation_PAS	Boolean	TRUE   FALSE	

## Steel Beam

Ifc4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Beam
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Intumescent Paint   Steel	
IFC4 Predefined PropertySet	<b>Pset_BeamCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Beam</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	BS 476 Part 20/21 British Standard 476 Fire Tests   BS 8202 Part 2 Coatings for fire protection of building elements	

## Transom (Beam)

Ifc4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Beam
PredefinedType	USERDEFINED			
ObjectType	TRANSOM			
IFC4 Predefined PropertySet	<b>Pset_BeamCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	N.A	

## IfcBuildingElementProxy

### Accessible Route

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	ACCESSIBLEROUTE			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	
	<b>SGPset_BuildingElementProxyDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
Width (mm)	Length	N.A		

## Adjacent Building

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Morph	Forms	Mass	N.A
PredefinedType	USERDEFINED			
ObjectType	SURROUNDINGBUILDING			

## Advertisement Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SignageType	Label	Advertisement Signage	

## Air Conditioning Tray

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Cable Tray	Place Raceray	Cable Trays	N.A
PredefinedType	USERDEFINED			
ObjectType	AIRCONDITIONINGTRAY			

## Autosampler

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	AUTOSAMPLER			

## Backfill

Ifc4 Entity	IfcBuildingElementProxy			
-------------	-------------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	BACKFILL			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Sand Sample Value(s): Crusher run   Granite dust   Gravel   Recycled aggregates   Corey dust	

## Balancing Weight

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_BALANCINGWEIGHT			

## Bicycle Parking Lot

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	BICYCLELOT			

## Bicycle Parking Rack

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	BICYCLERACK			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BicycleParkingRack_Type	Label	Single tier   Double tier	
	BicycleLotCount	Integer	N.A	

## Bicycle Route

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	BICYCLEROUTE			

## Breathing Apparatus

Ifc4 Entity	IfcBuildingElementProxy			
-------------	-------------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	BREATHINGAPPARATUS			

## Breeching Inlet Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_BREECHINGINLET			

## Buffer

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_BUFFER			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	CounterWeightBuffer_RatedSpeed (m/s)	Label	N.A	
	CounterWeightBuffer_Stroke (mm)	Length	N.A	
	CounterWeightBuffer_Type	Label	Energy Dissipating	
	LiftBuffer_Stroke	Label	N.A	
LiftBuffer_FixedToCar	Boolean	TRUE   FALSE		

## Buggy

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	BUGGY			

## Buggy Parking

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LORRYLOT			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ParkingUse	Label	Buggy	

## Building Date Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SignageType	Label	Building Date Signage	

## Building Mass

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	CONCEPT_BUILDINGMASS			

## Bus Bay

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_BUSBAY			

## Bus Parking Lot

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	BUSLOT			

## Business Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SignageType	Label	Business Signage	

## Car Parking Deck

Ifc4 Entity	IfcBuildingElementProxy			
-------------	-------------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	CARPARKINGDECK			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Steel		
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	FALSE	

## Car Parking Lot

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	CARLOT			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	
	FamilyParkingLot	Boolean	TRUE   FALSE	
	CarParking_ServedByCarLift	Boolean	TRUE   FALSE	
	<b>SGPset_BuildingElementProxyDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
Width (mm)	Length	N.A		
Length (mm)	Length	N.A		

## Car Parking Platform

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	CARPARKINGPLATFORM			

## Caution label

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_BIOHAZARDCAUTION			

## Chemical Feeder

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A

PredefinedType	USERDEFINED
ObjectType	CHEMICALFEEDER

## Circuit Diagram

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_CIRCUITDIAGRAM			

## Coach Lot

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	COACHLOT			

## Communication Instruction Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_COMMUNICATIONINSTRUCTION			

## Concrete Marker

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	CONCRETEMARKER			

## Conveyor Belt

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	CONVEYORBELT			

## Cooling Tower Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			



ObjectType	SIGNAGE_COOLINGTOWER
------------	----------------------

## Counter Weight

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_COUNTERWEIGHT			
IFC4 UserDefined PropertySet	<b>SGPset BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	CounterWeight_RopeDiameter (mm)	Length	N.A	
	CounterWeight_RopeCount	Integer	N.A	

## Directional Exit Sign

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Specialty Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_DIRECTIONALEXIT			
IFC4 UserDefined PropertySet	<b>SGPset BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SelfLuminous	Boolean	TRUE   FALSE	

## Dispensing Unit

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FUELDISPENSINGUNIT			
IFC4 UserDefined PropertySet	<b>SGPset BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Hose_Length (mm)	Length	Sample Value(s): 5m	
	FUELDISPENSINGUNIT_SafetyCutoff	Boolean	TRUE   FALSE	

## Dos and Donts Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_DOSANDDONTs			

## Drop Barrier

Ifc4 Entity	IfcBuildingElementProxy			
-------------	-------------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	DROPBARRIER			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireAlarmActivated	Boolean	TRUE   FALSE	
ManualOverrideLockingDevice	Boolean	TRUE   FALSE		

## EV Parking Lot

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LORRYLOT			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ParkingUse	Label	Electric Vehicle	

## EV Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_ELECTRICVEHICLE			

## Electric Vehicle Charging Point

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	EVCHARGINGPOINT			

## Emergency Cut-off Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_EMERGENCYCUTOFF			

## Emergency Door Release Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation				

	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_EMERGENCYDOORRELEASE			

## Emergency Information

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_EMERGENCYINFORMATION			

## Emergency Release Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_EMERGENCYRELEASE			

## Envelope Limit

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	CONCEPT_ENVELOPELIMIT			

## Envelope Required

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	CONCEPT_ENVELOPEREQUIRED			

## Escape Plan Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_ESCAPEPLAN			

## Evacuation Lift Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_EVACUATIONLIFT			

## Evacuee Holding Area Equipment

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	EVACUEEHOLDINGAREAEQUIPMENT			

## Evacuee Holding Area Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_EVACUEEHOLDINGAREA			

## Exit Access Door Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_EXITACCESSDOOR			

## Exit Sign

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Specialty Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_EXIT			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SelfLuminous	Boolean	TRUE   FALSE	

## Exit Staircase Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_EXITSTAIRCASE			

## False Bottom

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FALSEBOTTOM			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		

## Fire Access Opening Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_FIREACCESSOPENING			

## Fire Engine Accessway

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Floors	N.A
PredefinedType	USERDEFINED			
ObjectType	FIREENGINEACCESSWAY			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	LoadingCapacity (tonnes)	Real	Sample Value(s): 30 tonnes	

## Fire Engine Accessway Sign Post

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNPOST_DRIVEWAY			

## Fire Escape Bed Lift Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_FIREESCAPEBEDLIFT			

## Fire Escape Plan

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	ESCAPEPLAN			

## Fire Extinguisher

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	PORTABLEFIREEXTINGUISHER			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireExtinguisherRating	Label	Sample Value(s): 70B	
	ExternalReference	Label	SS 578 Code of practice for the use and maintenance of portable fire extinguishers	
	CapacityWeight (kg)	Real	Sample Value(s): 50kg	
	Hose_Length (mm)	Length	Sample Value(s): 6m	

## Fire Safety Equipment Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_FIRESAFETYEQUIPMENT			

## Fire Shutter Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_FRESHUTTER			

## Flag Pole

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Morph	Solid	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FLAGPOLE			

## Flood Barrier

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FLOODBARRIER			

## Floor Level Exit Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Specialty Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_FLOORLEVELEXITSIGN			

## Floor Marking

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_FLOORMARKING			

## Floor Plan

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FLOORPLAN			

## Forklift

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FORKLIFT			

## Fuel Dispensing Unit

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FUELDISPENSINGUNIT			

## Fuel Truck Parking

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LORRYLOT			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			

IFC4 UserDefined Property Name	Data Type	Sample Property Values
ParkingUse	Label	Mobile Tanker

## Gas Leak Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_GASLEAK			

## General Waste Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_GENERALWASTES			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		

## Guide Rail

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_GUIDERAIL			

## Hazard Warning Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_HAZARDWARNINGSIGN			

## Hearing Protection Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_HEARINGPROTECTION			

## Heavy Vehicle Parking (Articulated Vehicle)

Ifc4 Entity	IfcBuildingElementProxy			
-------------	-------------------------	--	--	--



Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	ARTICULATEDVEHICLELOT			

## Heavy Vehicle Parking (Rigid-framed Vehicle)

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LORRYLOT			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	VehicleType	Label	Rigid-framed vehicle	

## Holding Bay

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_HOLDINGBAY			

## Hump

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	HUMP			

## Information Plaque

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_POPSINFORMATIONPLAQUE			

## LPG Warning Sign

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_LPG			

## LPS Warning Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_LPSWARNING			

## Letter Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SignageType	Label	Letter Signage	

## Lift Well Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_LIFTWELL			

## Line Marking

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Component	N.A
PredefinedType	USERDEFINED			
ObjectType	LINEMARKING			

## MRT 1st Reserve Line

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_MRT1STRESERVELINE			

## MRT Track

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A

PredefinedType	USERDEFINED
ObjectType	RAIL_MRTTRACK

## Marking

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_DRIVEWAYMARKING			

## Mobile Tanker Parking

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LORRYLOT			
IFC4 UserDefined PropertySet	<b>SGPset BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ParkingUse	Label	Mobile Tanker	

## Motorcycle Parking Lot

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	MOTOR-CYCLELOT			
IFC4 UserDefined PropertySet	<b>SGPset BuildingElementProxyDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Width (mm)	Length	N.A	
	Length (mm)	Length	N.A	

## Neighbouring Building

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Morph	Forms	Mass	N.A
PredefinedType	USERDEFINED			
ObjectType	SURROUNDINGBUILDING			
IFC4 UserDefined PropertySet	<b>SGPset BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_ApprovedMasterplanUse	Label	N.A	

## No Obstruction Signage

Ifc4 Entity	IfcBuildingElementProxy			
-------------	-------------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_NOOBSTRUCTION			

## Obstacle

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	OBSTACLE			

## Oil Tanker Parking

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LORRYLOT			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ParkingUse	Label	Oil Tanker	

## On-Site Food Waste Treatment System

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FOODWASTETREATMENTSYSTEM			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	EquipmentType	Label	N.A	

## Operating Instruction Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_OPERATINGINSTRUCTION			

## PWCS Vacuum Truck Parking Lot

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LORRYLOT			
Ifc4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>Ifc4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ParkingUse	Label	Vacuum Truck	

## PWD Holding Point

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_PWDHOLDINGPOINT			

## PWD Holding Point Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_PWDHOLDINGPOINT			

## Passing Space

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_PASSINGSPACE			

## Pedestrian Crossing

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	PEDESTRIANCROSSING			

## Photoluminescent Marking

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	PHOTOLUMINESCENTMARKING			

## Pipe Arrow

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_PIPEARROW			

## Pipe Rack

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	PIPERACK			

## Planting Trough

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Morph	Solid	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LANDSCAPE_PLANTINGTROUGH			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Waterproofing		
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Vegetation_HasCreepers	Boolean	TRUE   FALSE	

## Pollution Control Equipment

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	POLLUTIONCONTROLEQUIPMENT			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TED_TemperatureOfDischarge (mg/l)	Label	N.A	
	TED_Colour (mg/l)	Label	N.A	
	TED_PHValue (mg/l)	Label	N.A	
	TED_BiochemicalOxygenDemand (mg/l)	Label	N.A	
	TED_ChemicalOxygenDemand (mg/l)	Label	N.A	
	TED_TotalSuspendedSolid (mg/l)	Label	N.A	
	TED_TotalDissolvedSolid (mg/l)	Label	N.A	
	TED_Chloride (mg/l)	Label	N.A	
	TED_Sulphate (mg/l)	Label	N.A	
	TED_Sulphide (mg/l)	Label	N.A	
	TED_Cyanide (mg/l)	Label	N.A	
	TED_Detergent (mg/l)	Label	N.A	
	TED_GreaseAndOil (mg/l)	Label	N.A	
	TED_Arsenic (mg/l)	Label	N.A	
	TED_Barium (mg/l)	Label	N.A	
TED_Tin (mg/l)	Label	N.A		

TED_Iron (mg/l)	Label	N.A
TED_Beryllium (mg/l)	Label	N.A
TED_Boron (mg/l)	Label	N.A
TED_Manganese (mg/l)	Label	N.A
TED_PhenolicCompound (mg/l)	Label	N.A
TED_Cadmium (mg/l)	Label	N.A
TED_Chromium (mg/l)	Label	N.A
TED_Copper (mg/l)	Label	N.A
TED_Lead (mg/l)	Label	N.A
TED_Mercury (mg/l)	Label	N.A
TED_Nickel (mg/l)	Label	N.A
TED_Selenium (mg/l)	Label	N.A
TED_Silver (mg/l)	Label	N.A
TED_Zinc (mg/l)	Label	N.A
TED_MetalsInTotal (mg/l)	Label	N.A
TED_Chlorine (mg/l)	Label	N.A
TED_Phosphate (mg/l)	Label	N.A
TED_Calcium (mg/l)	Label	N.A
TED_Magnesium (mg/l)	Label	N.A
TED_Nitrate (mg/l)	Label	N.A
AI_AmmoniaAndAmmonium (mg/Nm3)	Label	N.A
AI_Antimony (mg/Nm3)	Label	N.A
AI_Arsenic (mg/Nm3)	Label	N.A
AI_Benzene (mg/Nm3)	Label	N.A
AI_Cadmium (mg/Nm3)	Label	N.A
AI_CarbonMonoxide (mg/Nm3)	Label	N.A
AI_Chlorine (mg/Nm3)	Label	N.A
AI_Copper (mg/Nm3)	Label	N.A
AI_DioxinsAndFurans (TEQ/Nm3)	Label	N.A
AI_EthyleneOxide (mg/Nm3)	Label	N.A
AI_FluorineAndHydrofluoricAcid (mg/Nm3)	Label	N.A
AI_Formaldehyde (mg/Nm3)	Label	N.A
AI_HydrogenChloride (mg/Nm3)	Label	N.A
AI_HydrogenSulphide (mg/Nm3)	Label	N.A
AI_Lead (mg/Nm3)	Label	N.A
AI_Mercury (mg/Nm3)	Label	N.A
AI_OxidesOfNitrogen (mg/Nm3)	Label	N.A
AI_ParticulateSubstances (mg/Nm3)	Label	N.A
AI_StyreneMonomer (mg/Nm3)	Label	N.A
AI_SulphurDioxide (mg/Nm3)	Label	N.A
AI_SulphurTrioxideAndAcidGases (mg/Nm3)	Label	N.A
AI_SulphurTrioxideOrSulphuricAcidMist (mg/Nm3)	Label	N.A
AI_VinylChlorideMonomer (mg/Nm3)	Label	N.A

## Private Use Signage

Ifc4 Entity	IfcBuildingElementProxy								
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Object</td><td>Object</td><td>Generic Models</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Object	Generic Models	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Object	Object	Generic Models	N.A						
PredefinedType	USERDEFINED								
ObjectType	SIGNAGE_PRIVATEUSE								

## Queuing Space

Ifc4 Entity	IfcBuildingElementProxy								
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Model Element</td><td>Object</td><td>Generic Models</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Object	Generic Models	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Model Element	Object	Generic Models	N.A						
PredefinedType	USERDEFINED								
ObjectType	2D_QUEUINGSPACE								

## Recyclables Refuse Chute Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_RECYCLABLESCHUTE			

## Recyclables Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_RECYCLABLES			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		

## Refuge Space

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_LIFTRIFUGESPACE			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RefugeSpace_Type	Integer	1	

## Religious Symbol

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	RELIGIOUSYMBOL			

## Rescue Equipment

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	RESCUEEQUIPMENT			

## Rescue Hook Signage

Ifc4 Entity	IfcBuildingElementProxy			
-------------	-------------------------	--	--	--



Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_RESCUEHOOK			

## Rinse Shower Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_RINSESHOWER			

## SCBA Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_SCBA			

## Sign Post

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNPOST			

## Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE			
IFC4 Predefined PropertySet	<b>Pset_BuildingElementProxyCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	New	

## Signage Water Tap Point

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_WATERTAPPOINT			

## Site Plan

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_SITEPLAN			

## Smoke Curtain Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_SMOKECURTAIN			

## Smoke Vent Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_SMOKEVENT			

## Stationary Vacuum System

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	STATIONARYVACUUMSYSTEM			

## Storage Height Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Component	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_STORAGEHEIGHT			

## Taxi Bay

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_TAXIBAY			

## Temporary Refuse Truck Parking

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_REFUSETRUCKTEMPORARYPARKING			

## Temporary Refuse Truck Parking Sign Post

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNPOST_REFUSETEMPORARYPARKING			

## Through Block Link Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_THROUGHBLOCKLINK			

## Thrust Block

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	THRUSTBLOCK			

## Traditional Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE			
IFC4 Predefined PropertySet	<b>Pset_BuildingElementProxyCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Existing	
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SignageType	Label	Traditional Signage	

## Traffic Flow

Ifc4 Entity	IfcBuildingElementProxy			
-------------	-------------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_TRAFFICFLOW			

## Tree Protection Zone

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Morph	Solid	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_TREEPROTECTIONZONE			

## Tunnel

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	TUNNEL			

## Turnstile

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	TURNSTILE			

## Vehicular Barrier

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	VEHICULARBARRIER			
IFC4 UserDefined PropertySet	<b>SGPset BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	HorizontalForce (kN)	Real	N.A	
	HeightOfVehicularImpact (mm)	Length	N.A	
DesignedVehicleMass (kg)	Real	N.A		

## Warning Sign

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_WARNING			

## Warning Sign for Access Hatch

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_ACCESSHATCH			

## Water Level

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_WATERLINELEVEL			

## Water Playground

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	WATERPLAYGROUND			

## Wheelchair Space

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_WHEELCHAIRSPACE			
IFC4 UserDefined PropertySet	<b>SGPset BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	

## Wheelchair Symbol Signage

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SIGNAGE_WHEELCHAIRSYMBOL			

## IfcChimney

### Chimney

Ifc4 Entity	IfcChimney
-------------	------------

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Flue

Ifc4 Entity	IfcChimney			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FLUE			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Metal		
IFC4 Predefined PropertySet	<b>Pset_ChimneyCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	N.A	

## IfcCivilElement

### Access Point

Ifc4 Entity	IfcCivilElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	ACCESSPOINT			
IFC4 UserDefined PropertySet	<b>SGPset_CivilElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Ingress	Boolean	TRUE   FALSE	
Egress	Boolean	TRUE   FALSE		

### Back Lane

Ifc4 Entity	IfcCivilElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	BACKLANE			
IFC4 UserDefined PropertySet	<b>SGPset_CivilElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	OwnershipType	Label	N.A	

### Carriageway

Ifc4 Entity	IfcCivilElement			
-------------	-----------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	GIS_CARRIAGEWAY			
IFC4 UserDefined PropertySet	<b>SGPset_CivilElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadCategory	Label	1/2/3/4/5	

## Driveway

Ifc4 Entity	IfcCivilElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	DRIVEWAY			
IFC4 UserDefined PropertySet	<b>SGPset_CivilElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	DesignedVehicleMass (kg)	Real	N.A	
	Accessway	Boolean	TRUE   FALSE	
	VehicularServiceRoad	Boolean	TRUE   FALSE	
	VisitorLaneEntry	Boolean	TRUE   FALSE	
	Ingress	Boolean	TRUE   FALSE	
	Egress	Boolean	TRUE   FALSE	
AccessRoad	Boolean	TRUE   FALSE		

## Drop Barrier Divider

Ifc4 Entity	IfcCivilElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	ISLAND			

## Fire Engine Access Road

Ifc4 Entity	IfcCivilElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	DRIVEWAY			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Grass	
IFC4 UserDefined PropertySet	<b>SGPset_CivilElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireEngineAccessRoad	Boolean	TRUE   FALSE	
LoadingCapacity (tonnes)	Real	Sample Value(s): 24 tonnes   30 tonnes		

## Footpath

Ifc4 Entity	IfcCivilElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	FOOTPATH			

## Lay-by

Ifc4 Entity	IfcCivilElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	LAYBY			

## Paved Shoulder

Ifc4 Entity	IfcCivilElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	PAVEMENT			

## Road Kerb (within development/premises)

Ifc4 Entity	IfcCivilElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	ROADKERB			

## IfcColumn

### Cast-in-situ Column

Ifc4 Entity	IfcColumn			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Column	Column	Structural Columns	Concrete Column
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Column</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Cast-in-situ	
	<b>SGPset_ColumnReinforcement</b>			
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>		
PrefabricatedReinforcementCage	Boolean	TRUE   FALSE		



## Column

Ifc4 Entity	IfcColumn																	
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Column</td> <td>Column</td> <td>Columns</td> <td>Concrete Column</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Column	Column	Columns	Concrete Column									
ArchiCad	OpenBuildings	Revit	Tekla															
Column	Column	Columns	Concrete Column															
PredefinedType	Need not specify																	
ObjectType	N.A																	
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Concrete   Engineered Timber   Brick   Reinforced Concrete</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	Concrete   Engineered Timber   Brick   Reinforced Concrete													
Attributes	Sample Attribute Values																	
Name	Concrete   Engineered Timber   Brick   Reinforced Concrete																	
IFC4 Predefined PropertySet	<b>Pset_ColumnCommon</b> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>FireRating</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>Status</td> <td>Label</td> <td>Temporary   New   Existing</td> </tr> </tbody> </table>			IFC4 Predefined Property Name	Data Type	Sample Property Values	IsExternal	Boolean	TRUE   FALSE	FireRating (hr)	Label	N.A	FireRating	Label	N.A	Status	Label	Temporary   New   Existing
IFC4 Predefined Property Name	Data Type	Sample Property Values																
IsExternal	Boolean	TRUE   FALSE																
FireRating (hr)	Label	N.A																
FireRating	Label	N.A																
Status	Label	Temporary   New   Existing																
IFC4 UserDefined PropertySet	<b>SGPset_Column</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Combustible</td> <td>Boolean</td> <td>FALSE   TRUE   FALSE</td> </tr> </tbody> </table>			IFC4 UserDefined Property Name	Data Type	Sample Property Values	Combustible	Boolean	FALSE   TRUE   FALSE									
IFC4 UserDefined Property Name	Data Type	Sample Property Values																
Combustible	Boolean	FALSE   TRUE   FALSE																

## Entrance Post

Ifc4 Entity	IfcColumn										
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Column</td> <td>Column</td> <td>Columns</td> <td>Concrete Column</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Column	Column	Columns	Concrete Column		
ArchiCad	OpenBuildings	Revit	Tekla								
Column	Column	Columns	Concrete Column								
PredefinedType	Need not specify										
ObjectType	N.A										

## Gate Post

Ifc4 Entity	IfcColumn										
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Column</td> <td>Column</td> <td>Columns</td> <td>Concrete Column</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Column	Column	Columns	Concrete Column		
ArchiCad	OpenBuildings	Revit	Tekla								
Column	Column	Columns	Concrete Column								
PredefinedType	Need not specify										
ObjectType	N.A										

## Inclined Column

Ifc4 Entity	IfcColumn										
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Column</td> <td>Column</td> <td>Columns</td> <td>Concrete Column</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Column	Column	Columns	Concrete Column		
ArchiCad	OpenBuildings	Revit	Tekla								
Column	Column	Columns	Concrete Column								
PredefinedType	Need not specify										
ObjectType	N.A										

## Pilaster

Ifc4 Entity	IfcColumn										
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Column</td> <td>Column</td> <td>Columns</td> <td>Column</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Column	Column	Columns	Column		
ArchiCad	OpenBuildings	Revit	Tekla								
Column	Column	Columns	Column								

PredefinedType	PILASTER
ObjectType	N.A

## Precast Column

Ifc4 Entity	IfcColumn			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Column	Column	Columns	Concrete Column
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Column</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Precast	
	MechanicalConnectionType	Label	Column shoes Sample Value(s): Spiral Connector   Grouted Sleeves	

## Prefabricated Column

Ifc4 Entity	IfcColumn			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Column	Column	Columns	Concrete Column
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Column</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Prefabricated	
	MechanicalConnectionType	Label	Grouted Sleeves Sample Value(s): Spiral Connector   Column shoes	
	Accreditation_PAS	Boolean	TRUE   FALSE	

## Steel Column

Ifc4 Entity	IfcColumn			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Column	Column	Columns	Column
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Steel   Intumescent Paint	
IFC4 Predefined PropertySet	<b>Pset_ColumnCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Column</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	BS 476 Part 20/21 British Standard 476 Fire Tests   BS 8202 Part 2 Coatings for fire protection of building elements	

## Carpet

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOORING			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Carpet		

## Catch Screen

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	CorrosionResistant	Boolean	N.A	

## Ceiling

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ceiling	Slab	Ceilings	N.A
PredefinedType	CEILING			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Plastic   Nylon   Brick		
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	
	Combustible	Boolean	FALSE   TRUE   FALSE	
	FireRating	Label	N.A	
	Status	Label	N.A	
IsExternal	Boolean	TRUE   FALSE		
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FlameSpreadClass	Label	Sample Value(s): Class 0 Class 2   Class 1   Class 3   Class 4	
	ExternalReference	Label	BS 476 Part 7 British Standard 476 Fire Tests	
Perforated	Boolean	TRUE   FALSE		

# Cladding

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	CLADDING			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Timber	
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	TRUE   FALSE	

# Coldroom Panel

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	CLADDING			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	EN 13501-1 Fire classification of construction products and building elements	
	FlameSpreadClass	Label	N.A	
	ToxicityEmissionRating	Real	N.A	
SmokeDensityRating	Real	N.A		

# Composite Panel

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	CLADDING			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Plastic	
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	OuterLayer_Combustible	Boolean	TRUE   FALSE	
ExternalReference	Label	NFPA 285 Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components		

## Contrasting Colour Band

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOORING			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Contrasting colour band	

## Counter Weight Screen

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_COUNTERWEIGHTSCREEN			
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Perforated	Boolean	N.A	
	ExternalReference	Label	EN ISO 13857:2008 Safety of machinery	

## Covering

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Reinforced Concrete   Glass   Plasterboard	
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	
	Status	Label	Temporary	
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Perforated	Boolean	TRUE   FALSE	
	AntiMosquitoDevice	Boolean	TRUE   FALSE	
	ExternalReference	Label	SS 213 Unplasticised PVC pipes and fittings for soil   waste and vent applications	
Fixed	Boolean	TRUE   FALSE		

## Fire Curtain

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FIRECURTAIN			
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FusibleLink	Boolean	TRUE   FALSE	

## Fire Rated Fire Insulation Glass

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	INSULATION			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Glass		
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	

## Fire-rated Board

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	
	Combustible	Boolean	FALSE   TRUE   FALSE	

## Floor Finish

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOORING			
ObjectType	N.A			

## Floor Tile

Ifc4 Entity	IfcCovering			
-------------	-------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOORING			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Tiles	
IFC4 UserDefined PropertySet	<b>SGPset_CoveringTile</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Length (mm)	Length	Sample Value(s): 2400mm	
	Width (mm)	Length	Sample Value(s): 2400mm	

## Flooring

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOORING			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Wood   Timber   Non-skid Tiles	
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	Timber	
	Combustible	Boolean	FALSE	
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	PressureImpregnated	Boolean	TRUE   FALSE	

## Frieze

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Covering	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FRIEZE			

## Grass Pavers

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Covering	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LANDSCAPE_GRASSPAVER			

## Grating

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Covering	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	GRATING			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		GALVANIZED MILD STEEL HEAVY DUTY	
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Airtight	Boolean	TRUE   FALSE	
	Watertight	Boolean	TRUE   FALSE	
	ChequeredPlate	Boolean	TRUE   FALSE	
	ExternalReference	Label	LTA/SDRE14/4/GRA1/GRA6 STANDARD DETAILS OF ROAD ELEMENTS	
HingedOpen	Boolean	TRUE   FALSE		

## Haunch

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	HAUNCH			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Thickness (mm)	Length	Sample Value(s): 500 mm	
	<b>SGPset_ConcreteElementGeneral</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ReinforcementStrengthClass	Label	Sample Value(s): 500	

## Hinged Cover

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Covering	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	HINGEDCOVER			

## Homogenous Cladding

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	CLADDING			



ObjectType	N.A		
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>
	Name	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	CladdingType	Label	Homogenous

## Insulation

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Covering	Slab	Generic Models	N.A
PredefinedType	INSULATION			
ObjectType	N.A			

## Insulation Panel

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	INSULATION			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name	N.A		
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	FALSE	
	FireRating (hr)	Label	N.A	

## Insulation of Lightning Tape

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	INSULATION			
ObjectType	N.A			

## Lift Shaft Partition

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_COUNTERWEIGHTSCREEN			

## M&E Screen

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SCREEN			

## Non-slip Floor

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOORING			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_CoveringFlooring</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	HasNonSkidSurface	Boolean	TRUE   FALSE	

## Outer Shell Covering

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	OUTERSHELL			

## Pipe Sleeve

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	PIPESLEEVE			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	

## Prefabricated And Prefinished Ceiling

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ceiling	Slab	Ceilings	Slab
PredefinedType	CEILING			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Prefabricated and Prefinished	

## Raised Floor

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOORING			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	TRUE   FALSE	

## Raised Platform

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOORING			
ObjectType	N.A			

## Roof Covering

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Roofs	N.A
PredefinedType	ROOFING			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Plastic   Nylon	
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	TRUE   FALSE	
	FireRating (hr)	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	ASTM E108 Standard Test Methods for Fire Tests	
	FlameSpreadClass	Label	N.A	
	Perforated	Boolean	TRUE   FALSE	

## Roof Eave

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Roofs	N.A
PredefinedType	USERDEFINED			

ObjectType	SOFFIT		
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Status	Label	Existing

## Roof Ridge

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	ROOFING_RIDGE			
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	N.A	

## Roofing

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Roofs	N.A
PredefinedType	ROOFING			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	N.A	

## Security Bar

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SECURITYBAR			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	New	

## Service Platform

Ifc4 Entity	IfcCovering			
-------------	-------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOORING			
ObjectType	N.A			

## Smoke Curtain

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SMOKECURTAIN			
IFC4 Predefined PropertySet	<b>Pset_CoveringCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	FALSE	
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	EngineeredSmokeControlSystem	Boolean	TRUE   FALSE	

## Sump Cover

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOORING			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	SS30 Manhole tops and surface-box tops	

## Suspended Ceiling

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ceiling	Slab	Ceilings	Slab
PredefinedType	CEILING			
ObjectType	N.A			

## Tactile Detectable Warning Surface

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab

PredefinedType	USERDEFINED
ObjectType	TACTILE

## Trench Cover

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOORING			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Removable	Boolean	TRUE   FALSE	
	WithLiftingFeature	Boolean	TRUE   FALSE	

## Vertical Greenery

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Covering	Object	Generic Models	N.A
PredefinedType	CLADDING			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Stainless Steel		
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Vegetation_HasClimbers	Boolean	TRUE   FALSE	
	Vegetation_PlantName	Label	N.A	
	Vegetation_PlantedArea (m2)	Area	N.A	
Vegetation_HasCreeper	Boolean	TRUE   FALSE		

## Vinyl Flooring

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOORING			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Vinyl		

## IfcCurtainWall

### Curtain Wall

Ifc4 Entity	IfcCurtainWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Curtain Wall	Curtain Wall	Curtain Systems	N.A

PredefinedType	Need not specify		
ObjectType	N.A		
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>
	Name	Spandrel Panel	
IFC4 Predefined PropertySet	<b>Pset_CurtainWallCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	IsExternal	Boolean	TRUE   FALSE
	ThermalTransmittance	Thermal Transmittance	Sample Value(s): 1 W/m2 K
	FireRating (hr)	Label	N.A
ThermalTransmittance (W/m2 K)	Thermal Transmittance	Sample Value(s): 1 W/m2 K	
IFC4 UserDefined PropertySet	<b>SGPset_CurtainWall</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Material_DaylightReflectance	Label	N.A
	Material_SpecularReflectance	Label	N.A
	Material_DiffuseReflectance	Label	N.A
	ShadingCoefficient_Glass	Real	N.A
	ConstructionMethod	Label	N.A
FireStop	Boolean	TRUE   FALSE	

## Curtain Wall Panel

Ifc4 Entity	IfcCurtainWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Curtain Wall	Curtain Wall	Curtain Systems	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name	Glass		

## Full Height Glass Partition Wall

Ifc4 Entity	IfcCurtainWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Curtain Wall	Curtain Wall	Curtain Systems	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_CurtainWall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Prefabricated and Prefinished	

## Prefabricated And Prefinished Curtain Wall

Ifc4 Entity	IfcCurtainWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Curtain Wall	Curtain Wall	Curtain Systems	N.A

PredefinedType	Need not specify						
ObjectType	N.A						
IFC4 UserDefined PropertySet	<b>SGPset_CurtainWall</b>						
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Prefabricated and Prefinished</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ConstructionMethod	Label	Prefabricated and Prefinished
	IFC4 UserDefined Property Name	Data Type	Sample Property Values				
ConstructionMethod	Label	Prefabricated and Prefinished					

## IfcDiscreteAccessory

### Barrier Device

Ifc4 Entity	IfcDiscreteAccessory								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Object	Generic Models	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Model Element	Object	Generic Models	N.A						
PredefinedType	USERDEFINED								
ObjectType	ANTICLIMBINGDEVICE								

### Bracket

Ifc4 Entity	IfcDiscreteAccessory								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Solid</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Solid	Generic Models	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Model Element	Solid	Generic Models	N.A						
PredefinedType	BRACKET								
ObjectType	N.A								
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Metal</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	Metal				
	Attributes	Sample Attribute Values							
Name	Metal								

### Bridging Plate

Ifc4 Entity	IfcDiscreteAccessory								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Object	Generic Models	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Model Element	Object	Generic Models	N.A						
PredefinedType	USERDEFINED								
ObjectType	LIFT_BRIDGINGPLATE								
IFC4 UserDefined PropertySet	<b>SGPset_DiscreteAccessory</b>								
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>MinimumForce</td> <td>Real</td> <td>Sample Value(s): 2500N</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	MinimumForce	Real	Sample Value(s): 2500N		
	IFC4 UserDefined Property Name	Data Type	Sample Property Values						
MinimumForce	Real	Sample Value(s): 2500N							

### Ceiling Hanger

Ifc4 Entity	IfcDiscreteAccessory								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Object	Generic Models	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Object	Object	Generic Models	N.A						
PredefinedType	USERDEFINED								
ObjectType	CEILINGHANGER								
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	N.A				
	Attributes	Sample Attribute Values							
Name	N.A								



Ifc4 UserDefined PropertySet	<b>SGPset_DiscreteAccessory</b>		
	<b>Ifc4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Combustible	Boolean	TRUE   FALSE
	FlameSpreadClass	Label	N.A

## Deflector

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_DEFLECTOR			

## Detachable Bridging Plate

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_BRIDGINGPLATE			
Ifc4 UserDefined PropertySet	<b>SGPset_DiscreteAccessory</b>			
	<b>Ifc4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AntiSlipSurface	Boolean	TRUE   FALSE	
	LoadingCapacity (tonnes)	Real	Sample Value(s): 30 tonnes	
Weight (kg)	Real	Sample Value(s): 100 kg		

## Fire Hose Cradle

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FIREHOSECRADLE			

## Guide Roller

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_GUIDEROLLER			

## Guide Shoe

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_GUIDESHOE			

## Lift Car Apron

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_APRON			

## Lift Guiding Yoke

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_GUIDINGYOKE			

## Lift Landing Door Lock

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_DOORLOCK			

## M&E Bracket

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	PIPESUPPORT			

## Pawl Device

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_PAWLDEVICE			

## Pipe Support

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	PIPESUPPORT			
IFC4 UserDefined PropertySet	<b>SGPset_DiscreteAccessory</b>			

IFC4 UserDefined Property Name	Data Type	Sample Property Values
TensileStress (N/mm2)	Label	N.A
Temperature (C)	Label	N.A
TensileStress	Label	N.A

## Rescue Hook

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_RESCUEHOOK			
IFC4 UserDefined PropertySet	<b>SGPset DiscreteAccessory</b>			
	IFC4 UserDefined Property Name	Data Type	Sample Property Values	
	PullOutStrength (kN)	Real	Sample Value(s): 50 kN	
	Diameter (mm)	Length	Sample Value(s): 10 mm	

## Safety Gear

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_SAFETYGEAR			

## Sheave

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_SHEAVE			

## Tensioning Device

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_TENSIONINGDEVICE			

## Toe Board

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_TOEBOARD			

## Vertical Deflector

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	VERTICALDEFLECTOR			

## IfcDoor

### Access Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			

### Access Hatch

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	USERDEFINED			
ObjectType	ACCESSHATCH			
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	

### Accessible Gate

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	GATE			
ObjectType	N.A			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	OperationType		N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	

### Accessible Gate Panel

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	Door	Door	Doors	N.A
PredefinedType	GATE			
ObjectType	N.A			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	PanelDepth	N.A		
IFC4 Predefined PropertySet	<b>IfcDoorPanelProperties</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	N.A	N.A	N.A	

## Accessible Panel

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	TRAPDOOR			
ObjectType	N.A			

## Blast Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	USERDEFINED			
ObjectType	BLASTDOOR			

## CD Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	OperationType	N.A		
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	CDDoor_Type	Label	Sample Value(s): PT2	

## Cabinet Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Attributes				

	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>OperationType</td> <td>N.A</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	OperationType	N.A
Attributes	Sample Attribute Values				
OperationType	N.A				
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	N.A
Attributes	Sample Attribute Values				
Name	N.A				

## Car Emergency Door

Ifc4 Entity	IfcDoor												
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Door</td> <td>Door</td> <td>Doors</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Door	Door	Doors	N.A				
ArchiCad	OpenBuildings	Revit	Tekla										
Door	Door	Doors	N.A										
PredefinedType	DOOR												
ObjectType	N.A												
IFC4 UserDefined PropertySet	<b>SGPset Door</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>WithSafetyFeature</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>WithElectricalContract</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>				IFC4 UserDefined Property Name	Data Type	Sample Property Values	WithSafetyFeature	Boolean	TRUE   FALSE	WithElectricalContract	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values											
WithSafetyFeature	Boolean	TRUE   FALSE											
WithElectricalContract	Boolean	TRUE   FALSE											

## Car Lobby Entrance

Ifc4 Entity	IfcDoor											
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Door</td> <td>Door</td> <td>Doors</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Door	Door	Doors	N.A			
ArchiCad	OpenBuildings	Revit	Tekla									
Door	Door	Doors	N.A									
PredefinedType	DOOR											
ObjectType	N.A											

## Car Parking Lift Entrance

Ifc4 Entity	IfcDoor											
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Door</td> <td>Door</td> <td>Doors</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Door	Door	Doors	N.A			
ArchiCad	OpenBuildings	Revit	Tekla									
Door	Door	Doors	N.A									
PredefinedType	DOOR											
ObjectType	N.A											

## Door

Ifc4 Entity	IfcDoor													
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Door</td> <td>Door</td> <td>Doors</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Door	Door	Doors	N.A					
ArchiCad	OpenBuildings	Revit	Tekla											
Door	Door	Doors	N.A											
PredefinedType	DOOR													
ObjectType	N.A													
Attributes	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>OverallWidth</td> <td>N.A</td> </tr> <tr> <td>OperationType</td> <td>SINGLE_SWING_LEFT   ROLLINGUP   SLIDING_TO_LEFT</td> </tr> <tr> <td>OverallHeight</td> <td>N.A</td> </tr> <tr> <td>TransomThickness</td> <td>N.A</td> </tr> </tbody> </table>				Attributes	Sample Attribute Values	OverallWidth	N.A	OperationType	SINGLE_SWING_LEFT   ROLLINGUP   SLIDING_TO_LEFT	OverallHeight	N.A	TransomThickness	N.A
Attributes	Sample Attribute Values													
OverallWidth	N.A													
OperationType	SINGLE_SWING_LEFT   ROLLINGUP   SLIDING_TO_LEFT													
OverallHeight	N.A													
TransomThickness	N.A													
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> </tbody> </table>				Attributes	Sample Attribute Values								
Attributes	Sample Attribute Values													

	Name	Louvre	
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	AcousticRating	Label	N.A
	FireExit	Boolean	TRUE   FALSE
	FireRating (hr)	Label	N.A
	SelfClosing	Boolean	TRUE   FALSE
	HasDrive	Boolean	TRUE   FALSE
	MechanicalLoadRating	Label	N.A
	Status	Label	Existing   New
	<b>IfcDoorLiningProperties</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	N.A	N.A	N.A
	IFC4 UserDefined PropertySet	<b>SGPset_Door</b>	
<b>IFC4 UserDefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
BarrierFreeAccessibility		Boolean	TRUE   FALSE
Lockable		Boolean	TRUE   FALSE
OneWayLockingDevice		Boolean	TRUE   FALSE
NonDuplicableKeyLock		Boolean	TRUE   FALSE
FlameSpreadClass		Label	N.A
FireShutterElectricallyOperated		Boolean	TRUE   FALSE
Orientation		Label	N.A
TransomFireRating (hr)		Label	N.A
FusibleLinkForSelfClosingDevice		Boolean	TRUE   FALSE
ElectromagneticForSelfClosingDevice		Boolean	TRUE   FALSE
ElectromechanicalForSelfClosingDevice		Boolean	TRUE   FALSE
FireAccessOpening		Boolean	TRUE   FALSE
BypassDoor		Boolean	TRUE   FALSE
MagneticBarLockingDevice		Boolean	TRUE   FALSE
HandsFree		Boolean	TRUE   FALSE
WithFanlight		Boolean	N.A
<b>SGPset_DoorDimension</b>			
<b>IFC4 UserDefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
Width (mm)	Length	N.A	

## Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Door Jamb

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	LiningThickness	N.A		
	LiningDepth	N.A		
	LiningOffset	N.A		

Ifc4 Predefined PropertySet	<b>IfcDoorLiningProperties</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	N.A	N.A	N.A

## Door Panel

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	PanelDepth		N.A	
	PanelWidth		N.A	
Ifc4 Predefined PropertySet	<b>IfcDoorPanelProperties</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	N.A	N.A	N.A	

## Double Leaf Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	OperationType		DOUBLE_DOOR_SINGLE_SWING   DOUBLE_DOOR_SINGLE_SWING_OPPO SITE_LEFT   DOUBLE_DOOR_SINGLE_SWING_OPPO SITE_RIGHT   DOUBLE_DOOR_DOUBLE_SWING	

## Entrance Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Ifc4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	MainEntrance	Boolean	TRUE   FALSE	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	

## Entrance Gate

Ifc4 Entity	IfcDoor			
-------------	---------	--	--	--



Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	GATE			
ObjectType	N.A			

## Exit Access Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			

Attributes	<b>Attributes</b>	<b>Sample Attribute Values</b>
	OperationType	SLIDING_TO_LEFT   SLIDING_TO_RIGHT   ROLLINGUP   REVOLVING   SINGLE_SWING_LEFT
	PanelWidth	N.A
	PanelDepth	N.A

IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	FireRating (hr)	Label	N.A
	SelfClosing	Boolean	TRUE   FALSE
	FireExit	Boolean	TRUE   FALSE
	MechanicalLoadRating	Label	N.A
	<b>IfcDoorPanelProperties</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	N.A	N.A	N.A

IFC4 UserDefined PropertySet	<b>SGPset_Door</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	OneWayLockingDevice	Boolean	TRUE   FALSE
	ElectromechanicalLockingDevice	Boolean	TRUE   FALSE
	SwingOut	Boolean	TRUE   FALSE
	MagneticBarLockingDevice	Boolean	TRUE   FALSE
	SmartCardLockingDevice	Boolean	TRUE   FALSE
	ManualOverrideLockingDevice	Boolean	TRUE   FALSE
	ElectromechanicalForSelfClosingDevice	Boolean	TRUE   FALSE

## Exit Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			

Attributes	<b>Attributes</b>	<b>Sample Attribute Values</b>
	N.A	TRUE   FALSE
	OperationType	DOUBLE_DOOR_SINGLE_SWING   SLIDING_TO_LEFT   SLIDING_TO_RIGHT   ROLLINGUP   REVOLVING   SINGLE_SWING_LEFT   DOUBLE_SWING
	PanelWidth	N.A
	PanelDepth	N.A

Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name	Glass		
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>			
	<b>IFC4 Predefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	FireExit	Boolean	TRUE   FALSE   SLIDING_TO_LEFT   SLIDING_TO_RIGHT   ROLLINGUP	
	FireRating (hr)	Label	N.A	
	SelfClosing	Boolean	TRUE   FALSE	
	MechanicalLoadRating	Label	N.A	
	<b>IfcDoorPanelProperties</b>			
	<b>IFC4 Predefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	N.A	N.A	N.A	
	IFC4 UserDefined PropertySet	<b>SGPset_Door</b>		
<b>IFC4 UserDefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>	
SingleLeaf		Boolean	TRUE   FALSE	
OneWayLockingDevice		Boolean	TRUE   FALSE	
ElectromechanicalLockingDevice		Boolean	TRUE   FALSE	
SwingOut		Boolean	TRUE   FALSE	
MagneticBarLockingDevice		Boolean	TRUE   FALSE	
SmartCardLockingDevice		Boolean	TRUE   FALSE	
ManualOverrideLockingDevice		Boolean	TRUE   FALSE	

## Fire Shutter

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	OperationType	ROLLINGUP		
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name	N.A		
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>			
	<b>IFC4 Predefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	FireRating (hr)	Label	N.A	
	FireExit	Boolean	TRUE   FALSE	
	FireRating	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	FusibleLinkForSelfClosingDevice	Boolean	TRUE   FALSE	
	Orientation	Label	N.A	
	FullClosureMaxTime (s)	Label	N.A	
	DescendingSpeed (m/s)	Label	N.A	
	ThermalInsulated	Boolean	TRUE   FALSE	
	ExternalReference	Label	SS 489 Specification for fire shutters	
	FullClosureMaxTime	Label	N.A	

## Flap Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	USERDEFINED			
ObjectType	FLAPDOOR			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	N.A		TRUE   FALSE	
	PanelDepth		N.A	
	PanelWidth		N.A	
	LiningThickness		N.A	
	ThresholdThickness		N.A	
IFC4 Predefined PropertySet	<b>IfcDoorPanelProperties</b>			
	<b>IFC4 Predefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	N.A		N.A	N.A
	<b>IfcDoorLiningProperties</b>			
	<b>IFC4 Predefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	N.A		N.A	N.A
IFC4 UserDefined PropertySet	<b>SGPset Door</b>			
	<b>IFC4 UserDefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	CorrosionResistant		Boolean	TRUE   FALSE

## Folding Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	OperationType		FOLDING_TO_LEFT	

## Gate

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	GATE			
ObjectType	N.A			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	OperationType		N.A	
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 Predefined PropertySet	<b>Pset DoorCommon</b>			
	<b>IFC4 Predefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	SelfClosing		Boolean	TRUE   FALSE
Status		Label	New	

## Glass Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Glass	
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FlameSpreadClass	Label	N.A	

## Inspection Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			

## Intermediate Landing Emergency Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			

## Key Hole

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			

## Landing Emergency Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A

PredefinedType	DOOR		
ObjectType	N.A		
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>
	OperationType	SINGLE_SWING_LEFT	
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	SelfClosing	Boolean	TRUE   FALSE
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	SelfLocking	Boolean	TRUE   FALSE
	LandingDoorLock	Boolean	TRUE   FALSE
	WithElectricalContract	Boolean	TRUE   FALSE

## Lift Car Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	OperationType	N.A		
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name	Intumescent Glass		
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	MechanicalLock	Boolean	TRUE   FALSE	

## Lift Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	

## Lift Landing Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A

PredefinedType	DOOR		
ObjectType	N.A		
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>
	OperationType	SINGLE_SWING_LEFT	
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>
	Name	Intumescent Glass	
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	FireExit	Boolean	TRUE   FALSE
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	ElectricalSafetySwitch	Boolean	TRUE   FALSE
	ElectromechanicalLockingDevice	Boolean	TRUE   FALSE
	DrivenByLiftCarDoor	Boolean	TRUE   FALSE
	SpringClosingDevice	Boolean	TRUE   FALSE
	WeightClosingDevice	Boolean	TRUE   FALSE
	EmergencyUnlockingDevice	Boolean	TRUE   FALSE

## Lift Landing Door Frame

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	

## Maintenance Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ElectricalSafetySwitch	Boolean	TRUE   FALSE	

## One-way Swing Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			

Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	OperationType		SINGLE_SWING_LEFT	
IFC4 UserDefined PropertySet	<b>SGPset Door</b>			
	<b>IFC4 UserDefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	PowerOperated		Boolean	TRUE   FALSE

## Phenolic Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Phenolic	

## Pintu Pagar

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	GATE			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>			
	<b>IFC4 Predefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	Status		Label	New

## Platform Lift Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			

## Recyclables Refuse Chute Access Panel

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	USERDEFINED			
ObjectType	RECYCLABLESCHUTEACCESSPANEL			

## Recyclables Refuse Chute Hopper

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	USERDEFINED			
ObjectType	RECYCLABLESCHUTEHOPPER			
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SelfClosing	Boolean	TRUE   FALSE	
	FireRating (hr)	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Airtight	Boolean	TRUE   FALSE	
	SoftClosing	Boolean	TRUE   FALSE	
	VolumeControlled	Boolean	TRUE   FALSE	

## Refuse Chute Access Panel

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	USERDEFINED			
ObjectType	REFUSECHUTEACCESSPANEL			

## Refuse Chute Hopper

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	USERDEFINED			
ObjectType	REFUSECHUTEHOPPER			
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SelfClosing	Boolean	TRUE   FALSE	
	FireRating (hr)	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Airtight	Boolean	TRUE   FALSE	
	SoftClosing	Boolean	TRUE   FALSE	
	VolumeControlled	Boolean	TRUE   FALSE	

## Revolving Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			



ObjectType	N.A		
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>
	OperationType	REVOLVING	
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	BarrierFreeAccessibility	Boolean	TRUE   FALSE

## Roller Shutter Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	OperationType	ROLLINGUP		
	LiningThickness	N.A		
	PanelWidth	N.A		
	PanelDepth	N.A		
	ThresholdThickness	N.A		
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	ROLLINGUP	
	<b>IfcDoorLiningProperties</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	N.A	N.A	N.A	
	<b>IfcDoorPanelProperties</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	N.A	N.A	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SmokeDetection	Boolean	TRUE   FALSE	
	FireShutterElectricallyOperated	Boolean	TRUE   FALSE	
	Perforated	Boolean	TRUE   FALSE	

## Security Gate

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	GATE			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name	N.A		
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	N.A	

## Self-closing Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SelfClosing	Boolean	TRUE   FALSE	

## Shutter

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Attributes	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	OperationType	ROLLINGUP		

## Single Leaf Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Attributes	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	OperationType	SINGLE_SWING_LEFT		

## Sliding Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Attributes	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	OperationType	SLIDING_TO_LEFT		

## Sliding Gate

Ifc4 Entity	IfcDoor			
-------------	---------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	GATE			
ObjectType	N.A			
Attributes	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	OperationType	SLIDING_TO_LEFT		
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireAlarmActivated	Boolean	TRUE   FALSE	
	ManualOverrideLockingDevice	Boolean	TRUE   FALSE	

## Smoke Check Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_DoorCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	

## Swing Gate

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	GATE			
ObjectType	N.A			
Attributes	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	OperationType	SINGLE_SWING_LEFT		
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireAlarmActivated	Boolean	TRUE   FALSE	
	ManualOverrideLockingDevice	Boolean	TRUE   FALSE	

## Trap Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	TRAPDOOR			
ObjectType	N.A			
Attributes	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	OperationType	SINGLE_SWING_LEFT		

IFC4 UserDefined PropertySet	<b>SGPset_Door</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Counterbalanced	Boolean	TRUE   FALSE
	OpeningSize (m)	Length	N.A

## Trash Chute Door

IFC4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	USERDEFINED			
ObjectType	TRASHCHUTEDOOR			
Attributes	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	PanelDepth	N.A		
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		
IFC4 Predefined PropertySet	<b>IfcDoorPanelProperties</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	N.A	N.A	N.A	
	<b>Pset_DoorCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SelfClosing	Boolean	TRUE   FALSE	
IFC4 UserDefined PropertySet	<b>SGPset_Door</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	WithRubberGasket	Boolean	TRUE   FALSE	

## Two-way Swing Door

IFC4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			
Attributes	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	OperationType	DOUBLE_SWING		

## Vision Panel

IFC4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	DOOR			
ObjectType	N.A			

## Wicket Door

Ifc4 Entity	IfcDoor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Door	Door	Doors	N.A
PredefinedType	USERDEFINED			
ObjectType	WICKET			
Attributes	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	OperationType	SINGLE_SWING_LEFT		

## IfcElectricMotor

### Electric Motor

Ifc4 Entity	IfcElectricMotor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Mechanical Element	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## IfcFooting

### Footing

Ifc4 Entity	IfcFooting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Footing	Footing	Structural Foundations	Concrete Footing
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Brick		

### Footing Beam

Ifc4 Entity	IfcFooting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Footing	Corbel/Haunch	Structural Foundations	N.A
PredefinedType	FOOTING_BEAM			
ObjectType	N.A			

## IfcFurniture

### Accessible Water Closet Compartment

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	CUBICLE			
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	

## Ambulant Disabled Water Closet Compartment

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	CUBICLE			
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AmbulantDisabled	Boolean	TRUE   FALSE	

## Bed

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	BED			
ObjectType	N.A			

## Bench

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	BENCH			
IFC4 Predefined PropertySet	<b>Pset_FurnitureTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IsBuiltIn	Boolean	TRUE   FALSE	
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Capacity (L)	Label	N.A	

## Breathing Apparatus Cabinet

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	BREATHINGAPPARATUSCABINET			

## Bus Shelter

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	BUSHELTER			

## Cabinet

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	CABINET			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Steel		
IFC4 Predefined PropertySet	<b>Pset_FurnitureTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Style	Label	Modular	
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	FALSE	

## Chair

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	CHAIR			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_FurnitureTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IsBuiltIn	Boolean	TRUE   FALSE	
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	BS 5852 Methods of Test for the Ignitability by Smokers Materials of Upholstered Composites for Seating	

## Child Protection Seat

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A

PredefinedType	USERDEFINED
ObjectType	CHILDPROTECTIONSEAT

## Convex Mirror

Ifc4 Entity	IfcFurniture								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Furniture	Furniture	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Object	Furniture	Furniture	N.A						
PredefinedType	USERDEFINED								
ObjectType	CONVEXMIRROR								

## Cubicle

Ifc4 Entity	IfcFurniture								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Furniture	Furniture	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Object	Furniture	Furniture	N.A						
PredefinedType	USERDEFINED								
ObjectType	CUBICLE								

## Desk

Ifc4 Entity	IfcFurniture								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Furniture	Furniture	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Object	Furniture	Furniture	N.A						
PredefinedType	DESK								
ObjectType	N.A								

## Diaper Changing Station

Ifc4 Entity	IfcFurniture								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Furniture	Furniture	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Object	Furniture	Furniture	N.A						
PredefinedType	USERDEFINED								
ObjectType	DIAPERCHANGINGTABLE								

## Display Case

Ifc4 Entity	IfcFurniture								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Furniture	Furniture	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Object	Furniture	Furniture	N.A						
PredefinedType	USERDEFINED								
ObjectType	DISPLAYCASE								

## Emergency Voice Communication Cabinet

Ifc4 Entity	IfcFurniture								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Furniture	Generic Models	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Object	Furniture	Generic Models	N.A						
PredefinedType	USERDEFINED								
ObjectType	EMERGENCYVOICECOMMUNICATIONCABINET								



## Fire Extinguisher Cabinet

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FIREEXTINGUISHERCABINET			

## Fire Hose Cabinet

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FIREHOSECABINET			
IFC4 Predefined PropertySet	<b>Pset_FurnitureTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	NominalDepth (mm)	Length	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	FALSE	

## Fitness Equipment

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	FITNESSEQUIPMENT			

## Furniture

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Letter Box

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	LETTERBOX			

## Litter Bin

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	LITTERBIN			

## Mirror

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	MIRROR			

## Paper Towel Dispenser

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	PAPERTOWELDISPENSER			

## Planter Box

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	PLANTERBOX			

## Playground Equipment

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	PLAYGROUNDEQUIPMENT			

## Prefabricated Kitchen Cabinet

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	USERDEFINED			
ObjectType	CABINET			
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Prefabricated	

## Rack

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	RACK			

## Recyclables Compactor

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	RECYCLABLECOMPACTOR			
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	CompactionRatio	Label	Sample Value(s): 2:1	
	Litre (L)	Label	Sample Value(s): 240 L	
	ExternalReference	Label	DIN 30722 Roller contact tipper vehicles   roller containers	
	ColourCode	Label	N.A	
	Material_BasePlate	Label	N.A	
	BasePlate_Thickness (mm)	Length	Sample Value(s): 6 mm	
	TailGateOrientation	Label	Inward Facing	
	HookUpPoint	Label	Outward Facing	

## Recyclables Container

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	RECYCLABLECONTAINER			
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	CompactionRatio	Label	Sample Value(s): 2:1	
	Litre (L)	Label	Sample Value(s): 240 L	
	ExternalReference	Label	DIN 30722 Roller contact tipper vehicles   roller containers	
	ColourCode	Label	N.A	
	Material_BasePlate	Label	N.A	
	BasePlate_Thickness (mm)	Length	Sample Value(s): 6 mm	
	TailGateOrientation	Label	Inward Facing	
	HookUpPoint	Label	Outward Facing	

## Recycling Bin

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A

PredefinedType	USERDEFINED												
ObjectType	RECYCLINGBIN												
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>												
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Litre (L)</td> <td>Label</td> <td>Sample Value(s): 240 L</td> </tr> <tr> <td>Wheeled</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>ExternalReference</td> <td>Label</td> <td>SS EN 840 Singapore Standard for mobile waste and recycling containers</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Litre (L)	Label	Sample Value(s): 240 L	Wheeled	Boolean	TRUE   FALSE	ExternalReference	Label	SS EN 840 Singapore Standard for mobile waste and recycling containers
	IFC4 UserDefined Property Name	Data Type	Sample Property Values										
	Litre (L)	Label	Sample Value(s): 240 L										
Wheeled	Boolean	TRUE   FALSE											
ExternalReference	Label	SS EN 840 Singapore Standard for mobile waste and recycling containers											

## Refuse Bin

Ifc4 Entity	IfcFurniture												
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Furniture	Furniture	N.A				
	ArchiCad	OpenBuildings	Revit	Tekla									
Object	Furniture	Furniture	N.A										
PredefinedType	USERDEFINED												
ObjectType	REFUSEBIN												
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>												
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Litre (L)</td> <td>Label</td> <td>Sample Value(s): 240 L</td> </tr> <tr> <td>Wheeled</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>ExternalReference</td> <td>Label</td> <td>SS EN 840 Singapore Standard for mobile waste and recycling containers</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Litre (L)	Label	Sample Value(s): 240 L	Wheeled	Boolean	TRUE   FALSE	ExternalReference	Label	SS EN 840 Singapore Standard for mobile waste and recycling containers
	IFC4 UserDefined Property Name	Data Type	Sample Property Values										
	Litre (L)	Label	Sample Value(s): 240 L										
Wheeled	Boolean	TRUE   FALSE											
ExternalReference	Label	SS EN 840 Singapore Standard for mobile waste and recycling containers											

## Refuse Compactor

Ifc4 Entity	IfcFurniture																											
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Furniture	Furniture	N.A																			
	ArchiCad	OpenBuildings	Revit	Tekla																								
Object	Furniture	Furniture	N.A																									
PredefinedType	USERDEFINED																											
ObjectType	REFUSECOMPACTOR																											
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>																											
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>CompactionRatio</td> <td>Label</td> <td>Sample Value(s): 2:1</td> </tr> <tr> <td>Litre (L)</td> <td>Label</td> <td>Sample Value(s): 240 L</td> </tr> <tr> <td>ExternalReference</td> <td>Label</td> <td>DIN 30722 Roller contact tipper vehicles   roller containers</td> </tr> <tr> <td>ColourCode</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>Material_BasePlate</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>BasePlate_Thickness (mm)</td> <td>Length</td> <td>Sample Value(s): 6 mm</td> </tr> <tr> <td>TailGateOrientation</td> <td>Label</td> <td>Inward Facing</td> </tr> <tr> <td>HookUpPoint</td> <td>Label</td> <td>Outward Facing</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	CompactionRatio	Label	Sample Value(s): 2:1	Litre (L)	Label	Sample Value(s): 240 L	ExternalReference	Label	DIN 30722 Roller contact tipper vehicles   roller containers	ColourCode	Label	N.A	Material_BasePlate	Label	N.A	BasePlate_Thickness (mm)	Length	Sample Value(s): 6 mm	TailGateOrientation	Label	Inward Facing	HookUpPoint	Label	Outward Facing
	IFC4 UserDefined Property Name	Data Type	Sample Property Values																									
	CompactionRatio	Label	Sample Value(s): 2:1																									
	Litre (L)	Label	Sample Value(s): 240 L																									
	ExternalReference	Label	DIN 30722 Roller contact tipper vehicles   roller containers																									
	ColourCode	Label	N.A																									
	Material_BasePlate	Label	N.A																									
	BasePlate_Thickness (mm)	Length	Sample Value(s): 6 mm																									
	TailGateOrientation	Label	Inward Facing																									
HookUpPoint	Label	Outward Facing																										

## Refuse Container

Ifc4 Entity	IfcFurniture									
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Furniture	Furniture	N.A	
	ArchiCad	OpenBuildings	Revit	Tekla						
Object	Furniture	Furniture	N.A							
PredefinedType	USERDEFINED									
ObjectType	REFUSECONTAINER									
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>									
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>CompactionRatio</td> <td>Label</td> <td>Sample Value(s): 2:1</td> </tr> <tr> <td>Litre (L)</td> <td>Label</td> <td>Sample Value(s): 240 L</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	CompactionRatio	Label	Sample Value(s): 2:1	Litre (L)	Label	Sample Value(s): 240 L
	IFC4 UserDefined Property Name	Data Type	Sample Property Values							
CompactionRatio	Label	Sample Value(s): 2:1								
Litre (L)	Label	Sample Value(s): 240 L								

ExternalReference	Label	DIN 30722 Roller contact tipper vehicles   roller containers
ColourCode	Label	N.A
Material_BasePlate	Label	N.A
BasePlate_Thickness (mm)	Length	Sample Value(s): 6 mm
TailGateOrientation	Label	Inward Facing
HookUpPoint	Label	Outward Facing

## Sanitary Bin

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	SANITARYBIN			

## Seating

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	BENCH			

## Shelf

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	SHELF			
ObjectType	N.A			

## Shower Cubicle

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	CUBICLE			

## Shut-off Valve Pull Box

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SHUTOFFVALVEBOX			

## Soap Dispenser

Ifc4 Entity	IfcFurniture			
-------------	--------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	SOAPDISPENSER			
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IsTransparent	Boolean	TRUE   FALSE	

## Table

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	TABLE			
ObjectType	N.A			

## Taxi Shelter

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	TAXISHELTER			

## Toilet Paper Holder

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	TOILETPAPERHOLDER			

## Umbrella

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	UMBRELLA			

## Utility Box

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	UTILITYCABINET			
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>			

IFC4 UserDefined Property Name	Data Type	Sample Property Values
Combustible	Boolean	FALSE

## Wardrobe

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	CABINET			
IFC4 Predefined PropertySet	<b>Pset_FurnitureTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Style	Label	Pole System	

## Water Closet Compartment

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	USERDEFINED			
ObjectType	CUBICLE			

## Workstation

Ifc4 Entity	IfcFurniture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Furniture	Furniture	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Furniture</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SecurityCardAccess	Boolean	TRUE   FALSE	
	CarParkAccess	Boolean	TRUE   FALSE	
	FireAlarmGraphicSystem	Boolean	TRUE   FALSE	
	WalkieTalkieChargingStation	Boolean	TRUE   FALSE	
ACMVSsystem	Boolean	TRUE   FALSE		

## IfcGeographicElement

### 2D Land Lot

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_LANDLOT			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	LandLotNumber	Label	MK05-04512W	

## Air Space Lot

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	AIRSPACELOT			
IFC4 UserDefined PropertySet	<b>SGPset GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	LandLotNumber	Label	MK05-04512W Sample Value(s): MK01-80018T   MK01-70001W	
	LandLotArea (m2)	Area	58867.4	
	GeocodeID	Label	254XCJFLKJSNEJK	
	ParcelType	Label	Airspace	
	SVYFileNumber	Label	0536-1985 Sample Value(s): 3557-2019	
	LotStatus	Label	Live Sample Value(s): Provisional	
	OldFormatLotNumber	Label	MK01-229-1	
	BalanceLotIndicator	Boolean	TRUE   FALSE	
	HouseNumber	Label	38D	
	StreetName_StreetCode	Label	JALAN MAT JAMBOL(MAJ01M)	
	LevelNumber	Label	01	
	UnitNumber	Label	05	
	BuildingName_Source	Label	ISLAND VIEW (URA)	
PostalCode	Label	119522		
PlanNumber	Label	CP20628		

## Artwork

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	ARTWORK			

## Beach

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	BEACH			

## Bedding

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FOUNDATION			
IFC4 UserDefined PropertySet	<b>SGPset GeographicElement</b>			



IFC4 UserDefined Property Name	Data Type	Sample Property Values
BeddingType	Label	Type 1 Sample Value(s): Type 3   Type 2

## Controlled Watercourse

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	WATERBODY			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	IFC4 UserDefined Property Name	Data Type	Sample Property Values	
	PUBControlled	Boolean	TRUE   FALSE	

## Electrical Post

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	UTILITYPOLE			

## Existing Earthworks

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	EXISTINGEARTHWORKS			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElementDimension</b>			
	IFC4 UserDefined Property Name	Data Type	Sample Property Values	
	Area (m2)	Area	N.A	

## External Planting

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Planting	N.A
PredefinedType	USERDEFINED			
ObjectType	LANDSCAPE_EXTERNALPLANTING			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	IFC4 UserDefined Property Name	Data Type	Sample Property Values	
	ApprovedSoilMixture	Boolean	TRUE   FALSE	

## Foreshore Line

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_FORESHORELINE			

## Garden Floor Plate

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	PLANTINGAREA			

## Green Verge

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GREENVERGE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Sample Value(s): Proposed/New   To be Removed   Existing	
	ApprovedSoilMixture	Boolean	TRUE   FALSE	
	<b>SGPset_GeographicElementDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
Area (m2)	Area	N.A		

## Mega Underground Development

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	SUBTERRANEANLOT			

## Neighbouring Lot

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	NEIGHBOURINGLOT			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_LandUse	Label	N.A	
	GIS_TreeConservationArea	Boolean	TRUE   FALSE	
	VacantLand	Boolean	TRUE   FALSE	

	GIS_ApprovedMasterplanUse	Label	N.A
--	---------------------------	-------	-----

## Palm

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Planting	N.A
PredefinedType	USERDEFINED			
ObjectType	LANDSCAPE_PALM			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Sample Value(s): To be felled/removed   To be planted/proposed/new   To be transplanted   To be retained	
	Girth (m)	Length	N.A	
	Species	Label	N.A	
	TreeSize	Label	N.A	
	PalmType	Label	Sample Value(s): Cluster   Single stem	
SingleStem	Boolean	TRUE   FALSE		

## Planting Area

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	PLANTINGAREA			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Sample Value(s): Proposed/New   To be Removed   Existing	
	<b>SGPset_GeographicElementDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Area (m2)	Area	N.A	

## Proposed Earthworks

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	PROPOSEDEARTHWORKS			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElementDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Area (m2)	Area	N.A	

## Proposed Site (Land Lot)

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation				

	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Mesh	Mesh	Topography	N.A																																								
ArchiCad	OpenBuildings	Revit	Tekla																																														
Mesh	Mesh	Topography	N.A																																														
PredefinedType	USERDEFINED																																																
ObjectType	LANDLOT																																																
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>																																																
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ParcelType</td> <td>Label</td> <td>Land</td> </tr> <tr> <td>LandLotNumber</td> <td>Label</td> <td>MK05-04512W <i>Sample Value(s):</i> MK01-80018T   MK01-70001W</td> </tr> <tr> <td>LandLotArea (m2)</td> <td>Area</td> <td>58867.4</td> </tr> <tr> <td>GeocodeID</td> <td>Label</td> <td>254XCJFLKJSNEJK</td> </tr> <tr> <td>SVYFileNumber</td> <td>Label</td> <td>0536-1985 <i>Sample Value(s):</i> 3557-2019</td> </tr> <tr> <td>LotStatus</td> <td>Label</td> <td>Live <i>Sample Value(s):</i> Provisional</td> </tr> <tr> <td>OldFormatLotNumber</td> <td>Label</td> <td>MK01-229-1</td> </tr> <tr> <td>BalanceLotIndicator</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>HouseNumber</td> <td>Label</td> <td>38D</td> </tr> <tr> <td>StreetName_StreetCode</td> <td>Label</td> <td>JALAN MAT JAMBOL(MAJ01M)</td> </tr> <tr> <td>LevelNumber</td> <td>Label</td> <td>01</td> </tr> <tr> <td>UnitNumber</td> <td>Label</td> <td>05</td> </tr> <tr> <td>BuildingName_Source</td> <td>Label</td> <td>ISLAND VIEW (URA)</td> </tr> <tr> <td>PostalCode</td> <td>Label</td> <td>119522</td> </tr> <tr> <td>PlanNumber</td> <td>Label</td> <td>CP20628</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ParcelType	Label	Land	LandLotNumber	Label	MK05-04512W <i>Sample Value(s):</i> MK01-80018T   MK01-70001W	LandLotArea (m2)	Area	58867.4	GeocodeID	Label	254XCJFLKJSNEJK	SVYFileNumber	Label	0536-1985 <i>Sample Value(s):</i> 3557-2019	LotStatus	Label	Live <i>Sample Value(s):</i> Provisional	OldFormatLotNumber	Label	MK01-229-1	BalanceLotIndicator	Boolean	TRUE   FALSE	HouseNumber	Label	38D	StreetName_StreetCode	Label	JALAN MAT JAMBOL(MAJ01M)	LevelNumber	Label	01	UnitNumber	Label	05	BuildingName_Source	Label	ISLAND VIEW (URA)	PostalCode	Label	119522	PlanNumber	Label	CP20628
	IFC4 UserDefined Property Name	Data Type	Sample Property Values																																														
	ParcelType	Label	Land																																														
	LandLotNumber	Label	MK05-04512W <i>Sample Value(s):</i> MK01-80018T   MK01-70001W																																														
	LandLotArea (m2)	Area	58867.4																																														
	GeocodeID	Label	254XCJFLKJSNEJK																																														
	SVYFileNumber	Label	0536-1985 <i>Sample Value(s):</i> 3557-2019																																														
	LotStatus	Label	Live <i>Sample Value(s):</i> Provisional																																														
	OldFormatLotNumber	Label	MK01-229-1																																														
	BalanceLotIndicator	Boolean	TRUE   FALSE																																														
	HouseNumber	Label	38D																																														
	StreetName_StreetCode	Label	JALAN MAT JAMBOL(MAJ01M)																																														
	LevelNumber	Label	01																																														
	UnitNumber	Label	05																																														
BuildingName_Source	Label	ISLAND VIEW (URA)																																															
PostalCode	Label	119522																																															
PlanNumber	Label	CP20628																																															

## Public Land

Ifc4 Entity	IfcGeographicElement								
Proposed BIM Representation	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Mesh	Mesh	Topography	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Mesh	Mesh	Topography	N.A						
PredefinedType	Need not specify								
ObjectType	N.A								
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>								
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>GIS_LandOwnership</td> <td>Label</td> <td>STATE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	GIS_LandOwnership	Label	STATE		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
GIS_LandOwnership	Label	STATE							

## Retention Basin

Ifc4 Entity	IfcGeographicElement								
Proposed BIM Representation	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Mesh	Mesh	Topography	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Mesh	Mesh	Topography	N.A						
PredefinedType	USERDEFINED								
ObjectType	RETENTIONBASIN								

## Road

Ifc4 Entity	IfcGeographicElement								
Proposed BIM Representation	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Mesh	Mesh	Topography	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Mesh	Mesh	Topography	N.A						
PredefinedType	USERDEFINED								
ObjectType	GIS_ROAD								
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>								
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>RoadName</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	RoadName	Label	N.A		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
RoadName	Label	N.A							

## Roadside Verge

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GREENVERGE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElementDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Area (m2)	Area	N.A	
	<b>SGPset_GeographicElement</b>			
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>		
ApprovedSoilMixture	Boolean	TRUE   FALSE		

## Service Verge

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	PLANTINGAREA			

## Shrub

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LANDSCAPE_SHRUBS			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Turf	Boolean	TRUE   FALSE	
	Species	Label	N.A	
Status	Label	Sample Value(s): To be felled/removed   To be planted/proposed/new   To be transplanted   To be retained		

## Site Boundary (Cadastral Lot)

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	CADASTRALLOT			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	VacantLand	Boolean	TRUE   FALSE	
	ApprovedSoilMixture	Boolean	TRUE   FALSE	
GIS_TreeConservationArea	Boolean	TRUE   FALSE		

	<b>SGPset_GeographicElementDimension</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Area (m2)	Area	N.A

## Soil

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	PLANTINGAREA			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Turf	Boolean	TRUE   FALSE	
	ApprovedSoilMixture	Boolean	TRUE   FALSE	
	Status	Label	Sample Value(s): To be felled/removed   To be planted/proposed/new   To be transplanted   To be retained	
	TurfSpecies	Label	N.A	
	Species	Label	Axonopus compressus	

## Subterranean Lot

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	SUBTERRANEANLOT			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	LandLotNumber	Label	MK05-04512W Sample Value(s): MK01-80018T   MK01-70001W	
	LandLotArea (m2)	Area	58867.4	
	GeocodeID	Label	254XCJFLKJSNEJK	
	ParcelType	Label	Subterranean	
	SVYFileNumber	Label	0536-1985 Sample Value(s): 3557-2019	
	LotStatus	Label	Live Sample Value(s): Provisional	
	OldFormatLotNumber	Label	MK01-229-1	
	BalanceLotIndicator	Boolean	TRUE   FALSE	
	HouseNumber	Label	38D	
	StreetName_StreetCode	Label	JALAN MAT JAMBOL(MAJ01M)	
	LevelNumber	Label	01	
	UnitNumber	Label	05	
	BuildingName_Source	Label	ISLAND VIEW (URA)	
	PostalCode	Label	119522	
	PlanNumber	Label	CP20628	

## Traffic Light

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			

ObjectType	TRAFFICLIGHT
------------	--------------

## Tree

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Planting	N.A
PredefinedType	USERDEFINED			
ObjectType	LANDSCAPE_TREE			
IFC4 UserDefined PropertySet	<b>SGPset GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	Status		Label	Sample Value(s): To be felled/removed   To be planted/proposed/new   To be transplanted   To be retained
	Girth (m)		Length	N.A
	ReasonForRemoval		Label	N.A
	Species		Label	N.A
	TreeNumber		Label	N.A
	TreeSize		Label	N.A
	SingleStem		Boolean	TRUE   FALSE
	<b>SGPset GeographicElementDimension</b>			
	<b>IFC4 UserDefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	Height (m)		Length	N.A

## Water Body

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	WATERBODY			

## Water Feature

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	WATERFEATURE			

## Watercourse

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	WATERBODY			

## Waterfront

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation				

	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	WATERBODY			

## IfcGrid

### Gridline

Ifc4 Entity	IfcGrid			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Grid	Grid	Grid	Grid
PredefinedType	Need not specify			
ObjectType	N.A			

### Structural Grid

Ifc4 Entity	IfcGrid			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Grid	Grid	Grid	Grid
PredefinedType	Need not specify			
ObjectType	N.A			

## IfcJunctionBox

### Junction Box

Ifc4 Entity	IfcJunctionBox			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

### Lightning Control Box

Ifc4 Entity	IfcJunctionBox			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	POWER			
ObjectType	N.A			

### OG Box

Ifc4 Entity	IfcJunctionBox			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Electrical Equipment	N.A
PredefinedType	POWER			
ObjectType	N.A			



## Power

Ifc4 Entity	IfcJunctionBox			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	POWER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_JunctionBox</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	

## SCV Box

Ifc4 Entity	IfcJunctionBox			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	POWER			
ObjectType	N.A			

## Traffic Control Box

Ifc4 Entity	IfcJunctionBox			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	TRAFFICCONTROL			

## IfcMember

### Stringer

Ifc4 Entity	IfcMember			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item
PredefinedType	STRINGER			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		

### Supporting Structure

Ifc4 Entity	IfcMember			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Steel		

IFC4 Predefined PropertySet	<b>Pset_MemberCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	FireRating (hr)	Label	N.A
IFC4 UserDefined PropertySet	<b>SGPset_Member</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Combustible	Boolean	FALSE   TRUE   FALSE
	Material_MeltingPoint (C)	Label	N.A

## IfcMotorConnection

### Governor

Ifc4 Entity	IfcMotorConnection			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mechanical Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_GOVERNOR			
IFC4 UserDefined PropertySet	<b>SGPset_MotorConnection</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GovernorType	Label	Over speed	

### Governor Rope

Ifc4 Entity	IfcMotorConnection			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mechanical Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_GOVERNOR			
IFC4 UserDefined PropertySet	<b>SGPset_MotorConnection</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Governor_RopeDiameter	Length	N.A	

### Motor

Ifc4 Entity	IfcMotorConnection			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mechanical Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_MotorConnection</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	NoVoltRelease	Boolean	TRUE   FALSE	
	OverloadRelay	Boolean	TRUE   FALSE	
	MagneticTrip	Boolean	TRUE   FALSE	

## Traction Machine

Ifc4 Entity	IfcMotorConnection			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mechanical Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT_TRACTIONMACHINE			
IFC4 UserDefined PropertySet	<b>SGPset_MotorConnection</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RopeDiameter (mm)	Length	N.A	
	RopeCount	Integer	N.A	

## IfcOpeningElement

### Access Opening

Ifc4 Entity	IfcOpeningElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Opening	Opening	Void	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

### Air Intake Opening

Ifc4 Entity	IfcOpeningElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Opening	Opening	Void	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

### Entrance Opening

Ifc4 Entity	IfcOpeningElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Opening	Opening	Generic Models	N.A
PredefinedType	OPENING			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_OpeningElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	MainEntrance	Boolean	TRUE   FALSE	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	

### Exit Opening

Ifc4 Entity	IfcOpeningElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Opening	Opening	Void	N.A

PredefinedType	Need not specify
ObjectType	N.A

## Opening

Ifc4 Entity	IfcOpeningElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Opening	Opening	Shaft Openings	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_OpeningElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	EngineeredSmokeControlSystem	Boolean	TRUE   FALSE	
	MainEntrance	Boolean	TRUE   FALSE	

## Opening Element

Ifc4 Entity	IfcOpeningElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Opening	Opening	Generic Models	N.A
PredefinedType	OPENING			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_OpeningElementCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Existing	

## Opening Element

Ifc4 Entity	IfcOpeningElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Opening	Opening	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Recess

Ifc4 Entity	IfcOpeningElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Opening	Opening	Void	N.A
PredefinedType	RECESS			
ObjectType	N.A			

## Slab Opening

Ifc4 Entity	IfcOpeningElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Opening	Opening	Shaft Openings	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Unprotected Opening

Ifc4 Entity	IfcOpeningElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Opening	Opening	Void	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Ventilation Opening

Ifc4 Entity	IfcOpeningElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Opening	Opening	Void	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## IfcPile

### Pile

Ifc4 Entity	IfcPile			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Base Plate	Structural Foundations	Concrete Column
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	

### Piling

Ifc4 Entity	IfcPile			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Base Plate	Structural Foundations	Concrete Column
PredefinedType	SUPPORT			
ObjectType	N.A			

## IfcPlate

### Curtain Panel

Ifc4 Entity	IfcPlate			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Curtain Wall	Curtain Wall	Curtain Systems	N.A
PredefinedType	CURTAIN_PANEL			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	

## Orifice Plate

Ifc4 Entity	IfcPlate			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Curtain Wall	Curtain Wall	Curtain Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	ORIFICE			

## Solar Panel

Ifc4 Entity	IfcPlate			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Curtain Wall	Curtain Wall	Curtain Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	SOLARPANEL			
IFC4 Predefined PropertySet	<b>Pset_PlateCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	

## Steel Plate

Ifc4 Entity	IfcPlate			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	SHEET			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Stainless Steel Sample Value(s): Mild Steel		

## IfcProject

### GIS Coordinates

Ifc4 Entity	IfcProject			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ifc Project Manager	Floor Manager	Project Information	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Attributes	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Eastings	N.A		
	Northings	N.A		
IFC4 Predefined PropertySet	<b>IfcMapConversion</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	N.A	N.A	N.A	

## Project Global Positioning

Ifc4 Entity	IfcProject			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Project Manager	Floor Manager	Project Information	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Eastings		N.A	
	Northings		N.A	
IFC4 Predefined PropertySet	<b>IfcMapConversion</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	N.A	N.A	N.A	

## IfcRailing

### Baluster

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	GUARDRAIL			
ObjectType	N.A			

### Balustrade

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	BALUSTRADE			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_RailingCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Height (m)	Length	N.A	
	Status	Label	Existing	

### Bollard

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	USERDEFINED			
ObjectType	BOLLARD			

### Escalator Handrail

Ifc4 Entity	IfcRailing			
-------------	------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	USERDEFINED			
ObjectType	ESCALATORHANDRAIL			
IFC4 UserDefined PropertySet	<b>SGPset_Railing</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Balustrade_Material	Label	N.A	

## External Railing

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_RailingCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IsExternal	Boolean	TRUE	

## Grab Bar

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	HANDRAIL			
ObjectType	N.A			

## Guardrail

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	GUARDRAIL			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Glass		
IFC4 UserDefined PropertySet	<b>SGPset_RailingDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Height (mm)	Length	N.A	
	LateralLoad (kN/m)	Label	N.A	
	<b>SGPset_Railing</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TypeOfGlass	Label	Toughened Glass	
SafetyBarrier	Boolean	TRUE   FALSE		
TypeOfBarrier	Label	Full Height Barrier		
ExternalReference	Label	Drawing No. 4		



## Handrail

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	Railing
PredefinedType	HANDRAIL			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Metal	
IFC4 UserDefined PropertySet	<b>SGPset_Railing</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	KerbWidth (mm)	Length	N.A	
	KerbHeight (mm)	Length	N.A	
	<b>SGPset_RailingDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
Height	Length	N.A		

## Outrigger

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Platform Lift Partition

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	USERDEFINED			
ObjectType	PLATFORMLIFTPARTITION			

## Prefabricated Railing

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Railing</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Prefabricated	

## Rail

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	Railing	Railing	Railings	N.A
PredefinedType	GUARDRAIL			
ObjectType	N.A			

## Railing

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	Component
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Metal	
IFC4 UserDefined PropertySet	<b>SGPset_Railing</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	N.A	
ExternalReference	Label	Drawing 06   LTA/SDRE14/5/RAL1 STANDARD DETAILS OF ROAD ELEMENTS		

## Raised Barrier

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	GUARDRAIL			
ObjectType	N.A			

## Safety Railing

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Security Fence

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	

## Staircase Handrail

Ifc4 Entity	IfcRailing			
-------------	------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	HANDRAIL			
ObjectType	N.A			

## Vehicle Impact Guard

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	USERDEFINED			
ObjectType	PIER			

## IfcRamp

### Curved Ramp

Ifc4 Entity	IfcRamp			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ramp	Object	Ramps	Item
PredefinedType	USERDEFINED			
ObjectType	CURVEDRAMP			
IFC4 UserDefined PropertySet	<b>SGPset_Ramp</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TransitionRamp	Boolean	TRUE   FALSE	
	Vehicular	Boolean	TRUE   FALSE	
	<b>SGPset_RampDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
Gradient	Label	N.A		

### Exit Ramp

Ifc4 Entity	IfcRamp			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ramp	Object	Ramps	Item
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_RampCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireExit	Boolean	TRUE   FALSE	

### External Exit Ramp

Ifc4 Entity	IfcRamp			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ramp	Object	Ramps	Item
PredefinedType	Need not specify			
ObjectType	N.A			

IFC4 Predefined PropertySet	<b>Pset_RampCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	FireExit	Boolean	TRUE   FALSE
	IsExternal	Boolean	TRUE   FALSE

## Flared Kerb Ramp

IFC4 Entity	IfcRamp			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ramp	Object	Ramps	Item
PredefinedType	USERDEFINED			
ObjectType	FLAREDKERBRAMP			
IFC4 UserDefined PropertySet	<b>SGPset_Ramp</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	

## Internal Exit Ramp

IFC4 Entity	IfcRamp			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ramp	Object	Ramps	Item
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_RampCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IsExternal	Boolean	TRUE   FALSE	
	FireExit	Boolean	TRUE   FALSE	

## Kerb Ramp

IFC4 Entity	IfcRamp			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ramp	Object	Ramps	Item
PredefinedType	STRAIGHT_RUN_RAMP			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Ramp</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	
	<b>SGPset_RampDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Gradient	Label	N.A	
Width (mm)	Length	N.A		

## Ramp

IFC4 Entity	IfcRamp			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ramp	Object	Ramps	Item

PredefinedType	Need not specify		
ObjectType	N.A		
IFC4 UserDefined PropertySet	<b>SGPset_Ramp</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	BarrierFreeAccessibility	Boolean	TRUE   FALSE
	Vehicular	Boolean	TRUE   FALSE
	<b>SGPset_RampDimension</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
Width (mm)	Length	N.A	

## Ramp Kerb

Ifc4 Entity	IfcRamp			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Ramp</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	KerbHeight (mm)	Length	N.A	

## Straight Ramp

Ifc4 Entity	IfcRamp			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ramp	Object	Ramps	Item
PredefinedType	STRAIGHT_RUN_RAMP			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Ramp</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Ingress	Boolean	TRUE   FALSE	
	Accessway	Boolean	TRUE   FALSE	
	Egress	Boolean	TRUE   FALSE	
	Vehicular	Boolean	TRUE   FALSE	

## Transition

Ifc4 Entity	IfcRamp			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Ramp	Object	Ramps	Item
PredefinedType	Need not specify			
ObjectType	N.A			

## IfcRampFlight

### Rampflight

Ifc4 Entity	IfcRampFlight
Proposed BIM Representation	

	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Ramp</td> <td>Object</td> <td>Ramps</td> <td>Item</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Ramp	Object	Ramps	Item
ArchiCad	OpenBuildings	Revit	Tekla						
Ramp	Object	Ramps	Item						
PredefinedType	Need not specify								
ObjectType	N.A								
IFC4 UserDefined PropertySet	<b>SGPset_RampFlight</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>BarrierFreeAccessibility</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	BarrierFreeAccessibility	Boolean	TRUE   FALSE		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
BarrierFreeAccessibility	Boolean	TRUE   FALSE							

## IfcRoof

### Covering

Ifc4 Entity	IfcRoof								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Roof</td> <td>Roof</td> <td>Roofs</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Roof	Roof	Roofs	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Roof	Roof	Roofs	N.A						
PredefinedType	Need not specify								
ObjectType	N.A								

### Flat Roof

Ifc4 Entity	IfcRoof								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Roof</td> <td>Roof</td> <td>Roofs</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Roof	Roof	Roofs	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Roof	Roof	Roofs	N.A						
PredefinedType	FLAT_ROOF								
ObjectType	N.A								
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Reinforced Concrete</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	Reinforced Concrete				
Attributes	Sample Attribute Values								
Name	Reinforced Concrete								
IFC4 Predefined PropertySet	<b>Pset_RoofCommon</b> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Status</td> <td>Label</td> <td>Existing</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	Status	Label	Existing		
IFC4 Predefined Property Name	Data Type	Sample Property Values							
Status	Label	Existing							

### Green Roof

Ifc4 Entity	IfcRoof								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Roof</td> <td>Roof</td> <td>Roofs</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Roof	Roof	Roofs	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Roof	Roof	Roofs	N.A						
PredefinedType	Need not specify								
ObjectType	N.A								
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Plant</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	Plant				
Attributes	Sample Attribute Values								
Name	Plant								

### Jack Roof

Ifc4 Entity	IfcRoof								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Roof</td> <td>Roof</td> <td>Roofs</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Roof	Roof	Roofs	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Roof	Roof	Roofs	N.A						

PredefinedType	USERDEFINED		
ObjectType	JACK_ROOF		
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>
	Name	N.A	
IFC4 Predefined PropertySet	<b>Pset_RoofCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Status	Label	New   Existing
IFC4 UserDefined PropertySet	<b>SGPset_Roof</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	RoofFinish_Type	Label	Jack Roof

## Mono-pitch Roof

Ifc4 Entity	IfcRoof			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Roofs	N.A
PredefinedType	SHED_ROOF			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name	N.A		
IFC4 Predefined PropertySet	<b>Pset_RoofCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	N.A	

## Pitch Roof

Ifc4 Entity	IfcRoof			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Roofs	N.A
PredefinedType	GABLE_ROOF			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name	N.A		
IFC4 Predefined PropertySet	<b>Pset_RoofCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Existing	

## Roof

Ifc4 Entity	IfcRoof			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Roofs	N.A
PredefinedType	Need not specify			

ObjectType	N.A		
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>
	Name	MET   Plastic   Metal	
IFC4 Predefined PropertySet	<b>Pset_RoofCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	ThermalTransmittance	Thermal Transmittance	N.A
	AcousticRating	Label	N.A
	FireRating (hr)	Label	N.A
Status	Label	Temporary   Existing   New	
IFC4 UserDefined PropertySet	<b>SGPset_Roof</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	RTTV (W/m2)	Label	N.A
	WeightGroup	Label	N.A
	Weight (kg)	Real	N.A
	Material_DaylightReflectance	Label	N.A
	Material_SpecularReflectance	Label	N.A
	Material_DiffuseReflectance	Label	N.A
	ConstructionMethod	Label	N.A
	ExternalReference	Label	ASTM E108 Standard Test Methods for Fire Tests
	FlameSpreadClass	Label	N.A
	Combustible	Boolean	TRUE   FALSE
	Perforated	Boolean	TRUE   FALSE

## Shelter

Ifc4 Entity	IfcRoof			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Roofs	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## IfcShadingDevice

### Awning

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Generic Models	N.A
PredefinedType	AWNING			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name	Non-drip acrylic		
IFC4 UserDefined PropertySet	<b>SGPset_ShadingDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	
	Combustible	Boolean	FALSE	
	Retractable	Boolean	TRUE   FALSE	
FlameSpreadClass	Label	N.A		



## Balcony Screen

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	BALCONYSCREEN			
IFC4 UserDefined PropertySet	<b>SGPset_ShadingDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Retractable	Boolean	TRUE   FALSE	

## Canopy

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	CANOPY			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Non-drip acrylic	
IFC4 Predefined PropertySet	<b>Pset_ShadingDeviceCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	New   Existing	
IFC4 UserDefined PropertySet	<b>SGPset_ShadingDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Retractable	Boolean	TRUE   FALSE	

## Covering

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Object	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Non-drip acrylic	
IFC4 UserDefined PropertySet	<b>SGPset_ShadingDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Retractable	Boolean	TRUE   FALSE	
	SpringOpenType	Boolean	TRUE   FALSE	

## Drop Down Panel

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Curtain Panel	N.A

PredefinedType	USERDEFINED
ObjectType	DROPDOWNPANEL

## External Fins

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	EXTERNALFINS			
IFC4 UserDefined PropertySet	<b>SGPset_ShadingDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Spacing (mm)	Length	0	

## Louvred Panel

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LOUVREDPANEL			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 Predefined PropertySet	<b>Pset_ShadingDeviceCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ShadingDeviceType	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_ShadingDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Porosity	Label	Sample Value(s): 50	
	PanelDepth (mm)	Length	N.A	
	PanelSpacing (mm)	Length	N.A	
Inclination	Integer	N.A		

## Outer Shell Faade

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	OUTERSHELL			

## Parasol

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			

ObjectType	PARASOL
------------	---------

## Perforated Panel

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	PERFORATEDPANEL			
IFC4 UserDefined PropertySet	<b>SGPset ShadingDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Porosity	Label	Sample Value(s): 50	
	PerforationDiameter (mm)	Length	N.A	

## Retractable Screen

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	SHUTTER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset ShadingDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Retractable	Boolean	TRUE   FALSE	

## Roll-down Curtain

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	ROLLDOWNCURTAIN			

## Roof Screen

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SCREEN			

## Screen

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SCREEN			
Material				

	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	N.A		
Attributes	Sample Attribute Values						
Name	N.A						
IFC4 UserDefined PropertySet	<p><b>SGPset_ShadingDevice</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Porosity</td> <td>Label</td> <td>Sample Value(s): 50</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Porosity	Label	Sample Value(s): 50
IFC4 UserDefined Property Name	Data Type	Sample Property Values					
Porosity	Label	Sample Value(s): 50					

## Screen

Ifc4 Entity	IfcShadingDevice									
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Object	Generic Models	N.A	
ArchiCad	OpenBuildings	Revit	Tekla							
Model Element	Object	Generic Models	N.A							
PredefinedType	USERDEFINED									
ObjectType	LOUVREDPANEL									
IFC4 UserDefined PropertySet	<p><b>SGPset_ShadingDevice</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>PanelDepth (mm)</td> <td>Length</td> <td>N.A</td> </tr> <tr> <td>PanelSpacing (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	PanelDepth (mm)	Length	N.A	PanelSpacing (mm)	Length	N.A
IFC4 UserDefined Property Name	Data Type	Sample Property Values								
PanelDepth (mm)	Length	N.A								
PanelSpacing (mm)	Length	N.A								

## Screen

Ifc4 Entity	IfcShadingDevice									
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Object	Generic Models	N.A	
ArchiCad	OpenBuildings	Revit	Tekla							
Model Element	Object	Generic Models	N.A							
PredefinedType	USERDEFINED									
ObjectType	PERFORATEDPANEL									
IFC4 UserDefined PropertySet	<p><b>SGPset_ShadingDevice</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Porosity</td> <td>Label</td> <td>Sample Value(s): 50</td> </tr> <tr> <td>PerforationDiameter (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Porosity	Label	Sample Value(s): 50	PerforationDiameter (mm)	Length	N.A
IFC4 UserDefined Property Name	Data Type	Sample Property Values								
Porosity	Label	Sample Value(s): 50								
PerforationDiameter (mm)	Length	N.A								

## Shading Device

Ifc4 Entity	IfcShadingDevice									
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Object	Generic Models	N.A	
ArchiCad	OpenBuildings	Revit	Tekla							
Model Element	Object	Generic Models	N.A							
PredefinedType	Need not specify									
ObjectType	N.A									
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	N.A					
Attributes	Sample Attribute Values									
Name	N.A									
IFC4 Predefined PropertySet	<p><b>Pset_ShadingDeviceCommon</b></p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Status</td> <td>Label</td> <td>Temporary</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	Status	Label	Temporary			
IFC4 Predefined Property Name	Data Type	Sample Property Values								
Status	Label	Temporary								
IFC4 UserDefined PropertySet	<p><b>SGPset_ShadingDevice</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Fixed</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>Retractable</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Fixed	Boolean	TRUE   FALSE	Retractable	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values								
Fixed	Boolean	TRUE   FALSE								
Retractable	Boolean	TRUE   FALSE								

## Shelter

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Shutter Board

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SHUTTERBOARD			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		

## Sun-breaker

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	OUTERSHELL			

## Sun-shading Device

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Trellis

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	TRELLIS			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Metal		
IFC4 UserDefined PropertySet	<b>SGPset_ShadingDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Porosity	Label	Sample Value(s): 50	

## Weather Feature

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	OUTERSHELL			

## Window Screen

Ifc4 Entity	IfcShadingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Roof	Roof	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	SCREEN			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		
IFC4 Predefined PropertySet	<b>Pset_ShadingDeviceCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	New	

## IfcSlab

### Access Platform

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_SlabCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	

### Cast-in-situ Slab

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Concrete		
IFC4 UserDefined PropertySet	<b>SGPset_Slab</b>			

	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Cast-in-situ</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ConstructionMethod	Label	Cast-in-situ
IFC4 UserDefined Property Name	Data Type	Sample Property Values					
ConstructionMethod	Label	Cast-in-situ					
	<p><b>SGPset_SlabReinforcement</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>WeldedMesh</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	WeldedMesh	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values					
WeldedMesh	Boolean	TRUE   FALSE					

## Catwalk

Ifc4 Entity	IfcSlab								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Slab	Slab	Floors	Slab
ArchiCad	OpenBuildings	Revit	Tekla						
Slab	Slab	Floors	Slab						
PredefinedType	USERDEFINED								
ObjectType	CATWALK								
IFC4 UserDefined PropertySet	<p><b>SGPset_Slab</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Perforated</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Perforated	Boolean	TRUE   FALSE		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
Perforated	Boolean	TRUE   FALSE							

## Ceiling Slab

Ifc4 Entity	IfcSlab								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Slab	Slab	Floors	Slab
ArchiCad	OpenBuildings	Revit	Tekla						
Slab	Slab	Floors	Slab						
PredefinedType	Need not specify								
ObjectType	N.A								
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Reinforced Concrete</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	Reinforced Concrete				
Attributes	Sample Attribute Values								
Name	Reinforced Concrete								

## Double T Slab

Ifc4 Entity	IfcSlab								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Slab	Slab	Floors	Slab
ArchiCad	OpenBuildings	Revit	Tekla						
Slab	Slab	Floors	Slab						
PredefinedType	Need not specify								
ObjectType	N.A								
IFC4 Predefined PropertySet	<p><b>Pset_PrecastSlab</b></p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>TypeDesignator</td> <td>Label</td> <td>Double T Slab</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	TypeDesignator	Label	Double T Slab		
IFC4 Predefined Property Name	Data Type	Sample Property Values							
TypeDesignator	Label	Double T Slab							

## Engineered Stone Flooring Finish

Ifc4 Entity	IfcSlab								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Slab	Slab	Floors	Slab
ArchiCad	OpenBuildings	Revit	Tekla						
Slab	Slab	Floors	Slab						
PredefinedType	FLOOR								
ObjectType	N.A								
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> </tbody> </table>	Attributes	Sample Attribute Values						
Attributes	Sample Attribute Values								

	Name	Engineered Stone
--	------	------------------

## Engineered Timber Flooring

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOOR			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Engineered Timber		

## Equipment Platform

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	Need not specify			
ObjectType	N.A			

## Flared Side Ramp

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	Need not specify			
ObjectType	N.A			

## Floor

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOOR			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	MET   Concrete   Plastic   Timber   Nylon   Brick   Wood   Engineered Timber   Natural Stone   Reinforced Concrete		
IFC4 Predefined PropertySet	<b>Pset_SlabCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	Timber	
	Combustible	Boolean	TRUE   FALSE	
	FireRating	Label	N.A	
	Status	Label	Existing   New	
IsExternal	Boolean	TRUE   FALSE		
IFC4 UserDefined PropertySet	<b>SGPset_SlabDimension</b>			



IFC4 UserDefined Property Name	Data Type	Sample Property Values
Width (mm)	Length	N.A

**SGPset\_Slab**

IFC4 UserDefined Property Name	Data Type	Sample Property Values
Watertight	Boolean	TRUE   FALSE
FlameSpreadClass	Label	N.A
FireStop	Boolean	TRUE   FALSE
ConstructionMethod	Label	N.A
PressureImpregnated	Boolean	TRUE   FALSE
AntiSlipSurface	Boolean	TRUE   FALSE
FinishType	Label	N.A

## Glass Floor

Ifc4 Entity	IfcSlab								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Slab	Slab	Floors	Slab
ArchiCad	OpenBuildings	Revit	Tekla						
Slab	Slab	Floors	Slab						
PredefinedType	FLOOR								
ObjectType	N.A								
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Glass</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	Glass				
Attributes	Sample Attribute Values								
Name	Glass								
IFC4 Predefined PropertySet	<p><b>Pset_SlabCommon</b></p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	FireRating (hr)	Label	N.A		
IFC4 Predefined Property Name	Data Type	Sample Property Values							
FireRating (hr)	Label	N.A							
IFC4 UserDefined PropertySet	<p><b>SGPset_Slab</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FlameSpreadClass</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	FlameSpreadClass	Label	N.A		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
FlameSpreadClass	Label	N.A							

## Green Roof

Ifc4 Entity	IfcSlab								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Slab	Slab	Floors	Slab
ArchiCad	OpenBuildings	Revit	Tekla						
Slab	Slab	Floors	Slab						
PredefinedType	ROOF								
ObjectType	N.A								
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Plant</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	Plant				
Attributes	Sample Attribute Values								
Name	Plant								

## Ground

Ifc4 Entity	IfcSlab								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Slab	Slab	Floors	Slab
ArchiCad	OpenBuildings	Revit	Tekla						
Slab	Slab	Floors	Slab						
PredefinedType	Need not specify								
ObjectType	N.A								

## Hollow Core Slab

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_PrecastSlab</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TypeDesignator	Label	Hollow core	

## Intermediate Platform

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	INTERMEDIATEPLATFORM			

## Intermediate Slab

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	Need not specify			
ObjectType	N.A			

## Landing

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	LANDING			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_SlabCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	FALSE   TRUE   FALSE	
Status	Label	New		

## Ledge

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	Need not specify			
ObjectType	N.A			

## Non-combustible Floor

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOOR			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_SlabCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	TRUE   FALSE	

## Power Float Concrete Floor

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOOR			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Slab</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FinishType	Label	Power Float Concrete	

## Precast Landing

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	LANDING			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Slab</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Precast	
	MechanicalConnectionType	Label	Flexible loops	

## Precast Slab

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Slab</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Precast	
	MechanicalConnectionType	Label	Column shoes   Flexible loops Sample Value(s): Spiral Connector   Grouted Sleeves	
	<b>SGPset_SlabReinforcement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
LatticeGirderReinforcement	Boolean	TRUE   FALSE		

## Prefabricated And Prefinished Floor

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	FLOOR			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Slab</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Prefabricated and Prefinished	

## Prefabricated Slab

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Slab</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Prefabricated	
	Accreditation_PAS	Boolean	TRUE   FALSE	

## RC ledges (cantilevered)

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Reinforced Concrete		

## Ramp Landing

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	LANDING			
ObjectType	N.A			

## Roof

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab

PredefinedType	ROOF
ObjectType	N.A

## Roof Slab

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b> Slab	<b>OpenBuildings</b> Slab	<b>Revit</b> Floors	<b>Tekla</b> Slab
PredefinedType	ROOF			
ObjectType	N.A			
Material	<b>Attributes</b> Name	<b>Sample Attribute Values</b> Reinforced Concrete		
IFC4 Predefined PropertySet	<b>Pset_SlabCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ThermalTransmittance	Thermal Transmittance	N.A	
	FireRating (hr)	Label	N.A	
	Combustible	Boolean	TRUE   FALSE	
	Status	Label	Existing	
IFC4 UserDefined PropertySet	<b>SGPset_Slab</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	WeightGroup	Label	N.A	
	Weight (kg)	Real	N.A	
	FlameSpreadClass	Label	N.A	
	Perforated	Boolean	TRUE   FALSE	
	<b>SGPset_SlabDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Width (mm)	Length	N.A	

## Service Road

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b> Slab	<b>OpenBuildings</b> Slab	<b>Revit</b> Floors	<b>Tekla</b> Slab
PredefinedType	Need not specify			
ObjectType	N.A			

## Shelter

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b> Slab	<b>OpenBuildings</b> Slab	<b>Revit</b> Floors	<b>Tekla</b> N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Slab

Ifc4 Entity	IfcSlab		
Proposed BIM Representation			

	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Slab	Slab	Floors	Slab																
ArchiCad	OpenBuildings	Revit	Tekla																						
Slab	Slab	Floors	Slab																						
PredefinedType	Need not specify																								
ObjectType	N.A																								
Material	<table border="1"> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> <tr> <td>Name</td> <td>Reinforced Concrete</td> </tr> </table>	Attributes	Sample Attribute Values	Name	Reinforced Concrete																				
Attributes	Sample Attribute Values																								
Name	Reinforced Concrete																								
IFC4 Predefined PropertySet	<p><b>Pset_SlabCommon</b></p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AcousticRating</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>Combustible</td> <td>Boolean</td> <td>FALSE   TRUE   FALSE</td> </tr> <tr> <td>Status</td> <td>Label</td> <td>Temporary   New   Existing</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	AcousticRating	Label	N.A	FireRating (hr)	Label	N.A	Combustible	Boolean	FALSE   TRUE   FALSE	Status	Label	Temporary   New   Existing									
IFC4 Predefined Property Name	Data Type	Sample Property Values																							
AcousticRating	Label	N.A																							
FireRating (hr)	Label	N.A																							
Combustible	Boolean	FALSE   TRUE   FALSE																							
Status	Label	Temporary   New   Existing																							
IFC4 UserDefined PropertySet	<p><b>SGPset_SlabDimension</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Length (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table> <p><b>SGPset_Slab</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ChemicalResistantMaterial</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>FireStop</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>Perforated</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>FinishType</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Length (mm)	Length	N.A	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ChemicalResistantMaterial	Boolean	TRUE   FALSE	ConstructionMethod	Label	N.A	FireStop	Boolean	TRUE   FALSE	Perforated	Boolean	TRUE   FALSE	FinishType	Label	N.A
IFC4 UserDefined Property Name	Data Type	Sample Property Values																							
Length (mm)	Length	N.A																							
IFC4 UserDefined Property Name	Data Type	Sample Property Values																							
ChemicalResistantMaterial	Boolean	TRUE   FALSE																							
ConstructionMethod	Label	N.A																							
FireStop	Boolean	TRUE   FALSE																							
Perforated	Boolean	TRUE   FALSE																							
FinishType	Label	N.A																							

## Slab Cover

Ifc4 Entity	IfcSlab								
Proposed BIM Representation	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Slab	Slab	Floors	Slab
ArchiCad	OpenBuildings	Revit	Tekla						
Slab	Slab	Floors	Slab						
PredefinedType	FLOOR								
ObjectType	N.A								

## Steel Deck

Ifc4 Entity	IfcSlab								
Proposed BIM Representation	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Slab	Slab	Floors	Slab
ArchiCad	OpenBuildings	Revit	Tekla						
Slab	Slab	Floors	Slab						
PredefinedType	FLOOR								
ObjectType	N.A								
Material	<table border="1"> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> <tr> <td>Name</td> <td>Steel</td> </tr> </table>	Attributes	Sample Attribute Values	Name	Steel				
Attributes	Sample Attribute Values								
Name	Steel								

## IfcStair

### Access Ladder

Ifc4 Entity	IfcStair								
Proposed BIM Representation	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Stair	Stair	Stairs	Item
ArchiCad	OpenBuildings	Revit	Tekla						
Stair	Stair	Stairs	Item						

PredefinedType	USERDEFINED	
ObjectType	LADDER	
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>
	Name	N.A

## Access Staircase

Ifc4 Entity	IfcStair			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		

## Cat Ladder

Ifc4 Entity	IfcStair			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item
PredefinedType	USERDEFINED			
ObjectType	LADDER			
IFC4 Predefined PropertySet	<b>Pset_StairCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Reference	Label	CATLADDER	

## Circular Staircase

Ifc4 Entity	IfcStair			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item
PredefinedType	SPIRAL_STAIR			
ObjectType	N.A			

## Curved Staircase

Ifc4 Entity	IfcStair			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item
PredefinedType	CURVED_RUN_STAIR			
ObjectType	N.A			

## Exit Staircase

Ifc4 Entity	IfcStair			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item

PredefinedType	Need not specify		
ObjectType	N.A		
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>
	Name	Timber	
IFC4 Predefined PropertySet	<b>Pset_StairCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	FireExit	Boolean	TRUE   FALSE
	IsExternal	Boolean	TRUE   FALSE
FireRating (hr)	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_StairDimension</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Width (mm)	Length	N.A
	<b>SGPset_Stair</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	PressureImpregnated	Boolean	TRUE   FALSE
	Combustible	Boolean	FALSE   TRUE   FALSE

## External Exit Staircase

Ifc4 Entity	IfcStair			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item
PredefinedType	Need not specify			
ObjectType	N.A			

## Ladder

Ifc4 Entity	IfcStair			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item
PredefinedType	USERDEFINED			
ObjectType	LADDER			
IFC4 Predefined PropertySet	<b>Pset_StairCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	HasNonSkidSurface	Boolean	TRUE   FALSE	
IFC4 UserDefined PropertySet	<b>SGPset_Stair</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	EN 131 Ladder Standards	
	Ladder_RungClearWidth	Length	N.A	
	Ladder_RungDiameter	Length	N.A	
Ladder_RungSpacing	Length	N.A		

## Precast Staircase

Ifc4 Entity	IfcStair			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item



PredefinedType	Need not specify									
ObjectType	N.A									
IFC4 UserDefined PropertySet	<b>SGPset_Stair</b>									
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Precast</td> </tr> <tr> <td>Accreditation_PAS</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ConstructionMethod	Label	Precast	Accreditation_PAS	Boolean	TRUE   FALSE
	IFC4 UserDefined Property Name	Data Type	Sample Property Values							
	ConstructionMethod	Label	Precast							
Accreditation_PAS	Boolean	TRUE   FALSE								

## Ship Ladder

Ifc4 Entity	IfcStair								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Stair	Stair	Stairs	Item
	ArchiCad	OpenBuildings	Revit	Tekla					
Stair	Stair	Stairs	Item						
PredefinedType	USERDEFINED								
ObjectType	LADDER								
IFC4 Predefined PropertySet	<b>Pset_StairCommon</b>								
	<table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Reference</td> <td>Label</td> <td>SHIPLADDER</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	Reference	Label	SHIPLADDER		
	IFC4 Predefined Property Name	Data Type	Sample Property Values						
	Reference	Label	SHIPLADDER						
IFC4 UserDefined PropertySet	<b>SGPset_Stair</b>								
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ShipLadder_WorkLoad (kN)</td> <td>Real</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ShipLadder_WorkLoad (kN)	Real	N.A		
	IFC4 UserDefined Property Name	Data Type	Sample Property Values						
	ShipLadder_WorkLoad (kN)	Real	N.A						

## Spiral Staircase

Ifc4 Entity	IfcStair									
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Stair	Stair	Stairs	Item	
	ArchiCad	OpenBuildings	Revit	Tekla						
Stair	Stair	Stairs	Item							
PredefinedType	SPIRAL_STAIR									
ObjectType	N.A									
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	N.A					
	Attributes	Sample Attribute Values								
Name	N.A									
IFC4 Predefined PropertySet	<b>Pset_StairCommon</b>									
	<table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FireExit</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	FireExit	Boolean	TRUE   FALSE	IsExternal	Boolean	TRUE   FALSE
	IFC4 Predefined Property Name	Data Type	Sample Property Values							
	FireExit	Boolean	TRUE   FALSE							
IsExternal	Boolean	TRUE   FALSE								

## Stair

Ifc4 Entity	IfcStair								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Stair	Stair	Stairs	Item
	ArchiCad	OpenBuildings	Revit	Tekla					
Stair	Stair	Stairs	Item						
PredefinedType	Need not specify								
ObjectType	N.A								
IFC4 Predefined PropertySet	<b>Pset_StairCommon</b>								
	<table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	IsExternal	Boolean	TRUE   FALSE		
	IFC4 Predefined Property Name	Data Type	Sample Property Values						
IsExternal	Boolean	TRUE   FALSE							
IFC4 UserDefined PropertySet	<b>SGPset_Stair</b>								

IFC4 UserDefined Property Name	Data Type	Sample Property Values
Perforated	Boolean	TRUE   FALSE

## Staircase

Ifc4 Entity	IfcStair												
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Stair	Stair	Stairs	Item				
ArchiCad	OpenBuildings	Revit	Tekla										
Stair	Stair	Stairs	Item										
PredefinedType	Need not specify												
ObjectType	N.A												
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Timber   Metal</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	Timber   Metal								
Attributes	Sample Attribute Values												
Name	Timber   Metal												
IFC4 Predefined PropertySet	<p><b>Pset_StairCommon</b></p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Status</td> <td>Label</td> <td>New   Existing</td> </tr> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	Status	Label	New   Existing	IsExternal	Boolean	TRUE   FALSE			
IFC4 Predefined Property Name	Data Type	Sample Property Values											
Status	Label	New   Existing											
IsExternal	Boolean	TRUE   FALSE											
IFC4 UserDefined PropertySet	<p><b>SGPset_StairDimension</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Width (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table> <p><b>SGPset_Stair</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>PressureImpregnated</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Width (mm)	Length	N.A	IFC4 UserDefined Property Name	Data Type	Sample Property Values	PressureImpregnated	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values											
Width (mm)	Length	N.A											
IFC4 UserDefined Property Name	Data Type	Sample Property Values											
PressureImpregnated	Boolean	TRUE   FALSE											

## Staircore

Ifc4 Entity	IfcStair								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Stair	Stair	Stairs	Item
ArchiCad	OpenBuildings	Revit	Tekla						
Stair	Stair	Stairs	Item						
PredefinedType	Need not specify								
ObjectType	N.A								
IFC4 Predefined PropertySet	<p><b>Pset_StairCommon</b></p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Status</td> <td>Label</td> <td>New</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	Status	Label	New		
IFC4 Predefined Property Name	Data Type	Sample Property Values							
Status	Label	New							

## IfcStairFlight

### Curved Stair Flight

Ifc4 Entity	IfcStairFlight								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Stair	Stair	Stairs	Item
ArchiCad	OpenBuildings	Revit	Tekla						
Stair	Stair	Stairs	Item						
PredefinedType	CURVED								
ObjectType	N.A								

### Precast Stair Flight

Ifc4 Entity	IfcStairFlight			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_StairFlight</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Precast	
	MechanicalConnectionType	Label	Flexible loops	

## Spiral Stair Flight

Ifc4 Entity	IfcStairFlight			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item
PredefinedType	SPIRAL			
ObjectType	N.A			

## Stair Flight

Ifc4 Entity	IfcStairFlight			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		
IFC4 Predefined PropertySet	<b>Pset_StairFlightCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RiserHeight (mm)	Length	N.A	
	TreadLength (mm)	Length	N.A	
	NumberOfRiser	Integer	N.A	
	NumberOfTreads	Integer	N.A	

## Stair Winder

Ifc4 Entity	IfcStairFlight			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item
PredefinedType	USERDEFINED			
ObjectType	WINDER			

## Staircase

Ifc4 Entity	IfcStairFlight			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	Stair	Stairs	Item
PredefinedType	Need not specify			

ObjectType	N.A
------------	-----

## IfcSystemFurnitureElement

### Prefabricated Kitchen Unit

Ifc4 Entity	IfcSystemFurnitureElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	PREFABRICATEDKITCHENUNIT			

## IfcTransportElement

### Bed Lift

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT			
IFC4 UserDefined PropertySet	<b>SGPset_TransportElementTypeLift</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BedLift	Boolean	TRUE   FALSE	

### Car Parking Lift

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	CARLIFT			
IFC4 UserDefined PropertySet	<b>SGPset_TransportElementTypeLift</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RatedSpeed	Label	Sample Value(s): 30 m/min	
	<b>SGPset_TransportElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
DischargeCapacityRate (cars/hr)	Label	Sample Value(s): 30 cars/hr		

### Compensating Rope

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT			

Ifc4 UserDefined PropertySet	<b>SGPset_TransportElement</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	ExternalReference	Label	EN 12385-5 Steel Wire Ropes Safety
	<b>SGPset_TransportElementTypeLift</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	CompensatingRope_NominalDiameter	Length	N.A

## Escalator

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	ESCALATOR			
ObjectType	N.A			
Ifc4 UserDefined PropertySet	<b>SGPset_TransportElementTypeEscalator</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AuxiliaryBrake	Boolean	TRUE   FALSE	
	NonFrictionDrivingElement	Boolean	TRUE   FALSE	
	DrivingElementSafetyFactor	Integer	5	
	TrapezoidalBeltSafetyFactor	Integer	3	
	ElectromechanicalBrakeType	Boolean	TRUE   FALSE	
	AuxiliaryBrake_MechanicalType	Boolean	TRUE   FALSE	
	ChainCount	Integer	5	
	InteriorPanelMaterial	Label	N.A	
	NominalSpeed (m/s)	Label	N.A	
	CombTeeth_Width (mm)	Length	N.A	
	CombTeeth_Radius (mm)	Length	N.A	
	CombTeeth_Angle	Label	N.A	
CombTeeth_MeshDepth (mm)	Length	N.A		
CombTeeth_Clearance (mm)	Length	N.A		

## Escalator Pallet

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	ESCALATOR			
ObjectType	N.A			
Ifc4 UserDefined PropertySet	<b>SGPset_TransportElementTypeEscalator</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	PalletWidth (mm)	Length	N.A	
	PalletStepHeight (mm)	Length	N.A	
	PalletStepWidth (mm)	Length	N.A	

## Escalator Steps

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	ESCALATOR			
ObjectType	N.A			

## Evacuation Lift

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT			
IFC4 UserDefined PropertySet	<b>SGPset_TransportElementTypelift</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	EvacuationLift	Boolean	TRUE   FALSE	
	<b>SGPset_TransportElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	

## Fire Escape Bed Lift

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT			
IFC4 UserDefined PropertySet	<b>SGPset_TransportElementTypelift</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireFightingLift	Boolean	TRUE   FALSE	
	BedLift	Boolean	TRUE   FALSE	

## Fire Lift

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT			
IFC4 UserDefined PropertySet	<b>SGPset_TransportElementTypelift</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireFightingLift	Boolean	TRUE   FALSE	
	MinimumLoad (kg)	Real	N.A	
	RatedSpeed	Label	N.A	
	ClearWidth (mm)	Length	N.A	
	ClearDepth (mm)	Length	N.A	
	EvacuationLift	Boolean	TRUE   FALSE	
	<b>SGPset_TransportElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
BarrierFreeAccessibility	Boolean	TRUE   FALSE		

## Fire Lift Car

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT			
IFC4 UserDefined PropertySet	<b>SGPset_TransportElementTypeLift</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireFightingLift	Boolean	TRUE   FALSE	

## Goods Lift

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	GOODSLIFT			
IFC4 UserDefined PropertySet	<b>SGPset_TransportElementTypeLift</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RatedLoad	Label	N.A	

## Lift

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT			
IFC4 Predefined PropertySet	<b>Pset_TransportElementCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireExit	Boolean	TRUE   FALSE	
	Status	Label	N.A	

## Lift Car

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT			
IFC4 Predefined PropertySet	<b>Pset_TransportElementCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	CapacityWeight	Real	N.A	
	CapacityPeople	Integer	N.A	

IFC4 UserDefined PropertySet	<b>SGPset_TransportElementTypeLift</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	RatedSpeed	Label	Sample Value(s): 2m/s
	RatedLoad (kg/m2)	Label	N.A
	ClearWidth (mm)	Length	N.A
	ClearDepth (mm)	Length	N.A
	StaticLoad	Label	N.A
	PlatformSupportSystemType	Label	Screw   Hydraulic   Chain Sample Value(s): Nut
	SafetyGear	Boolean	TRUE   FALSE
	DriveSystemType	Label	N.A
	TransmissionUnitCount	Integer	N.A
	ClearHeight	Length	N.A
	ClearWidth	Length	N.A
	ClearDepth	Length	N.A
	TravelHeight (m)	Length	Sample Value(s): 30m
	ControlDevice_OperableDistance	Length	N.A
	RopeCount	Integer	N.A
	<b>SGPset_TransportElement</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	BarrierFreeAccessibility	Boolean	TRUE   FALSE
<b>SGPset_TransportElementTypeLiftDimension</b>			
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
Length (mm)	Length	N.A	
Width (mm)	Length	N.A	

## Lift Car Glass Wall

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Glass	

## Lift Trap Door

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT			
IFC4 UserDefined PropertySet	<b>SGPset_TransportElementTypeLift</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TrapDoor_OpenOutward	Boolean	TRUE   FALSE	

## Moving Walk Belt

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>



	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	MOVINGWALKWAY			
ObjectType	N.A			

## Moving Walkway

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	MOVINGWALKWAY			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_TransportElementTypeMovingWalkway</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AuxiliaryBrake	Boolean	TRUE   FALSE	
	ElectromechanicalBrakeType	Boolean	TRUE   FALSE	
	AuxiliaryBrake_MechanicalType	Boolean	TRUE   FALSE	
InteriorPanelMaterial	Label	N.A		

## PWD Evacuation Lift

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT			
IFC4 UserDefined PropertySet	<b>SGPset_TransportElementTypeLift</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	EvacuationLift	Boolean	TRUE   FALSE	
	<b>SGPset_TransportElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	

## Passenger Lift

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFT			

## Tensioning Pulley

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			

ObjectType	LIFT		
IFC4 UserDefined PropertySet	<b>SGPset_TransportElementTypeLift</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	TensioningPulley_PitchDiameter	Length	N.A
	TensioningPulley_NipGuard	Boolean	TRUE   FALSE

## IfcUnitaryControlElement

### Lift Car Control Button

Ifc4 Entity	IfcUnitaryControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFTCARCONTROLBUTTON			
IFC4 UserDefined PropertySet	<b>SGPset_UnitaryControlElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TelephoneButton	Boolean	TRUE   FALSE	

### Lift Car Control Panel

Ifc4 Entity	IfcUnitaryControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFTCARCONTROLPANEL			

### Lift Landing Call Button

Ifc4 Entity	IfcUnitaryControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFTCALLBUTTON			

## IfcWall

### Barrier

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	USERDEFINED			
ObjectType	BARRIER			
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Watertight	Boolean	TRUE   FALSE	

## Blockwall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	USERDEFINED			
ObjectType	BLOCKWALL			

## Boundary Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	USERDEFINED			
ObjectType	BOUNDARYWALL			
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IsExternal	Boolean	TRUE   FALSE	
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	PorousFence	Boolean	TRUE   FALSE	

## Bund Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	USERDEFINED			
ObjectType	BUND			

## Cast-in-situ Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Concrete Panel
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Cast-in-situ	
	<b>SGPset_WallReinforcement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
PrefabricatedReinforcementCage	Boolean	TRUE   FALSE		

## Cavity Barrier

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	
	Combustible	Boolean	TRUE   FALSE	

## Divider

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			

## Double Bay Facade Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Concrete Panel
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Precast	

## DryWall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	ELEMENTEDWALL			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	
	Combustible	Boolean	TRUE   FALSE	
	LoadBearing	Boolean	TRUE   FALSE	
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			

IFC4 UserDefined Property Name	Data Type	Sample Property Values
StrengthClass	Label	N.A

**SGPset\_ConcreteElementGeneral**

IFC4 UserDefined Property Name	Data Type	Sample Property Values
ReinforcementStrengthClass	Label	N.A

## External Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IsExternal	Boolean	TRUE   FALSE	
	Combustible	Boolean	FALSE   TRUE   FALSE	
	FireRating (hr)	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Material_DiffuseReflectance	Label	N.A	

## Fence

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	USERDEFINED			
ObjectType	BOUNDARYWALL			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Metal	
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IsExternal	Boolean	TRUE   FALSE	
	Status	Label	Demolished Sample Value(s): Existing/New	
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	PorousFence	Boolean	TRUE   FALSE	

## Glass Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation				

	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Wall	Wall	Walls	Panel	
ArchiCad	OpenBuildings	Revit	Tekla							
Wall	Wall	Walls	Panel							
PredefinedType	Need not specify									
ObjectType	N.A									
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Glass</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	Glass					
Attributes	Sample Attribute Values									
Name	Glass									
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>Combustible</td> <td>Boolean</td> <td>FALSE</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	FireRating (hr)	Label	N.A	Combustible	Boolean	FALSE
IFC4 Predefined Property Name	Data Type	Sample Property Values								
FireRating (hr)	Label	N.A								
Combustible	Boolean	FALSE								
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FlameSpreadClass</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	FlameSpreadClass	Label	N.A			
IFC4 UserDefined Property Name	Data Type	Sample Property Values								
FlameSpreadClass	Label	N.A								

## Internal Wall

Ifc4 Entity	IfcWall									
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Wall	Wall	Walls	Panel	
ArchiCad	OpenBuildings	Revit	Tekla							
Wall	Wall	Walls	Panel							
PredefinedType	Need not specify									
ObjectType	N.A									
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	N.A					
Attributes	Sample Attribute Values									
Name	N.A									
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>Combustible</td> <td>Boolean</td> <td>FALSE</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	IsExternal	Boolean	TRUE   FALSE	Combustible	Boolean	FALSE
IFC4 Predefined Property Name	Data Type	Sample Property Values								
IsExternal	Boolean	TRUE   FALSE								
Combustible	Boolean	FALSE								

## Kerb

Ifc4 Entity	IfcWall								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Wall	Wall	Walls	Panel
ArchiCad	OpenBuildings	Revit	Tekla						
Wall	Wall	Walls	Panel						
PredefinedType	USERDEFINED								
ObjectType	KERB								

## Knock-out Panel

Ifc4 Entity	IfcWall								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Wall	Wall	Walls	Panel
ArchiCad	OpenBuildings	Revit	Tekla						
Wall	Wall	Walls	Panel						
PredefinedType	USERDEFINED								
ObjectType	KNOCKOUTPANEL								
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>RightOfWay</td> <td>Boolean</td> <td>TRUE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	RightOfWay	Boolean	TRUE		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
RightOfWay	Boolean	TRUE							

## Lightweight Concrete Panel

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Autoclaved Lightweight Concrete	

## Load-bearing Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	LoadBearing	Boolean	TRUE   FALSE	
	IsExternal	Boolean	TRUE   FALSE	
	FireRating (hr)	Label	N.A	

## Masonry

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Brick	
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	Brick	

## Multi-tier Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset Wall</b>			

IFC4 UserDefined Property Name	Data Type	Sample Property Values
ConstructionMethod	Label	Precast

## Non-combustible Wall

Ifc4 Entity	IfcWall										
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Wall	Wall	Walls	Panel		
ArchiCad	OpenBuildings	Revit	Tekla								
Wall	Wall	Walls	Panel								
PredefinedType	Need not specify										
ObjectType	N.A										
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Combustible</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>			IFC4 Predefined Property Name	Data Type	Sample Property Values	Combustible	Boolean	TRUE   FALSE		
IFC4 Predefined Property Name	Data Type	Sample Property Values									
Combustible	Boolean	TRUE   FALSE									

## Non-load-bearing External Wall

Ifc4 Entity	IfcWall											
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Wall	Wall	Walls	Panel			
ArchiCad	OpenBuildings	Revit	Tekla									
Wall	Wall	Walls	Panel									
PredefinedType	Need not specify											
ObjectType	N.A											
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>LoadBearing</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>			IFC4 Predefined Property Name	Data Type	Sample Property Values	LoadBearing	Boolean	TRUE   FALSE	IsExternal	Boolean	TRUE   FALSE
IFC4 Predefined Property Name	Data Type	Sample Property Values										
LoadBearing	Boolean	TRUE   FALSE										
IsExternal	Boolean	TRUE   FALSE										

## Non-load-bearing Internal Wall

Ifc4 Entity	IfcWall														
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Wall	Wall	Walls	Panel						
ArchiCad	OpenBuildings	Revit	Tekla												
Wall	Wall	Walls	Panel												
PredefinedType	Need not specify														
ObjectType	N.A														
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>LoadBearing</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>Combustible</td> <td>Boolean</td> <td>FALSE</td> </tr> </tbody> </table>			IFC4 Predefined Property Name	Data Type	Sample Property Values	LoadBearing	Boolean	TRUE   FALSE	IsExternal	Boolean	TRUE   FALSE	Combustible	Boolean	FALSE
IFC4 Predefined Property Name	Data Type	Sample Property Values													
LoadBearing	Boolean	TRUE   FALSE													
IsExternal	Boolean	TRUE   FALSE													
Combustible	Boolean	FALSE													

## Parapet Wall

Ifc4 Entity	IfcWall										
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Wall	Wall	Walls	Panel		
ArchiCad	OpenBuildings	Revit	Tekla								
Wall	Wall	Walls	Panel								
PredefinedType	PARAPET										
ObjectType	N.A										
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> </tbody> </table>	Attributes	Sample Attribute Values								
Attributes	Sample Attribute Values										



	Name	N.A
--	------	-----

## Partition Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	PARTITIONING			
ObjectType	N.A			

## Party Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Brick		
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Existing	
	LoadBearing	Boolean	TRUE   FALSE	
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IsPartyWall	Boolean	TRUE   FALSE	

## Perimeter Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IsExternal	Boolean	TRUE   FALSE	

## Phenolic Panel

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	PARTITIONING			
ObjectType	N.A			
Material				

Attributes	Sample Attribute Values
Name	Phenolic

## Precast Parapet Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	PARAPET			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Precast	
	MechanicalConnectionType	Label	Flexible loops	

## Precast Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Precast	
	MechanicalConnectionType	Label	Column shoes   Flexible loops Sample Value(s): Spiral Connector   Grouted Sleeves	

## Precast Wall Off-form

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Off-form Precast	

## Precision Blockwall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	USERDEFINED			
ObjectType	BLOCKWALL			
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			

IFC4 UserDefined Property Name	Data Type	Sample Property Values
PrecisionBlockwall	Boolean	TRUE   FALSE

## Prefabricated And Prefinished Wall

Ifc4 Entity	IfcWall										
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Wall	Wall	Walls	Panel		
ArchiCad	OpenBuildings	Revit	Tekla								
Wall	Wall	Walls	Panel								
PredefinedType	Need not specify										
ObjectType	N.A										
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Prefabricated and Prefinished</td> </tr> </tbody> </table>			IFC4 UserDefined Property Name	Data Type	Sample Property Values	ConstructionMethod	Label	Prefabricated and Prefinished		
IFC4 UserDefined Property Name	Data Type	Sample Property Values									
ConstructionMethod	Label	Prefabricated and Prefinished									

## Prefabricated Wall

Ifc4 Entity	IfcWall											
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Wall	Wall	Walls	Panel			
ArchiCad	OpenBuildings	Revit	Tekla									
Wall	Wall	Walls	Panel									
PredefinedType	Need not specify											
ObjectType	N.A											
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Prefabricated</td> </tr> <tr> <td>Accreditation_PAS</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>			IFC4 UserDefined Property Name	Data Type	Sample Property Values	ConstructionMethod	Label	Prefabricated	Accreditation_PAS	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values										
ConstructionMethod	Label	Prefabricated										
Accreditation_PAS	Boolean	TRUE   FALSE										

## Proscenium Wall

Ifc4 Entity	IfcWall										
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Wall	Wall	Walls	Panel		
ArchiCad	OpenBuildings	Revit	Tekla								
Wall	Wall	Walls	Panel								
PredefinedType	Need not specify										
ObjectType	N.A										
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table>			IFC4 Predefined Property Name	Data Type	Sample Property Values	FireRating (hr)	Label	N.A		
IFC4 Predefined Property Name	Data Type	Sample Property Values									
FireRating (hr)	Label	N.A									

## Recyclables Refuse Chute

Ifc4 Entity	IfcWall										
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Wall	Wall	Walls	Panel		
ArchiCad	OpenBuildings	Revit	Tekla								
Wall	Wall	Walls	Panel								
PredefinedType	USERDEFINED										
ObjectType	RECYCLABLESCHUTE										
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	N.A						
Attributes	Sample Attribute Values										
Name	N.A										

IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	LoadBearing	Boolean	TRUE   FALSE

## Refuse Chute

IFC4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	USERDEFINED			
ObjectType	REFUSECHUTE			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	LoadBearing	Boolean	TRUE   FALSE	

## Retaining Wall

IFC4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	USERDEFINED			
ObjectType	RETAININGWALL			
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IsExternal	Boolean	TRUE   FALSE	

## Separating Wall

IFC4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	FALSE   TRUE   FALSE	
	FireRating (hr)	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireStop	Boolean	TRUE   FALSE	

## Shear Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	SHEAR			
ObjectType	N.A			

## Skim Coat Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FinishType	Label	Skim coat	

## Vapour Barrier

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Vapour Barrier	
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	

## Vertical Partition

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	PARTITIONING			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Glass	

## Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel

PredefinedType	Need not specify		
ObjectType	N.A		
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>
	Name		Reinforced Concrete   Plastic   Nylon   Brick   Glass   Glass Block   Engineered Timber   Tiles   Ceramic Tiles
IFC4 Predefined PropertySet	<b>Pset_WallCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	IsExternal	Boolean	TRUE   FALSE
	LoadBearing	Boolean	TRUE   FALSE
	ThermalTransmittance	Thermal Transmittance	Sample Value(s): 1 W/m2 K
	AcousticRating	Label	N.A
	FireRating (hr)	Label	N.A
	Combustible	Boolean	TRUE   FALSE
	FireRating	Label	N.A
	ThermalTransmittance (W/m2 K)	Thermal Transmittance	Sample Value(s): 1 W/m2 K
	Status	Label	New   Existing
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Material_SpecularReflectance	Label	N.A
	CorrectionFactor	Real	Sample Value(s): 1.17
	Watertight	Boolean	TRUE   FALSE
	WaterSealant	Boolean	TRUE   FALSE
	ConstructionMethod	Label	N.A
	FireStop	Boolean	TRUE   FALSE
	FlameSpreadClass	Label	Sample Value(s): Class 0 Class 1   Class 2   Class 3   Class 4
	ExternalReference	Label	BS 476 Part 7 British Standard 476 Fire Tests
	FinishType	Label	Lime Plaster   Timber   Shanghai Plaster   Fair-faced Brickwalls
	<b>SGPset_WallDimension</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Length (mm)	Length	N.A

## Wall Paper

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FinishType	Label	Wall Paper	

## Wall Vinyl Tile

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Panel
PredefinedType	Need not specify			

ObjectType	N.A					
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Vinyl</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	Vinyl	
Attributes	Sample Attribute Values					
Name	Vinyl					

## Wire-mesh Screen

Ifc4 Entity	IfcWall											
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Wall	Wall	Walls	Panel			
ArchiCad	OpenBuildings	Revit	Tekla									
Wall	Wall	Walls	Panel									
PredefinedType	USERDEFINED											
ObjectType	WIREMESHSCREEN											

## IfcWasteTerminal

### Chute Interface

Ifc4 Entity	IfcWasteTerminal											
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Object	Generic Models	N.A			
ArchiCad	OpenBuildings	Revit	Tekla									
Model Element	Object	Generic Models	N.A									
PredefinedType	USERDEFINED											
ObjectType	CHUTEINTERFACE											

### Recyclables Outdoor Throw Point

Ifc4 Entity	IfcWasteTerminal											
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Object	Generic Models	N.A			
ArchiCad	OpenBuildings	Revit	Tekla									
Model Element	Object	Generic Models	N.A									
PredefinedType	USERDEFINED											
ObjectType	RECYCLABLESTHROWPOINT											

### Refuse Outdoor Throw Point

Ifc4 Entity	IfcWasteTerminal											
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Object	Generic Models	N.A			
ArchiCad	OpenBuildings	Revit	Tekla									
Model Element	Object	Generic Models	N.A									
PredefinedType	USERDEFINED											
ObjectType	REFUSETHROWPOINT											

## IfcWindow

### Bay Window

Ifc4 Entity	IfcWindow											
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Window</td> <td>Window</td> <td>Windows</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Window	Window	Windows	N.A			
ArchiCad	OpenBuildings	Revit	Tekla									
Window	Window	Windows	N.A									
PredefinedType	USERDEFINED											
ObjectType	BAYWINDOW											
IFC4 UserDefined PropertySet	<b>SGPset_Window</b>											

IFC4 UserDefined Property Name	Data Type	Sample Property Values
OperationType	Label	N.A

## Dormer Window

Ifc4 Entity	IfcWindow			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Window	Window	Windows	N.A
PredefinedType	USERDEFINED			
ObjectType	DORMER			
IFC4 Predefined PropertySet	<b>Pset_WindowCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	New	

## Fragmentation Plate

Ifc4 Entity	IfcWindow			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Window	Window	Windows	N.A
PredefinedType	USERDEFINED			
ObjectType	VENTILATIONSLEEVE			

## Louvre

Ifc4 Entity	IfcWindow			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Window	Window	Windows	N.A
PredefinedType	USERDEFINED			
ObjectType	LOUVRE			
IFC4 UserDefined PropertySet	<b>SGPset_Window</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FixedLouvreBlade	Boolean	TRUE   FALSE	

## Skylight

Ifc4 Entity	IfcWindow			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Window	Window	Windows	N.A
PredefinedType	SKYLIGHT			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 Predefined PropertySet	<b>Pset_WindowCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	New	



IFC4 UserDefined PropertySet	<b>SGPset_Window</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Material_SpecularReflectance	Label	N.A
	OperationType	Label	N.A

## Skylight Frame

IFC4 Entity	IfcWindow			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Window	Window	Windows	N.A
PredefinedType	SKYLIGHT			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	

## Vent

IFC4 Entity	IfcWindow			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Window	Window	Windows	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Metal	
IFC4 Predefined PropertySet	<b>Pset_WindowCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Existing   New	

## Ventilation Sleeve

IFC4 Entity	IfcWindow			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Window	Window	Windows	N.A
PredefinedType	USERDEFINED			
ObjectType	VENTILATIONSLEEVE			
IFC4 UserDefined PropertySet	<b>SGPset_WindowDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	InnerDiameter (mm)	Length	N.A	
	OuterDiameter (mm)	Length	N.A	

## Window

IFC4 Entity	IfcWindow			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Window	Window	Windows	N.A

PredefinedType	WINDOW		
ObjectType	N.A		
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>
	Name	Glass   UPVC	
IFC4 Predefined PropertySet	<b>Pset_WindowCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	IsExternal	Boolean	TRUE   FALSE
	ThermalTransmittance	Thermal Transmittance	Sample Value(s): 1 W/m2 K
	FireRating (hr)	Label	N.A
	FireExit	Boolean	TRUE   FALSE
Status	Label	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Window</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	OperationType	Label	N.A
	PercentageOfOpening	Real	Sample Value(s): 50
	Material_DaylightReflectance	Label	N.A
	Material_DiffuseReflectance	Label	N.A
	Material_SpecularReflectance	Label	N.A
	ShadingCoefficient_Glass	Real	N.A
	IsBuiltIn	Boolean	TRUE   FALSE
	ShadingCoefficient	Real	N.A
	ConstructionMethod	Label	N.A
	WithMetalGrill	Boolean	TRUE   FALSE
	CorrosionResistant	Boolean	TRUE   FALSE
	Fixed	Boolean	TRUE   FALSE
	FireAccessOpening	Boolean	TRUE   FALSE
	IsLaminated	Boolean	TRUE   FALSE
	Combustible	Boolean	FALSE   TRUE   FALSE
InsectScreen	Boolean	TRUE   FALSE	

## Window

IFC4 Entity	IfcWindow			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Window	Window	Windows	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Attributes	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	TransomThickness	N.A		
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name	Glass		
IFC4 Predefined PropertySet	<b>Pset_WindowCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ThermalTransmittance (W/m2 K)	Thermal Transmittance	Sample Value(s): 1 W/m2 K	
	Status	Label	Existing   New	
	<b>IfcWindowLiningProperties</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
N.A	N.A	N.A		
IFC4 UserDefined PropertySet	<b>SGPset_Window</b>			

IFC4 UserDefined Property Name	Data Type	Sample Property Values
ShadingCoefficient_Glass	Real	N.A
ShadingCoefficient	Real	N.A
OperationType	Label	SLIDING
WithFanlight	Boolean	N.A

## Window Ledge

Ifc4 Entity	IfcWindow			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Window	Window	Windows	N.A
PredefinedType	WINDOW			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Ledge		

## ELECTRICAL ELEMENTS

### IfcAirTerminal

#### Louvre

Ifc4 Entity	IfcAirTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	LOUVRE			
ObjectType	N.A			

### IfcAlarm

#### Alarm

Ifc4 Entity	IfcAlarm			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Home Fire Alarm Device

Ifc4 Entity	IfcAlarm			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	USERDEFINED			
ObjectType	HOMEFIREALARMDEVICE			
IFC4 UserDefined PropertySet	<b>SGPset Alarm</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	

	SmokeDetection	Boolean	TRUE   FALSE
--	----------------	---------	--------------

## Manual Call Point

Ifc4 Entity	IfcAlarm			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	BREAKGLASSBUTTON			
ObjectType	N.A			

## Siren Alarm

Ifc4 Entity	IfcAlarm			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	SIREN			
ObjectType	N.A			

## Sound Alarm

Ifc4 Entity	IfcAlarm			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	BELL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Alarm</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SoundLevel (dBA)	Label	Sample Value(s): 5 dBA	
	ElectronicallyInterlocked	Boolean	TRUE   FALSE	

## Visual Alarm

Ifc4 Entity	IfcAlarm			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	LIGHT			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Alarm</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FlashingRate (flash/min)	Label	Sample Value(s): 30 flash/min	

## Visual Alarm Light Housing

Ifc4 Entity	IfcAlarm			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	LIGHT			
ObjectType	N.A			

## Visual Indicator

Ifc4 Entity	IfcAlarm			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	USERDEFINED			
ObjectType	VISUALINDICATOR			

## IfcAudioVisualAppliance

### Amplifier

Ifc4 Entity	IfcAudioVisualAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	AMPLIFIER			
ObjectType	N.A			

### Battery Telephone Point

Ifc4 Entity	IfcAudioVisualAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Data Devices	N.A
PredefinedType	TELEPHONE			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_AudioVisualAppliance</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IntercomSystemType	Label	Sample Value(s): Master	

### CCTV

Ifc4 Entity	IfcAudioVisualAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Security Devices	N.A
PredefinedType	CAMERA			
ObjectType	N.A			

### Loudspeaker

Ifc4 Entity	IfcAudioVisualAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Fire Alarm Devices	N.A
PredefinedType	USERDEFINED			
ObjectType	LOUDSPEAKER			

### Microphone

Ifc4 Entity	IfcAudioVisualAppliance			
-------------	-------------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	MICROPHONE			
ObjectType	N.A			

## Speaker

Ifc4 Entity	IfcAudioVisualAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Fire Alarm Devices	N.A
PredefinedType	SPEAKER			
ObjectType	N.A			

## Switcher

Ifc4 Entity	IfcAudioVisualAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	SWITCHER			
ObjectType	N.A			

## Video Image Fire Detection Camera

Ifc4 Entity	IfcAudioVisualAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Security Devices	N.A
PredefinedType	CAMERA			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_AudioVisualAppliance</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	VideoFireImageDetection	Boolean	TRUE   FALSE	

## Voice Communication Handset

Ifc4 Entity	IfcAudioVisualAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Telephone Devices	N.A
PredefinedType	TELEPHONE			
ObjectType	N.A			

## IfcCableCarrierSegment

### Cable Carrier Segment

Ifc4 Entity	IfcCableCarrierSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Cable Tray	Place Raceray	Cable Trays	N.A
PredefinedType	Need not specify			

ObjectType	N.A
------------	-----

## Cable Tray

Ifc4 Entity	IfcCableCarrierSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Cable Tray	Place Raceray	Cable Trays	N.A
PredefinedType	CABLETRAYSEGMENT			
ObjectType	N.A			

## Conduit

Ifc4 Entity	IfcCableCarrierSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Duct	Duct	Conduits	N.A
PredefinedType	CONDUITSEGMENT			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		

## Flexible Metal Conduit

Ifc4 Entity	IfcCableCarrierSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Duct	Duct	Conduits	N.A
PredefinedType	CONDUITSEGMENT			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Flexible Metal		

## Liquid Tight Flexible Metal Conduit

Ifc4 Entity	IfcCableCarrierSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Duct	Duct	Conduits	N.A
PredefinedType	CONDUITSEGMENT			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Liquid Tight Flexible Metal		

## Metal Conduit

Ifc4 Entity	IfcCableCarrierSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Duct	Duct	Conduits	N.A
PredefinedType	CONDUITSEGMENT			

ObjectType	N.A		
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>	
	Name	Metal	

## Metal Trunking

Ifc4 Entity	IfcCableCarrierSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Cable Tray	Place Raceray	Cable Trays	N.A
PredefinedType	CABLETRUNKINGSEGMENT			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Metal		

## Rigid Metal Conduit

Ifc4 Entity	IfcCableCarrierSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Duct	Duct	Conduits	N.A
PredefinedType	CONDUITSEGMENT			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Rigid Metal		

## Trunking

Ifc4 Entity	IfcCableCarrierSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Cable Tray	Place Raceray	Cable Trays	N.A
PredefinedType	CABLETRUNKINGSEGMENT			
ObjectType	N.A			

## IfcCableFitting

### Cable Fitting

Ifc4 Entity	IfcCableFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipework	Raceway	Conduits	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_CableFitting</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	



## Cable Segment

Ifc4 Entity	IfcCableSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		
IFC4 UserDefined PropertySet	<b>SGPset_CableSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	SS 638 Code of practice for electrical installations   SS 299 Fire-resistant cables of rated voltage up to and including 600/1000 V for fixed installations   having low emission of smoke and corrosive gases when affected by fire   NFPA 262 Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces   SS 254 Electrical apparatus for explosive gas atmospheres	
	FireRating (hr)	Label	N.A	
	Cable_MineralInsulatedMetalSheathed	Boolean	TRUE   FALSE	
	Cable_AluminiumSheathed	Boolean	TRUE   FALSE	
	Cable_CopperSheathed	Boolean	TRUE   FALSE	
Cable_MetalCladded	Boolean	TRUE   FALSE		

## Down Conductor

Ifc4 Entity	IfcCableSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LPS_DOWNCONDUCTOR			
IFC4 UserDefined PropertySet	<b>SGPset_CableSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	LinkedToNaturalRebar	Boolean	TRUE   FALSE	
	LPS_ConnectedToFoundation	Boolean	TRUE   FALSE	

## Natural Down Conductor

Ifc4 Entity	IfcCableSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LPS_NATURALDOWNCONDUCTOR			

## Power Cable

Ifc4 Entity	IfcCableSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_CableSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	

## Signal Cable

Ifc4 Entity	IfcCableSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_CableSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	

## Wire Cable

Ifc4 Entity	IfcCableSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## IfcCommunicationsAppliance

### Antennae

Ifc4 Entity	IfcCommunicationsAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	ANTENNA			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		

### Computer

Ifc4 Entity	IfcCommunicationsAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	COMPUTER			
ObjectType	N.A			

## Distress Button

Ifc4 Entity	IfcCommunicationsAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	DISTRESSBUTTON			

## Integrated Communication Console

Ifc4 Entity	IfcCommunicationsAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	INTEGRATEDCOMMUNICATIONCONSOLE			
IFC4 UserDefined PropertySet	<b>SGPset_CommunicationsAppliance</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IntercomSystemType	Label	Sample Value(s): Master	

## Network Appliance

Ifc4 Entity	IfcCommunicationsAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	NETWORKAPPLIANCE			
ObjectType	N.A			

## IfcDamper

### Blade

Ifc4 Entity	IfcDamper			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Air Terminal	Air Terminals	N.A
PredefinedType	FIRE DAMPER			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Blade		

### Flange Sleeve

Ifc4 Entity	IfcDamper			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Duct Accessories	N.A
PredefinedType	FIRE DAMPER			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Flange		

## IfcDiscreteAccessory

### Air-finial

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LPS_AIRFINIAL			

### Air-termination Tape

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LPS_TAPE			

### Bi-metallic Connector

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LPS_BIMETALLICCONNECTOR			

### Flush Bolt

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FLUSHBOLT			

### Lightning Tape

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LPS_LIGHTNINGTAPE			
IFC4 UserDefined PropertySet	<b>SGPset_DiscreteAccessory</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	LPS_ConnectedToRebar	Boolean	TRUE   FALSE	
	LPS_ConnectedToFoundation	Boolean	TRUE   FALSE	

## Locking Device

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Metal capping

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LPS_METALCAPPING			

## Panic Device

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Strike Pad

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LPS_STRIKEPAD			

## Test Link Box

Ifc4 Entity	IfcDiscreteAccessory			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LPS_TESTLINKBOX			

## IfcDistributionChamberElement

### Earth Pit

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LPS_EARTHPIIT			

## Air Cleaning Equipment

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	AIRCLEANINGEQUIPMENT			

## Coffee Maker

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	COFFEEMAKER			

## Dishwasher

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	DISHWASHER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ElectricAppliance</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	CapacityWeight (kg)	Real	in kg	

## Drinking Fountain

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	DRINKINGFOUNTAIN			
IFC4 UserDefined PropertySet	<b>SGPset_ElectricAppliance</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	WithHoodedJet	Boolean	TRUE   FALSE	

## Electric Cooker

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	ELECTRICCOOKER			
ObjectType	N.A			

Ifc4 UserDefined PropertySet	<b>SGPset_ElectricApplianceTypeElectricCooker</b>		
	<b>Ifc4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	ElectricCookerType	Label	BOILINGPAN   TILTINGBOILINGPAN   TILTINGROASTEDTIN   FIXEDROASTEDTIN

## Electric Heater

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	FREESTANDINGELECTRICHEATER			
ObjectType	N.A			

## Freezer

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	FREEZER			
ObjectType	N.A			

## Fume Hood

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fire Protection	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	FUMEHOOD			

## Hand Dryer

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	HANDDRYER			
ObjectType	N.A			

## High Pressure Cleaner

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	HIGHPRESSURECLEANER			

## Ice Maker

Ifc4 Entity	IfcElectricAppliance			
-------------	----------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	ICEMAKER			

## Range Hood

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fire Protection	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	RANGEHOOD			
IFC4 UserDefined PropertySet	<b>SGPset_ElectricAppliance</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ApprovedExtinguishingSystem	Boolean	TRUE   FALSE	

## Refrigerator

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	REFRIGERATOR			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ElectricAppliance</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FlammableRefrigerant	Boolean	TRUE   FALSE	

## Scraper

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	SCRAPER			

## Standalone Refrigerator

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	STANDALONEREFRIGIRATOR			
IFC4 UserDefined PropertySet	<b>SGPset_ElectricAppliance</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FlammableRefrigerant	Boolean	TRUE   FALSE	



## Steam Cleaner

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	STEAMCLEANER			

## Television

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	TELEVISION			

## Washing Machine

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	WASHINGMACHINE			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ElectricAppliance</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	CapacityWeight (kg)	Real	in kg	

## Water Cooler

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	FREESTANDINGWATERCOOLER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ElectricAppliance</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	WithHoodedJet	Boolean	TRUE   FALSE	

## Water Dispenser

Ifc4 Entity	IfcElectricAppliance			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	WATERDISPENSER			

## Water Heater

Ifc4 Entity	IfcElectricAppliance			
-------------	----------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Electrical Equipment	N.A
PredefinedType	FREESTANDINGWATERHEATER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ElectricAppliance</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	MainsPressureType	Boolean	TRUE   FALSE	
	PressureAndTemperatureReliefValveWithControllingStopcock	Boolean	TRUE   FALSE	

## IfcElectricDistributionBoard

### Distribution Board

Ifc4 Entity	IfcElectricDistributionBoard			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	DISTRIBUTIONBOARD			
ObjectType	N.A			

### Switchboard

Ifc4 Entity	IfcElectricDistributionBoard			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	SWITCHBOARD			
ObjectType	N.A			

## IfcElectricFlowStorageDevice

### Battery

Ifc4 Entity	IfcElectricFlowStorageDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Equipment	Electrical Equipment	N.A
PredefinedType	BATTERY			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ElectricFlowStorageDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	DischargeTime (hr)	Label	N.A	
	ExternalReference	Label	SS CP 10 Code of practice for automatic fire sprinkler system   SS 563 Code of practice for the design   installation and maintenance of emergency lighting and power supply systems in buildings   SS 575 Code of practice for fire hydrant   rising mains and hose reel systems   SS CP 52 Code of practice for fire hydrant   rising mains and hose reel systems	
BatteryType	Label	Vented		

### Battery Backup Power Supply

Ifc4 Entity	IfcElectricFlowStorageDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Equipment	Electrical Equipment	N.A
PredefinedType	UPS			
ObjectType	N.A			

## Electrical Equipment

Ifc4 Entity	IfcElectricFlowStorageDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Equipment	Electrical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ElectricFlowStorageDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	SS 254 Electrical apparatus for explosive gas atmospheres	

## Electrical Equipment - Electric Flow Storage Device

Ifc4 Entity	IfcElectricFlowStorageDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Equipment	Electrical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ElectricFlowStorageDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	SS 254 Electrical apparatus for explosive gas atmospheres	

## UPS

Ifc4 Entity	IfcElectricFlowStorageDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Equipment	Electrical Equipment	N.A
PredefinedType	UPS			
ObjectType	N.A			

## IfcElectricGenerator

### Diesel Generator

Ifc4 Entity	IfcElectricGenerator			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Equipment	Mechanical Equipment	N.A
PredefinedType	ENGINEGENERATOR			
ObjectType	N.A			

## Emergency Generator

Ifc4 Entity	IfcElectricGenerator			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	EMERGENCYENGINEGENERATOR			

## Generator

Ifc4 Entity	IfcElectricGenerator			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Equipment	Mechanical Equipment	N.A
PredefinedType	ENGINEGENERATOR			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ElectricGenerator</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Standby	Boolean	TRUE   FALSE	
	DischargeTime (hr)	Label	N.A	
	ExternalReference	Label	SS 535 Code of practice for installation   operation   maintenance   performance and construction   SS CP 10 Code of practice for automatic fire sprinkler system   SS 563 Code of practice for the design   installation and maintenance of emergency lighting and power supply systems in buildings   SS 575 Code of practice for fire hydrant   rising mains and hose reel systems   SS CP 52 Code of practice for fire hydrant   rising mains and hose reel systems	

## Genset

Ifc4 Entity	IfcElectricGenerator			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Mechanical Element	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Standby Generating Plant

Ifc4 Entity	IfcElectricGenerator			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	STANDBYGENERATINGPLANT			

## IfcFlowInstrument

### Thermocouple Display Panel

Ifc4 Entity	IfcFlowInstrument			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	THERMOCOUPLEPANEL			
IFC4 UserDefined PropertySet	<b>SGPset_FlowInstrument</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AlarmPanel	Boolean	TRUE   FALSE	

## IfcLightFixture

### Beacon Light

Ifc4 Entity	IfcLightFixture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Lighting Fixtures	N.A
PredefinedType	SECURITYLIGHTING			
ObjectType	N.A			

### Emergency Lighting

Ifc4 Entity	IfcLightFixture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Lighting Fixtures	N.A
PredefinedType	SECURITYLIGHTING			
ObjectType	N.A			

### Lighting Fixture

Ifc4 Entity	IfcLightFixture			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Lighting Fixtures	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_LightFixture</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	EnergyEfficiency	Integer	N.A	
	IndexOfProtection	Label	IP66	
	ColorRenderingIndex	Integer	N.A	
	ColorTemperature (K)	Real	N.A	
Intensity	Integer	N.A		

## IfcOutlet

### Communication Fixture

Ifc4 Entity	IfcOutlet			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Communication Devices	N.A

PredefinedType	Need not specify
ObjectType	N.A

## Electrical Fixture

Ifc4 Entity	IfcOutlet			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Electrical Socket Outlet

Ifc4 Entity	IfcOutlet			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	POWEROUTLET			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset Outlet</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	OutletType	Label	Sample Value(s): 2 P PE	

## Single Phase Socket Outlet

Ifc4 Entity	IfcOutlet			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Fixtures	N.A
PredefinedType	POWEROUTLET			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset Outlet</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	OutletSocketType	Label	Single Phase	

## Three Phase Socket Outlet

Ifc4 Entity	IfcOutlet			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Fixtures	N.A
PredefinedType	POWEROUTLET			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset Outlet</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	OutletSocketType	Label	Three Phase	

## Circuit Breaker

Ifc4 Entity	IfcProtectiveDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Fixtures	N.A
PredefinedType	CIRCUITBREAKER			
ObjectType	N.A			

## High Rupturing Capacity Fuse

Ifc4 Entity	IfcProtectiveDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	N.A	N.A	Electrical Equipment	N.A
PredefinedType	FUSEDISCONNECTOR			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ProtectiveDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FuseDisconnectoralType	Label	HRC	

## Moulded Case Circuit Breaker

Ifc4 Entity	IfcProtectiveDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	N.A	N.A	Electrical Equipment	N.A
PredefinedType	FUSEDISCONNECTOR			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ProtectiveDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FuseDisconnectoralType	Label	ENGINEPROTECTIONDEVICE	

## IfcProtectiveDeviceTrippingUnit

### Electro Magnetic

Ifc4 Entity	IfcProtectiveDeviceTrippingUnit			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	N.A	N.A	Electrical Equipment	N.A
PredefinedType	ELECTROMAGNETIC			
ObjectType	N.A			

## IfcSensor

### Beam Detector

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	USERDEFINED			
ObjectType	SMOKEDETECTOR			

Ifc4 UserDefined PropertySet	<b>SGPset_Sensor</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	SmokeDetectorType	Label	Sample Value(s): Optical beam line smoke detector   Point smoke detector

## Fire Sensor

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	FIRESENSOR			
ObjectType	N.A			

## Gas Detector

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	GASSENSOR			
ObjectType	N.A			

## Heat Detector

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	HEATSENSOR			
ObjectType	N.A			
Ifc4 UserDefined PropertySet	<b>SGPset_Sensor</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	EngineeredSmokeControlSystem	Boolean	TRUE   FALSE	

## Movement Sensor

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Security Devices	N.A
PredefinedType	MOVEMENTSENSOR			
ObjectType	N.A			

## Refuse-Level Sensor

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	LEVELSENSOR			
ObjectType	N.A			
Ifc4 UserDefined PropertySet	<b>SGPset_Sensor</b>			



IFC4 UserDefined Property Name	Data Type	Sample Property Values
Declaration	Label	N.A

## Sensor

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Electrical Fixtures	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Smoke Detector

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	SMOKESENSOR			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Sensor</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	EngineeredSmokeControlSystem	Boolean	TRUE   FALSE	
ExternalReference	Label	SS CP 10 Code of practice for automatic fire sprinkler system		

## Smoke Detector

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	FIRESSENSOR			
ObjectType	N.A			

## Thermocouple

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Solid	Fire Alarm Devices	N.A
PredefinedType	TEMPERATURESENSOR			
ObjectType	N.A			

## Valve Position Sensor

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	CONTACTSENSOR			
ObjectType	N.A			

## Solar Panel

Ifc4 Entity	IfcSolarDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Equipment	Electrical Equipment	N.A
PredefinedType	SOLARPANEL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_SolarDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	N.A	

## Bed Lift Switch

Ifc4 Entity	IfcSwitchingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Electrical Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	BEDLIFTSWITCH			

## EV Shut-off Switch

Ifc4 Entity	IfcSwitchingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Electrical Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	EVSHUTOFFSWITCH			

## Emergency Stop

Ifc4 Entity	IfcSwitchingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Electrical Fixtures	N.A
PredefinedType	EMERGENCYSTOP			
ObjectType	N.A			

## Evacuation Switch

Ifc4 Entity	IfcSwitchingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Electrical Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	EVACUATIONSWITCH			
IFC4 UserDefined PropertySet	<b>SGPset_SwitchingDevice</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Breakable	Boolean	TRUE   FALSE	

## Fire Lift Switch

Ifc4 Entity	IfcSwitchingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Electrical Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	FIRELIFTSWITCH			

## Lighting Switch

Ifc4 Entity	IfcSwitchingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Lighting Devices	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Manual Overriding Mechanism

Ifc4 Entity	IfcSwitchingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	EMERGENCYSTOP			
ObjectType	N.A			

## Stop Switch

Ifc4 Entity	IfcSwitchingDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Electrical Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	MANUALSWITCH			

## IfcTransformer

### Inverter

Ifc4 Entity	IfcTransformer			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	INVERTER			
ObjectType	N.A			
Ifc4 UserDefined PropertySet	<b>SGPset_Transformer</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	DischargeTime (hr)	Label	N.A	
ExternalReference	Label	SS CP 10 Code of practice for automatic fire sprinkler system   SS 563 Code of practice for the design   installation and maintenance of emergency lighting and power supply systems in buildings   SS 575 Code of practice for fire hydrant   rising mains and hose reel systems   SS		

			CP 52 Code of practice for fire hydrant   rising mains and hose reel systems
--	--	--	--

## Transformer

Ifc4 Entity	IfcTransformer			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## IfcUnitaryControlElement

### Automatic Rescue Device

Ifc4 Entity	IfcUnitaryControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	AUTOMATICRESCUEDEVICE			

### Control Panel

Ifc4 Entity	IfcUnitaryControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	CONTROLPANEL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_UnitaryControlElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	PWCS_AirIntakeValve	Boolean	TRUE   FALSE	
	PWCS_DischargeValve	Boolean	TRUE   FALSE	
	PWCS_TemporaryStorageSection	Boolean	TRUE   FALSE	
	IPRating	Integer	Sample Value(s): 65	
	PWCS_Flushing	Boolean	TRUE   FALSE	
	PWCS_CollectionStation	Boolean	TRUE   FALSE	
	Ammeter	Boolean	TRUE   FALSE	
	IndicatingLight	Boolean	TRUE   FALSE	
	StartStopPushButton	Boolean	TRUE   FALSE	
	FaultResetPushButton	Boolean	TRUE   FALSE	
	AutoManualSelectorSwitch	Boolean	TRUE   FALSE	
	Automatic	Boolean	TRUE   FALSE	
	NominalVoltage (Volt)	Real	N.A	
	EngineeredSmokeControlSystem	Boolean	TRUE   FALSE	
	SmokePurging	Boolean	TRUE   FALSE	
JetFan	Boolean	TRUE   FALSE		
ElectricVehicle	Boolean	TRUE   FALSE		

### Door Status Panel

Ifc4 Entity	IfcUnitaryControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	INDICATORPANEL			

ObjectType	N.A
------------	-----

## Electrical Equipment

Ifc4 Entity	IfcUnitaryControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset UnitaryControlElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	SS 254 Electrical apparatus for explosive gas atmospheres	

## Electrical Equipment - Unitary Control Element

Ifc4 Entity	IfcUnitaryControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset UnitaryControlElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	SS 254 Electrical apparatus for explosive gas atmospheres	

## FCC Equipment

Ifc4 Entity	IfcUnitaryControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Fire Alarm Panel

Ifc4 Entity	IfcUnitaryControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	ALARMPANEL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset UnitaryControlElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AutomaticFireAlarmSystem	Boolean	TRUE   FALSE	

## Gas Detection Panel

Ifc4 Entity	IfcUnitaryControlElement			
-------------	--------------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	GASDETECTIONPANEL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_UnityControlElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AlarmPanel	Boolean	TRUE   FALSE	

## Lift Supervisory Panel

Ifc4 Entity	IfcUnityControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	LIFTSUPERVISORYPANEL			

## Main Fire Alarm Panel

Ifc4 Entity	IfcUnityControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	ALARMPANEL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_UnityControlElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireAlarmPanel	Boolean	TRUE   FALSE	
Purpose	Label	MAINPANEL		

## Main Smoke Control Panel

Ifc4 Entity	IfcUnityControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	ALARMPANEL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_UnityControlElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SmokeControlPanel	Boolean	TRUE   FALSE	
Purpose	Label	MAINPANEL		

## Operator Panel

Ifc4 Entity	IfcUnityControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	OPERATORPANEL			

IFC4 UserDefined PropertySet	<b>SGPset_UnityControlElement</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	PWCS_CollectionStation	Boolean	TRUE   FALSE

## Stopping Device

Ifc4 Entity	IfcUnityControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Fixtures	N.A
PredefinedType	CONTROLPANEL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_UnityControlElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	StoppingDevice	Boolean	TRUE   FALSE	

## Sub Fire Alarm Panel

Ifc4 Entity	IfcUnityControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	ALARMPANEL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_UnityControlElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireAlarmPanel	Boolean	TRUE   FALSE	
	Purpose	Label	SUBPANEL	

## Sub Smoke Control Panel

Ifc4 Entity	IfcUnityControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	ALARMPANEL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_UnityControlElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Purpose	Label	SUBPANEL	

## Voice Communication Panel

Ifc4 Entity	IfcUnityControlElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Electrical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	VOICECOMMUNICATIONPANEL			
IFC4 UserDefined PropertySet	<b>SGPset_UnityControlElement</b>			

IFC4 UserDefined Property Name	Data Type	Sample Property Values
TwoWayCommunication	Boolean	TRUE   FALSE
OneWayCommunication	Boolean	TRUE   FALSE

## EXTERNAL WORKS ELEMENTS

### IfcCivilElement

#### Carriageway

Ifc4 Entity	IfcCivilElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	GIS_CARRIAGEWAY			
IFC4 UserDefined PropertySet	<b>SGPset_CivilElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadCategory	Label	1/2/3/4/5	
	AccelerationLane	Boolean	TRUE   FALSE	
	DecelerationLane	Boolean	TRUE   FALSE	
	FireEngineAccessRoad	Boolean	TRUE   FALSE	

#### Road Kerb

Ifc4 Entity	IfcCivilElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	GIS_ROADKERB			

#### Side Table

Ifc4 Entity	IfcCivilElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	GIS_SIDETABLE			

#### Slip Road

Ifc4 Entity	IfcCivilElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Slab
PredefinedType	USERDEFINED			
ObjectType	GIS_CARRIAGEWAY			
IFC4 UserDefined PropertySet	<b>SGPset_CivilElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SlipRoad	Boolean	TRUE   FALSE	



## Activity Generating Use Zone

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Activity Generating Use Zone	
	GIS_Name	Label	N.A	

## Approved Railway Area

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Rail Station	
	GIS_Name	Label	N.A	

## Bencoolen Street

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Bencoolen Street	

## Botanic Gardens Vicinity Area

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Botanic Gardens Vicinity Area	

	GIS_Name	Label	N.A
--	----------	-------	-----

## Bras Basah Road

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Bras Basah Road	

## Building Height Control

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Building Height Control	
	GIS_Name	Label	N.A	
	BuildingHeightControl_Height (m)	Length	N.A	
BuildingHeightControl_StoreyCount	Integer	N.A		

## Building Height Control Area

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Building Height Control Area	
GIS_Name	Label	N.A		

## Bus Stop

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_TRANSPORTNODE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	

	BusStop	Boolean	TRUE   FALSE
--	---------	---------	--------------

## Campus Boulevard

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Campus Boulevard	

## Car-lite Precincts

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_CARLITEPRECINCTS			

## Central Business District Incentive

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Central Business District Incentive	
	GIS_Name	Label	Cecil St   Robinson Rd   Shenton Way   Tanjong Pagar   Anson	

## Clemenceau Avenue

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Clemenceau Avenue	

## Commercial

Ifc4 Entity	IfcGeographicElement			
-------------	----------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			

## Conservation Area

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
Ifc4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Conservation Area	
	GIS_Name	Label	Geylang   Tiong Bahru   River Valley   Balestier   Beach Road   Jalan Besar   Jalan Jurong Kechil   Joo Chiat   Mount Sophia   Tanjong Katong   Upper Circular Road	
GIS_ConservationAreaType	Label	Historic District   Residential Historic District   Secondary Settlement   Others   Bungalows		

## Conservation Special Control

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
Ifc4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Conservation Special Control	
	GIS_Name	Label	Shopfront Control   Staircase Control   Residential Front Control   Forecourt Control   Corner Unit Control   Conserved Extent Control	

## Conserved Building

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
Ifc4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Conserved Building	
	GIS_Name	Label	N.A	

## Core Area

Ifc4 Entity	IfcGeographicElement			
-------------	----------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Core Area	
	GIS_Name	Label	Sample Value(s): Chinatown   Kampong Glam   Little India	

## Designated Landed Housing Area

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	N.A	
	GIS_Name	Label	N.A	

## Drainage Reserve

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_DRAINAGERESERVE			

## Elevated Pedestrian Link

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ELEVATEDPEDESTRIANLINK			

## Envelope Control Site

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Envelope Control Site	
	GIS_Name	Label	N.A	

## GIS Scheme

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	N.A	
	GIS_Name	Label	N.A	

## Geylang Road

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Geylang Road	

## Good Class Bungalow Area

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Good Class Bungalow Area	
	GIS_Name	Label	2-storey	
	ApprovedStoreyHeight (m)	Length	N.A	

## HDB Estate Parcel

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	N.A	
	GIS_Name	Label	HBD Estate	

## Handy Road

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Handy Road	

## Hill Street

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Hill Street	

## Historical Conservation District

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Historical Conservation District	
	GIS_Name	Label	Little India   Kampong Glam   Chinatown   Boat Quay	

## Industrial Estate Parcel

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	N.A	
	GIS_Name	Label	Industrial Estate	

## Key Growth Area

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Key Growth Area	
	GIS_Name	Label	N.A	

## Key Route

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_KEYROUTE			

## Lamp Post

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Lighting Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_LAMPPOST			

## Landed Housing Area

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ApprovedStoreyHeight (m)	Length	N.A	
	GIS_Scheme	Label	Landed Housing Area	
GIS_Name	Label	2-storey		

## Lorong

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			



IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	RoadName	Label	Lorong

## Lower Height Control Area

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BuildingHeightControl_Height (m)	Length	N.A	
	BuildingHeightControl_StoreyCount	Integer	N.A	
	GIS_Scheme	Label	Lower Height Control Area	
	GIS_Name	Label	N.A	

## Major Transport Node

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	WCP Buffer	
	GIS_Name	Label	Kallang MRT	

## Master Plan

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_MASTERPLAN			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_MasterPlanUse	Label	N.A	
	GIS_PlanningArea	Label	N.A	
	GIS_LandOwnership	Label	N.A	
	GIS_GovernmentLandSale	Boolean	TRUE   FALSE	

## Master Plan Parcel

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A

PredefinedType	USERDEFINED		
ObjectType	GIS_MASTERPLAN		
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	GIS_AllowableMasterPlanUse	Label	Business Park   Residential   Residential/Institution   Commercial and Residential   Residential with Commercial at 1st Storey   White   Commercial & Residential   Civic and Community Institution   Residential with 1st Storey Commercial   Business Park - White   Health and Medical Care   Hotel   Business Whites   Place of Worship   Sports and Recreation   Transport Facilities   Educational Institution   Agriculture
	GIS_PlanningArea	Label	Punggol Digital District   Museum   Marina South Marina East and Straits View   Newton   River Valley   Outram   Downtown Core   Jurong Lake   Orchard   Paya Lebar Central   Singapore River   Woodlands Central   Rochor (Bras Basah Bugis)   Geylang   Kampong Bugis   Woodlands North   Bayshore   Jurong Lake District   Chinatown   Little India   Kampong Glam   Boat Quay   Blair Plain   Emerald Hill   Cairnhill   Central Area   Lim Chu Kang Value Source: To refer to URA Master Plan Planning Area layers
	FloorAreaRatio	Real	N.A
GIS_Region	Label	Central	

## Middle Road

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Middle Road	

## National Monument

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	National Monument	
	GIS_Name	Label	N.A	

## Night Lighting Area

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Night Lighting Area	
	GIS_Name	Label	N.A	

## Non-landed Residential Estate Parcel

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	N.A	
	GIS_Name	Label	Non-landed Residential Estate	

## Orchard Boulevard

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Orchard Boulevard	

## Orchard Road

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Orchard Road	

## PUB Water Catchment Boundaries

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A

PredefinedType	USERDEFINED									
ObjectType	GIS_FEATURE									
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>									
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>GIS_Scheme</td> <td>Label</td> <td>Kranji</td> </tr> <tr> <td>GIS_Name</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	GIS_Scheme	Label	Kranji	GIS_Name	Label	N.A
	IFC4 UserDefined Property Name	Data Type	Sample Property Values							
	GIS_Scheme	Label	Kranji							
GIS_Name	Label	N.A								

## Paya Lebar Expressway

Ifc4 Entity	IfcGeographicElement								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Mesh	Mesh	Topography	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Mesh	Mesh	Topography	N.A						
PredefinedType	USERDEFINED								
ObjectType	GIS_ROAD								
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>								
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>RoadName</td> <td>Label</td> <td>Paya Lebar Expressway</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	RoadName	Label	Paya Lebar Expressway		
	IFC4 UserDefined Property Name	Data Type	Sample Property Values						
	RoadName	Label	Paya Lebar Expressway						

## Penang Road

Ifc4 Entity	IfcGeographicElement								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Mesh	Mesh	Topography	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Mesh	Mesh	Topography	N.A						
PredefinedType	USERDEFINED								
ObjectType	GIS_ROAD								
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>								
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>RoadName</td> <td>Label</td> <td>Penang Road</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	RoadName	Label	Penang Road		
	IFC4 UserDefined Property Name	Data Type	Sample Property Values						
	RoadName	Label	Penang Road						

## Prinsep Street

Ifc4 Entity	IfcGeographicElement								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Mesh	Mesh	Topography	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Mesh	Mesh	Topography	N.A						
PredefinedType	USERDEFINED								
ObjectType	GIS_ROAD								
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>								
	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>RoadName</td> <td>Label</td> <td>Prinsep Street</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	RoadName	Label	Prinsep Street		
	IFC4 UserDefined Property Name	Data Type	Sample Property Values						
	RoadName	Label	Prinsep Street						

## Promenade Reserve Line

Ifc4 Entity	IfcGeographicElement								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Mesh	Mesh	Topography	N.A
	ArchiCad	OpenBuildings	Revit	Tekla					
Mesh	Mesh	Topography	N.A						
PredefinedType	USERDEFINED								
ObjectType	GIS_PROMENADERESERVELINE								

## Proposed Landed Housing Cluster

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Landed Housing Area	
	GIS_Name	Label	N.A	
ConstructionPhase	Label	New		

## Public Road

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			

## Queen Street

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Queen Street	

## River Valley Road

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	River Valley Road	

## Road

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A

PredefinedType	USERDEFINED		
ObjectType	GIS_ROAD		
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	RoadCategory	Label	N.A
	RoadName	Label	Lorong 23   Aljunied
	<b>SGPset_GeographicElementDimension</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
Area (m2)	Area	N.A	

## Road Reserve Line

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Massing	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROADRESERVELINE			

## Rochor Canal Road

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Rochor Canal Road	

## Safeguarded Site

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Safeguarded Site	
	GIS_Name	Label	N.A	

## Scotts Road

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			

IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	RoadName	Label	Scotts Road

## Selegie Road

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Selegie Road	

## Sindo Industrial Estate Parcel

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	N.A	
	GIS_Name	Label	Sindo Industrial Estate	

## Site Boundary (Nuisance Buffer)

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_NUISANCE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	N.A	
	GIS_Name	Label	Nuisance Buffer	

## Special Control Area

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset_GeographicElement</b>			

	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	GIS_Scheme	Label	Special Control Area
	GIS_Name	Label	N.A

## Strategic Area Boundary

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_STRATEGICAREABOUNDARY			

## Strategic Development Incentive

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Strategic Development Incentive	
	GIS_Name	Label	Anson	

## Street Block Control Area

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_FEATURE			
IFC4 UserDefined PropertySet	<b>SGPset GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	GIS_Scheme	Label	Street Block Control Area	
	GIS_Name	Label	N.A	

## Taxi Stand

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_TRANSPORTNODE			
IFC4 UserDefined PropertySet	<b>SGPset GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TaxiStand	Boolean	TRUE   FALSE	



## Through Block Link

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_THROUGHBLOCKLINK			

## Underground Pedestrian Link

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_UNDERGROUNDPEDESTRIANLINK			

## Vertical Circulation Point

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_VERTICALCIRCULATIONPOINT			

## Victoria Street

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Victoria Street	

## Waterloo Street

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ROAD			
IFC4 UserDefined PropertySet	<b>SGPset GeographicElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	RoadName	Label	Waterloo Street	

## Zonal Vehicle Parking

Ifc4 Entity	IfcGeographicElement			
-------------	----------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Mesh	Mesh	Topography	N.A
PredefinedType	USERDEFINED			
ObjectType	GIS_ZONALVEHICLEPARKING			

## FIRE PROTECTION ELEMENTS

### IfcFireSuppressionTerminal

#### Breeching Inlet

Ifc4 Entity	IfcFireSuppressionTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Plumbing Fixtures	N.A
PredefinedType	BREECHINGINLET			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_FireSuppressionTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ID	Label	N.A	

#### Fire Hydrant

Ifc4 Entity	IfcFireSuppressionTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fire Protection	Mechanical Equipment	N.A
PredefinedType	FIREHYDRANT			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_FireSuppressionTerminalTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Temporary	
IFC4 UserDefined PropertySet	<b>SGPset_FireSuppressionTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ID	Label	N.A	
	Private	Boolean	TRUE   FALSE	
	Public	Boolean	TRUE   FALSE	
	RunningPressure (bar)	Label	Sample Value(s): 5 bar	
	FlowRate (m3/s)	Volumetric FlowRate	Sample Value(s): 2 L/s	
FlowRate	Volumetric FlowRate	Sample Value(s): 2 L/s		

#### Foam Inlet

Ifc4 Entity	IfcFireSuppressionTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			

ObjectType	FOAMINLET
------------	-----------

## Foam Nozzle

Ifc4 Entity	IfcFireSuppressionTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fire Protection	Sprinklers	N.A
PredefinedType	USERDEFINED			
ObjectType	FOAMNOZZLE			

## Hose Reel

Ifc4 Entity	IfcFireSuppressionTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Mechanical Equipment	N.A
PredefinedType	HOSEREEL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_FireSuppressionTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Hose_NominalDiameter (mm)	Length	Sample Value(s): 50 mm	
	ExternalReference	Label	SS 575 Code of practice for fire hydrant   rising mains and hose reel systems Sample Value(s): 30m	
Hose_Length (mm)	Length	Sample Value(s): 30m		

## Sprinkler

Ifc4 Entity	IfcFireSuppressionTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Terminal	Sprinkler	Sprinklers	N.A
PredefinedType	SPRINKLER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_FireSuppressionTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FlowRate (m3/s)	Volumetric FlowRate	Sample Value(s): 3 L/min   56 L/min	
	Pressure	Label	Sample Value(s): 50 kPa	
	Kfactor	Label	Sample Value(s): 11.5	
	<b>SGPset_FireSuppressionTerminalTypeSprinkler</b>			
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>		
ActivationTemperature	Real	N.A		

## IfcPipeSegment

### Hose

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Mechanical Equipment	N.A

PredefinedType	FLEXIBLESEGMENT		
ObjectType	N.A		
IFC4 Predefined PropertySet	<b>Pset_PipeSegmentTypeCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	InnerDiameter (mm)	Length	N.A
	WorkingPressure (psi)	Real	N.A
	PressureRange (psi)	Real	N.A
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Coupling_Diameter (mm)	Length	N.A
	Length (mm)	Length	N.A
	ExternalReference	Label	SS 233 Specification for flexible rubber tubing   rubber hose and rubber hose assemblies for use in LPG vapour phase installations

## Pipe Segment

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FlowRate (m3/s)	Volumetric FlowRate	Sample Value(s): 3 L/min	

## Standby Fire Hose

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	STANDBYFIREHOSE			
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegmentDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Diameter (mm)	Length	N.A	

## IfcPump

### Fire Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	ENDSUCTION			
ObjectType	N.A			

## Fire Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Jockey Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	JOCKEYPUMP			

## Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Pump</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireRating (hr)	Label	Sample Value(s): 1 hr	

## Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	SPLITCASE			
ObjectType	N.A			

## IfcTank

### Clean Agent Fire Extinguisher

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FIREEXTINGUISHINGTANK			
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExtinguisherType	Label	Clean Agent	

	Standby	Boolean	TRUE   FALSE
--	---------	---------	--------------

## Dry Chemical Fire Extinguisher

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FIREEXTINGUISHINGTANK			
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	OperatingWeight (kg)	Real	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExtinguisherType	Label	Dry Chemical	

## Fire Extinguishing Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FIREEXTINGUISHINGTANK			

## Hydrant Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	STORAGE			
ObjectType	N.A			

## Wet Chemical Fire Extinguisher

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FIREEXTINGUISHINGTANK			
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExtinguisherType	Label	Wet Chemical	

IfcValve

## Sprinkler Control Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	SPRINKLERCONTROL			

## MECHANICAL ELEMENTS

### IfcFan

#### Jet Fan

Ifc4 Entity	IfcFan			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Mechanical Equipment	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

### IfcPump

#### Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

### IfcSolarDevice

#### Solar Panel

Ifc4 Entity	IfcSolarDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Equipment	Electrical Equipment	N.A
PredefinedType	SOLARPANEL			
ObjectType	N.A			

### IfcTransportElement

#### Goods Lift

Ifc4 Entity	IfcTransportElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Transport Element	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			

ObjectType	GOODSLIFT
------------	-----------

## PLUMBING ELEMENTS

### IfcBoiler

#### Boiler

Ifc4 Entity	IfcBoiler			
Proposed BIM Representation	<b>ArchiCad</b> Flow Equipment	<b>OpenBuildings</b> Equipment	<b>Revit</b> Mechanical Equipment	<b>Tekla</b> N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Boiler</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AI_AmmoniaAndAmmonium (mg/Nm3)	Label	N.A	
	AI_Antimony (mg/Nm3)	Label	N.A	
	AI_Arsenic (mg/Nm3)	Label	N.A	
	AI_Benzene (mg/Nm3)	Label	N.A	
	AI_Cadmium (mg/Nm3)	Label	N.A	
	AI_CarbonMonoxide (mg/Nm3)	Label	N.A	
	AI_Chlorine (mg/Nm3)	Label	N.A	
	AI_Copper (mg/Nm3)	Label	N.A	
	AI_DioxinsAndFurans (TEQ/Nm3)	Label	N.A	
	AI_EthyleneOxide (mg/Nm3)	Label	N.A	
	AI_FluorineAndHydrofluoricAcid (mg/Nm3)	Label	N.A	
	AI_Formaldehyde (mg/Nm3)	Label	N.A	
	AI_HydrogenChloride (mg/Nm3)	Label	N.A	
	AI_HydrogenSulphide (mg/Nm3)	Label	N.A	
	AI_Lead (mg/Nm3)	Label	N.A	
	AI_Mercury (mg/Nm3)	Label	N.A	
	AI_OxidesOfNitrogen (mg/Nm3)	Label	N.A	
	AI_ParticulateSubstances (mg/Nm3)	Label	N.A	
AI_StyreneMonomer (mg/Nm3)	Label	N.A		
AI_SulphurDioxide (mg/Nm3)	Label	N.A		
AI_SulphurTrioxideAndAcidGases (mg/Nm3)	Label	N.A		
AI_SulphurTrioxideOrSulphuricAcidMist (mg/Nm3)	Label	N.A		
AI_VinylChlorideMonomer (mg/Nm3)	Label	N.A		

#### Boiler

Ifc4 Entity	IfcBoiler			
Proposed BIM Representation	<b>ArchiCad</b> Flow Equipment	<b>OpenBuildings</b> Equipment	<b>Revit</b> Mechanical Equipment	<b>Tekla</b> N.A
PredefinedType	WATER			
ObjectType	N.A			

#### Steam Condensate Tank

Ifc4 Entity	IfcBoiler			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>



	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	STEAM			
ObjectType	N.A			

## IfcBuildingElementProxy

### Fuel Burning Equipment

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	FUELBURNINGEQUIPMENT			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AI_AmmoniaAndAmmonium (mg/Nm3)	Label	N.A	
	AI_Antimony (mg/Nm3)	Label	N.A	
	AI_Arsenic (mg/Nm3)	Label	N.A	
	AI_Benzene (mg/Nm3)	Label	N.A	
	AI_Cadmium (mg/Nm3)	Label	N.A	
	AI_CarbonMonoxide (mg/Nm3)	Label	N.A	
	AI_Chlorine (mg/Nm3)	Label	N.A	
	AI_Copper (mg/Nm3)	Label	N.A	
	AI_DioxinsAndFurans (TEQ/Nm3)	Label	N.A	
	AI_EthyleneOxide (mg/Nm3)	Label	N.A	
	AI_FluorineAndHydrofluoricAcid (mg/Nm3)	Label	N.A	
	AI_Formaldehyde (mg/Nm3)	Label	N.A	
	AI_HydrogenChloride (mg/Nm3)	Label	N.A	
	AI_HydrogenSulphide (mg/Nm3)	Label	N.A	
	AI_Lead (mg/Nm3)	Label	N.A	
	AI_Mercury (mg/Nm3)	Label	N.A	
	AI_OxidesOfNitrogen (mg/Nm3)	Label	N.A	
	AI_ParticulateSubstances (mg/Nm3)	Label	N.A	
	AI_StyreneMonomer (mg/Nm3)	Label	N.A	
AI_SulphurDioxide (mg/Nm3)	Label	N.A		
AI_SulphurTrioxideAndAcidGases (mg/Nm3)	Label	N.A		
AI_SulphurTrioxideOrSulphuricAcidMist (mg/Nm3)	Label	N.A		
AI_VinylChlorideMonomer (mg/Nm3)	Label	N.A		

### Incinerator

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	INCINERATOR			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AI_AmmoniaAndAmmonium (mg/Nm3)	Label	N.A	
	AI_Antimony (mg/Nm3)	Label	N.A	
	AI_Arsenic (mg/Nm3)	Label	N.A	
	AI_Benzene (mg/Nm3)	Label	N.A	
	AI_Cadmium (mg/Nm3)	Label	N.A	
AI_CarbonMonoxide (mg/Nm3)	Label	N.A		
AI_Chlorine (mg/Nm3)	Label	N.A		

Al_Copper (mg/Nm3)	Label	N.A
Al_DioxinsAndFurans (TEQ/Nm3)	Label	N.A
Al_EthyleneOxide (mg/Nm3)	Label	N.A
Al_FluorineAndHydrofluoricAcid (mg/Nm3)	Label	N.A
Al_Formaldehyde (mg/Nm3)	Label	N.A
Al_HydrogenChloride (mg/Nm3)	Label	N.A
Al_HydrogenSulphide (mg/Nm3)	Label	N.A
Al_Lead (mg/Nm3)	Label	N.A
Al_Mercury (mg/Nm3)	Label	N.A
Al_OxidesOfNitrogen (mg/Nm3)	Label	N.A
Al_ParticiulateSubstances (mg/Nm3)	Label	N.A
Al_StyreneMonomer (mg/Nm3)	Label	N.A
Al_SulphurDioxide (mg/Nm3)	Label	N.A
Al_SulphurTrioxideAndAcidGases (mg/Nm3)	Label	N.A
Al_SulphurTrioxideOrSulphuricAcidMist (mg/Nm3)	Label	N.A
Al_VinylChlorideMonomer (mg/Nm3)	Label	N.A

## Permanent Unit Number Tag

Ifc4 Entity	IfcBuildingElementProxy								
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Morph</td><td>Solid</td><td>Pipe Accessories</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Morph	Solid	Pipe Accessories	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Morph	Solid	Pipe Accessories	N.A						
PredefinedType	USERDEFINED								
ObjectType	PERMANENTUNITNUMBERTAG								
Ifc4 UserDefined PropertySet	<b>SGPset_BuildingElementProxy</b> <table border="1"> <thead> <tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr> </thead> <tbody> <tr><td>UnitNumber</td><td>Label</td><td>N.A</td></tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	UnitNumber	Label	N.A		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
UnitNumber	Label	N.A							

## Rung

Ifc4 Entity	IfcBuildingElementProxy								
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Model Element</td><td>Object</td><td>Generic Models</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Object	Generic Models	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Model Element	Object	Generic Models	N.A						
PredefinedType	USERDEFINED								
ObjectType	RUNG								
Material	<table border="1"> <thead> <tr><th>Attributes</th><th>Sample Attribute Values</th></tr> </thead> <tbody> <tr><td>Name</td><td>Non-skid aluminium</td></tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	Non-skid aluminium				
Attributes	Sample Attribute Values								
Name	Non-skid aluminium								

## Slot-outlet

Ifc4 Entity	IfcBuildingElementProxy								
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Model Element</td><td>Object</td><td>Generic Models</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Object	Generic Models	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Model Element	Object	Generic Models	N.A						
PredefinedType	USERDEFINED								
ObjectType	SLOTOUTLET								

## Valve Protection Cover

Ifc4 Entity	IfcBuildingElementProxy								
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td></td><td></td><td></td><td></td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla				
ArchiCad	OpenBuildings	Revit	Tekla						

	Morph	Solid	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	VALVEPROTECTINGCOVER			

## Water Level

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	2D_WATERLINELEVEL			

## IfcBurner

### Barbecue Pit

Ifc4 Entity	IfcBurner			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	OPENFLAMECOOKING			

### Cooking Hob

Ifc4 Entity	IfcBurner			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	OPENFLAMECOOKING			

### Open Flame Appliance

Ifc4 Entity	IfcBurner			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	OPENFLAMECOOKING			

## IfcCoolingTower

### Cooling Tower

Ifc4 Entity	IfcCoolingTower			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Access Manhole

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Morph	Solid	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	ACCESSMANHOLE			

## Chamber Cover

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Morph	Solid	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	CHAMBERCOVER			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	FinishType		Label	N.A
	Lockable		Boolean	TRUE

## Covering

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Hinged Cover

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Morph	Solid	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	HINGEDCOVER			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	

## Inspection Chamber Cover

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Covering	Slab	Generic Models	N.A

PredefinedType	USERDEFINED		
ObjectType	INSPECTIONCHAMBERCOVER		
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>
	Name	Heavy Duty Cast Iron	
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Grade	Label	Grade A2 Sample Value(s): C   B
ExternalReference	Label	SS30 Manhole tops and surface-box tops   PUB/WRN/STD/017A STANDARD INSPECTION CHAMBER FRAME AND COVER	

## Manhole Cover

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Covering	Slab	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	MANHOLECOVER			
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	SS30 Manhole tops and surface-box tops   PUB/WRN/STD/015A PUB/WRN/STD/016A STANDARD MEDIUM DUTY MANHOLE FRAME AND COVER	

## PWCS Manhole Cover

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Covering	Slab	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	PWCSMANHOLECOVER			
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Watertight	Boolean	TRUE   FALSE	
ExternalReference	Label	SS 30 Manhole tops and surface-box tops		

## Pit Lid

Ifc4 Entity	IfcCovering			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Morph	Solid	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	ACCESSMANHOLE			

## Tank Cover

Ifc4 Entity	IfcCovering			
Proposed BIM Representation				

	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Morph</td> <td>Solid</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Morph	Solid	Generic Models	N.A				
ArchiCad	OpenBuildings	Revit	Tekla										
Morph	Solid	Generic Models	N.A										
PredefinedType	Need not specify												
ObjectType	N.A												
IFC4 UserDefined PropertySet	<b>SGPset_Covering</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>NonDuplicableKeyLock</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>CorrosionResistant</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>Lockable</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	NonDuplicableKeyLock	Boolean	TRUE   FALSE	CorrosionResistant	Boolean	TRUE   FALSE	Lockable	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values											
NonDuplicableKeyLock	Boolean	TRUE   FALSE											
CorrosionResistant	Boolean	TRUE   FALSE											
Lockable	Boolean	TRUE   FALSE											

## IfcDiscreteAccessory

### Benching

Ifc4 Entity	IfcDiscreteAccessory								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Solid</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Solid	Generic Models	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Model Element	Solid	Generic Models	N.A						
PredefinedType	USERDEFINED								
ObjectType	BENCHING								

### Dry Weather Flow

Ifc4 Entity	IfcDiscreteAccessory								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Solid</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Solid	Generic Models	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Model Element	Solid	Generic Models	N.A						
PredefinedType	USERDEFINED								
ObjectType	DRYWEATHERFLOW								

### Stainless Steel Bracket

Ifc4 Entity	IfcDiscreteAccessory								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Morph</td> <td>Solid</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Morph	Solid	Generic Models	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Morph	Solid	Generic Models	N.A						
PredefinedType	BRACKET								
ObjectType	N.A								
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	N.A				
Attributes	Sample Attribute Values								
Name	N.A								

### Stainless Steel Tapered Round Nut

Ifc4 Entity	IfcDiscreteAccessory								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Morph</td> <td>Solid</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Morph	Solid	Generic Models	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Morph	Solid	Generic Models	N.A						
PredefinedType	USERDEFINED								
ObjectType	TAPEREDNUTS								
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	N.A				
Attributes	Sample Attribute Values								
Name	N.A								

## Abandoned Chamber

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_DistributionChamberElementCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Abandoned	

## Access Chamber

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	ACCESSCHAMBER			

## Air Valve Chamber

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	AIRVALVECHAMBER			

## Chamber

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Inspection Chamber

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	INSPECTIONCHAMBER			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Heavy Duty Cast Iron   HDPE Sample Value(s): High Density Polyethylene		

IFC4 UserDefined PropertySet	<b>SGPset_DistributionChamberElementTypeInspectionChamber</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	WithBackdrop	Boolean	TRUE   FALSE
	<b>SGPset_DistributionChamberElementDimension</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Length (mm)	Length	N.A
	Width (mm)	Length	N.A
	Depth (mm)	Length	N.A
	TopLevel	Label	N.A
	InvertLevel	Label	N.A
	Height (mm)	Length	N.A
	Diameter (mm)	Length	N.A
<b>SGPset_DistributionChamberElement</b>			
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
ExternalReference	Label	BS EN 13598-1 Plastics piping systems for non-pressure underground drainage and sewerage.	

## Knock-out Pot

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	KNOCKOUTPOT			

## Lightning Pits

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	LPS_EARTHPIIT			

## Manhole

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	MANHOLE			
ObjectType	N.A			

IFC4 Predefined PropertySet	<b>Pset_DistributionChamberElementCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Status	Label	New   Abandoned

IFC4 UserDefined PropertySet	<b>SGPset_DistributionChamberElement</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	HDPELiningwithIntegralAnchorStudAllAr ound	Boolean	TRUE   FALSE
	WithVortexDrop	Boolean	TRUE   FALSE
	<b>SGPset_DistributionChamberElementTypeManhole</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	WithBackdrop	Boolean	TRUE   FALSE



	<b>SGPset DistributionChamberElementDimension</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Length (mm)	Length	N.A
	Width (mm)	Length	N.A
	Depth (mm)	Length	N.A
	TopLevel	Label	N.A
	InvertLevel	Label	N.A
	Height (mm)	Length	N.A
	Diameter (mm)	Length	N.A

## Meter Chamber

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Generic Models	N.A
PredefinedType	METERCHAMBER			
ObjectType	N.A			

## Sampling Sump

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	SAMPLINGSUMP			
IFC4 UserDefined PropertySet	<b>SGPset DistributionChamberElement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	SS 593 Annex P Code of Practice for Pollution Control	

## Screen Chamber

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	SCREENCHAMBER			

## Sump

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	SUMP			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset DistributionChamberElementDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Length (mm)	Length	N.A	
	Width (mm)	Length	N.A	
	Depth (mm)	Length	N.A	
	TopLevel	Label	N.A	
	InvertLevel	Label	N.A	
	Height (mm)	Length	N.A	

	Diameter (mm)	Length	N.A
--	---------------	--------	-----

## Trade Effluent Discharge

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	SAMPLINGSUMP			
IFC4 UserDefined PropertySet	<b>SGPset_DistributionChamberElementSamplingSump</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TED_TemperatureOfDischarge (mg/l)	Label	N.A	
	TED_Colour (mg/l)	Label	N.A	
	TED_PHValue (mg/l)	Label	N.A	
	TED_BiochemicalOxygenDemand (mg/l)	Label	N.A	
	TED_ChemicalOxygenDemand (mg/l)	Label	N.A	
	TED_TotalSuspendedSolid (mg/l)	Label	N.A	
	TED_TotalDissolvedSolid (mg/l)	Label	N.A	
	TED_Chloride (mg/l)	Label	N.A	
	TED_Sulphate (mg/l)	Label	N.A	
	TED_Sulphide (mg/l)	Label	N.A	
	TED_Cyanide (mg/l)	Label	N.A	
	TED_Detergent (mg/l)	Label	N.A	
	TED_GreaseAndOil (mg/l)	Label	N.A	
	TED_Arsenic (mg/l)	Label	N.A	
	TED_Barium (mg/l)	Label	N.A	
	TED_Tin (mg/l)	Label	N.A	
	TED_Iron (mg/l)	Label	N.A	
	TED_Beryllium (mg/l)	Label	N.A	
	TED_Boron (mg/l)	Label	N.A	
	TED_Manganese (mg/l)	Label	N.A	
	TED_PhenolicCompound (mg/l)	Label	N.A	
	TED_Cadmium (mg/l)	Label	N.A	
	TED_Chromium (mg/l)	Label	N.A	
	TED_Copper (mg/l)	Label	N.A	
	TED_Lead (mg/l)	Label	N.A	
	TED_Mercury (mg/l)	Label	N.A	
	TED_Nickel (mg/l)	Label	N.A	
	TED_Selenium (mg/l)	Label	N.A	
	TED_Silver (mg/l)	Label	N.A	
	TED_Zinc (mg/l)	Label	N.A	
	TED_MetalsInTotal (mg/l)	Label	N.A	
TED_Chlorine (mg/l)	Label	N.A		
TED_Phosphate (mg/l)	Label	N.A		
TED_Calcium (mg/l)	Label	N.A		
TED_Magnesium (mg/l)	Label	N.A		
TED_Nitrate (mg/l)	Label	N.A		

## Trench

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	TRENCH			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Reinforced Concrete		

## Valve Chamber

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	VALVECHAMBER			
ObjectType	N.A			

## Wash-out Chamber

Ifc4 Entity	IfcDistributionChamberElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	WASHOUTCHAMBER			

## IfcEngine

### Engine

Ifc4 Entity	IfcEngine			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## IfcFilter

### Oil Filter

Ifc4 Entity	IfcFilter			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	OILFILTER			
ObjectType	N.A			

### Overflow Strainer

Ifc4 Entity	IfcFilter			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	STRAINER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Filter</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	CorrosionResistant	Boolean	N.A	

## Scrubber

Ifc4 Entity	IfcFilter			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	SCRUBBER			

## Strainer

Ifc4 Entity	IfcFilter			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	STRAINER			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		

## Water Filter

Ifc4 Entity	IfcFilter			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	WATERFILTER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_FilterTypeWaterFilter</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	WaterFilterType	Label	Sample Value(s): FILTRATION_SAND   SOFTENING_ZEOLITE   FILTRATION_DIATOMACEOUSEARTH	

## IfcFireSuppressionTerminal

### Dividing Breeching

Ifc4 Entity	IfcFireSuppressionTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	DIVIDINGBREECHING			

### Drencher

Ifc4 Entity	IfcFireSuppressionTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fire Protection	Mechanical Equipment	N.A

PredefinedType	USERDEFINED
ObjectType	DRENCHER

## Foam Inlet

Ifc4 Entity	IfcFireSuppressionTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	FOAMINLET			

## Water Mist

Ifc4 Entity	IfcFireSuppressionTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fire Protection	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	WATERMIST			

## Water Monitor

Ifc4 Entity	IfcFireSuppressionTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fire Protection	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	WATERMONITOR			

## IfcFlowInstrument

### Pressure Gauge

Ifc4 Entity	IfcFlowInstrument			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Pipe Accessory	Pipe Accessories	N.A
PredefinedType	PRESSUREGAUGE			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_FlowInstrument</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	HighPressureSection (psi)	Real	N.A	
LowPressureSection (psi)	Real	N.A		

## IfcFlowMeter

### Electric Meter

Ifc4 Entity	IfcFlowMeter			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Pipe Accessory	Pipe Accessories	N.A

PredefinedType	ENERGYMETER
ObjectType	N.A

## Fuel Meter

Ifc4 Entity	IfcFlowMeter			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Pipe Accessory	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	FUELMETER			

## Gas Meter

Ifc4 Entity	IfcFlowMeter			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Pipe Accessory	Pipe Accessories	N.A
PredefinedType	GASMETER			
ObjectType	N.A			

## Submeter

Ifc4 Entity	IfcFlowMeter			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Pipe Accessory	Pipe Accessories	N.A
PredefinedType	WATERMETER			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_FlowMeterOccurrence</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Purpose	Label	SUBMETER	

## Vapour Meter

Ifc4 Entity	IfcFlowMeter			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Pipe Accessory	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	VAPOURMETER			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Tin   Iron		

## Water Bulk Meter

Ifc4 Entity	IfcFlowMeter			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Pipe Accessory	Pipe Accessories	N.A
PredefinedType	WATERMETER			
ObjectType	N.A			

## Water Meter

Ifc4 Entity	IfcFlowMeter			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Pipe Accessory	Pipe Accessories	N.A
PredefinedType	WATERMETER			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_FlowMeterOccurrence</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Purpose	Label	MASTER   SUBMETER   PRIVATE	
	<b>Pset_EnvironmentallImpactIndicators</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	WaterConsumptionPerUnit (L)	Volume	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_FlowMeter</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	WaterSupplySource	Label	N.A	
	Capacity (L)	Label	N.A	
	UnitNumberTag	Boolean	TRUE   FALSE	
	UnitNumber	Label	N.A	
	ConnectionSize (mm)	Length	N.A	
	<b>SGPset_FlowMeterDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Diameter (mm)	Length	N.A	
	Length (mm)	Length	N.A	
	<b>SGPset_FlowMeterTypeWaterMeter</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	MaximumFlowRate (m3/s)	Volumetric FlowRate	N.A	

## IfcGeographicElement

### Water Feature

Ifc4 Entity	IfcGeographicElement			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	WATERFEATURE			

## IfcHeatExchanger

### Vaporiser

Ifc4 Entity	IfcHeatExchanger			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	VAPORISER			

## Grease Trap

Ifc4 Entity	IfcInterceptor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	GREASE			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Interceptor</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	MassDensity (mg/l)	Label	In mg/liter	
	ExternalReference	Label	BS-EN1825 Grease separators. Principles of design   performance and testing   marking and quality control   ASME A112.14.3 Hydromechanical Grease Interceptors   PUB/WRN/STD/040 PUB/WRN/STD/041 STANDARD GREASE TRAP	
	CalculatedNS (mm)	Length	N.A	
	Fr_OccasionallyOrAlways	Boolean	TRUE   FALSE	
	Ft_above60degreeC	Boolean	TRUE   FALSE	
	CalculatedQs (L/s)	Label	N.A	
	<b>SGPset_InterceptorDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Height (mm)	Length	N.A	
	Width (mm)	Length	N.A	
	Length (mm)	Length	N.A	

## Interceptor (Oil and grease)

Ifc4 Entity	IfcInterceptor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	OIL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_InterceptorDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TopLevel	Label	N.A	
	InvertLevel	Label	N.A	
	Width (mm)	Length	N.A	
	Length (mm)	Length	N.A	
	Height (mm)	Length	N.A	
	Diameter (mm)	Length	N.A	

## Oil Interceptor

Ifc4 Entity	IfcInterceptor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	OIL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_InterceptorDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Height (mm)	Length	N.A	
Width (mm)	Length	N.A		



	Length (mm)	Length	N.A
--	-------------	--------	-----

## Portable Grease Trap

Ifc4 Entity	IfcInterceptor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	GREASE			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Interceptor</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Portable	Boolean	TRUE   FALSE	

## IfcPipeFitting

### Bend

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	BEND			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Ductile iron   uPVC (SS 213) Sample Value(s): Lined cast iron   HDPE (BS EN 1519)   Hubless cast iron with epoxy coating (BS EN 877)   Polypropylene (BS EN 1451-1)   Ductile iron (BS EN 598)		

### Branch-off

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	JUNCTION			
ObjectType	N.A			

### Drain Channel Bend

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	USERDEFINED			
ObjectType	DRAINCHANNELBEND			

### Entry Cap

Ifc4 Entity	IfcPipeFitting			
-------------	----------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	ENTRY			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_PipeFitting</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	VapourTight	Boolean	TRUE   FALSE	
	Lockable	Boolean	TRUE   FALSE	

## Exit Cap

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	EXIT			
ObjectType	N.A			

## Flange

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	CONNECTOR			
ObjectType	N.A			

## Flange Adaptor

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	USERDEFINED			
ObjectType	FLANGEADAPTOR			

## Flange Joint

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	CONNECTOR			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_PipeFitting</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	Class K9	

## Flexible Coupling

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation				

	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	USERDEFINED			
ObjectType	FLEXIBLECOUPLING			

## Flexible Joint

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	CONNECTOR			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset PipeFitting</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	HotDippedGalvanised	Boolean	TRUE   FALSE	

## Floor Flange

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	TRANSITION			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset PipeFitting</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	WithFlange	Boolean	TRUE   FALSE	

## Inspection Opening

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	ENTRY			
ObjectType	N.A			

## Junction

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	JUNCTION			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	uPVC (SS 213) Sample Value(s): HDPE (BS EN 1519)   Hubless cast iron with epoxy coating (BS EN 877)   Polypropylene (BS EN 1451-1)   Ductile iron (BS EN 598)		

## Male Adapter

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	USERDEFINED			
ObjectType	MALEADAPTER			
IFC4 UserDefined PropertySet	<b>SGPset_PipeFittingDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Diameter (mm)	Length	N.A	

## Pan Collar

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	TRANSITION			
ObjectType	N.A			

## Pipe Fitting

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Metal   Ductile Iron Sample Value(s): Vitriified clay		
IFC4 UserDefined PropertySet	<b>SGPset_PipeFitting</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Pre-insulated	Boolean	TRUE   FALSE	
	CorrosionResistant	Boolean	TRUE   FALSE	
	HighTemperatureResistant (C)	Label	N.A	
	PressureRating (bar)	Label	N.A	
	PolyethyleneSleeve	Boolean	TRUE   FALSE	
	WaterProofingTape	Boolean	TRUE   FALSE	
	Thickness (mm)	Length	N.A	
	WeldedJoint	Boolean	TRUE   FALSE	
	ProtectiveCoating	Boolean	TRUE   FALSE	
	CathodicProtection	Boolean	TRUE   FALSE	
	HeatResistant	Boolean	TRUE   FALSE	
	<b>SGPset_PipeFittingDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
InnerDiameter (mm)	Length	N.A		
OuterDiameter (mm)	Length	N.A		

## Pipe Fitting Insulation

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation				

	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>Pipe Accessory</td> <td>Pipe Fittings</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A				
ArchiCad	OpenBuildings	Revit	Tekla										
Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A										
PredefinedType	Need not specify												
ObjectType	N.A												
IFC4 UserDefined PropertySet	<p><b>SGPset_PipeFitting</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Insulation_FlameSpreadClass</td> <td>Label</td> <td>Sample Value(s): Class 0</td> </tr> <tr> <td>Insulation_Material</td> <td>Label</td> <td>Foam Rubber</td> </tr> <tr> <td>Insulation_Combustible</td> <td>Boolean</td> <td>FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Insulation_FlameSpreadClass	Label	Sample Value(s): Class 0	Insulation_Material	Label	Foam Rubber	Insulation_Combustible	Boolean	FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values											
Insulation_FlameSpreadClass	Label	Sample Value(s): Class 0											
Insulation_Material	Label	Foam Rubber											
Insulation_Combustible	Boolean	FALSE											

## Short Piece

Ifc4 Entity	IfcPipeFitting								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>Pipe Accessory</td> <td>Pipe Fittings</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A						
PredefinedType	USERDEFINED								
ObjectType	SHORTPIECE								

## Spigot and Socket

Ifc4 Entity	IfcPipeFitting								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>Pipe Accessory</td> <td>Pipe Fittings</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A						
PredefinedType	USERDEFINED								
ObjectType	SPIGOTANDSOCKET								
IFC4 UserDefined PropertySet	<p><b>SGPset_PipeFitting</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ExternalReference</td> <td>Label</td> <td>Class K9</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ExternalReference	Label	Class K9		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
ExternalReference	Label	Class K9							

## Swan Neck

Ifc4 Entity	IfcPipeFitting								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>Pipe Accessory</td> <td>Pipe Fittings</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A						
PredefinedType	Need not specify								
ObjectType	N.A								
IFC4 UserDefined PropertySet	<p><b>SGPset_PipeFitting</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ExternalReference</td> <td>Label</td> <td>Drawing 1</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ExternalReference	Label	Drawing 1		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
ExternalReference	Label	Drawing 1							

## Thermal Pipe Fitting Insulation

Ifc4 Entity	IfcPipeFitting								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>Pipe Accessory</td> <td>Pipe Fittings</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A						
PredefinedType	Need not specify								
ObjectType	N.A								
IFC4 UserDefined PropertySet	<b>SGPset_PipeFitting</b>								

IFC4 UserDefined Property Name	Data Type	Sample Property Values
ThermalInsulation_Material	Label	N.A
ThermalInsulation_Material_MeltingPoint (C)	Label	N.A

## Vertical Grating

Ifc4 Entity	IfcPipeFitting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	OBSTRUCTION			
ObjectType	N.A			

## IfcPipeSegment

### Abandoned Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_PipeSegmentTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Abandoned	
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FilledOrGrouted	Label	N.A	

### Air Vent Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	

### Blowdown Discharge Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			

## Box Culvert

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Drains&Basins	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	BOXCULVERT			

## Bypass Channel

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Drains&Basins	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	BYPASSCHANNEL			

## Canal

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	GUTTER			
ObjectType	N.A			

## Channel

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Drains&Basins	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	CHANNEL			

## Common Channel

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Drains&Basins	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	CHANNEL			

## Culvert

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Drains&Basins	Plumbing Fixtures	N.A
PredefinedType	CULVERT			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_PipeSegmentTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	

	Status	Label	Existing
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Footpath	Boolean	TRUE   FALSE
	LoadBearing	Boolean	TRUE   FALSE
	MaintainedByOwner	Boolean	TRUE   FALSE
	Shared	Boolean	TRUE   FALSE
	ConstructionMethod	Label	Improvement
	<b>SGPset_PipeSegmentDimension</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Width (mm)	Length	N.A
	Length (mm)	Length	N.A
	Height (mm)	Length	N.A
	Thickness (mm)	Length	N.A

## Drain

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Drains&Basins	Plumbing Fixtures	N.A
PredefinedType	GUTTER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegmentDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Width (mm)	Length	N.A	
	Thickness (mm)	Length	N.A	
	Length (mm)	Length	N.A	

## Drain-line

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Ductile iron Sample Value(s): Vitrified clay   HDPE		

## Drain-off Discharge Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			

## Drainage Pipe

Ifc4 Entity	IfcPipeSegment			
-------------	----------------	--	--	--



Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FlowRate (L/min)	Volumetric FlowRate	Sample Value(s): 600 L/min	

## Entrance Culvert

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Drains&Basins	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	ENTRANCECULVERT			

## Existing Sewerage

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_PipeSegmentTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Existing	

## Filling Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			

## Flare Stack

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	USERDEFINED			
ObjectType	FLARESTACK			

## Flexible Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation				

	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Flexible Pipe	Flex Pipes	N.A
PredefinedType	FLEXIBLESEGMENT			
ObjectType	N.A			

## Flexible Sprinkler Dropper

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Flexible Pipe	Flex Pipes	N.A
PredefinedType	FLEXIBLESEGMENT			
ObjectType	N.A			

## Gutter

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Drains&Basins	Plumbing Fixtures	N.A
PredefinedType	GUTTER			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		
IFC4 Predefined PropertySet	<b>Pset_PipeSegmentTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Existing Sample Value(s): New	
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	MaintainedByOwner	Boolean	TRUE   FALSE	
	Shared	Boolean	TRUE   FALSE	
	ConstructionMethod	Label	Improvement   Reconstruction Sample Value(s): Reconstruction	
	RoughnessCoefficient	Label	N.A	
	CatchmentArea (m2)	Area	N.A	
	<b>SGPset_PipeSegmentDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Width (mm)	Length	N.A	
	Length (mm)	Length	N.A	
	Height (mm)	Length	N.A	
	Thickness (mm)	Length	N.A	

## Inlet Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## New Drain-line

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_PipeSegmentTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	New	

## New Sewerage

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_PipeSegmentTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	New	

## Non-combustible Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Combustible	Boolean	FALSE	
Material_MeltingPoint (C)	Label	N.A		

## Open Drain

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	GUTTER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	N.A	

## Outlet Pipe

Ifc4 Entity	IfcPipeSegment			
-------------	----------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			

## Overflow Discharge Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			

## Overflow Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		

## Perforated Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Perforated	Boolean	TRUE   FALSE	

## Perimeter Overflow

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Drains&Basins	Plumbing Fixtures	N.A
PredefinedType	GUTTER			
ObjectType	N.A			

## Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A

PredefinedType	RIGIDSEGMENT		
ObjectType	N.A		
IFC4 Predefined PropertySet	<b>Pset_PipeSegmentTypeCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	InnerDiameter (mm)	Length	N.A
	OuterDiameter (mm)	Length	N.A
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegmentDimension</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Length (mm)	Length	N.A
	InnerDiameter (mm)	Length	N.A
	OuterDiameter (mm)	Length	N.A
Gradient	Label	N.A	

## Pipe Insulation

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Insulation_FlameSpreadClass	Label	Sample Value(s): Class 0	
	Insulation_Material	Label	Foam Rubber	
Insulation_Combustible	Boolean	FALSE		

## Pipe Outlet

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Pipe Segment

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Metal   Stainless Steel   Vitrified Clay BS EN 295   Ductile iron   Cast iron   uPVC (SS 272)   uPVC (SS 213)   Paint   Polyethylene Sample Value(s): Ductile Iron BS EN 598   Polymer Concrete BS EN 14636   Reinforced Concrete BS EN 1916   Reinforced Concrete SS183   RC pipe   Vitrified clay   uPVC   HDPE (BS EN 1519)   Polymer concrete (BS EN 14636)   Reinforced Concrete (RC) (SS		

		183/BS EN 1916)   Vitrified Clay (BS EN 295)   Ductile iron (BS EN 598)   Hubless cast iron with epoxy coating (BS EN 877)   Polypropylene (BS EN 1451-1)	
IFC4 Predefined PropertySet	<b>Pset_PipeSegmentTypeCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Status	Label	Existing   New <i>Sample Value(s):</i> New
	WorkingPressure (psi)	Real	N.A
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Pre-insulated	Boolean	TRUE   FALSE
	CalculatedQapproved (L/s)	Label	N.A
	CalculatedDN (DUs- litres/second)	Label	in mm
	CorrosionResistant	Boolean	TRUE   FALSE
	HighTemperatureResistant (C)	Label	N.A
	PressureRating (bar)	Label	N.A
	ExternalReference	Label	BS EN 295 Vitrified clay pipe systems for drains and sewers
	PolyethyleneSleeve	Boolean	TRUE   FALSE
	WaterProofingTape	Boolean	TRUE   FALSE
	Thickness (mm)	Length	N.A
	ConstructionMethod	Label	Direct pipe jacking
	AnfiCorrosionProtection	Boolean	TRUE   FALSE
	DesignedAgainstLongTermCorrosion	Boolean	TRUE   FALSE
	InternalLiner (mm)	Length	CAC/HDPE
	Combustible	Boolean	TRUE   FALSE
FireRating (hr)	Label	N.A	
ProtectiveCoating	Boolean	TRUE   FALSE	
CathodicProtection	Boolean	TRUE   FALSE	
HeatResistant	Boolean	TRUE   FALSE	

## Pipe Segment

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Rain Water Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			

## Rainwater Outlet

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	USERDEFINED			
ObjectType	RAINWATEROUTLET			

## Roof Gutter

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Drains&Basins	Plumbing Fixtures	N.A
PredefinedType	GUTTER			
ObjectType	N.A			

## Scupper Drain

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Drains&Basins	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	SCUPPERDRAIN			

## Short Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	SPOOL			
ObjectType	N.A			

## Surface Drain

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Drains&Basins	Plumbing Fixtures	N.A
PredefinedType	GUTTER			
ObjectType	N.A			

## Thermal Pipe Insulation

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_PipeSegment</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ThermalInsulation_Material	Label	N.A	
	ThermalInsulation_Material_MeltingPoint (C)	Label	N.A	

## Vent Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	Pipe	Pipe	Pipes	N.A
PredefinedType	RIGIDSEGMENT			
ObjectType	N.A			

## Warning Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		

## Washout Pipe

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Weep Hole

Ifc4 Entity	IfcPipeSegment			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## IfcPump

### Chemical Appliance

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

### Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	Need not specify			
ObjectType	N.A			



IFC4 Predefined PropertySet	<b>Pset_PumpOccurrence</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	BaseType	Label	FRAME
IFC4 UserDefined PropertySet	<b>SGPset_Pump</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	WorkingPressure (psi)	Real	N.A
	Duty	Boolean	TRUE   FALSE
	FlowRate (m3/s)	Volumetric FlowRate	N.A

## Submersible Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe	Pipe	Pipes	N.A
PredefinedType	SUBMERSIBLEPUMP			
ObjectType	N.A			

## Sump Pump

Ifc4 Entity	IfcPump			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Pump	Mechanical Equipment	N.A
PredefinedType	SUMPPUMP			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Pump</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Standby	Boolean	TRUE   FALSE	
	Duty	Boolean	TRUE   FALSE	
	Capacity (L)	Label	N.A	
	FlowRate (m3/s)	Volumetric FlowRate	N.A	
	InternalSurfaceArea (m2)	Area	N.A	
	StandbyGenerator	Boolean	TRUE   FALSE	

## IfcRailing

### Backguard

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A
PredefinedType	USERDEFINED			
ObjectType	BACKGUARD			

### Guardrail

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	N.A

PredefinedType	GUARDRAIL
ObjectType	N.A

## IfcSanitaryTerminal

### Ambulant Disabled Urinal

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	URINAL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_SanitaryTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AmbulantDisabled	Boolean	TRUE   FALSE	

### Ambulant Disabled Water Closet

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	WATERCLOSET			
IFC4 UserDefined PropertySet	<b>SGPset_SanitaryTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AmbulantDisabled	Boolean	TRUE   FALSE	

### Bathtub

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	BATH			
ObjectType	N.A			

### Bidet

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	BIDET			
ObjectType	N.A			

### Breeching Inlet

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Equipment	Plumbing Fixtures	N.A

PredefinedType	USERDEFINED
ObjectType	BREECHINGINLET

## Chemical Appliance

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Child Urinal

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	URINAL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset SanitaryTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ChildrenFriendly	Boolean	TRUE   FALSE	

## Fixture

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Fogger

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fire Protection	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	FOGGER			

## Hot Tub Shower

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	SHOWER			
ObjectType	N.A			

## Hydropool Shower

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	SHOWER			
ObjectType	N.A			

## Hydrotherapy Pool Shower

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	SHOWER			
ObjectType	N.A			

## Jacuzzi Shower

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	SHOWER			
ObjectType	N.A			

## Mister

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fire Protection	Mechanical Equipment	N.A
PredefinedType	USERDEFINED			
ObjectType	MISTER			

## Onsen Pool Shower

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	SHOWER			
ObjectType	N.A			

## Plumbing Fixture

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Pool Shower

Ifc4 Entity	IfcSanitaryTerminal			
-------------	---------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	SHOWER			
ObjectType	N.A			

## Sanitary Fixture

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Sanitary Terminal

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Shower

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	SHOWER			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_SanitaryTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	WithPlug	Boolean	TRUE   FALSE	

## Shower Point

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	SHOWER			
ObjectType	N.A			

## Sink

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	SINK			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_SanitaryTerminalTypeSink</b>			

	<table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>SinkType</td> <td>Label</td> <td>RINSING   VEGETABLEPREPARATION</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	SinkType	Label	RINSING   VEGETABLEPREPARATION
IFC4 UserDefined Property Name	Data Type	Sample Property Values					
SinkType	Label	RINSING   VEGETABLEPREPARATION					
	<p><b>SGPset_SanitaryTerminal</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Siphoning</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Siphoning	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values					
Siphoning	Boolean	TRUE   FALSE					

## Skimmer

Ifc4 Entity	ifcSanitaryTerminal								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Flow Terminal</td> <td>Fixture</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A						
PredefinedType	USERDEFINED								
ObjectType	POOLSKIMMER								

## Spa Pool Shower

Ifc4 Entity	ifcSanitaryTerminal								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Flow Terminal</td> <td>Fixture</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A						
PredefinedType	SHOWER								
ObjectType	N.A								

## Sprinkler

Ifc4 Entity	ifcSanitaryTerminal								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Terminal</td> <td>Sprinkler</td> <td>Sprinklers</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Terminal	Sprinkler	Sprinklers	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Terminal	Sprinkler	Sprinklers	N.A						
PredefinedType	USERDEFINED								
ObjectType	SPRINKLER								
IFC4 UserDefined PropertySet	<p><b>SGPset_SanitaryTerminal</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FlowRate (L/min)</td> <td>Volumetric FlowRate</td> <td>Sample Value(s): 600 L/min</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	FlowRate (L/min)	Volumetric FlowRate	Sample Value(s): 600 L/min		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
FlowRate (L/min)	Volumetric FlowRate	Sample Value(s): 600 L/min							

## Urinal

Ifc4 Entity	ifcSanitaryTerminal									
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Flow Terminal</td> <td>Fixture</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A	
ArchiCad	OpenBuildings	Revit	Tekla							
Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A							
PredefinedType	URINAL									
ObjectType	N.A									
IFC4 UserDefined PropertySet	<p><b>SGPset_SanitaryTerminalTypeUrinal</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Mounting</td> <td>Label</td> <td>WALLHUNG</td> </tr> <tr> <td>Waterless</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Mounting	Label	WALLHUNG	Waterless	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values								
Mounting	Label	WALLHUNG								
Waterless	Boolean	TRUE   FALSE								

## Wading Pool Shower

Ifc4 Entity	ifcSanitaryTerminal
-------------	---------------------

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	SHOWER			
ObjectType	N.A			

## Wash Basin

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Drains&Basins	Plumbing Fixtures	N.A
PredefinedType	WASHHANDBASIN			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_SanitaryTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ChildrenFriendly	Boolean	TRUE   FALSE	
	<b>SGPset_SanitaryTerminalTypeWashHandBasin</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Mounting	Label	COUNTERTOP	

## Water Closet

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	WATERCLOSET			
IFC4 UserDefined PropertySet	<b>SGPset_SanitaryTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	
	FlushVolume (DUs- litres/second)	Label	in liters	
	ExternalReference	Label	SS574 Specification for dual flush low capacity water closet (WC) up to 4.5/3.0 litres capacity	
	ReducedFlushVolume (L)	Label	N.A	
	FullFlushVolume (L)	Label	N.A	
	IsSingleFlush	Boolean	TRUE   FALSE	
	ChildrenFriendly	Boolean	TRUE   FALSE	
	<b>SGPset_SanitaryTerminalTypeWaterCloset</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	PanMounting	Label	PEDESTAL	
	ToiletPanType	Label	SQUAT	

## Waterless Urinal

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	URINAL			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_SanitaryTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	

	ExternalReference	Label	ASME A112.19.19 Vitreous China Nonwater Urinals
--	-------------------	-------	---

## Whirlpool Shower

Ifc4 Entity	IfcSanitaryTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	SHOWER			
ObjectType	N.A			

## IfcSensor

### Leak Sensor

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Electrical Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	LEAKSENSOR			

### Level Sensor

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Electrical Fixtures	N.A
PredefinedType	LEVELSENSOR			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Sensor</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ReactionTime	Label	N.A	

### Overflow Warning Alarm

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	FLOWSENSOR			
ObjectType	N.A			

### PH Monitoring Device

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Generic Models	N.A
PredefinedType	PHSENSOR			
ObjectType	N.A			



## VOC Monitoring System

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	GASSENSOR			
ObjectType	N.A			

## Warning Alarm

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	FLOWSENSOR			
ObjectType	N.A			

## Water Level Sensing Device

Ifc4 Entity	IfcSensor			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	LEVELSENSOR			
ObjectType	N.A			
Ifc4 UserDefined PropertySet	<b>SGPset_Sensor</b>			
	<b>Ifc4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IndependentPowerSupply	Boolean	TRUE   FALSE	
	AC (Volt)	Real	N.A	
	DC (Volt)	Real	N.A	

## IfcSolarDevice

### Solar Water Heater

Ifc4 Entity	IfcSolarDevice			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	SOLARCOLLECTOR			
ObjectType	N.A			

## IfcStackTerminal

### Cowl

Ifc4 Entity	IfcStackTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A

PredefinedType	COWL
ObjectType	N.A

## Vent Cap

Ifc4 Entity	IfcStackTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Fitting	Pipe Accessory	Pipe Fittings	N.A
PredefinedType	COWL			
ObjectType	N.A			

## IfcTank

### Backwash Water Holding Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	BACKWASHWATERHOLDINGTANK			

### Balancing Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	BALANCINGTANK			
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TradeEffluent	Boolean	TRUE   FALSE	
	AquaticFacility	Boolean	TRUE   FALSE	
	ExternalReference	Label	SS 593 Annex P Code of Practice for Pollution Control	
	NoBackflowThroughOverflowPipe	Boolean	TRUE   FALSE	
OverflowPipeAsWarningDevice	Boolean	TRUE   FALSE		

### Blowdown Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	BLOWDOWN			

### Chemical Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	STORAGE			

ObjectType	N.A		
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	StorageType	Label	CHEMICAL
	NominalCapacity	Real	N.A
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	ChemicalType	Label	Sample Value(s): Boric Acid   Cyanide
	StateofMatter	Label	Sample Value(s): Gas   Liquid   Solid

## Containment Facility

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Plumbing Fixtures	N.A
PredefinedType	STORAGE			
ObjectType	N.A			

## Day Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	STORAGE			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Steel		
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	NominalCapacity	Real	Sample Value(s): 1000 L	
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FuelType	Label	DIESEL	

## Detention Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	STORAGE			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	NominalCapacity	Real	N.A	

IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	IsPotable	Boolean	TRUE   FALSE
	<b>SGPset_TankDimension</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Width (mm)	Length	N.A
	Length (mm)	Length	N.A
Height (mm)	Length	N.A	

## Dilution Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	DILUTIONTANK			
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TradeEffluent	Boolean	TRUE   FALSE	

## Ejector Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	EJECTORTANK			

## Fertilizer Storage

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Plumbing Fixtures	N.A
PredefinedType	STORAGE			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	StorageType	Label	Fertilizer	

## Fuel Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	STORAGE			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	

	StorageType	Label	FUEL
	NominalCapacity	Real	N.A
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	FuelType	Label	Sample Value(s): Diesel   LPG
	StateofMatter	Label	Sample Value(s): Gas   Liquid   Solid
	ProtectiveCoating	Boolean	TRUE   FALSE
	CathodicProtection	Boolean	TRUE   FALSE
	CorrosionResistant	Boolean	TRUE   FALSE

## Gas Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Mechanical Equipment	N.A
PredefinedType	STORAGE			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	StorageType	Label	GAS	

## Hazardous Substances

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Plumbing Fixtures	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	HazardousSubstances	Boolean	TRUE   FALSE	
	HazardousSubstancesMass	Real	N.A	

## Hazardous Waste

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Plumbing Fixtures	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	HazardousWaste	Boolean	TRUE   FALSE	

## Holding Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation				

	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Flow Equipment	Equipment	Plumbing Fixtures	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Flow Equipment	Equipment	Plumbing Fixtures	N.A						
PredefinedType	USERDEFINED								
ObjectType	HOLDINGTANK								

## Industrial Waste Storage

Ifc4 Entity	IfcTank								
Proposed BIM Representation	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Object</td> <td>Object</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Object	Plumbing Fixtures	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Object	Object	Plumbing Fixtures	N.A						
PredefinedType	STORAGE								
ObjectType	N.A								
IFC4 Predefined PropertySet	<p><b>Pset_TankTypeCommon</b></p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>StorageType</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	StorageType	Label	N.A		
IFC4 Predefined Property Name	Data Type	Sample Property Values							
StorageType	Label	N.A							

## LPG Cylinder

Ifc4 Entity	IfcTank												
Proposed BIM Representation	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Flow Equipment	Equipment	Mechanical Equipment	N.A				
ArchiCad	OpenBuildings	Revit	Tekla										
Flow Equipment	Equipment	Mechanical Equipment	N.A										
PredefinedType	PRESSUREVESSEL												
ObjectType	N.A												
IFC4 Predefined PropertySet	<p><b>Pset_TankTypeCommon</b></p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>OperatingWeight (kg)</td> <td>Real</td> <td>Sample Value(s): 15kg</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	OperatingWeight (kg)	Real	Sample Value(s): 15kg						
IFC4 Predefined Property Name	Data Type	Sample Property Values											
OperatingWeight (kg)	Real	Sample Value(s): 15kg											
IFC4 UserDefined PropertySet	<p><b>SGPset_Tank</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FuelType</td> <td>Label</td> <td>LPG</td> </tr> <tr> <td>ExternalReference</td> <td>Label</td> <td>SS 99 Welded low carbon steel cylinders for storage and transportation of compressed liquefied gases</td> </tr> <tr> <td>Standby</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	FuelType	Label	LPG	ExternalReference	Label	SS 99 Welded low carbon steel cylinders for storage and transportation of compressed liquefied gases	Standby	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values											
FuelType	Label	LPG											
ExternalReference	Label	SS 99 Welded low carbon steel cylinders for storage and transportation of compressed liquefied gases											
Standby	Boolean	TRUE   FALSE											

## Oil Tank

Ifc4 Entity	IfcTank									
Proposed BIM Representation	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Flow Equipment	Equipment	Plumbing Fixtures	N.A	
ArchiCad	OpenBuildings	Revit	Tekla							
Flow Equipment	Equipment	Plumbing Fixtures	N.A							
PredefinedType	STORAGE									
ObjectType	N.A									
IFC4 Predefined PropertySet	<p><b>Pset_TankTypeCommon</b></p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>StorageType</td> <td>Label</td> <td>OIL</td> </tr> <tr> <td>NominalCapacity</td> <td>Real</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	StorageType	Label	OIL	NominalCapacity	Real	N.A
IFC4 Predefined Property Name	Data Type	Sample Property Values								
StorageType	Label	OIL								
NominalCapacity	Real	N.A								
IFC4 UserDefined PropertySet	<p><b>SGPset_Tank</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>OilType</td> <td>Label</td> <td>Sample Value(s): Lubricant Oil   Hydraulic Oil</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	OilType	Label	Sample Value(s): Lubricant Oil   Hydraulic Oil			
IFC4 UserDefined Property Name	Data Type	Sample Property Values								
OilType	Label	Sample Value(s): Lubricant Oil   Hydraulic Oil								

	StateofMatter	Label	Sample Value(s): Gas   Liquid   Solid
--	---------------	-------	---------------------------------------

## Pesticide Storage

Ifc4 Entity	IfcTank								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Object</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Object	Object	Plumbing Fixtures	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Object	Object	Plumbing Fixtures	N.A						
PredefinedType	STORAGE								
ObjectType	N.A								
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>StorageType</td> <td>Label</td> <td>Pesticide</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	StorageType	Label	Pesticide		
IFC4 Predefined Property Name	Data Type	Sample Property Values							
StorageType	Label	Pesticide							

## Rainwater Tank

Ifc4 Entity	IfcTank								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Flow Equipment	Equipment	Mechanical Equipment	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Flow Equipment	Equipment	Mechanical Equipment	N.A						
PredefinedType	VESSEL								
ObjectType	N.A								

## Recharge well

Ifc4 Entity	IfcTank								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Flow Equipment	Equipment	Plumbing Fixtures	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Flow Equipment	Equipment	Plumbing Fixtures	N.A						
PredefinedType	USERDEFINED								
ObjectType	RECHARGEWELL								

## Sampling Tank

Ifc4 Entity	IfcTank								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Flow Equipment	Equipment	Plumbing Fixtures	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Flow Equipment	Equipment	Plumbing Fixtures	N.A						
PredefinedType	USERDEFINED								
ObjectType	SAMPLINGTANK								
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ExternalReference</td> <td>Label</td> <td>SS 593 Annex P Code of Practice for Pollution Control</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ExternalReference	Label	SS 593 Annex P Code of Practice for Pollution Control		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
ExternalReference	Label	SS 593 Annex P Code of Practice for Pollution Control							

## Storage Tank

Ifc4 Entity	IfcTank								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Flow Equipment	Equipment	Plumbing Fixtures	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Flow Equipment	Equipment	Plumbing Fixtures	N.A						
PredefinedType	STORAGE								

ObjectType	N.A		
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b>		
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	StorageType	Label	FUEL
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	FuelType	Label	Diesel

## Surge Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	SURGETANK			
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AquaticFacility	Boolean	TRUE   FALSE	

## Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Metal	
IFC4 UserDefined PropertySet	<b>SGPset_TankDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Width (mm)	Length	N.A	
	Length (mm)	Length	N.A	
	Height (mm)	Length	N.A	
	Diameter (mm)	Length	N.A	

## Temporary Holding Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	HOLDINGTANK			
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Temporary	



## Waste Storage

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Object	Object	Plumbing Fixtures	N.A
PredefinedType	STORAGE			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	StorageType	Label	Waste	

## Water Tank

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	STORAGE			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		N.A	
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	NominalCapacity	Real	Sample Value(s): 40 m3	
	StorageType	Label	WATER	
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	BoltWithStainlessSteelBracket	Boolean	TRUE   FALSE	
	FasternWithStainlessSteelFasteners	Boolean	TRUE   FALSE	
	Watertight	Boolean	TRUE   FALSE	
	CorrosionResistant	Boolean	TRUE   FALSE	
	WaterSealant	Boolean	TRUE   FALSE	
	OneDayRequirement (L)	Label	N.A	
	VerticalLifeline	Boolean	TRUE   FALSE	
	AnchorPoint	Boolean	TRUE   FALSE	
FireRating (hr)	Label	Sample Value(s): 1 hr		
StorageDuration (mins)	Label	Sample Value(s): 30 mins		

## Water Tank (Potable Water)

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	POTABLEWATER			
IFC4 Predefined PropertySet	<b>Pset_TankTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	NominalCapacity	Real	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_TankDimension</b>			

IFC4 UserDefined Property Name	Data Type	Sample Property Values
Height (mm)	Length	N.A
Diameter (mm)	Length	N.A
Thickness (mm)	Length	N.A

## Water Tank (Sectional)

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	SECTIONAL			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		

## Water Trough

Ifc4 Entity	IfcTank			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Flow Equipment	Equipment	Plumbing Fixtures	N.A
PredefinedType	BASIN			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Tank</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ContinuousUse	Boolean	TRUE   FALSE	

## IfcValve

### Air Admittance Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	AIRADMITTANCE			

### Air Intake Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	AIRINTAKEVALVE			

### Air Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation				

	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A	
ArchiCad	OpenBuildings	Revit	Tekla							
Pipe In-line Flow Device	Valve	Pipe Accessories	N.A							
PredefinedType	AIRRELEASE									
ObjectType	N.A									
IFC4 UserDefined PropertySet	<p><b>SGPset_Valve</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>OrificeType</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>WithIsolatingValve</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	OrificeType	Label	N.A	WithIsolatingValve	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values								
OrificeType	Label	N.A								
WithIsolatingValve	Boolean	TRUE   FALSE								

## Anti-vacuum Relief Valve

Ifc4 Entity	IfcValve								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe In-line Flow Device	Valve	Pipe Accessories	N.A						
PredefinedType	ANTIVACUUM								
ObjectType	N.A								

## Anti-vacuum Valve

Ifc4 Entity	IfcValve								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe In-line Flow Device	Valve	Pipe Accessories	N.A						
PredefinedType	ANTIVACUUM								
ObjectType	N.A								

## Ball Valve

Ifc4 Entity	IfcValve									
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A	
ArchiCad	OpenBuildings	Revit	Tekla							
Pipe In-line Flow Device	Valve	Pipe Accessories	N.A							
PredefinedType	GASTAP									
ObjectType	N.A									
IFC4 Predefined PropertySet	<p><b>Pset_ValveTypeCommon</b></p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ValveMechanism</td> <td>Label</td> <td>BALL</td> </tr> <tr> <td>WorkingPressure (psi)</td> <td>Real</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	ValveMechanism	Label	BALL	WorkingPressure (psi)	Real	N.A
IFC4 Predefined Property Name	Data Type	Sample Property Values								
ValveMechanism	Label	BALL								
WorkingPressure (psi)	Real	N.A								

## Change-over Valve

Ifc4 Entity	IfcValve								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe In-line Flow Device	Valve	Pipe Accessories	N.A						
PredefinedType	CHANGEOVER								
ObjectType	N.A								

## Check Valve

Ifc4 Entity	IfcValve
Proposed BIM Representation	

	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe In-line Flow Device	Valve	Pipe Accessories	N.A						
PredefinedType	CHECK								
ObjectType	N.A								
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ValveMechanism</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table>	IFC4 Predefined Property Name	Data Type	Sample Property Values	ValveMechanism	Label	N.A		
IFC4 Predefined Property Name	Data Type	Sample Property Values							
ValveMechanism	Label	N.A							

## Chemical Appliance

Ifc4 Entity	IfcValve								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe In-line Flow Device	Valve	Pipe Accessories	N.A						
PredefinedType	Need not specify								
ObjectType	N.A								

## Double Check Valve

Ifc4 Entity	IfcValve								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe In-line Flow Device	Valve	Pipe Accessories	N.A						
PredefinedType	DOUBLECHECK								
ObjectType	N.A								

## Drain Plug

Ifc4 Entity	IfcValve								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe In-line Flow Device	Valve	Pipe Accessories	N.A						
PredefinedType	USERDEFINED								
ObjectType	DRAINOFFCOCK								

## Drain-out Test Cock

Ifc4 Entity	IfcValve								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe In-line Flow Device	Valve	Pipe Accessories	N.A						
PredefinedType	USERDEFINED								
ObjectType	DRAINOFFCOCK								

## Draining Valve

Ifc4 Entity	IfcValve								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
Pipe In-line Flow Device	Valve	Pipe Accessories	N.A						
PredefinedType	USERDEFINED								
ObjectType	DRAINOFFCOCK								

## Draw-off Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	DRAINOFFCOCK			

## Emergency Shut-off Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	SAFETYCUTOFF			
ObjectType	N.A			

## Faucet

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	FAUCET			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Lockable	Boolean	TRUE   FALSE	
	FlowRate (m3/s)	Volumetric FlowRate	N.A	
	BatteryOperated	Boolean	TRUE   FALSE	
	ChargeableBatteryOperated	Boolean	TRUE   FALSE	
	<b>SGPset_ValveTypeFaucet</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FaucetOperation	Label	TIMEDSELF CLOSING	
	FaucetType	Label	SPRAY	

## Float Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	ISOLATING			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ValveOperation	Label	N.A	

## Float Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	GASTAP			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ValveOperation	Label	FLOAT	

## Flush Valve

IFC4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	FLUSHING			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Size (mm)	Length	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	VacuumBreaker	Boolean	TRUE   FALSE	
	SensorOperated	Boolean	TRUE   FALSE	
ManualOverride	Boolean	TRUE   FALSE		

## Gas Regulating Valve

IFC4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	GASCOCK			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	SS 281 Pressure regulators for liquefied petroleum gases	

## Gas Tap Valve

IFC4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	GASTAP			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ValveOperation	Label	LEVER   WHEEL	

## Gate Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	ISOLATING			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ValveMechanism	Label	N.A	

## Hydrostatic Relief Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	HYDROSTATICRELIEF			
IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	UL 132 Standard for Safety Safety Relief Valves for Anhydrous Ammonia and LP-Gas	

## Infill Point

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	INFILLPOINT			

## Isolating Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	ISOLATING			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ValveMechanism	Label	N.A	

## Landing Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	USERDEFINED			

ObjectType	LANDINGVALVE
------------	--------------

## Magnetic Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	GASTAP			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ValveOperation	Label	SOLENOID	

## Mixing Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	MIXING			
ObjectType	N.A			

## Muzzle operated device

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ValveOperation	Label	N.A	

## Pilot Reducing Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	PILOTREDUCING			
IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	NonModulatingType	Boolean	TRUE   FALSE	

## Pressure Reducing Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>



	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	PRESSUREREDUCING			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	WorkingPressure (psi)	Real	N.A	
IFC4 UserDefined PropertySet	<b>SGPset_ValveTypePressureReducing</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	DownstreamPressure (bar)	Label	N.A	

## Pressure Relief Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	PRESSURERELIEF			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ValveTypePressureRelief</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ReliefPressure (psi)	Real	N.A	

## Reflux Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	REFLUXVALVE			

## Regulating Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	REGULATING			
ObjectType	N.A			

## Sampling Tap

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	FAUCET			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Lockable	Boolean	TRUE   FALSE	

## Shut-off Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ValveOperation	Label	DROPWEIGHT	

## Shut-off Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	ISOLATING			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	FireSuppressionActivated	Boolean	TRUE   FALSE	

## Stop Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	ISOLATING			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ValveMechanism	Label	N.A	

## Stopcock

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	STOPCOCK			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Handle	Boolean	TRUE   FALSE	

## Tee-check Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	GASTAP			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ValvePattern	Label	STRAIGHT_3_PORT	

## Terminal Draw Off

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	DRAINOFFCOCK			

## Thermostatic Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	GASTAP			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ValveOperation	Label	THERMOSTATIC	

## Vacuum Breaker

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	ANTIVACUUM			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IntegratedCheckValve	Boolean	TRUE   FALSE	

## Valve

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	WithLockingDevice	Boolean	TRUE   FALSE

## Water Supply Outlet

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	FAUCET			
ObjectType	N.A			
IFC4 Predefined PropertySet	<b>Pset_ValveTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Permanent	
IFC4 UserDefined PropertySet	<b>SGPset_Valve</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	QuickCouplerType	Boolean	TRUE   FALSE	

## Water Tap

Ifc4 Entity	IfcValve			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Valve	Pipe Accessories	N.A
PredefinedType	FAUCET			
ObjectType	N.A			

## IfcWasteTerminal

### Drain Plug

Ifc4 Entity	IfcWasteTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	DRAINPLUG			

### Drop-inlet Chamber

Ifc4 Entity	IfcWasteTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe In-line Flow Device	Equipment	Plumbing Fixtures	N.A
PredefinedType	USERDEFINED			
ObjectType	DROPINLETCHAMBER			
IFC4 UserDefined PropertySet	<b>SGPset_WasteTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	Drawing No. 5   LTA/SDRE14/2/DRA6 STANDARD DETAILS OF ROAD ELEMENTS	

## Fitting Trap

Ifc4 Entity	IfcWasteTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Pipe Accessories	N.A
PredefinedType	WASTETRAP			
ObjectType	N.A			

## Floor Trap

Ifc4 Entity	IfcWasteTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Pipe Accessories	N.A
PredefinedType	FLOORTRAP			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	uPVC (SS 272)   uPVC (SS 213) Sample Value(s): HDPE (BS EN 1519)   Ductile iron (BS EN 598)   Hubless cast iron with epoxy coating (BS EN 877)   Polypropylene (BS EN 1451-1)		
IFC4 Predefined PropertySet	<b>Pset_WasteTerminalTypeCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Status	Label	Permanent	
IFC4 UserDefined PropertySet	<b>SGPset_WasteTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	WithApprovedSeal	Boolean	TRUE   FALSE	
	IsBolted	Boolean	TRUE   FALSE	
	IsScrewed	Boolean	TRUE   FALSE	

## Floor Waste

Ifc4 Entity	IfcWasteTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Pipe Accessories	N.A
PredefinedType	FLOORWASTE			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_WasteTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AntiMosquitoDevice	Boolean	TRUE   FALSE	

## Gully Sump

Ifc4 Entity	IfcWasteTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Pipe Accessories	N.A
PredefinedType	GULLYSUMP			

ObjectType	N.A
------------	-----

## Gully Trap

Ifc4 Entity	IfcWasteTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Pipe Accessories	N.A
PredefinedType	GULLYTRAP			
ObjectType	N.A			

## Return Inlet

Ifc4 Entity	IfcWasteTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	RETURNINLET			

## Sanitary Fixture

Ifc4 Entity	IfcWasteTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Plumbing Fixtures	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Shallow Floor Trap

Ifc4 Entity	IfcWasteTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	SHALLOWFLOORTRAP			
IFC4 UserDefined PropertySet	<b>SGPset_WasteTerminal</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ExternalReference	Label	BS EN 1253-1 Gullies for buildings. Requirements   BS EN 1253-2 Gullies for buildings. Test methods	
	PassageClearance (mm)	Length	N.A	
	WaterSealCompartment (mm)	Length	N.A	

## Waste Sump

Ifc4 Entity	IfcWasteTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Pipe Accessories	N.A
PredefinedType	USERDEFINED			
ObjectType	WASTESUMP			

## Waste Terminal

Ifc4 Entity	IfcWasteTerminal			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Pipe Flow Terminal	Fixture	Pipe Accessories	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## STRUCTURAL ELEMENTS

### IfcBeam

#### Beam

Ifc4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Beam
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		MET   Reinforced Concrete   Steel	
IFC4 Predefined PropertySet	<b>Pset_BeamCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IsExternal	Boolean	TRUE   FALSE	
IFC4 UserDefined PropertySet	<b>SGPset_BeamDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Depth (mm)	Length	N.A	
	Width (mm)	Length	N.A	
	<b>SGPset_SteelConnection</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	LeftConnectionType	Label	Fixed <i>Sample Value(s):</i> Pinned	
	LeftConnectionDetail	Label	Detail 1 <i>Sample Value(s):</i> Detail A   Detail B   Detail 2	
	RightConnectionType	Label	Fixed <i>Sample Value(s):</i> Pinned	
	RightConnectionDetail	Label	Detail 1 <i>Sample Value(s):</i> Detail A   Detail B   Detail 2	

#### Beam

Ifc4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Beam
PredefinedType	BEAM			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Concrete <i>Sample Value(s):</i> Aluminum   Timber   Steel	

IFC4 UserDefined  
PropertySet

**SGPset\_BeamReinforcement**

IFC4 UserDefined Property Name	Data Type	Sample Property Values
TopLeft	Label	3H323H25
TopMiddle	Label	3H25
TopRight	Label	3H323H25
BottomLeft	Label	3H25
BottomMiddle	Label	3H323H253H20
BottomRight	Label	3H25
SideBar	Label	1H13-250
OuterStirrupsLeft	Label	1H16-250
OuterStirrupsTypeLeft	Label	U Type Sample Value(s): Torsion
InnerStirrupsLeft	Label	2H10-250
InnerStirrupsTypeLeft	Label	U Type Sample Value(s): C/L Type
OuterStirrupsMiddle	Label	1H16-250
OuterStirrupsTypeMiddle	Label	U Type Sample Value(s): Torsion
InnerStirrupsMiddle	Label	2H10-250
InnerStirrupsTypeMiddle	Label	U Type Sample Value(s): C/L Type
OuterStirrupsRight	Label	1H16-250
OuterStirrupsTypeRight	Label	U Type Sample Value(s): Torsion
InnerStirrupsRight	Label	2H10-250
InnerStirrupsTypeRight	Label	U Type Sample Value(s): C/L Type
AsRequiredBottomLeft	Label	213
AsRequiredBottomMiddle	Label	321
AsRequiredBottomRight	Label	432
AsRequiredTopLeft	Label	231
AsRequiredTopMiddle	Label	232
AsRequiredTopRight	Label	345
AsRequiredStirrupsLeft	Label	213
AsRequiredStirrupsMiddle	Label	323
AsRequiredStirrupsRight	Label	532
BeamCage	Boolean	TRUE   FALSE

**SGPset\_Beam**

IFC4 UserDefined Property Name	Data Type	Sample Property Values
BeamSpanType	Label	End Span Sample Value(s): Cantilever   Single Span   Interior Span
ReinforcementSteelGrade	Label	fyk 500 N/mm2   Class B
ConstructionMethod	Label	Cast Insitu Sample Value(s): Precast   PT Beam
SectionFabricationMethod	Label	To input with values for submission

**SGPset\_ConcreteElementGeneral**

IFC4 UserDefined Property Name	Data Type	Sample Property Values
StrengthClass	Label	C32/40

**SGPset\_SteelElementGeneral**

IFC4 UserDefined Property Name	Data Type	Sample Property Values
SteelGrade	Label	To input with values for submission

**SGPset\_BeamDimension**

IFC4 UserDefined Property Name	Data Type	Sample Property Values
Mark	Label	600x300 Sample Value(s): B1
Depth (mm)	Length	600
Width (mm)	Length	300
MemberSection	Label	RHS600x30x4   CHS500x3.0   254x254x63 kg/m

## Concrete Beam

IFC4 Entity	IfcBeam			
Proposed BIM Representation	ArchiCad	OpenBuildings	Revit	Tekla



	Beam	Beam	Structural Framing	Concrete Beam
PredefinedType	BEAM			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_BeamReinforcement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AsRequiredBottomLeft	Label	213	
	AsRequiredBottomMiddle	Label	321	
	AsRequiredBottomRight	Label	432	
	AsRequiredTopLeft	Label	231	
	AsRequiredTopMiddle	Label	232	
	AsRequiredTopRight	Label	345	
	AsRequiredStirrupsLeft	Label	213	
	AsRequiredStirrupsMiddle	Label	323	
	AsRequiredStirrupsRight	Label	532	
	OuterStirrupsLeft	Label	1H16-250	
	InnerStirrupsLeft	Label	2H10-250	
	OuterStirrupsMiddle	Label	1H16-250	
	InnerStirrupsMiddle	Label	2H10-250	
	OuterStirrupsRight	Label	1H16-250	
	InnerStirrupsRight	Label	2H10-250	
	ShearLinkAngle	Real	90	
	OuterStirrupsTypeLeft	Label	U Type	
	InnerStirrupsTypeLeft	Label	C/L Type	
	OuterStirrupsTypeMiddle	Label	U Type	
	InnerStirrupsTypeMiddle	Label	C/L Type	
	OuterStirrupsTypeRight	Label	U Type	
	InnerStirrupsTypeRight	Label	C/L Type	
	<b>SGPset_ConcreteElementGeneral</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	StrengthClass	Label	C32/40	
	<b>SGPset_BeamDimension</b>			
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>		
Depth (mm)	Length	N.A		
Width (mm)	Length	N.A		
Breadth (mm)	Length	N.A		
<b>SGPset_Beam</b>				
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>		
ReinforcementSteelGrade	Label	500		
<b>SGPset_Deflection</b>				
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>		
Deflection (mm)	Label	16		

## Concrete Beam (Cantilever)

IFC4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Concrete Beam
PredefinedType	BEAM			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Deflection</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Deflection (mm)	Label	16	
	<b>SGPset_BeamDimension</b>			
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>		
Breadth (mm)	Length	N.A		

## PT Beam

Ifc4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Concrete Beam
PredefinedType	USERDEFINED			
ObjectType	PRESTRESSED_BEAM			
IFC4 UserDefined PropertySet	<b>SGPset_Beam</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	PrestressForce (kN)	Label	100	
	CharacteristicPTTendonStrength	Label	TEXT	
	<b>SGPset_BeamReinforcement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
NumberOfTendons	Integer	1		
TendonDiameter (mm)	Length	12		

## Steel Beam

Ifc4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Steel Beam
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Steel		

## Transfer Beam

Ifc4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Concrete Beam
PredefinedType	Need not specify			
ObjectType	N.A			

## Trellis

Ifc4 Entity	IfcBeam			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Beam	Beam	Structural Framing	Steel Beam
PredefinedType	USERDEFINED			
ObjectType	TRELLIS			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Reinforced Concrete   Steel		

IfcBuildingElementProxy

## Borehole

Ifc4 Entity	IfcBuildingElementProxy			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Object	Generic Models	N.A
PredefinedType	USERDEFINED			
ObjectType	BOREHOLE			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingElementProxyDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TopLevel	Label	SHD3.423 m <i>Sample Value(s):</i> SHD-50 m	
	TerminationLevel	Label	SHD3.423 m <i>Sample Value(s):</i> SHD-50 m	
	FirstHardStratumLevel	Label	SHD3.423 m <i>Sample Value(s):</i> SHD-50 m	
	Mark	Label	To input with values for submission	
	Diameter (mm)	Length	N.A	
Depth (mm)	Length	N.A		

## IfcColumn

### Column

Ifc4 Entity	IfcColumn			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Column	Column	Columns	Concrete Column
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		MET   Steel	
IFC4 Predefined PropertySet	<b>Pset_ColumnCommon</b>			
	<b>IFC4 Predefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	IsExternal	Boolean	TRUE   FALSE	

### Column (Circular)

Ifc4 Entity	IfcColumn			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Column	Column	Structural Columns	Concrete Column
PredefinedType	COLUMN			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Concrete <i>Sample Value(s):</i> Aluminum   Timber   Steel	
IFC4 UserDefined PropertySet	<b>SGPset_ConcreteElementGeneral</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	StrengthClass	Label	C32/40	
	<b>SGPset_SteelElementGeneral</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SteelGrade	Label	To input with values for submission	

SGPset_Column		
IFC4 UserDefined Property Name	Data Type	Sample Property Values
ReinforcementSteelGrade	Label	fyk 500 N/mm2   Class B
ConstructionMethod	Label	Cast Insitu <i>Sample Value(s):</i> Precast
SectionFabricationMethod	Label	To input with values for submission
SGPset_ColumnStructuralLoad		
IFC4 UserDefined Property Name	Data Type	Sample Property Values
WorkingLoad (kN)	Label	1234
SGPset_ColumnReinforcement		
IFC4 UserDefined Property Name	Data Type	Sample Property Values
MainRebar	Label	4H32
OuterStirrups	Label	1H16-250
OuterStirrupsType	Label	Closed <i>Sample Value(s):</i> Spiral
AsRequiredMainRebar (mm2)	Label	324
AsRequiredStirrups	Label	543
SGPset_ColumnDimension		
IFC4 UserDefined Property Name	Data Type	Sample Property Values
Mark	Label	C1 <i>Sample Value(s):</i> TC1
Diameter (mm)	Length	600
Height	Length	8000
StartingStorey	Label	To input with values for submission
EndStorey	Label	To input with values for submission
MemberSection	Label	RHS600x30x4   CHS500x3.0
SGPset_SteelConnection		
IFC4 UserDefined Property Name	Data Type	Sample Property Values
ConnectionDetailsTop	Label	To input with values for submission
ConnectionTypeTop	Label	To input with values for submission
ConnectionDetailsBottom	Label	To input with values for submission
ConnectionTypeBottom	Label	To input with values for submission
SpliceDetail	Label	To input with values for submission

## Column (Rectangular)

Ifc4 Entity	IfcColumn			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Column	Column	Structural Columns	Concrete Column
PredefinedType	COLUMN			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Concrete <i>Sample Value(s):</i> Aluminum   Timber   Steel		
IFC4 UserDefined PropertySet	SGPset_ConcreteElementGeneral			
	IFC4 UserDefined Property Name	Data Type	Sample Property Values	
	StrengthClass	Label	C32/40	
	SGPset_SteelElementGeneral			
	IFC4 UserDefined Property Name	Data Type	Sample Property Values	
	SteelGrade	Label	To input with values for submission	
	SGPset_Column			
	IFC4 UserDefined Property Name	Data Type	Sample Property Values	
	ReinforcementSteelGrade	Label	fyk 500 N/mm2   Class B	
ConstructionMethod	Label	Cast Insitu <i>Sample Value(s):</i> Precast		
SectionFabricationMethod	Label	To input with values for submission		

**SGPset\_ColumnStructuralLoad**

IFC4 UserDefined Property Name	Data Type	Sample Property Values
WorkingLoad (kN)	Label	1234

**SGPset\_ColumnReinforcement**

IFC4 UserDefined Property Name	Data Type	Sample Property Values
CornerRebar	Label	4H32
OuterStirrups	Label	1H16-250
OuterStirrupsType	Label	Close Link Sample Value(s): Double U Link
BreadthInnerStirrups	Label	3H16-250
BreadthInnerStirrupsType	Label	U Link Sample Value(s): C Link
WidthInnerStirrups	Label	21H16-250
WidthInnerStirrupsType	Label	U Link Sample Value(s): C Link
AsRequiredBreadth (mm2)	Label	324
AsRequiredWidth (mm2)	Label	324
AsRequiredStirrups	Label	543
ColumnCage	Boolean	TRUE   FALSE

**SGPset\_ColumnDimension**

IFC4 UserDefined Property Name	Data Type	Sample Property Values
Mark	Label	C1 Sample Value(s): TC1
Width (mm)	Length	600
Breadth (mm)	Length	300
Height	Length	8000
StartingStorey	Label	To input with values for submission
EndStorey	Label	To input with values for submission

**SGPset\_SteelConnection**

IFC4 UserDefined Property Name	Data Type	Sample Property Values
ConnectionDetailsTop	Label	To input with values for submission
ConnectionTypeTop	Label	To input with values for submission
ConnectionDetailsBottom	Label	To input with values for submission
ConnectionTypeBottom	Label	To input with values for submission
SpliceDetail	Label	To input with values for submission

## Concrete Column

Ifc4 Entity	IfcColumn			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Column	Column	Structural Columns	Concrete Column
PredefinedType	COLUMN			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ColumnStructuralLoad</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	WorkingLoad (kN)	Label	1234	
	<b>SGPset_Column</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ReinforcementSteelGrade	Label	500	
	<b>SGPset_ColumnDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Breadth (mm)	Length	N.A	
	Width (mm)	Length	N.A	

## Concrete Column (Circular)

Ifc4 Entity	IfcColumn
-------------	-----------

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Column	Column	Structural Columns	Concrete Column
PredefinedType	COLUMN			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ColumnReinforcement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AsRequiredMainRebar (mm2)	Label	324	
	MainRebar	Label	4H32	
	OuterStirrups	Label	1H16-250	

## Concrete Column (Rectangular)

Ifc4 Entity	IfcColumn			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Column	Column	Structural Columns	Concrete Column
PredefinedType	COLUMN			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_ColumnReinforcement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AsRequiredBreadth (mm2)	Label	324	
	AsRequiredWidth (mm2)	Label	324	
	CornerRebar	Label	4H32	
	OuterStirrups	Label	1H16-250	
	BreadthInnerStirrups	Label	3H16-250	
	WidthInnerStirrups	Label	21H16-250	

## Multi-tier Column

Ifc4 Entity	IfcColumn			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Column	Column	Columns	Concrete Column
PredefinedType	Need not specify			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_PrecastConcreteElementGeneral</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ArrangementType	Label	Multi-tier Column	
	<b>SGPset_Column</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
ConstructionMethod	Label	Precast		

## Pier

Ifc4 Entity	IfcColumn			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Column	Column	Columns	Concrete Column
PredefinedType	USERDEFINED			
ObjectType	PIER			

# Steel Column

Ifc4 Entity	IfcColumn			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Column	Column	Columns	Steel Column
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Steel	

## IfcFooting

### Footing

Ifc4 Entity	IfcFooting			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Footing	Footing	Structural Foundations	Concrete Footing
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>		<b>Sample Attribute Values</b>	
	Name		Concrete Sample Value(s): Timber   Composite	

Ifc4 UserDefined PropertySet

#### SGPset\_Footing

IFC4 UserDefined Property Name	Data Type	Sample Property Values
RequiredBearingCapacity (kPa)	Label	100
DA1-1_BearingCapacity (kPa)	Label	100
SoilVerificationTest	Boolean	TRUE   FALSE
ReinforcementSteelGrade	Label	fyk 500 N/mm2   Class B
DA1-2_BearingCapacity (kPa)	Label	100

#### SGPset\_ConcreteElementGeneral

IFC4 UserDefined Property Name	Data Type	Sample Property Values
StrengthClass	Label	C32/40

#### SGPset\_FoundationStructuralLoad

IFC4 UserDefined Property Name	Data Type	Sample Property Values
WorkingLoad (kN)	Label	4321

#### SGPset\_FootingReinforcement

IFC4 UserDefined Property Name	Data Type	Sample Property Values
TopMain	Label	T25-150
TopDistribution	Label	T16-150
BottomMain	Label	T32-150
BottomDistribution	Label	T20-150
Stirrups	Label	1H10-150-300
StirrupsType	Label	U Type Sample Value(s): C/L Type
SideBar	Label	1H13-250
AsRequiredTopMain (mm2)	Label	321
AsRequiredTopDistribution (mm2)	Label	213
AsRequiredBottomMain (mm2)	Label	321
AsRequiredBottomDistribution (mm2)	Label	213
AsRequiredStirrupsMain	Label	321
AsRequiredStirrupsDistribution	Label	321

#### SGPset\_FootingDimension

IFC4 UserDefined Property Name	Data Type	Sample Property Values
Mark	Label	F1 Sample Value(s): PC1   PC2   PC4_1   F2

Breadth (mm)	Length	8400   6200
Depth (mm)	Length	300

## Pad Footing

Ifc4 Entity	IfcFooting																		
Proposed BIM Representation	<b>ArchiCad</b> N.A	<b>OpenBuildings</b> Footing	<b>Revit</b> Structural Foundations	<b>Tekla</b> Concrete Footing															
PredefinedType	PAD_FOOTING																		
ObjectType	N.A																		
IFC4 UserDefined PropertySet	<b>SGPset_FootingReinforcement</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>TopMain</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>TopDistribution</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>BottomMain</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>BottomDistribution</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table>				IFC4 UserDefined Property Name	Data Type	Sample Property Values	TopMain	Label	N.A	TopDistribution	Label	N.A	BottomMain	Label	N.A	BottomDistribution	Label	N.A
IFC4 UserDefined Property Name	Data Type	Sample Property Values																	
TopMain	Label	N.A																	
TopDistribution	Label	N.A																	
BottomMain	Label	N.A																	
BottomDistribution	Label	N.A																	

## Pile Cap

Ifc4 Entity	IfcFooting																																										
Proposed BIM Representation	<b>ArchiCad</b> N.A	<b>OpenBuildings</b> N.A	<b>Revit</b> Structural Foundations	<b>Tekla</b> Concrete Footing																																							
PredefinedType	PILE_CAP																																										
ObjectType	N.A																																										
IFC4 UserDefined PropertySet	<b>SGPset_FootingReinforcement</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AsRequiredTopMain (mm2)</td> <td>Label</td> <td>321</td> </tr> <tr> <td>AsRequiredTopDistribution (mm2)</td> <td>Label</td> <td>213</td> </tr> <tr> <td>AsRequiredBottomMain (mm2)</td> <td>Label</td> <td>321</td> </tr> <tr> <td>AsRequiredBottomDistribution (mm2)</td> <td>Label</td> <td>213</td> </tr> <tr> <td>TopMain</td> <td>Label</td> <td>T25-150</td> </tr> <tr> <td>TopDistribution</td> <td>Label</td> <td>T16-150</td> </tr> <tr> <td>BottomMain</td> <td>Label</td> <td>T32-150</td> </tr> <tr> <td>BottomDistribution</td> <td>Label</td> <td>T20-150</td> </tr> </tbody> </table> <b>SGPset_ConcreteElementGeneral</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>StrengthClass</td> <td>Label</td> <td>C32/40</td> </tr> </tbody> </table> <b>SGPset_Footing</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ReinforcementSteelGrade</td> <td>Label</td> <td>500</td> </tr> </tbody> </table>				IFC4 UserDefined Property Name	Data Type	Sample Property Values	AsRequiredTopMain (mm2)	Label	321	AsRequiredTopDistribution (mm2)	Label	213	AsRequiredBottomMain (mm2)	Label	321	AsRequiredBottomDistribution (mm2)	Label	213	TopMain	Label	T25-150	TopDistribution	Label	T16-150	BottomMain	Label	T32-150	BottomDistribution	Label	T20-150	IFC4 UserDefined Property Name	Data Type	Sample Property Values	StrengthClass	Label	C32/40	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ReinforcementSteelGrade	Label	500
IFC4 UserDefined Property Name	Data Type	Sample Property Values																																									
AsRequiredTopMain (mm2)	Label	321																																									
AsRequiredTopDistribution (mm2)	Label	213																																									
AsRequiredBottomMain (mm2)	Label	321																																									
AsRequiredBottomDistribution (mm2)	Label	213																																									
TopMain	Label	T25-150																																									
TopDistribution	Label	T16-150																																									
BottomMain	Label	T32-150																																									
BottomDistribution	Label	T20-150																																									
IFC4 UserDefined Property Name	Data Type	Sample Property Values																																									
StrengthClass	Label	C32/40																																									
IFC4 UserDefined Property Name	Data Type	Sample Property Values																																									
ReinforcementSteelGrade	Label	500																																									

## Strip Footing

Ifc4 Entity	IfcFooting												
Proposed BIM Representation	<b>ArchiCad</b> N.A	<b>OpenBuildings</b> Footing	<b>Revit</b> Structural Foundations	<b>Tekla</b> Concrete Footing									
PredefinedType	STRIP_FOOTING												
ObjectType	N.A												
IFC4 UserDefined PropertySet	<b>SGPset_FootingDimension</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Depth (mm)</td> <td>Length</td> <td>N.A</td> </tr> <tr> <td>Breadth (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table>				IFC4 UserDefined Property Name	Data Type	Sample Property Values	Depth (mm)	Length	N.A	Breadth (mm)	Length	N.A
IFC4 UserDefined Property Name	Data Type	Sample Property Values											
Depth (mm)	Length	N.A											
Breadth (mm)	Length	N.A											



	Width (mm)	Length	N.A
--	------------	--------	-----

## IfcPile

### Bored Pile

Ifc4 Entity	IfcPile			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Base Plate	Structural Foundations	Concrete Column
PredefinedType	BORED			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_Pile</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ULTTestPile	Boolean	TRUE   FALSE	
	WorkingLoadTestPile	Boolean	TRUE   FALSE	
	NonDestructiveTestPile	Boolean	TRUE   FALSE	
	DA1-1_CompressionCapacity (kN)	Label	100	
	DA1-2_CompressionCapacity (kN)	Label	100	
	DA1-1_TensionCapacity (kN)	Label	100	
	DA1-2_TensionCapacity (kN)	Label	100	
	StructuralCompressionCapacity (kN)	Label	To input with values for submission	
	StructuralTensionCapacity (kN)	Label	To input with values for submission	
	BoreholeRef	Label	To input with values for submission	
	MinEmbedmentIntoBearingLayer_SPT_MoreThan_60N	Label	To input with values for submission	
	MinEmbedmentIntoBearingLayer_SPT_MoreThan_100N	Label	To input with values for submission	
	<b>SGPset_PileDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Breadth (mm)	Length	N.A	
	Diameter (mm)	Length	N.A	
	<b>SGPset_ConcreteElementGeneral</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
StrengthClass	Label	C32/40		
ReinforcementStrengthClass	Label	500		

### End Bearing Pile

Ifc4 Entity	IfcPile			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Base Plate	Structural Foundations	Concrete Column
PredefinedType	USERDEFINED			
ObjectType	END_BEARING			

### Friction Pile

Ifc4 Entity	IfcPile			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Base Plate	Structural Foundations	Concrete Column
PredefinedType	FRICTION			
ObjectType	N.A			

# Pile

Ifc4 Entity	IfcPile																																																						
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Base Plate</td> <td>Structural Foundations</td> <td>Concrete Column</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Base Plate	Structural Foundations	Concrete Column																																														
ArchiCad	OpenBuildings	Revit	Tekla																																																				
Model Element	Base Plate	Structural Foundations	Concrete Column																																																				
PredefinedType	Need not specify																																																						
ObjectType	N.A																																																						
IFC4 UserDefined PropertySet	<p><b>SGPset_PileStructuralLoad</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>DA1-1_CompressionDesignLoad (kN)</td> <td>Label</td> <td>21321</td> </tr> <tr> <td>DA1-2_CompressionDesignLoad (kN)</td> <td>Label</td> <td>21321</td> </tr> <tr> <td>DA1-1_TensionDesignLoad (kN)</td> <td>Label</td> <td>To input with values for submission</td> </tr> <tr> <td>DA1-2_TensionDesignLoad (kN)</td> <td>Label</td> <td>To input with values for submission</td> </tr> <tr> <td>NegativeSkinFriction (kN)</td> <td>Label</td> <td>21321</td> </tr> </tbody> </table> <p><b>SGPset_Pile</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>EndBearingR4DesignFactor</td> <td>Real</td> <td>1</td> </tr> <tr> <td>ShaffR4DesignFactor</td> <td>Real</td> <td>1</td> </tr> <tr> <td>PileModelFactor</td> <td>Real</td> <td>1</td> </tr> <tr> <td>ULTTestPile</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>MaintainedLoadTestPile</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Driven</td> </tr> <tr> <td>DA1-1_TensionCapacity (kN)</td> <td>Label</td> <td>100</td> </tr> <tr> <td>DA1-2_TensionCapacity (kN)</td> <td>Label</td> <td>100</td> </tr> </tbody> </table> <p><b>SGPset_PileReinforcement</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ReinforcementLength (mm)</td> <td>Length</td> <td>1000</td> </tr> </tbody> </table>				IFC4 UserDefined Property Name	Data Type	Sample Property Values	DA1-1_CompressionDesignLoad (kN)	Label	21321	DA1-2_CompressionDesignLoad (kN)	Label	21321	DA1-1_TensionDesignLoad (kN)	Label	To input with values for submission	DA1-2_TensionDesignLoad (kN)	Label	To input with values for submission	NegativeSkinFriction (kN)	Label	21321	IFC4 UserDefined Property Name	Data Type	Sample Property Values	EndBearingR4DesignFactor	Real	1	ShaffR4DesignFactor	Real	1	PileModelFactor	Real	1	ULTTestPile	Boolean	TRUE   FALSE	MaintainedLoadTestPile	Boolean	TRUE   FALSE	ConstructionMethod	Label	Driven	DA1-1_TensionCapacity (kN)	Label	100	DA1-2_TensionCapacity (kN)	Label	100	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ReinforcementLength (mm)	Length	1000
IFC4 UserDefined Property Name	Data Type	Sample Property Values																																																					
DA1-1_CompressionDesignLoad (kN)	Label	21321																																																					
DA1-2_CompressionDesignLoad (kN)	Label	21321																																																					
DA1-1_TensionDesignLoad (kN)	Label	To input with values for submission																																																					
DA1-2_TensionDesignLoad (kN)	Label	To input with values for submission																																																					
NegativeSkinFriction (kN)	Label	21321																																																					
IFC4 UserDefined Property Name	Data Type	Sample Property Values																																																					
EndBearingR4DesignFactor	Real	1																																																					
ShaffR4DesignFactor	Real	1																																																					
PileModelFactor	Real	1																																																					
ULTTestPile	Boolean	TRUE   FALSE																																																					
MaintainedLoadTestPile	Boolean	TRUE   FALSE																																																					
ConstructionMethod	Label	Driven																																																					
DA1-1_TensionCapacity (kN)	Label	100																																																					
DA1-2_TensionCapacity (kN)	Label	100																																																					
IFC4 UserDefined Property Name	Data Type	Sample Property Values																																																					
ReinforcementLength (mm)	Length	1000																																																					

# Pile (Circular)

Ifc4 Entity	IfcPile																		
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Base Plate</td> <td>Structural Foundations</td> <td>Concrete Column</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Base Plate	Structural Foundations	Concrete Column										
ArchiCad	OpenBuildings	Revit	Tekla																
Model Element	Base Plate	Structural Foundations	Concrete Column																
PredefinedType	BORED																		
ObjectType	N.A																		
IFC4 UserDefined PropertySet	<p><b>SGPset_PileReinforcement</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AsRequiredMain (mm2)</td> <td>Label</td> <td>324</td> </tr> <tr> <td>MainRebar</td> <td>Label</td> <td>10H3210H16</td> </tr> </tbody> </table> <p><b>SGPset_PileDimension</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Diameter (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table>				IFC4 UserDefined Property Name	Data Type	Sample Property Values	AsRequiredMain (mm2)	Label	324	MainRebar	Label	10H3210H16	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Diameter (mm)	Length	N.A
IFC4 UserDefined Property Name	Data Type	Sample Property Values																	
AsRequiredMain (mm2)	Label	324																	
MainRebar	Label	10H3210H16																	
IFC4 UserDefined Property Name	Data Type	Sample Property Values																	
Diameter (mm)	Length	N.A																	

# Pile (Circular)

Ifc4 Entity	IfcPile											
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Base Plate</td> <td>Structural Foundations</td> <td>Concrete Column</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	Model Element	Base Plate	Structural Foundations	Concrete Column			
ArchiCad	OpenBuildings	Revit	Tekla									
Model Element	Base Plate	Structural Foundations	Concrete Column									
PredefinedType	Need not specify											
ObjectType	N.A											
Material	<table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Concrete</td> </tr> </tbody> </table>	Attributes	Sample Attribute Values	Name	Concrete							
Attributes	Sample Attribute Values											
Name	Concrete											

		Sample Value(s): Aluminum   Timber   Steel	
IFC4 UserDefined PropertySet	<b>SGPset_ConcreteElementGeneral</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	StrengthClass	Label	C32/40
	<b>SGPset_SteelElementGeneral</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	SteelGrade	Label	To input with values for submission
	<b>SGPset_Pile</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	ReinforcementSteelGrade	Label	fyk 500 N/mm2   Class B
	ConstructionMethod	Label	Bored Sample Value(s): Driven   Jacked In
	<b>SGPset_PileStructuralLoad</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	DA1-1_CompressionDesignLoad (kN)	Label	21321
	DA1-2_CompressionDesignLoad (kN)	Label	4321
	DA1-1_TensionDesignLoad (kN)	Label	To input with values for submission
	DA1-2_TensionDesignLoad (kN)	Label	To input with values for submission
	<b>SGPset_PileReinforcement</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	PileType	Label	Cast Insitu Sample Value(s): Spun   Precast
	MainRebar	Label	10H3210H16
	Stirrups	Label	1H16-250
AsRequiredMain (mm2)	Label	324	
AsRequiredStirrups	Label	543	
<b>SGPset_PileDimension</b>			
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
Mark	Label	C1 Sample Value(s): TC1	
Diameter (mm)	Length	600	
Breadth (mm)	Length	40	
MemberSection	Label	CHS500x3.0   254x254x63 kg/m	
ToeLevel	Label	SHD3.423 m Sample Value(s): SHD-50 m	
HeadLevel	Label	SHD3.423 m Sample Value(s): SHD-50 m	

## Pile (Rectangular)

Ifc4 Entity	IfcPile			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Base Plate	Structural Foundations	Concrete Column
PredefinedType	DRIVEN			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_PileReinforcement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AsRequiredBreadth (mm2)	Label	324	
	AsRequiredWidth (mm2)	Label	324	
	CornerRebar	Label	4H25	
DistributionRebar	Label	4H16		

## Pile (Rectangular)

Ifc4 Entity	IfcPile
-------------	---------

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Model Element	Base Plate	Structural Foundations	Concrete Column
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Concrete Sample Value(s): Timber   Steel		
IFC4 UserDefined PropertySet	<b>SGPset_ConcreteElementGeneral</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	StrengthClass	Label	C32/40	
	<b>SGPset_SteelElementGeneral</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SteelGrade	Label	To input with values for submission	
	<b>SGPset_Pile</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ReinforcementSteelGrade	Label	fyk 500 N/mm2   Class B	
	ConstructionMethod	Label	Jacked In Sample Value(s): Driven	
	RapidLoadTestPile	Boolean	TRUE   FALSE	
	<b>SGPset_PileStructuralLoad</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	DA1-1_CompressionDesignLoad (kN)	Label	21321	
	DA1-2_CompressionDesignLoad (kN)	Label	4321	
	DA1-1_TensionDesignLoad (kN)	Label	To input with values for submission	
	DA1-2_TensionDesignLoad (kN)	Label	To input with values for submission	
	<b>SGPset_PileReinforcement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	PileType	Label	Precast Sample Value(s): Spun	
	CornerRebar	Label	4H25	
	DistributionRebar	Label	4H16	
	Stirrups	Label	1H16-250	
	AsRequiredBreadth (mm2)	Label	324	
	AsRequiredWidth (mm2)	Label	324	
	AsRequiredStirrups	Label	543	
	<b>SGPset_PileDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
Mark	Label	C1 Sample Value(s): TC1		
Width (mm)	Length	600		
Breadth (mm)	Length	300   40		
MemberSection	Label	RHS600x30x4   CHS500x3.0		
ToeLevel	Label	N.A		
HeadLevel	Label	N.A		

## IfcRailing

### Handrail

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Railing	Railing	Railings	Railing
PredefinedType	HANDRAIL			
ObjectType	N.A			

Ifc4 UserDefined PropertySet	<b>SGPset_RailingStructuralLoad</b>		
	IFC4 UserDefined Property Name	Data Type	Sample Property Values
	LateralLoad (kN/m)	Label	1.5

## Railing

Ifc4 Entity	IfcRailing			
Proposed BIM Representation	ArchiCad	OpenBuildings	Revit	Tekla
	Railing	Railing	Railings	Component
PredefinedType	Need not specify			
ObjectType	N.A			
Material	Attributes	Sample Attribute Values		
	Name	N.A		
Ifc4 UserDefined PropertySet	<b>SGPset_RailingStructuralLoad</b>			
	IFC4 UserDefined Property Name	Data Type	Sample Property Values	
	LateralLoad (kN/m)	Label	N.A	

## IfcReinforcingBar

### Rebar

Ifc4 Entity	IfcReinforcingBar			
Proposed BIM Representation	ArchiCad	OpenBuildings	Revit	Tekla
	Model Element	Object	Structural Rebar	Rebar
PredefinedType	Need not specify			
ObjectType	N.A			

## IfcSlab

### Concrete Slab

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	ArchiCad	OpenBuildings	Revit	Tekla
	Slab	Slab	Floors	Concrete Slab
PredefinedType	FLOOR			
ObjectType	N.A			
Ifc4 UserDefined PropertySet	<b>SGPset_SlabReinforcement</b>			
	IFC4 UserDefined Property Name	Data Type	Sample Property Values	
	TopMain	Label	H32-150H20-300	
	TopDistribution	Label	H25-150H16-300	
	BottomMain	Label	H25-150H16-300	
	BottomDistribution	Label	H25-150H16-300	
	AsRequiredTopX (mm2/m)	Label	432	
	AsRequiredTopY (mm2/m)	Label	324	
	AsRequiredBottomX (mm2/m)	Label	324	
	AsRequiredBottomY (mm2/m)	Label	543	
	<b>SGPset_Slab</b>			
	IFC4 UserDefined Property Name	Data Type	Sample Property Values	
	SlabType	Label	One-Way   Two-Way	
	ReinforcementSteelGrade	Label	500	

CategoryOfLoadedArea	Label	A1
<b>SGPset_ConcreteElementGeneral</b>		
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
StrengthClass	Label	C32/40
<b>SGPset_SlabDimension</b>		
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
Thickness (mm)	Length	N.A
Length (mm)	Length	N.A
Width (mm)	Length	N.A
<b>SGPset_SlabStructuralLoad</b>		
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
ImposedLiveLoad (kPa)	Label	1.5
<b>SGPset_Deflection</b>		
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
Deflection (mm)	Label	16

## Floor

Ifc4 Entity	IfcSlab								
Proposed BIM Representation	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>N.A</td> <td>N.A</td> <td>Floors</td> <td>Concrete Slab</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	N.A	N.A	Floors	Concrete Slab
ArchiCad	OpenBuildings	Revit	Tekla						
N.A	N.A	Floors	Concrete Slab						
PredefinedType	FLOOR								
ObjectType	N.A								
IFC4 UserDefined PropertySet	<b>SGPset_SlabStructuralLoad</b> <table border="1"> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> <tr> <td>ImposedLiveLoad (kPa)</td> <td>Label</td> <td>1.5</td> </tr> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ImposedLiveLoad (kPa)	Label	1.5		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
ImposedLiveLoad (kPa)	Label	1.5							

## Raft Slab

Ifc4 Entity	IfcSlab																																				
Proposed BIM Representation	<table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>N.A</td> <td>N.A</td> <td>Floors</td> <td>Concrete Slab</td> </tr> </table>	ArchiCad	OpenBuildings	Revit	Tekla	N.A	N.A	Floors	Concrete Slab																												
ArchiCad	OpenBuildings	Revit	Tekla																																		
N.A	N.A	Floors	Concrete Slab																																		
PredefinedType	USERDEFINED																																				
ObjectType	RAFTSLAB																																				
Material	<table border="1"> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> <tr> <td>Name</td> <td>N.A</td> </tr> </table>	Attributes	Sample Attribute Values	Name	N.A																																
Attributes	Sample Attribute Values																																				
Name	N.A																																				
IFC4 UserDefined PropertySet	<b>SGPset_SlabDimension</b> <table border="1"> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> <tr> <td>Length (mm)</td> <td>Length</td> <td>N.A</td> </tr> </table> <b>SGPset_SlabReinforcement</b> <table border="1"> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> <tr> <td>Mark</td> <td>Label</td> <td>To input with values for submission</td> </tr> <tr> <td>AsRequiredBottomDistribution</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>AsRequiredBottomMain</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>AsRequiredTopDistribution</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>AsRequiredTopMain</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>BottomDistribution</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>BottomMain</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>TopDistribution</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>TopMain</td> <td>Label</td> <td>N.A</td> </tr> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Length (mm)	Length	N.A	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Mark	Label	To input with values for submission	AsRequiredBottomDistribution	Label	N.A	AsRequiredBottomMain	Label	N.A	AsRequiredTopDistribution	Label	N.A	AsRequiredTopMain	Label	N.A	BottomDistribution	Label	N.A	BottomMain	Label	N.A	TopDistribution	Label	N.A	TopMain	Label	N.A
IFC4 UserDefined Property Name	Data Type	Sample Property Values																																			
Length (mm)	Length	N.A																																			
IFC4 UserDefined Property Name	Data Type	Sample Property Values																																			
Mark	Label	To input with values for submission																																			
AsRequiredBottomDistribution	Label	N.A																																			
AsRequiredBottomMain	Label	N.A																																			
AsRequiredTopDistribution	Label	N.A																																			
AsRequiredTopMain	Label	N.A																																			
BottomDistribution	Label	N.A																																			
BottomMain	Label	N.A																																			
TopDistribution	Label	N.A																																			
TopMain	Label	N.A																																			

# Roof Slab

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Concrete Slab
PredefinedType	ROOF			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_SlabStructuralLoad</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ImposedLiveLoad (kPa)	Label	1.5	

# Slab

Ifc4 Entity	IfcSlab			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Slab	Slab	Floors	Concrete Slab
PredefinedType	FLOOR			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Concrete Sample Value(s): Timber   Composite		
IFC4 UserDefined PropertySet	<b>SGPset_ConcreteElementGeneral</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	StrengthClass	Label	C32/40	
	<b>SGPset_Slab</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ReinforcementSteelGrade	Label	fyk 500 N/mm2   Class B	
	ConstructionMethod	Label	Cast Insitu Sample Value(s): Precast   PT Beam	
	ShelterUsage	Boolean	TRUE   FALSE	
	<b>SGPset_SlabStructuralLoad</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ImposedLoad (kPa)	Label	5	
	<b>SGPset_SlabReinforcement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TopMain	Label	H32-150H20-300	
	TopDistribution	Label	H25-150H16-300	
	BottomMain	Label	H25-150H16-300	
	BottomDistribution	Label	H25-150H16-300	
	Stirrups	Label	1H10-150-300	
	StirrupsType	Label	U Type Sample Value(s): C/L Type	
	AsRequiredTopX (mm2/m)	Label	432	
AsRequiredTopY (mm2/m)	Label	324		
AsRequiredBottomX (mm2/m)	Label	324		
AsRequiredBottomY (mm2/m)	Label	543		
AsRequiredStirrups	Label	132		
<b>SGPset_SlabDimension</b>				
<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>		
Mark	Label	S1 Sample Value(s): S01		
Width (mm)	Length	8400   6200		
Thickness (mm)	Length	300		

## Stair

Ifc4 Entity	IfcStair			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	N.A	Stairs	Component
PredefinedType	STRAIGHT_RUN_STAIR			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_StairStructuralLoad</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ImposedLiveLoad (kPa)	Label	1.5	

## Staircase

Ifc4 Entity	IfcStair			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Stair	N.A	Stairs	Component
PredefinedType	Need not specify			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	N.A		
IFC4 UserDefined PropertySet	<b>SGPset_StairReinforcement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	AsRequiredBottomX (mm2/m)	Label	N.A	
	AsRequiredBottomY (mm2/m)	Label	N.A	
	AsRequiredStirrups	Label	N.A	
	AsRequiredTopX (mm2/m)	Label	N.A	
	AsRequiredTopY (mm2/m)	Label	N.A	
	BottomMain	Label	N.A	
	BottomDistribution	Label	N.A	
	ConstructionMethod	Label	N.A	
	ImposedLoad (kPa)	Label	N.A	
	StirrupsType	Label	To input with values for submission	
	TopMain	Label	N.A	
	TopDistribution	Label	N.A	
	<b>SGPset_ConcreteElementGeneral</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	StrengthClass	Label	N.A	
	<b>SGPset_SteelElementGeneral</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SteelGrade	Label	To input with values for submission	
	<b>SGPset_Stair</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ReinforcementSteelGrade	Label	N.A	
	SectionFabricationMethod	Label	To input with values for submission	
	BarrierFreeAccessibility	Boolean	TRUE   FALSE	
	<b>SGPset_StairDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
Width (mm)	Length	N.A		
Thickness (mm)	Length	N.A		
<b>SGPset_StairSteelConnection</b>				



IFC4 UserDefined Property Name	Data Type	Sample Property Values
ConnectionDetailsTop	Label	To input with values for submission
ConnectionTypeTop	Label	To input with values for submission
ConnectionDetailsBottom	Label	To input with values for submission
ConnectionTypeBottom	Label	To input with values for submission

## IfcWall

### Concrete Wall

Ifc4 Entity	IfcWall																								
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>																					
	Wall	N.A	Walls	Concrete Panel																					
PredefinedType	STANDARD																								
ObjectType	N.A																								
IFC4 UserDefined PropertySet	<b>SGPset_WallReinforcement</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AsRequiredVertical (mm2/m)</td> <td>Label</td> <td>1232   213</td> </tr> <tr> <td>AsRequiredHorizontal (mm2/m)</td> <td>Label</td> <td>431   333</td> </tr> <tr> <td>VerticalRebar</td> <td>Label</td> <td>H32-150H25-150   H25-150</td> </tr> <tr> <td>HorizontalRebar</td> <td>Label</td> <td>H20-150</td> </tr> </tbody> </table> <b>SGPset_WallDimension</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Thickness (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table>				IFC4 UserDefined Property Name	Data Type	Sample Property Values	AsRequiredVertical (mm2/m)	Label	1232   213	AsRequiredHorizontal (mm2/m)	Label	431   333	VerticalRebar	Label	H32-150H25-150   H25-150	HorizontalRebar	Label	H20-150	IFC4 UserDefined Property Name	Data Type	Sample Property Values	Thickness (mm)	Length	N.A
IFC4 UserDefined Property Name	Data Type	Sample Property Values																							
AsRequiredVertical (mm2/m)	Label	1232   213																							
AsRequiredHorizontal (mm2/m)	Label	431   333																							
VerticalRebar	Label	H32-150H25-150   H25-150																							
HorizontalRebar	Label	H20-150																							
IFC4 UserDefined Property Name	Data Type	Sample Property Values																							
Thickness (mm)	Length	N.A																							

### Double Bay Facade Wall

Ifc4 Entity	IfcWall									
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>						
	Wall	Wall	Walls	Concrete Panel						
PredefinedType	Need not specify									
ObjectType	N.A									
IFC4 UserDefined PropertySet	<b>SGPset_PrecastConcreteElementGeneral</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ArrangementType</td> <td>Label</td> <td>Double Bay Facade Wall</td> </tr> </tbody> </table>				IFC4 UserDefined Property Name	Data Type	Sample Property Values	ArrangementType	Label	Double Bay Facade Wall
IFC4 UserDefined Property Name	Data Type	Sample Property Values								
ArrangementType	Label	Double Bay Facade Wall								

### Multi-tier Wall

Ifc4 Entity	IfcWall									
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>						
	Wall	Wall	Walls	Concrete Panel						
PredefinedType	Need not specify									
ObjectType	N.A									
IFC4 UserDefined PropertySet	<b>SGPset_PrecastConcreteElementGeneral</b> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ArrangementType</td> <td>Label</td> <td>Multi-tier Wall</td> </tr> </tbody> </table>				IFC4 UserDefined Property Name	Data Type	Sample Property Values	ArrangementType	Label	Multi-tier Wall
IFC4 UserDefined Property Name	Data Type	Sample Property Values								
ArrangementType	Label	Multi-tier Wall								

## Wall

Ifc4 Entity	IfcWall			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Wall	Wall	Walls	Concrete Panel
PredefinedType	STANDARD			
ObjectType	N.A			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Concrete		
IFC4 UserDefined PropertySet	<b>SGPset_ConcreteElementGeneral</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	StrengthClass	Label	C32/40	
	<b>SGPset_Wall</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ReinforcementSteelGrade	Label	fyk 500 N/mm2   Class B	
	ConstructionMethod	Label	Cast Insitu <i>Sample Value(s):</i> Precast	
	ShelterUsage	Boolean	TRUE   FALSE	
	<b>SGPset_WallReinforcement</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	VerticalRebar	Label	H32-150H25-150	
	HorizontalRebar	Label	H20-150	
	Stirrups	Label	T10-150-300	
	StirrupsType	Label	To input with values for submission	
	AsRequiredVertical (mm2/m)	Label	1232	
	AsRequiredHorizontal (mm2/m)	Label	333	
	AsRequiredStirrups (mm2/m)	Label	213	
	<b>SGPset_WallDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Mark	Label	W1 <i>Sample Value(s):</i> W2	
	TypeMark	Label	W1 <i>Sample Value(s):</i> W2	
	Length (mm)	Length	6000	
	Thickness (mm)	Length	300	
	Height	Length	8000	

## List of Identified Systems

### IfcBuildingSystem

#### Air Speed Measuring Device

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	AIRSPEEDMEASURINGDEVICE			

#### Beam-Facade Wall

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	BEAMFACADEWALL			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingSystem</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Precast	
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Beam	IfcBeam		

#### Capsule Pod

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	CAPSULEPOD			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Wall	IfcWall		
	Floor	IfcSlab		
	Door	IfcDoor		
	Ceiling	IfcCovering		
	Access Opening	IfcOpeningElement		

#### Ceiling Support

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	FRAMING			

Ifc4 UserDefined PropertySet	<b>SGPset_BuildingSystem</b>		
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>
	Combustible	Boolean	FALSE

## Diaphragm Wall System

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	DIAPHRAGMWALLSYSTEM			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Wall	IfcWall		

## Duct Framing

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	FRAMING			
Ifc4 UserDefined PropertySet	<b>SGPset_BuildingSystem</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	TensileStress	Label	Sample Value(s): 10N/mm2	

## Energy Storage System

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	ENERGYSTORAGE			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Battery	IfcElectricFlowStorageDevice		
	Switchboard	IfcElectricDistributionBoard		

## Fire Alarm System

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Fire Alarm Devices	N.A
PredefinedType	USERDEFINED			
ObjectType	FIREALARM			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Smoke Detector	IfcSensor		
	Siren Alarm	IfcAlarm		
	Visual Alarm	IfcAlarm		

	Heat Detector	IfcSensor
	Fire Sensor	IfcSensor
	Fire Alarm Panel	IfcUnitaryControlElement
	Sound Alarm	IfcAlarm

## Gondola

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	GONDOLA			

## Lift Drive System

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	TRANSPORT			
ObjectType	N.A			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingSystem</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	SelfSustaining	Boolean	TRUE   FALSE	
	LoadSideBrake	Boolean	TRUE   FALSE	
	BeltOrChainCount	Integer	N.A	
	ElectromechanicalFrictionBrake	Boolean	TRUE   FALSE	
EmergencyControlDevice	Boolean	TRUE   FALSE		

## Maintenance Platform

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	MAINTENANCE			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Beam	IfcBeam		
	Slab	IfcSlab		

## Master Antenna Television System

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	MASTERANTENNATELEVISIONSYSTEM			

## Mechanized Car Parking

Ifc4 Entity	IfcBuildingSystem			
-------------	-------------------	--	--	--

Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	MECHANIZEDCARPARKING			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingSystem</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	MechanizedCarParking_Type	Label	Fully automated system   Stack type	
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Car Parking Deck		IfcBuildingElementProxy	
	Supporting Structure		IfcMember	

## Outfall Structure

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	Group	Group	Model Groups	N.A
PredefinedType	FOUNDATION			
ObjectType	N.A			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Box Culvert		IfcPipeSegment	

## Oxygen-reduction System

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	OXYGENREDUCTION			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Water Mist		IfcFireSuppressionTerminal	
	Fire Extinguisher		IfcBuildingElementProxy	

## PPVC Module

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	PPVCMODULE			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingSystem</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	PPVC	
	Accreditation_PAS	Boolean	TRUE   FALSE	
	Accreditation_MAS	Boolean	TRUE   FALSE	
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Wall		IfcWall	

	Floor	IfcSlab
	Door	IfcDoor
	Ceiling	IfcCovering
	Cabinet	IfcFurniture

## PWCS Main Control System

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	PWCSMAINCONTROL			
IFC4 UserDefined PropertySet	<b>SGPset BuildingSystem</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	CommunicationSystem	Boolean	TRUE   FALSE	
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Network Appliance	IfcCommunicationsAppliance		
	Control Panel	IfcUnitaryControlElement		
	Computer	IfcCommunicationsAppliance		

## Pneumatic Recyclables Chute Conveyance System

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	PNEUMATICRECYCLABLESCHUTECONVEYANCESYSTEM			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Recycling Bin	IfcFurniture		
	Recyclables Container	IfcFurniture		
	Recyclables Compactor	IfcFurniture		

## Pneumatic Waste Conveyance System

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	PNEUMATICWASTECONVEYANCESYSTEM			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Temporary Storage Section	IfcPipeSegment		
	Refuse Outdoor Throw Point	IfcWasteTerminal		
	Refuse Chute Hopper	IfcDoor		
	Refuse Chute	IfcWall		
	Recyclables Outdoor Throw Point	IfcWasteTerminal		
	Recyclables Refuse Chute Hopper	IfcDoor		
	Recyclables Refuse Chute	IfcWall		
	Discharge Valve	IfcValve		
	Conveyance Pipe	IfcPipeSegment		
	Chute Interface	IfcWasteTerminal		
	Air Intake Valve	IfcValve		
Waste-air Separator	IfcFilter			

	Waste Flow Diverter	IfcWasteTerminal
	Vacuum Exhauster	IfcPump
	Refuse Container	IfcFurniture
	Refuse Compactor	IfcFurniture
	Recyclables Container	IfcFurniture
	Recyclables Compactor	IfcFurniture
	Odour Filtration System	IfcFilter
	Dust Filtration System	IfcFilter
	Operator Panel	IfcUnitaryControlElement
	Control Panel	IfcUnitaryControlElement

## Precast Household Shelter

Ifc4 Entity	IfcBuildingSystem									
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>IFC Assignments</td><td>System</td><td>Model Groups</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	IFC Assignments	System	Model Groups	N.A	
ArchiCad	OpenBuildings	Revit	Tekla							
IFC Assignments	System	Model Groups	N.A							
PredefinedType	USERDEFINED									
ObjectType	HOUSEHOLDSHELTER									
IFC4 UserDefined PropertySet	<p><b>SGPset_BuildingSystem</b></p> <table border="1"> <thead> <tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr> </thead> <tbody> <tr><td>ConstructionMethod</td><td>Label</td><td>Precast</td></tr> <tr><td>Accreditation_PAS</td><td>Boolean</td><td>TRUE   FALSE</td></tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ConstructionMethod	Label	Precast	Accreditation_PAS	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values								
ConstructionMethod	Label	Precast								
Accreditation_PAS	Boolean	TRUE   FALSE								
Components of the group	<table border="1"> <thead> <tr><th>Identified Component</th><th>IFC4 Entity</th></tr> </thead> <tbody> <tr><td>Wall</td><td>IfcWall</td></tr> <tr><td>Slab</td><td>IfcSlab</td></tr> </tbody> </table>	Identified Component	IFC4 Entity	Wall	IfcWall	Slab	IfcSlab			
Identified Component	IFC4 Entity									
Wall	IfcWall									
Slab	IfcSlab									

## Precast Refuse Chute

Ifc4 Entity	IfcBuildingSystem									
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>IFC Assignments</td><td>System</td><td>Model Groups</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	IFC Assignments	System	Model Groups	N.A	
ArchiCad	OpenBuildings	Revit	Tekla							
IFC Assignments	System	Model Groups	N.A							
PredefinedType	USERDEFINED									
ObjectType	REFUSECHUTE									
IFC4 UserDefined PropertySet	<p><b>SGPset_BuildingSystem</b></p> <table border="1"> <thead> <tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr> </thead> <tbody> <tr><td>ConstructionMethod</td><td>Label</td><td>Precast</td></tr> <tr><td>Accreditation_PAS</td><td>Boolean</td><td>TRUE   FALSE</td></tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ConstructionMethod	Label	Precast	Accreditation_PAS	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values								
ConstructionMethod	Label	Precast								
Accreditation_PAS	Boolean	TRUE   FALSE								
Components of the group	<table border="1"> <thead> <tr><th>Identified Component</th><th>IFC4 Entity</th></tr> </thead> <tbody> <tr><td>Wall</td><td>IfcWall</td></tr> </tbody> </table>	Identified Component	IFC4 Entity	Wall	IfcWall					
Identified Component	IFC4 Entity									
Wall	IfcWall									

## Prefabricated And Prefinished Ceiling with MEP Services

Ifc4 Entity	IfcBuildingSystem								
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>IFC Assignments</td><td>System</td><td>Model Groups</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	IFC Assignments	System	Model Groups	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
IFC Assignments	System	Model Groups	N.A						
PredefinedType	USERDEFINED								
ObjectType	PREFABRICATEDANDPREFINISHEDCEILING								
IFC4 UserDefined PropertySet	<p><b>SGPset_BuildingSystem</b></p> <table border="1"> <thead> <tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr> </thead> <tbody> <tr><td>ConstructionMethod</td><td>Label</td><td>Prefabricated and Prefinished</td></tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ConstructionMethod	Label	Prefabricated and Prefinished		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
ConstructionMethod	Label	Prefabricated and Prefinished							



Components of the group	<table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Ceiling</td> <td>IfcCovering</td> </tr> </tbody> </table>	Identified Component	IFC4 Entity	Ceiling	IfcCovering
Identified Component	IFC4 Entity				
Ceiling	IfcCovering				

## Prefabricated And Prefinished Floor with MEP Services

Ifc4 Entity	IfcBuildingSystem								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>IFC Assignments</td> <td>System</td> <td>Model Groups</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	IFC Assignments	System	Model Groups	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
IFC Assignments	System	Model Groups	N.A						
PredefinedType	USERDEFINED								
ObjectType	PREFABRICATEDANDPREFINISHEDFLOOR								
IFC4 UserDefined PropertySet	<p><b>SGPset_BuildingSystem</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Prefabricated and Prefinished</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ConstructionMethod	Label	Prefabricated and Prefinished		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
ConstructionMethod	Label	Prefabricated and Prefinished							
Components of the group	<table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Floor</td> <td>IfcSlab</td> </tr> </tbody> </table>	Identified Component	IFC4 Entity	Floor	IfcSlab				
Identified Component	IFC4 Entity								
Floor	IfcSlab								

## Prefabricated And Prefinished Wall with MEP Services

Ifc4 Entity	IfcBuildingSystem								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>IFC Assignments</td> <td>System</td> <td>Model Groups</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	IFC Assignments	System	Model Groups	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
IFC Assignments	System	Model Groups	N.A						
PredefinedType	USERDEFINED								
ObjectType	PREFABRICATEDANDPREFINISHEDWALL								
IFC4 UserDefined PropertySet	<p><b>SGPset_BuildingSystem</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Prefabricated and Prefinished</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ConstructionMethod	Label	Prefabricated and Prefinished		
IFC4 UserDefined Property Name	Data Type	Sample Property Values							
ConstructionMethod	Label	Prefabricated and Prefinished							
Components of the group	<table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>IfcWall</td> </tr> </tbody> </table>	Identified Component	IFC4 Entity	Wall	IfcWall				
Identified Component	IFC4 Entity								
Wall	IfcWall								

## Prefabricated Bathroom Unit

Ifc4 Entity	IfcBuildingSystem												
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>IFC Assignments</td> <td>System</td> <td>Model Groups</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	IFC Assignments	System	Model Groups	N.A				
ArchiCad	OpenBuildings	Revit	Tekla										
IFC Assignments	System	Model Groups	N.A										
PredefinedType	USERDEFINED												
ObjectType	PREFABRICATEDBATHROOMUNIT												
IFC4 UserDefined PropertySet	<p><b>SGPset_BuildingSystem</b></p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Prefabricated</td> </tr> <tr> <td>Accreditation_PAS</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> <tr> <td>Accreditation_MAS</td> <td>Boolean</td> <td>TRUE   FALSE</td> </tr> </tbody> </table>	IFC4 UserDefined Property Name	Data Type	Sample Property Values	ConstructionMethod	Label	Prefabricated	Accreditation_PAS	Boolean	TRUE   FALSE	Accreditation_MAS	Boolean	TRUE   FALSE
IFC4 UserDefined Property Name	Data Type	Sample Property Values											
ConstructionMethod	Label	Prefabricated											
Accreditation_PAS	Boolean	TRUE   FALSE											
Accreditation_MAS	Boolean	TRUE   FALSE											
Components of the group	<table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>IfcWall</td> </tr> <tr> <td>Slab</td> <td>IfcSlab</td> </tr> </tbody> </table>	Identified Component	IFC4 Entity	Wall	IfcWall	Slab	IfcSlab						
Identified Component	IFC4 Entity												
Wall	IfcWall												
Slab	IfcSlab												

## Prefabricated MEP Horizontal Module

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	PREFABRICATEDMEPHORIZONTALMODULE			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingSystem</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Prefabricated	
	MechanicalConnectionType	Label	N.A	
Accreditation_MAS	Boolean	TRUE   FALSE		

## Prefabricated MEP Plant Module

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	PREFABRICATEDMEPLANTMODULE			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingSystem</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Prefabricated	
	MechanicalConnectionType	Label	N.A	
Accreditation_MAS	Boolean	TRUE   FALSE		

## Prefabricated MEP Vertical Module

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	PREFABRICATEDMEPVERTICALMODULE			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingSystem</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	ConstructionMethod	Label	Prefabricated	
	MechanicalConnectionType	Label	N.A	
Accreditation_MAS	Boolean	TRUE   FALSE		

## Prefabricated Pump Skid

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	PREFABRICATEDPUMPSKID			
IFC4 UserDefined PropertySet	<b>SGPset_BuildingSystem</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	

	ConstructionMethod	Label	Prefabricated
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>	
	Pump	IfcPump	
	Motor	IfcMotorConnection	
	Control Panel	IfcUnitaryControlElement	

## Public Address System

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	PUBLICADDRESSSYSTEM			

## Roof Structure

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	ROOFSTRUCTURE			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	Timber		

## Solar PV System

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	SOLARPV			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Solar Panel	IfcSolarDevice		
	Solar Panel	IfcPlate		
	Cable Segment	IfcCableSegment		
	Switchboard	IfcElectricDistributionBoard		
	Emergency Stop	IfcSwitchingDevice		
	Control Panel	IfcUnitaryControlElement		

## Truss

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	TRUSS			
Material	<b>Attributes</b>	<b>Sample Attribute Values</b>		
	Name	MET   Timber   Steel		

## Unit

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	UNIT			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Wall	IfcWall		
	Floor	IfcSlab		
	Door	IfcDoor		
	Ceiling	IfcCovering		

## Working Platform

Ifc4 Entity	IfcBuildingSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	IFC Assignments	System	Model Groups	N.A
PredefinedType	USERDEFINED			
ObjectType	MAINTENANCE			

## IfcDistributionSystem

### ACMV System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Duct Systems	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

### Air Conditioning System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	AIRCONDITIONING			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Prefabricated Duct Segment	IfcDuctSegment		
	Prefabricated Duct Fitting	IfcDuctFitting		

### Cabling

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A

PredefinedType	USERDEFINED
ObjectType	CABLING

## Chemical System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	CHEMICAL			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Water Filter		IfcFilter	
	Strainer		IfcFilter	
	Sanitary Fixture		IfcSanitaryTerminal	
	Sanitary Fixture		IfcWasteTerminal	
	Oil Filter		IfcFilter	
	Sampling Tank		IfcTank	
	Sampling Sump		IfcDistributionChamberElement	
	Pipe Segment		IfcPipeSegment	
	Inspection Chamber		IfcDistributionChamberElement	
	Pipe Fitting		IfcPipeFitting	
Autosampler		IfcBuildingElementProxy		

## Chilled Water System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	CHILLEDWATER			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Pipe Segment		IfcPipeSegment	
	Pipe Fitting		IfcPipeFitting	

## Cold Water System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	DOMESTICCOLDWATER			
IFC4 UserDefined PropertySet	<b>SGPset_SystemDimension</b>			
	<b>IFC4 UserDefined Property Name</b>		<b>Data Type</b>	<b>Sample Property Values</b>
	Length (mm)		Length	N.A
	Diameter (mm)		Length	N.A
Material		Label	N.A	
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Flexible Pipe		IfcPipeSegment	
	Infill Point		IfcValve	
	Pipe Segment		IfcPipeSegment	
	Water Tank (Potable Water)		IfcTank	

Water Meter	IfcFlowMeter
Pipe Fitting	IfcPipeFitting
Water Tank	IfcTank
Stop Valve	IfcValve
Valve	IfcValve
Pump	IfcPump
Pressure Reducing Valve	IfcValve
Warning pipe	IfcPipeSegment
Draw-off Valve	IfcValve
Sampling Tap	IfcValve
Overflow Pipe	IfcPipeSegment
Outlet Pipe	IfcPipeSegment
Isolating valve	IfcValve
Inlet Pipe	IfcPipeSegment
Draining Valve	IfcValve
Water Tank (Sectional)	IfcTank
Washout Pipe	IfcPipeSegment
Stopcock	IfcValve
Hose	IfcPipeSegment
Float Valve	IfcValve
Double Check Valve	IfcValve
Check Valve	IfcValve
Short Pipe	IfcPipeSegment
Gate valve	IfcValve
Drain-out Test Cock	IfcValve
Water Tap	IfcValve

## Compressed Air System

Ifc4 Entity	IfcDistributionSystem								
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>MEP System</td><td>System</td><td>MEP Fabrication Pipework</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	MEP System	System	MEP Fabrication Pipework	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
MEP System	System	MEP Fabrication Pipework	N.A						
PredefinedType	USERDEFINED								
ObjectType	COMPRESSED AIR								

## Condensate System

Ifc4 Entity	IfcDistributionSystem								
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>MEP System</td><td>System</td><td>Piping Systems</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	MEP System	System	Piping Systems	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
MEP System	System	Piping Systems	N.A						
PredefinedType	USERDEFINED								
ObjectType	CONDENSER WATER								
Components of the group	<table border="1"> <thead> <tr><th>Identified Component</th><th>IFC4 Entity</th></tr> </thead> <tbody> <tr><td>Pipe Segment</td><td>IfcPipeSegment</td></tr> </tbody> </table>	Identified Component	IFC4 Entity	Pipe Segment	IfcPipeSegment				
Identified Component	IFC4 Entity								
Pipe Segment	IfcPipeSegment								

## Deep Tunnel Sewerage System

Ifc4 Entity	IfcDistributionSystem								
Proposed BIM Representation	<table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>MEP System</td><td>System</td><td>Piping Systems</td><td>N.A</td></tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	MEP System	System	Piping Systems	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
MEP System	System	Piping Systems	N.A						
PredefinedType	USERDEFINED								
ObjectType	DEEPTUNNELSEWERAGE								
Components of the group	<table border="1"> <thead> <tr><th>Identified Component</th><th>IFC4 Entity</th></tr> </thead> <tbody> <tr><td>Pipe Segment</td><td>IfcPipeSegment</td></tr> </tbody> </table>	Identified Component	IFC4 Entity	Pipe Segment	IfcPipeSegment				
Identified Component	IFC4 Entity								
Pipe Segment	IfcPipeSegment								

## Drainage System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	DRAINAGE			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Pipe Segment		IfcPipeSegment	
	Gutter		IfcPipeSegment	
	Sump Pump		IfcPump	

## Dry Riser System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	DRYRISER			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Breeching Inlet		IfcFireSuppressionTerminal	
	Pipe Segment		IfcPipeSegment	
	Landing Valve		IfcValve	

## Electrical System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	ELECTRICAL			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Cable Segment		IfcCableSegment	
	Cable Fitting		IfcCableFitting	
	Control Panel		IfcUnitaryControlElement	
	Metal Conduit		IfcCableCarrierSegment	
	Conduit		IfcCableCarrierSegment	
	Cable Tray		IfcCableCarrierSegment	

## Exhaust Air System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Duct Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	EXHAUSTAIR			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Exhaust Air Fan		IfcFan	
	Exhaust Air Grille		IfcAirTerminal	
	Duct Fitting		IfcDuctFitting	

	Duct Segment	IfcDuctSegment
	Exhaust Air Louvre	IfcAirTerminal
	Exhaust Air Outlet	IfcFan
	Air Terminal	IfcAirTerminal

## Fire Protection System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	FIREPROTECTION			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Pump	IfcPump		
	Pipe Segment	IfcPipeSegment		
	Fire Hydrant	IfcFireSuppressionTerminal		
	Sprinkler	IfcFireSuppressionTerminal		
	Hydrant Tank	IfcTank		
	Jockey Pump	IfcPump		

## Firefighting System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	FIREFIGHTING			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Water Tank	IfcTank		
	Sprinkler	IfcFireSuppressionTerminal		
	Pipe Segment	IfcPipeSegment		
	Hose Reel	IfcFireSuppressionTerminal		
	Fire Hydrant	IfcFireSuppressionTerminal		
	Drain-out Test Cock	IfcValve		
	Check Valve	IfcValve		
Pipe Fitting	IfcPipeFitting			

## Fresh Air System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Duct Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	FRESHAIR			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Fresh Air Fan	IfcFan		
	Duct Segment	IfcDuctSegment		

## Fuel System

Ifc4 Entity	IfcDistributionSystem			
-------------	-----------------------	--	--	--



Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	FUEL			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Infill Point	IfcValve		
	Pipe Fitting	IfcPipeFitting		
	Pipe Segment	IfcPipeSegment		
	Diesel Generator	IfcElectricGenerator		

## Gas System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	GAS			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Gas Tap Valve	IfcValve		
	Knock-out Pot	IfcDistributionChamberElement		
	Change-over Valve	IfcValve		
	Vaporiser	IfcHeatExchanger		
	Gas Regulating Valve	IfcValve		
	Gas Detector	IfcSensor		
	Pressure Reducing Valve	IfcValve		
	Hydrostatic Relief Valve	IfcValve		
	Isolating Valve	IfcValve		
	Emergency Shut-off Valve	IfcValve		
	Pressure Gauge	IfcFlowInstrument		
	Gas Meter	IfcFlowMeter		
	Gas Tank	IfcTank		
Pipe Segment	IfcPipeSegment			

## Grey Water System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	GREYWATER			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Pipe Segment	IfcPipeSegment		

## Hot Water System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	DOMESTICHOTWATER			
Components of the group				

	Identified Component	IFC4 Entity
	Terminal Draw Off	IfcValve
	Pipe Fitting	IfcPipeFitting
	Pipe Segment	IfcPipeSegment
	Water Heater	IfcElectricAppliance
	Mixing Valve	IfcValve
	Solar Water Heater	IfcSolarDevice

## Hydronic System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	HYDRONIC			
Components of the group	Identified Component	IFC4 Entity		
	Water Tank	IfcTank		

## Industrial Waste

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	INDUSTRIALWASTE			

## Industrial Water System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	INDUSTRIALWATER			

## Irrigation System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	IRRIGATION			
Components of the group	Identified Component	IFC4 Entity		
	Pipe Segment	IfcPipeSegment		

## Jet Fan System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Duct Systems	N.A

PredefinedType	USERDEFINED								
ObjectType	JETFAN								
Components of the group	<table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Jet Fan</td> <td>IfcFan</td> </tr> <tr> <td>Fresh Air Fan</td> <td>IfcFan</td> </tr> <tr> <td>Exhaust Air Fan</td> <td>IfcFan</td> </tr> </tbody> </table>	Identified Component	IFC4 Entity	Jet Fan	IfcFan	Fresh Air Fan	IfcFan	Exhaust Air Fan	IfcFan
Identified Component	IFC4 Entity								
Jet Fan	IfcFan								
Fresh Air Fan	IfcFan								
Exhaust Air Fan	IfcFan								

## Kitchen Fire Suppression System

Ifc4 Entity	IfcDistributionSystem								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>MEP System</td> <td>System</td> <td>Piping Systems</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	MEP System	System	Piping Systems	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
MEP System	System	Piping Systems	N.A						
PredefinedType	USERDEFINED								
ObjectType	KITCHENFIRESUPPRESSION								
Components of the group	<table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Pipe Segment</td> <td>IfcPipeSegment</td> </tr> </tbody> </table>	Identified Component	IFC4 Entity	Pipe Segment	IfcPipeSegment				
Identified Component	IFC4 Entity								
Pipe Segment	IfcPipeSegment								

## Lightning Protection System

Ifc4 Entity	IfcDistributionSystem								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>MEP System</td> <td>System</td> <td>Piping Systems</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	MEP System	System	Piping Systems	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
MEP System	System	Piping Systems	N.A						
PredefinedType	USERDEFINED								
ObjectType	LIGHTNINGPROTECTION								
Components of the group	<table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Down Conductor</td> <td>IfcCableSegment</td> </tr> </tbody> </table>	Identified Component	IFC4 Entity	Down Conductor	IfcCableSegment				
Identified Component	IFC4 Entity								
Down Conductor	IfcCableSegment								

## Municipal Solid Waste System

Ifc4 Entity	IfcDistributionSystem								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>MEP System</td> <td>System</td> <td>Piping Systems</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	MEP System	System	Piping Systems	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
MEP System	System	Piping Systems	N.A						
PredefinedType	USERDEFINED								
ObjectType	MUNICIPALSOLIDWASTE								
Components of the group	<table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Refuse Chute</td> <td>IfcWall</td> </tr> </tbody> </table>	Identified Component	IFC4 Entity	Refuse Chute	IfcWall				
Identified Component	IFC4 Entity								
Refuse Chute	IfcWall								

## NEWater System

Ifc4 Entity	IfcDistributionSystem								
Proposed BIM Representation	<table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>MEP System</td> <td>System</td> <td>Piping Systems</td> <td>N.A</td> </tr> </tbody> </table>	ArchiCad	OpenBuildings	Revit	Tekla	MEP System	System	Piping Systems	N.A
ArchiCad	OpenBuildings	Revit	Tekla						
MEP System	System	Piping Systems	N.A						
PredefinedType	USERDEFINED								
ObjectType	NEWATER								
Components of the group	<table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>IfcPipeFitting</td> </tr> </tbody> </table>	Identified Component	IFC4 Entity	Pipe Fitting	IfcPipeFitting				
Identified Component	IFC4 Entity								
Pipe Fitting	IfcPipeFitting								

	Pipe Segment	IfcPipeSegment
--	--------------	----------------

## Non-domestic Cold Water System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	NONDOMESTICCOLDWATER			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Pipe Segment	IfcPipeSegment		

## Oil System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	OIL			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Oil Tank	IfcTank		
	Pipe Fitting	IfcPipeFitting		
	Pipe Segment	IfcPipeSegment		

## Plumbing System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	System	System	Piping Systems	N.A
PredefinedType	Need not specify			
ObjectType	N.A			

## Pumping Main

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	PUMPINGMAIN			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Pipe Segment	IfcPipeSegment		
	Pump	IfcPump		

## Pumping System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	FUEL			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Dispensing Unit		IfcBuildingElementProxy	

## Rainwater System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	RAINWATER			
IFC4 UserDefined PropertySet	<b>SGPset_SystemDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Diameter (mm)	Length	N.A	
	Gradient	Label	N.A	
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Pipe Segment		IfcPipeSegment	

## Recycled Water System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	RECYCLEDWATER			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Water Tank		IfcTank	

## Return Air System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Duct Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	RETURNAIR			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Duct Segment		IfcDuctSegment	
	Exhaust Air Fan		IfcFan	
	Exhaust Air Grille		IfcAirTerminal	

## SPPG

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>

	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	ELECTRICAL			

## Sanitary System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	SANITARY			
IFC4 UserDefined PropertySet	<b>SGPset_SystemDimension</b>			
	<b>IFC4 UserDefined Property Name</b>	<b>Data Type</b>	<b>Sample Property Values</b>	
	Gradient	Label	N.A	
	Length (mm)	Length	N.A	
	Diameter (mm)	Length	N.A	
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Sanitary Fixture	IfcSanitaryTerminal		
	Floor Waste	IfcWasteTerminal		
	Bidet	IfcSanitaryTerminal		
	Water Closet	IfcSanitaryTerminal		
	Floor Trap	IfcWasteTerminal		
	Pipe Segment	IfcPipeSegment		
	Inspection Chamber	IfcDistributionChamberElement		

## Service System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	System	System	Piping Systems	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Pipe Segment	IfcPipeSegment		
	Duct Segment	IfcDuctSegment		
	Cable Segment	IfcCableSegment		

## Sewerage System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	MEP Fabrication Pipework	N.A
PredefinedType	USERDEFINED			
ObjectType	SEWAGE			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Pipe Segment	IfcPipeSegment		
	Junction	IfcPipeFitting		
	Existing Sewerage	IfcPipeSegment		
	New Sewerage	IfcPipeSegment		
	Abandoned Pipe	IfcPipeSegment		

	Chamber	IfcDistributionChamberElement
	Manhole	IfcDistributionChamberElement
	Spigot and Socket	IfcPipeFitting

## Smoke Engineering Air

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Duct Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	SMOKEENGINEERINGAIR			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Ventilation Duct		IfcDuctSegment	
	Fire Damper		IfcDamper	
	Motorized Fire Damper		IfcDamper	

## Steam System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	MEP Fabrication Pipework	N.A
PredefinedType	USERDEFINED			
ObjectType	HEATING			

## Supply Air System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Duct Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	SUPPLYAIR			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Supply Air Fan		IfcFan	
	Duct Segment		IfcDuctSegment	

## System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	System	System	Piping Systems	N.A
PredefinedType	Need not specify			
ObjectType	N.A			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Pipe Fitting		IfcPipeFitting	
	Pipe Segment		IfcPipeSegment	

## Telecommunication System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	COMMUNICATION			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Cable Segment		IfcCableSegment	

## Underground Services

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	SEWAGE			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Pipe Segment		IfcPipeSegment	

## Vapour Recovery System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	VENT			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Pipe Segment		IfcPipeSegment	

## Vent Exhaust System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Duct Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	EXHAUSTAIR			

## Vent Supply System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Duct Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	SUPPLYAIR			



## Vent System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	VENT			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Entry Cap		IfcPipeFitting	
	Pipe Segment		IfcPipeSegment	
	Cowl		IfcStackTerminal	
	Air Terminal		IfcAirTerminal	
	Smoke Vent		IfcAirTerminal	

## Ventilation System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Duct Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	VENTILATION			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Opening		IfcOpeningElement	
	Fan		IfcFan	
	Fire Damper		IfcDamper	
	Duct Segment		IfcDuctSegment	
	Mechanical Ventilation		IfcAirTerminal	

## Water System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	WATERSUPPLY			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Sprinkler		IfcSanitaryTerminal	
	Water Tank		IfcTank	
	Pump		IfcPump	

## Watering System Pipe

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	DOMESTICCOLDWATER			
Components of the group	<b>Identified Component</b>		<b>IFC4 Entity</b>	
	Male Adapter		IfcPipeFitting	
	Breaching Inlet		IfcSanitaryTerminal	

# Wet Riser System

Ifc4 Entity	IfcDistributionSystem			
Proposed BIM Representation	<b>ArchiCad</b>	<b>OpenBuildings</b>	<b>Revit</b>	<b>Tekla</b>
	MEP System	System	Piping Systems	N.A
PredefinedType	USERDEFINED			
ObjectType	WETRISER			
Components of the group	<b>Identified Component</b>	<b>IFC4 Entity</b>		
	Water Tank	IfcTank		
	Pump	IfcPump		
	Landing Valve	IfcValve		
	Pipe Segment	IfcPipeSegment		