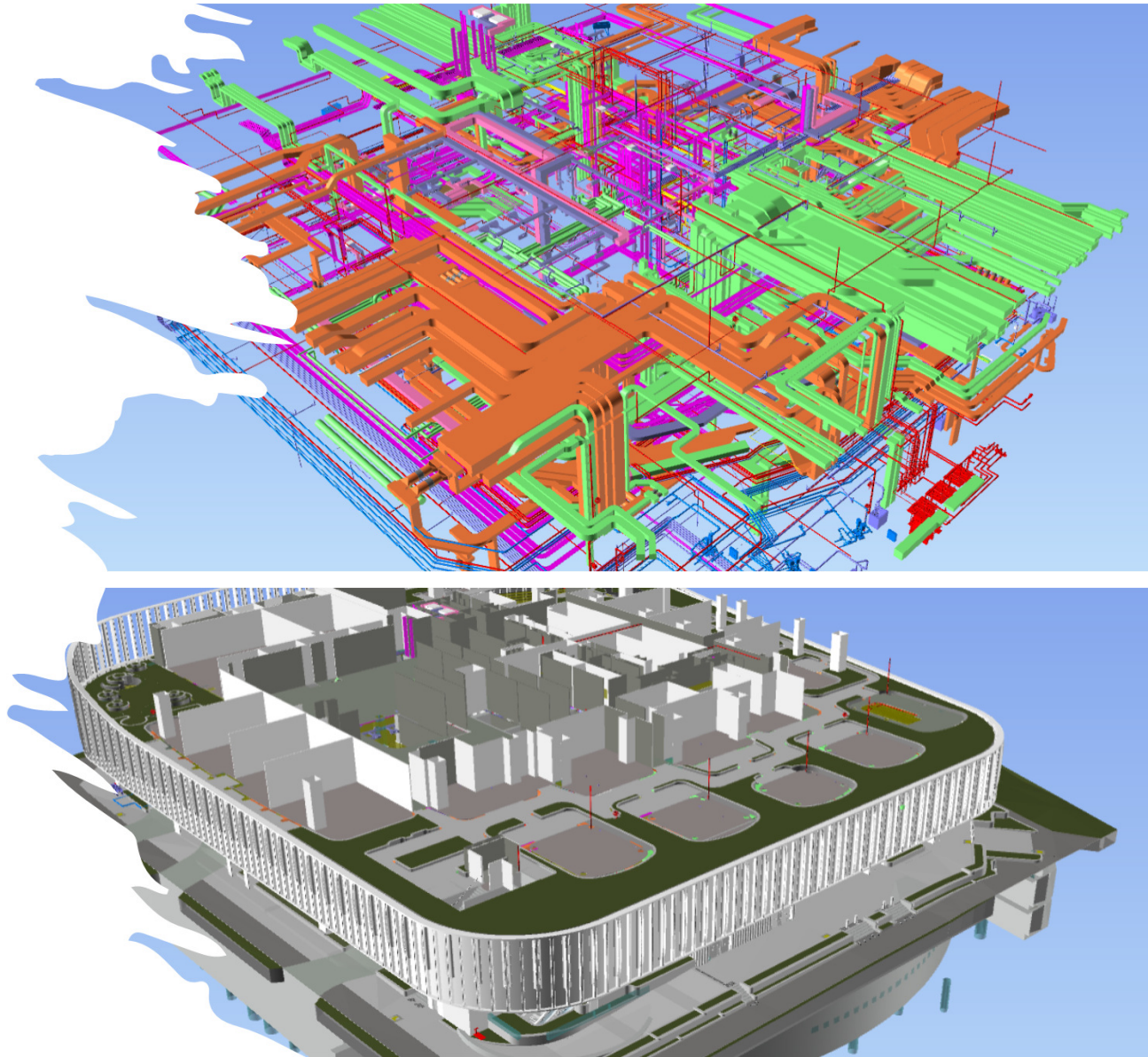


Sharing of CORENET X trial with BCA (MEP)

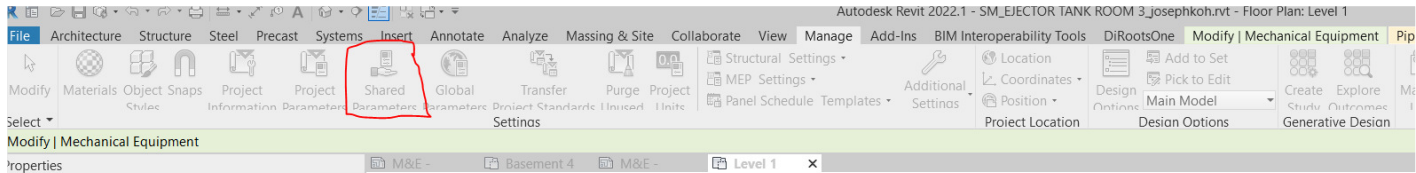
1. Introduction about the project
2. How to add IFC parameters
3. Conclusion
4. QnA

Introduction about the project

PROPOSED MIXED-USE DEVELOPMENT
COMPRISING OF A 63-STOUREY TOWER
BLOCK WITH A 2-STOUREY PODIUM FOR
SHOP & RESTAURANT USE, 1ST STOUREY
FOR OFFICE/ HOTEL/ RESIDENTIAL
LOBBIES WITH PLAZA SPACE AND
OFFICE, HOTEL (11 RMS) AND
RESIDENTIAL FLATS (215 UNITS) WITH
SKY TERRACES, COMMUNAL /
ANCILLARY FACILITIES AND 4
BASEMENT CONSISTING AN
UNDERGROUND PEDESTRIAN LINK
(UPL) AND BASEMENT CARPARK TS30
ON LOT 00144C & 00147V AT 8
SHENTON WAY (DOWNTOWN CORE
PLANNING AREA)



Setup



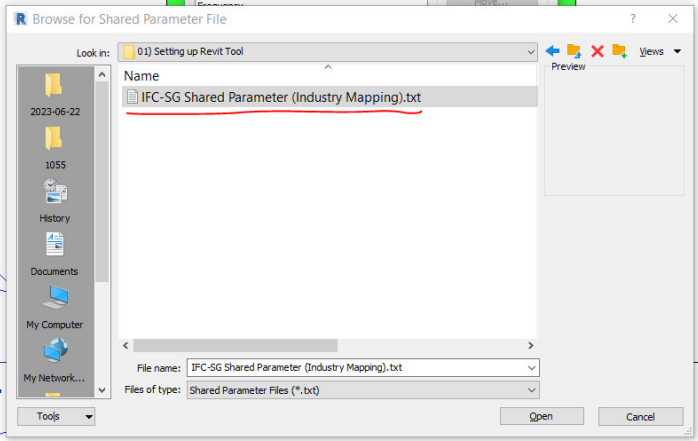
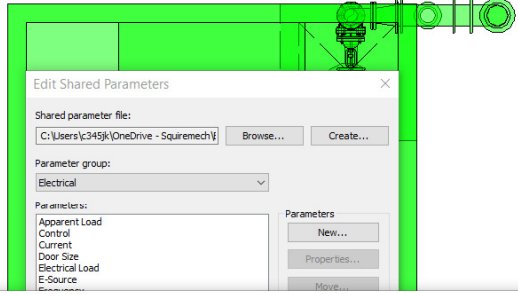
Load IFC-SG Shared Parameter

Properties

Pump-Submersible- Grundfos_SESLFAM_Concre...
SL1.85.100.100.4.52H.S.N.51D_50_99110106_Co...

Mechanical Equipment (1) Edit Type

Material	
Area Served	
Equipment No.	
Local Motor Control	
Size	
Eff. Vol.	
Equipment Type	
Electrical	
EST. ELECTRICAL LOAD	
Electrical - Loads	
Panel	
Circuit Number	
Dimensions	
D:	
Mechanical	
System Classification	Sanitary Power
System Name	SDDP 2
Power	
LEAVING CONDENSER W...	
Mechanical - Flow	
Critical Path	<input checked="" type="checkbox"/>
Identity Data	
Part Number	SL1.85.100.100.4.52H.S.N.5...
Part Description	Sewage pumps
Equipment Number	
Image	
Comments	
Mark	230
Workset	Sanitation
Edited by	
Phasing	
Phase Created	New Construction
Phase Demolished	None
IFC Parameters	
Standby	<input type="checkbox"/>
IfcExportAs	IfcPump
IfcObjectType	SUMPPUMP
General	



The image shows the Autodesk Revit 2022.1 interface with the BIM Interoperability Tools ribbon active. The 'Assign' button is circled in red. A dialog box titled 'AUTODESK STANDARDIZED DATA TOOL FOR REVIT' is open, displaying a list of IFC-SG spaces and areas. A red box highlights the file path 'ifc-sg-bit-for-ifcexportas-and-ifcobjecttype-(industry-mapping-set)aeb3ff5b10e144f29d861314fdcc16bb' at the top of the dialog. A red arrow points from this box to a file icon in the Project Browser. Another red box highlights the file name 'ifc-sg-bit-for-ifcexportas-and-ifcobjecttype-(industry-mapping-set)aeb3ff5b10e144f29d861314fdcc16bb.xlsx' in the Project Browser. The dialog box has 'Close' and 'Assign' buttons at the bottom.

Autodesk Revit 2022.1 - 1055_ME_BasenPodium

File Architecture Structure Steel Precast Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins BIM Interoperability Tools DiRootsOn

Create Setup Setup Synchronize Assign Assign Setup Run View Launch Setup Setup Contacts Import Zones Select Update Create Help
Configuration Families Equipment Data Spatial Data Classification Standardized Data Model Checker Configurator Families Print COBie Extension Spreadsheet About
BIT

Project Browser - 1055_ME_BasenPodium.rvt

Views (Sub-Discipline)

3D View

M&E -

Autodesk Interoperability Tools | Standardized Data

AUTODESK STANDARDIZED DATA TOOL FOR REVIT

ifc-sg-bit-for-ifcexportas-and-ifcobjecttype-(industry-mapping-set)aeb3ff5b10e144f29d861314fdcc16bb

Space Element

IFC-SG Spaces and Areas

- IfcSpace.USERDEFINED - AREA_CONNECTIVITY
- IfcSpace.USERDEFINED - AREA_GFA
- IfcSpace.USERDEFINED - AREA_LANDSCAPE
- IfcSpace.USERDEFINED - AREA_STRATA
- IfcSpace.USERDEFINED - AREA_VERIFICATION
- IfcSpace.USERDEFINED - AREA_FST
- IfcSpace.USERDEFINED - ACCESSWAY
- IfcSpace.USERDEFINED - ACCESSROAD
- IfcSpace.USERDEFINED - FIREENGINEACCESSROAD
- IfcSpace.USERDEFINED - VEHICULARSERVICEROAD
- IfcSpace.USERDEFINED - INGRESS
- IfcSpace.USERDEFINED - EGRESS
- IfcSpace.USERDEFINED - FIREENGINEACCESSWAY

ifc-sg-bit-for-ifcexportas-and-ifcobjecttype-(industry-mapping-set)aeb3ff5b10e144f29d861314fdcc16bb.xlsx

Close Assign

Load IFC-SG mapping spreadsheet to BIM Interoperability Tools

Check for MEP IFC parameter needed

industry-mapping-2-jul-2023.xlsx • Saved

Agency	Identified Component	Identified parameters	Revit Representation	Discipline	IFC4 Entities	IFC Sub Types (* = USERDEFINED)	Property Set	Property Name	Property Type	Property Unit	IFC4 Material Set	Sample Value for Reference
0	Unitary Equipment	N.A.	Mechanical Equipment	MEP	UnitaryEquipment	Need not specify	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1	Pump	N.A.	Mechanical Equipment	MEP	IfcPump	Need not specify	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2	Pump	N.A.	Mechanical Equipment	MEP	IfcPump	Need not specify	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
4	Pump	N.A.	Mechanical Equipment	MEP	IfcPump	Need not specify	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
5	Pump	Capacity	Mechanical Equipment	MEP	IfcPump	SUMPPUMP	SGPset_Pump	Capacity	VolumetricFlowRate	L/s	N.A.	N.A.
3	Pump	Duty	Mechanical Equipment	MEP	IfcPump	SUMPPUMP	SGPset_Pump	Duty	Boolean	N.A.	N.A.	TRUE/FALSE
4	Pump	Standby Pump	Mechanical Equipment	MEP	IfcPump	SUMPPUMP	SGPset_Pump	Standby	Boolean	N.A.	N.A.	TRUE/FALSE
5	Pump	Flow Rate	Mechanical Equipment	MEP	IfcPump	SUMPPUMP	SGPset_Pump	FlowRate	VolumetricFlowRate	N.A.	N.A.	N.A.
6	Security Lighting	N.A.	Lighting Fixtures	MEP	IfcLightFixture	SECURITYLIGHTING	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7	Sensor	Smoke Detector Type	Fire Alarm Devices	MEP	IfcSensor	*FLAMEDETECTOR	SGPset_Sensor	SmokeDetectorType	Label	N.A.	N.A.	Point Type/ Optical
8	Sensor	N.A.	Fire Alarm Devices	MEP	IfcSensor	*HEATDETECTOR	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
9	Sensor	N.A.	Fire Alarm Devices	MEP	IfcSensor	*SMOKEDETECTOR	N.A.	SmokeDetectorType	Label	N.A.	N.A.	N.A.
0	Sensor	N.A.	Fire Alarm Devices	MEP	IfcSensor	FIRESENSOR	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1	Sensor	N.A.	Fire Alarm Devices	MEP	IfcSensor	GASSENSOR	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2	Sensor	Engineered Smoke Control System	Fire Alarm Devices	MEP	IfcSensor	HEATSENSOR	SGPset_Sensor	EngineeredSmokeControlSystem	Boolean	N.A.	N.A.	TRUE/FALSE
3	Sensor	Declaration	Mechanical Equipment	MEP	IfcSensor	LEVELSENSOR	SGPset_Sensor	Declaration	Label	N.A.	N.A.	N.A.
4	Sensor	N.A.	Fire Alarm Devices	MEP	IfcSensor	MOVEMENTSENSOR	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
5	Sensor	Engineered Smoke Control System	Fire Alarm Devices	MEP	IfcSensor	SMOKESENSOR	SGPset_Sensor	EngineeredSmokeControlSystem	Boolean	N.A.	N.A.	TRUE/FALSE
6	Sensor	N.A.	Fire Alarm Devices	MEP	IfcSensor	TEMPERATURESENSOR	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7	Shower	N.A.	Plumbing Fixtures	MEP	IfcSanitaryTerminal	SHOWER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
8	Sink	N.A.	Plumbing Fixtures	MEP	IfcSanitaryTerminal	SINK	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
9	Sprinkler (Non-Fire; for NEA)	N.A.	Sprinklers	MEP	IfcSanitaryTerminal	*SPRINKLER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
0	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*CHILLEDWATER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1	System	N.A.	Piping Systems	MEP	IfcBuildingSystem	*DRAINAGE	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*DRYRISER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
0	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*FIREPROTECTION	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*HOSEREEL	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*POTABLEWATER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
3	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*POTABLEWATER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
4	System	Material	Piping Systems	MEP	IfcDistributionSystem	*POTABLEWATER	SGPset_Material	Material	Label	N.A.	N.A.	N.A.
5	System	Diameter	Piping Systems	MEP	IfcDistributionSystem	*POTABLEWATER	SGPset_PipeSegmentDimension	Diameter	Length	mm	N.A.	N.A.
6	System	Length	Piping Systems	MEP	IfcDistributionSystem	*POTABLEWATER	SGPset_PipeSegmentDimension	Length	Length	mm	N.A.	N.A.
7	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*RAINWATER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
8	System	Diameter	Piping Systems	MEP	IfcDistributionSystem	*RAINWATER	SGPset_PipeSegmentDimension	Diameter	Length	mm	N.A.	N.A.

Filter and sort MEP items that need IFC parameters

	A	B	C	D	H	I	J	
	Agency	Identified Component	Identified parameters	Revit Representation	Discipline	IFC4 Entities	IFC Sub Types (* = USERDEFINED)	Propert
6	PUB	Bidet	N.A	Plumbing Fixtures	MEP	IfcSanitaryTerminal	BIDET	N.A
15	SCDF	Breeching Inlet	Hose Nominal Diameter	Plumbing Fixtures	MEP	IfcFireSuppressionTerminal	BREECHINGINLET	SGPset
16	SCDF	Breeching Inlet	ID	Plumbing Fixtures	MEP	IfcFireSuppressionTerminal	BREECHINGINLET	SGPset
17	SCDF	Control Element	N.A	Electrical Equipment	MEP	IfcUnitaryControlElement	*AUTOMATICRESCUEDEVICE	N.A
18	SCDF	Control Element	N.A	Electrical Equipment	MEP	IfcUnitaryControlElement	*LIFTSUPERVISORYPANEL	N.A
19	SCDF	Control Element	Fire Alarm Panel	Electrical Equipment	MEP	IfcUnitaryControlElement	ALARMPANEL	SGPset
20	SCDF	Control Element	Purpose	Electrical Equipment	MEP	IfcUnitaryControlElement	ALARMPANEL	SGPset
22	SCDF	Control Element	Smoke Control Panel	Electrical Equipment	MEP	IfcUnitaryControlElement	ALARMPANEL	SGPset
23	SCDF	Control Element	Engineered Smoke Control System	Electrical Equipment	MEP	IfcUnitaryControlElement	CONTROLPANEL	SGPset
24	SCDF	Control Element	Smoke Purging	Electrical Equipment	MEP	IfcUnitaryControlElement	CONTROLPANEL	SGPset
26	SCDF	Control Element	Alarm Panel	Electrical Equipment	MEP	IfcUnitaryControlElement	GADETECTIONPANEL	SGPset
28	URA	Control Panel	N.A	Electrical Equipment	MEP	IfcUnitaryControlElement	CONTROLPANEL	N.A
29	NEA	Control Panel	Flushing	Electrical Equipment	MEP	IfcUnitaryControlElement	CONTROLPANEL	SGPset
31	PUB	Culvert	Public	Generic Models	MEP	IfcCivilElement	CULVERT	SGPset
33	PUB	Culvert	Diameter	Generic Models	MEP	IfcCivilElement	CULVERT	SGPset
34	PUB	Culvert	Height	Generic Models	MEP	IfcCivilElement	CULVERT	SGPset
35	PUB	Culvert	Length	Generic Models	MEP	IfcCivilElement	CULVERT	SGPset
37	PUB	Culvert	Thickness	Generic Models	MEP	IfcCivilElement	CULVERT	SGPset
38	PUB	Culvert	Width	Generic Models	MEP	IfcCivilElement	CULVERT	SGPset
40	SCDF	Damper	Fire Rating	Duct Accessories	MEP	IfcDamper	FIREDDAMPERS	SGPset
43	SCDF	Damper	Engineered Smoke Control System	Duct Accessories	MEP	IfcDamper	FIREDDAMPERS	SGPset
45	SCDF	Damper	N.A	Duct Accessories	MEP	IfcDamper	SMOKEDAMPERS	SGPset
46	NEA	Distribution Chamber	N.A	Plumbing Fixtures	MEP	IfcDistributionChamberElement	*PWCSINSPECTIONCHAMBER	N.A
47	NEA	Distribution Chamber	N.A	Plumbing Fixtures	MEP	IfcDistributionChamberElement	*PWCSMANHOLE	N.A
48	PUB	Distribution Chamber	Depth	Plumbing Fixtures	MEP	IfcDistributionChamberElement	INSPECTIONCHAMBER	SGPset
49	PUB	Distribution Chamber	Diameter	Plumbing Fixtures	MEP	IfcDistributionChamberElement	INSPECTIONCHAMBER	SGPset
50	PUB	Distribution Chamber	Height	Plumbing Fixtures	MEP	IfcDistributionChamberElement	INSPECTIONCHAMBER	SGPset

Identified parameters Revit Representation Discipline

Sort A to Z
Sort Z to A
Sort by Color
Sheet View
Clear Filter From "Discipline"
Filter by Color
Text Filters

Search

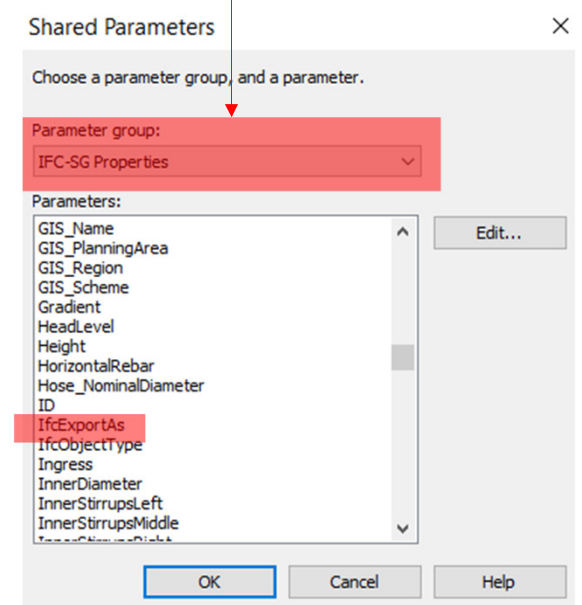
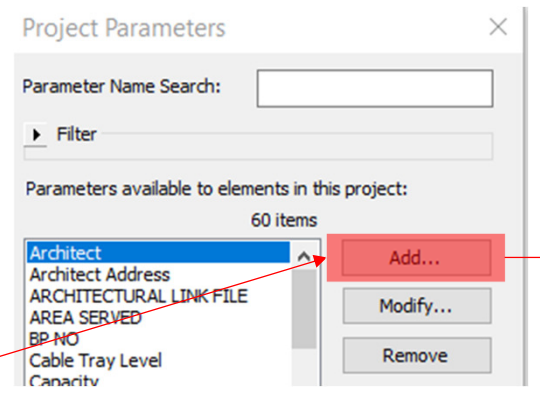
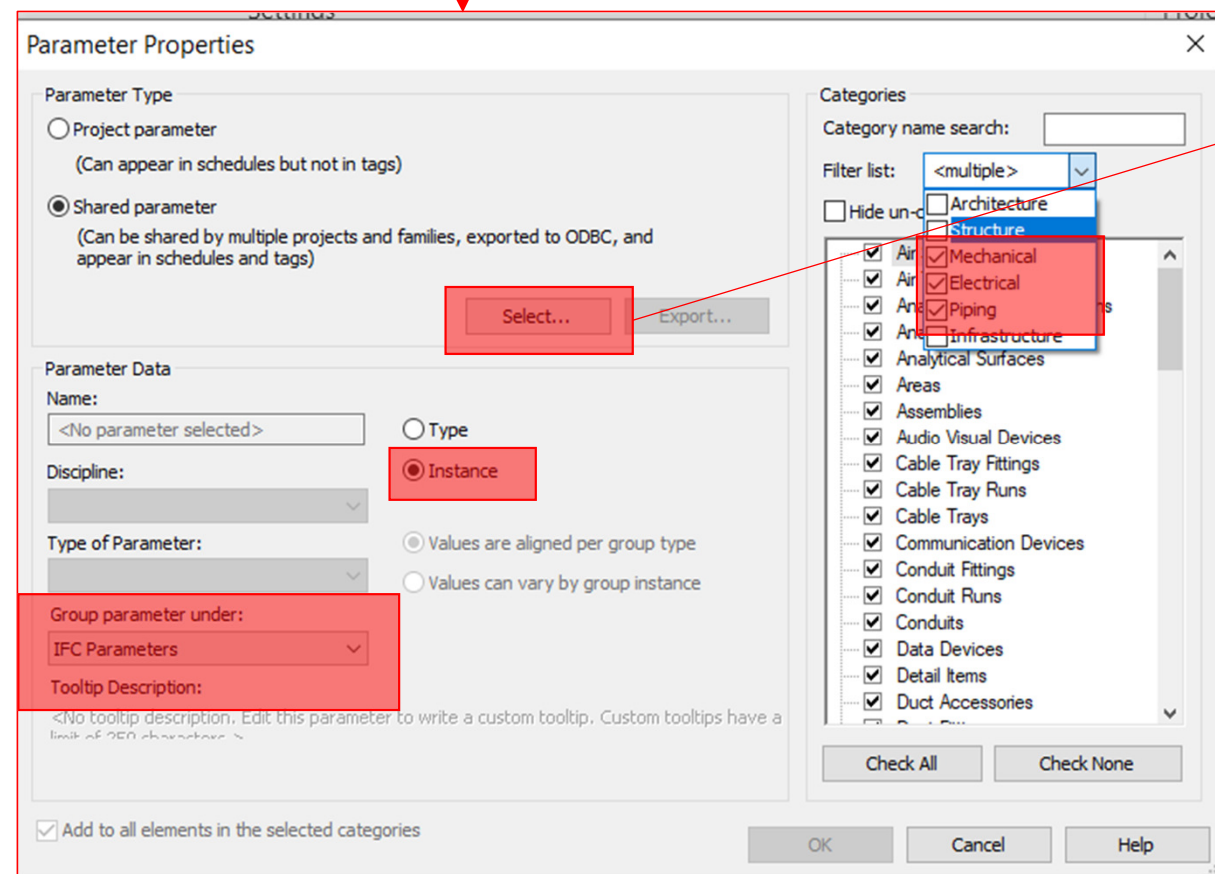
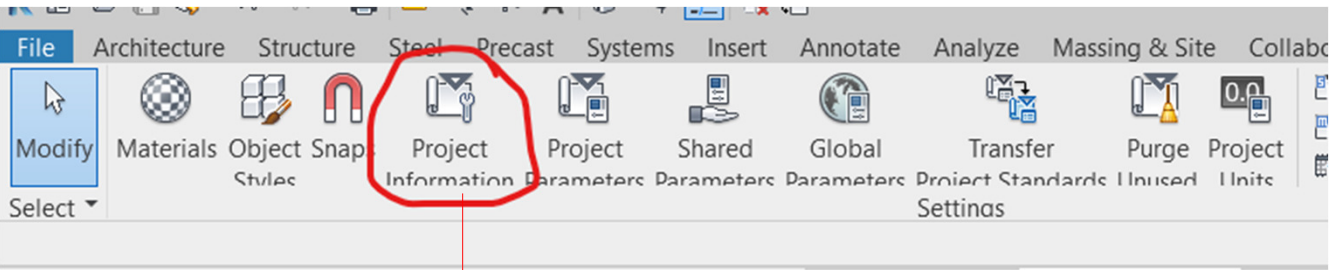
- (Select All)
- ARC
- External Works
- MEP
- STR

OK Cancel

Add MEP IFC parameter

A	B	C	D	H	I	J	K	L	M	N	O	P
Agency	Identified Component	Identified parameters	Revit Representation	Discipline	IFC4 Entities	IFC Sub Types (* = USERDEFINED)	Property Set	Property Name	Property Type	Property Unit	IFC4 Material Set	Sample Value for Reference
0	Unitary Equipment	N.A.	Mechanical Equipment	MEP	UnitaryEquipment	Need not specify	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1	Pump	N.A.	Mechanical Equipment	MEP	IfcPump	Need not specify	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2	Pump	N.A.	Mechanical Equipment	MEP	IfcPump	Need not specify	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
4	Pump	N.A.	Mechanical Equipment	MEP	IfcPump	Need not specify	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
5	Pump	Capacity	Mechanical Equipment	MEP	IfcPump	SUMPPUMP	SGPset_Pump	Capacity	VolumetricFlowRate	L/s	N.A.	N.A.
3	Pump	Duty	Mechanical Equipment	MEP	IfcPump	SUMPPUMP	SGPset_Pump	Duty	Boolean	N.A.	N.A.	TRUE/FALSE
4	Pump	Standby Pump	Mechanical Equipment	MEP	IfcPump	SUMPPUMP	SGPset_Pump	Standby	Boolean	N.A.	N.A.	TRUE/FALSE
5	Pump	Flow Rate	Mechanical Equipment	MEP	IfcPump	SUMPPUMP	SGPset_Pump	FlowRate	VolumetricFlowRate	N.A.	N.A.	N.A.
6	Security Lighting	N.A.	Lighting Fixtures	MEP	IfcLightFixture	SECURITYLIGHTING	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7	Sensor	Smoke Detector Type	Fire Alarm Devices	MEP	IfcSensor	*FLAMEDETECTOR	SGPset_Sensor	SmokeDetectorType	Label	N.A.	N.A.	Point Type/ Optical
8	Sensor	N.A.	Fire Alarm Devices	MEP	IfcSensor	*HEATDETECTOR	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
9	Sensor	N.A.	Fire Alarm Devices	MEP	IfcSensor	*SMOKEDETECTOR	N.A.	SmokeDetectorType	Label	N.A.	N.A.	N.A.
0	Sensor	N.A.	Fire Alarm Devices	MEP	IfcSensor	FIRESENSOR	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1	Sensor	N.A.	Fire Alarm Devices	MEP	IfcSensor	GASSENSOR	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2	Sensor	Engineered Smoke Control System	Fire Alarm Devices	MEP	IfcSensor	HEATSENSOR	SGPset_Sensor	EngineeredSmokeControlSystem	Boolean	N.A.	N.A.	TRUE/FALSE
3	Sensor	Declaration	Mechanical Equipment	MEP	IfcSensor	LEVELSENSOR	SGPset_Sensor	Declaration	Label	N.A.	N.A.	N.A.
4	Sensor	N.A.	Fire Alarm Devices	MEP	IfcSensor	MOVEMENTSENSOR	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
5	Sensor	Engineered Smoke Control System	Fire Alarm Devices	MEP	IfcSensor	SMOKESENSOR	SGPset_Sensor	EngineeredSmokeControlSystem	Boolean	N.A.	N.A.	TRUE/FALSE
6	Sensor	N.A.	Fire Alarm Devices	MEP	IfcSensor	TEMPERATURESENSOR	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7	Shower	N.A.	Plumbing Fixtures	MEP	IfcSanitaryTerminal	SHOWER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
8	Sink	N.A.	Plumbing Fixtures	MEP	IfcSanitaryTerminal	SINK	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
9	Sprinkler (Non-Fire; for NEA)	N.A.	Sprinklers	MEP	IfcSanitaryTerminal	*SPRINKLER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
0	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*CHILLEDWATER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1	System	N.A.	Piping Systems	MEP	IfcBuildingSystem	*DRAINAGE	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*DRYRISER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
0	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*FIREPROTECTION	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*HOSEREEL	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*POTABLEWATER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
3	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*POTABLEWATER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
4	System	Material	Piping Systems	MEP	IfcDistributionSystem	*POTABLEWATER	SGPset_Material	Material	Label	N.A.	N.A.	N.A.
5	System	Diameter	Piping Systems	MEP	IfcDistributionSystem	*POTABLEWATER	SGPset_PipeSegmentDimension	Diameter	Length	mm	N.A.	N.A.
6	System	Length	Piping Systems	MEP	IfcDistributionSystem	*POTABLEWATER	SGPset_PipeSegmentDimension	Length	Length	mm	N.A.	N.A.
7	System	N.A.	Piping Systems	MEP	IfcDistributionSystem	*RAINWATER	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
8	System	Diameter	Piping Systems	MEP	IfcDistributionSystem	*RAINWATER	SGPset_PipeSegmentDimension	Diameter	Length	mm	N.A.	N.A.

IFC parameters needed



Properties

Pump-Submersible-Grundfos_SESLFAM_Concrete_Plate-M...
SL1.85.100.100.4.52H.S.N.51D_50_99110106_Concrete_Plate

Mechanical Equipment (1) Edit Type

EFF. VOL.

EQUIPMENT TYPE

Electrical

EST. ELECTRICAL LOAD

Electrical - Loads

Panel

Circuit Number

Mechanical

System Classification Sanitary,Power

System Name SDDP 2

Power

LEAVING CONDENSER WATER ...

Mechanical - Flow

Critical Path

Identity Data

Part Number SL1.85.100.100.4.52H.S.N.51D

Part Description Sewage pumps

Equipment Number

Image

Comments

Mark 229

Workset Sanitation

Edited by josephkoh

Phasing

Phase Created New Construction

Phase Demolished None

IFC Parameters

IfcGUID

IfcExportAs

IfcObjectType

Capacity

Standby

Hose_NominalDiameter

TopLevel

InvertLevel

ReferToDrawingNumber

General

REMARKS

QUANTITY

Other

B	I
Identified Component	IFC4 Entities
Pump	IfcPump
Pump	IfcPump
Pump	IfcPump
Pump	IfcPump
Pump	IfcPump
Pump	IfcPump
Pump	IfcPump
Pump	IfcPump

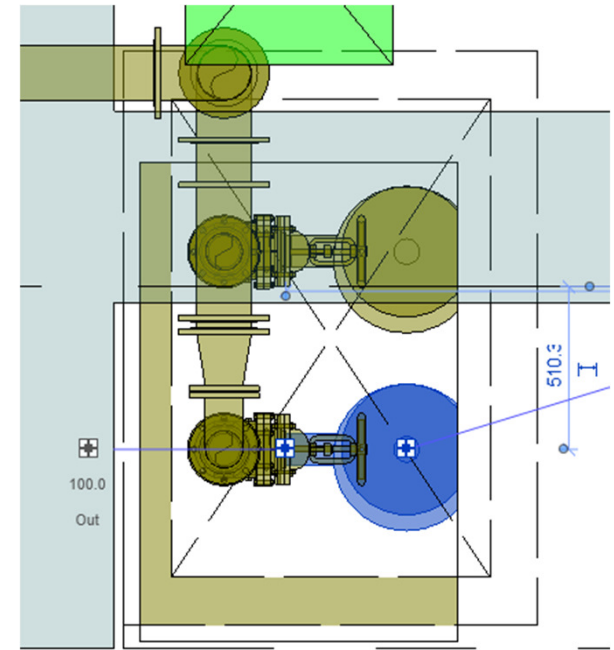
B	J
Identified Component	IFC Sub Types (* = USERDEFINED)
Pump	Need not specify
Pump	Need not specify
Pump	Need not specify
Pump	SUMPPUMP
Pump	SUMPPUMP
Pump	SUMPPUMP
Pump	SUMPPUMP

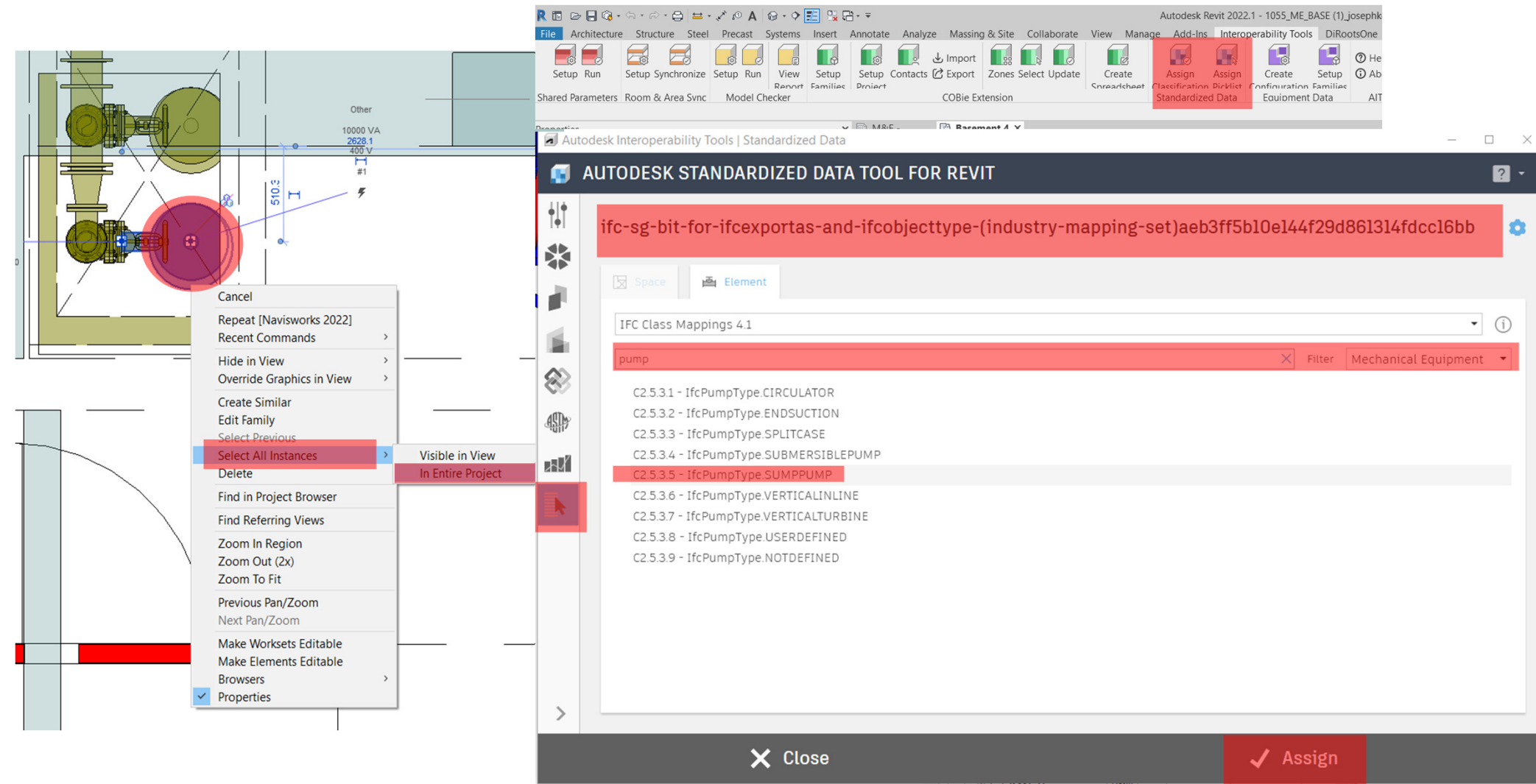
	A	B	L	M	N	P
	Agency	Identified Component	Property Name	Property Type	Property Unit	Sample Value for Reference
1						
231	PUB	Pump	N.A	N.A	N.A	N.A
232	SCDF	Pump	N.A	N.A	N.A	N.A
234	URA	Pump	N.A	N.A	N.A	N.A
235	PUB	Pump	Capacity	VolumetricFlowRate	L/s	N.A
253	PUB	Pump	Duty	Boolean	N.A	TRUE/FALSE
254	PUB	Pump	Standby	Boolean	N.A	TRUE/FALSE
255	PUB	Pump	FlowRate	VolumetricFlowRate	N.A	N.A

Adding value to MEP IFC parameter

A	B	C	D	H	I	J	K	L	M	N	O	P
Agency	Identified Component	Identified parameters	Revit Representation	Discipline	IFC4 Entities	IFC Sub Types (* = USERDEFINED)	Property Set	Property Name	Property Type	Property Unit	IFC4 Material Set	Sample Value for Reference
UBK	Unitary Equipment	N.A	Mechanical Equipment	MEP	ifcPump	Need not specify	N.A	N.A	N.A	N.A	N.A	N.A
PUB	Pump	N.A	Mechanical Equipment	MEP	ifcPump	Need not specify	N.A	N.A	N.A	N.A	N.A	N.A
SCDF	Pump	N.A	Mechanical Equipment	MEP	ifcPump	Need not specify	N.A	N.A	N.A	N.A	N.A	N.A
URA	Pump	N.A	Mechanical Equipment	MEP	ifcPump	Need not specify	N.A	N.A	N.A	N.A	N.A	N.A
PUB	Pump	Capacity	Mechanical Equipment	MEP	ifcPump	SUMPPUMP	SGPset_Pump	Capacity	VolumetricFlowRate	L/s	N.A	N.A
PUB	Pump	Duty	Mechanical Equipment	MEP	ifcPump	SUMPPUMP	SGPset_Pump	Duty	Boolean	N.A	N.A	TRUE/FALSE
PUB	Pump	Standby Pump	Mechanical Equipment	MEP	ifcPump	SUMPPUMP	SGPset_Pump	Standby	Boolean	N.A	N.A	TRUE/FALSE
PUB	Pump	Flow Rate	Mechanical Equipment	MEP	ifcPump	SUMPPUMP	SGPset_Pump	FlowRate	VolumetricFlowRate	N.A	N.A	N.A

Phase Demolished	None
IFC Parameters	
IfcGUID	
IfcExportAs	ifcPump
IfcObjectType	SUMPPUMP
Capacity	18 L/s
Duty	<input checked="" type="checkbox"/>
Standby	<input type="checkbox"/>
Hose_NominalDiameter	
TopLevel	
InvertLevel	
ReferToDrawingNumber	
General	

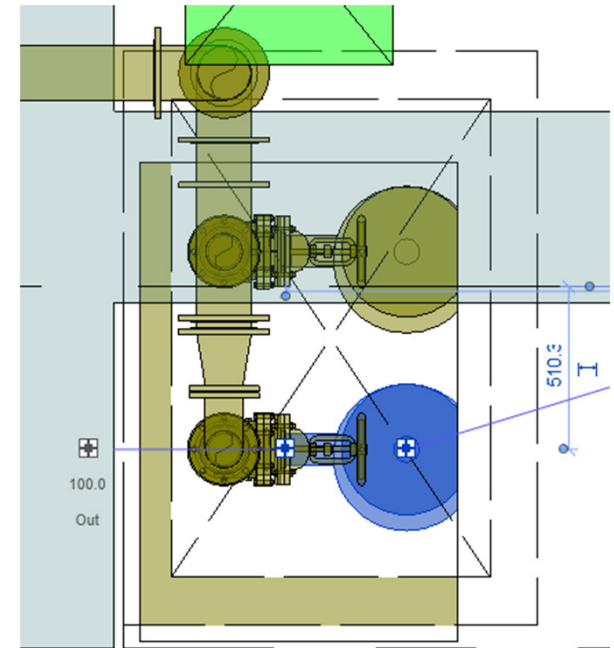




Add parameters using Autodesk BIM Interoperability Tools

A	B	C	D	H	I	J	K	L	M	N	O	P
Agency	Identified Component	Identified parameters	Revit Representation	Discipline	IFC4 Entities	IFC Sub Types (* = USERDEFINED)	Property Set	Property Name	Property Type	Property Unit	IFC4 Material Set	Sample Value for Reference
UBK	Unitary Equipment	N.A	Mechanical Equipment	MEP	Secondary equipment	Need not specify	N.A	N.A	N.A	N.A	N.A	N.A
PUB	Pump	N.A	Mechanical Equipment	MEP	IfcPump	Need not specify	N.A	N.A	N.A	N.A	N.A	N.A
SCDF	Pump	N.A	Mechanical Equipment	MEP	IfcPump	Need not specify	N.A	N.A	N.A	N.A	N.A	N.A
URA	Pump	N.A	Mechanical Equipment	MEP	IfcPump	Need not specify	N.A	N.A	N.A	N.A	N.A	N.A
PUB	Pump	Capacity	Mechanical Equipment	MEP	IfcPump	SUMPPUMP	SGPset_Pump	Capacity	VolumetricFlowRate	L/s	N.A	N.A
PUB	Pump	Duty	Mechanical Equipment	MEP	IfcPump	SUMPPUMP	SGPset_Pump	Duty	Boolean	N.A	N.A	TRUE/FALSE
PUB	Pump	Standby Pump	Mechanical Equipment	MEP	IfcPump	SUMPPUMP	SGPset_Pump	Standby	Boolean	N.A	N.A	TRUE/FALSE
PUB	Pump	Flow Rate	Mechanical Equipment	MEP	IfcPump	SUMPPUMP	SGPset_Pump	FlowRate	VolumetricFlowRate	N.A	N.A	N.A

Phase Demolished	None
IFC Parameters	
IfcGUID	
IfcExportAs	IfcPump
IfcObjectType	SUMPPUMP
Capacity	18 L/s
Duty	<input checked="" type="checkbox"/>
Standby	<input type="checkbox"/>
Hose_NominalDiameter	
TopLevel	
InvertLevel	
ReferToDrawingNumber	
General	



File Architecture Structure Steel Precast Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins BIM Interoperability Tools DiRootsOne Modify | Piping Systems

Modify | Piping Systems

Select Properties Clipboard Geometr Modif View Measure Create Design to Fabrication Generate Layout Generate Placeholder System Inspector Analysis Show Related Warnings Pipe Pressure Loss Report Filter Save Load Edit

Modify | Piping Systems

Properties M&E - Basement 4 3D Coord PUB- 3D MODEL x

Piping System
Wat - Potable Water(Direct)

Piping Systems (11) Edit Type

Mechanical

Number of Elements <varies>

System Equipment

System Name <varies>

Volume <varies>

Static Pressure <varies>

Fixture Units 0.000000

Mechanical - Flow

Flow <varies>

Identity Data

Image

Comments

Workset <varies>

Edited by josephkoh

IFC Parameters

IfcGUID <varies>

IfcExportAs IfcDistributionSystemType.USERDEFINED

IfcObjectType POTABLEWATER

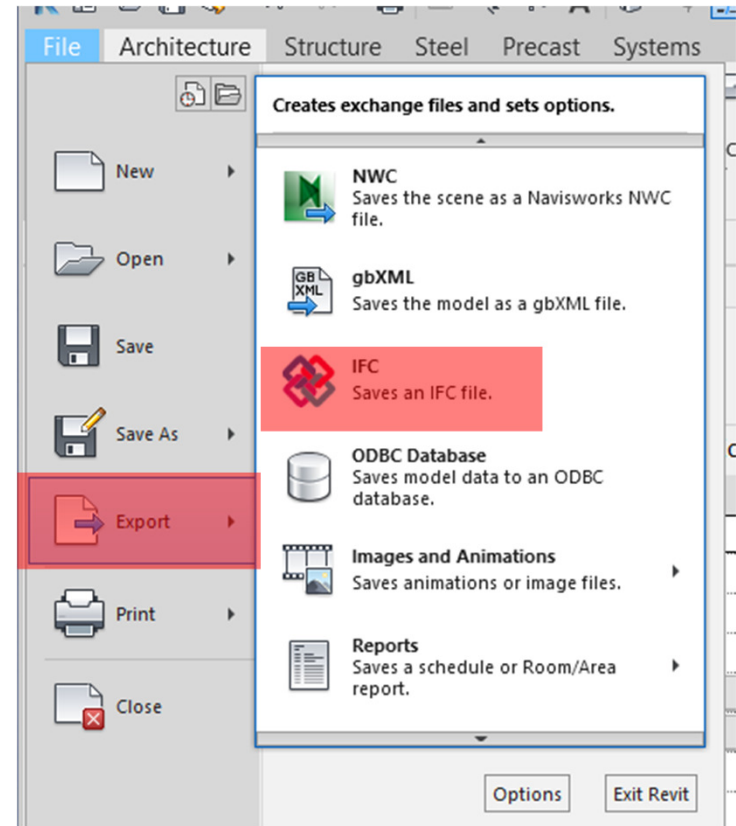
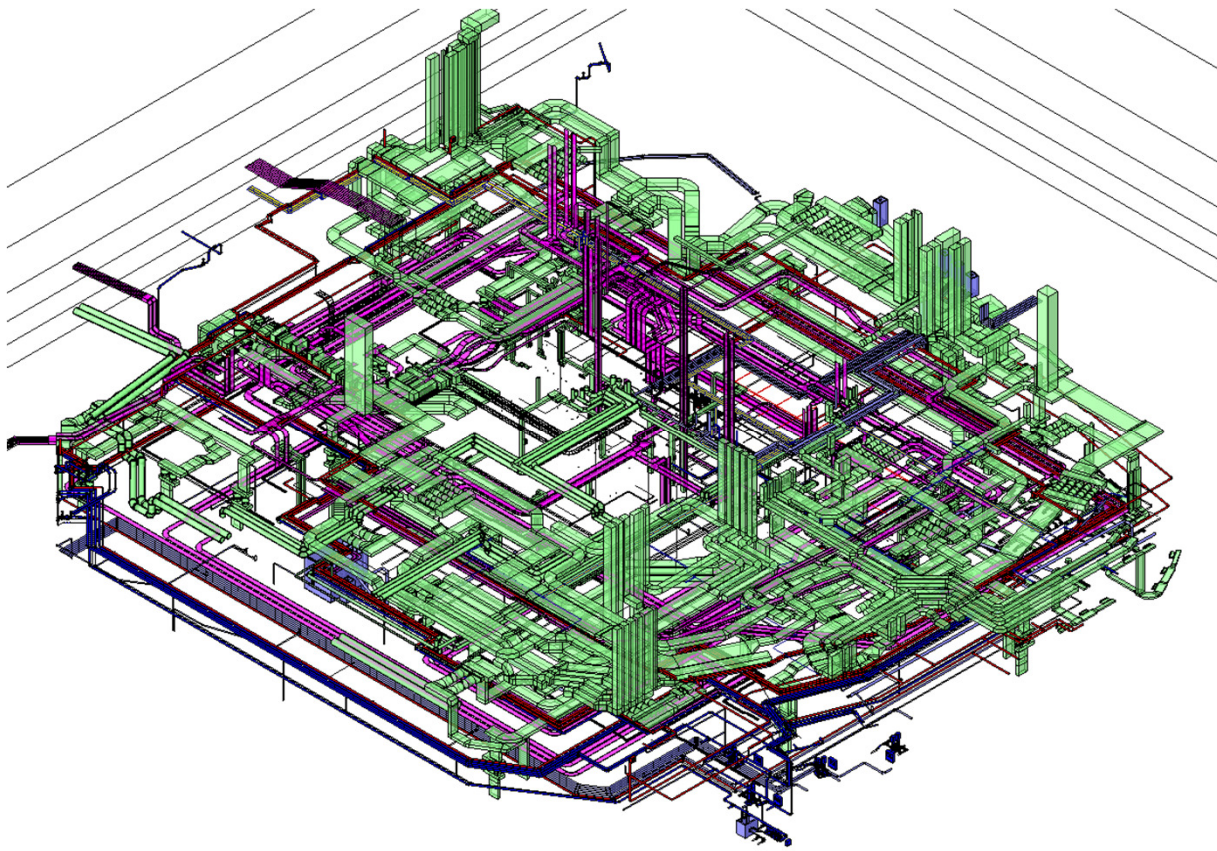
System Browser - 1055_ME_BASE (1).rvt

Systems All Disciplines

Systems	Flow	Size	Space Name	Sp
Unassigned (374 items)				
Mechanical (267 systems)				
Piping (175 systems)				
ACMV - Chilled Water Return				
ACMV - Chilled Water Supply				
Fire - Hosereel				
Fire - Hydrant				
Fire - Sprinkler				
Fire - Wet Riser				
Gas				
Sani - Ejector Pump Discharge				
Sani - Kitchen Waste				
Sani - Main				
Sani - Soil Waste				
Sani - Vent				
Sani - Waste				
Surface Drain Discharge				
TEL Lead In				
Wat - Newwater(Direct)				
Wat - Potable Water(Direct)				
PWP(D) 1	Not...			
PWP(D) 2	0.6...			
PWP(D) 3	Not...			
PWP(D) 4	Not...			
PWP(D) 5	Not...			
PWP(D) 6	Not...			
PWP(D) 7	0.5...			
PWP(D) 8	0.6...			
PWP(D) 9	Not...			
PWP(D) 10	Not...			
PWP(D) 11	2.5...			
Wat - Potable Water(Pump)				
Electrical (0 systems)				

Add parameters to system family

Export to IFC



Modify Setup

<In-Session Setup>

- <IFC 2x3 Coordination View 2.0 Setup>
- <IFC 2x3 Coordination View Setup>
- <IFC 2x3 GSA Concept Design BIM 2>
- <IFC 2x3 Basic FM Handover View Setup>
- <IFC 2x2 Coordination View Setup>
- <IFC2x3 COBie 2.4 Design Deliverable>
- <IFC4 Reference View [Architecture] Setup>
- <IFC4 Reference View [Structural] Setup>
- <IFC4 Reference View [Building Services] Setup>
- <IFC4 Design Transfer View [Unofficial] Setup>
- IFC-SG Export Setup R22

Level of Detail	Advanced	Geographic Reference
General	Additional Content	Property Sets
IFC version	IFC 2x3 Coordination View 2.0	
Exchange Requirement		
File type	IFC	
Phase to export	Default phase to export	
Space boundaries	None	

- IFC Configuration - IFC-SG Export Setup R20.json JSON File
- IFC Configuration - IFC-SG Export Setup R21.json JSON File
- IFC Configuration - IFC-SG Export Setup R22.json JSON File
- IFC Configuration - IFC-SG Export Setup R23.json JSON File

Split Walls, Columns, Ducts by Level

Include Steel Elements

File Header Information...

Project Address...

Reset OK Cancel

Open the correct version

Modify Setup

<In-Session Setup>
<IFC 2x3 Coordination View 2.0 Setup>
<IFC 2x3 Coordination View Setup>
<IFC 2x3 GSA Concept Design BIM 2>
<IFC 2x3 Basic FM Handover View Setup>
<IFC 2x2 Coordination View Setup>
<IFC2x3 COBie 2.4 Design Deliverable>
<IFC4 Reference View [Architecture]>
<IFC4 Reference View [Structural] Setup>
<IFC4 Reference View [Building Services]>
<IFC4 Design Transfer View [Unofficial]>
IFC-SG Export Setup R22

Level of Detail	Advanced	Geographic Reference
General	Additional Content	Property Sets

- Export 2D plan view elements
- Export linked files as separate IFCs
- Export only elements visible in view
- Export rooms, areas and spaces in 3D views

< >

Reset OK Cancel

Modify Setup



<In-Session Setup>
<IFC 2x3 Coordination View 2.0 Setup>
<IFC 2x3 Coordination View Setup>
<IFC 2x3 GSA Concept Design BIM 2.0 Setup>
<IFC 2x3 Basic FM Handover View Setup>
<IFC 2x2 Coordination View Setup>
<IFC2x3 COBie 2.4 Design Deliverable Setup>
<IFC4 Reference View [Architecture] Setup>
<IFC4 Reference View [Structural] Setup>
<IFC4 Reference View [Building Services] Setup>
<IFC4 Design Transfer View [Unofficial] Setup>
IFC-SG Export Setup R22

Level of Detail Advanced Geographic Reference
General Additional Content **Property Sets**

- Export Revit property sets
- Export IFC common property sets
- Export base quantities
- Export material property sets
- Export schedules as property sets
 - Export only schedules containing IFC, Pset, or Common in the title
- Export user defined property sets
 - C:\Users\c345jk\OneDrive - Squiremech\Coreenet-X\IFC-SG Resources\IFC-SG Property Mapping Export (Industry Mapping).txt **Browse ...**
- Export parameter mapping table
Browse ...

Revit IFC Exporter Json Files ✓
IFC-SG Property Mapping Export (Industry Mapping).txt ✓

Classification Settings...

Reset OK Cancel

Modify Setup



<In-Session Setup>	General	Additional Content	Property Sets
<ul style="list-style-type: none"> <IFC 2x3 Coordination View 2.0 Setu <IFC 2x3 Coordination View Setup> <IFC 2x3 GSA Concept Design BIM 2 <IFC 2x3 Basic FM Handover View Se <IFC 2x2 Coordination View Setup> <IFC2x3 COBie 2.4 Design Deliverabl <IFC4 Reference View [Architecture] <IFC4 Reference View [Structural] Se <IFC4 Reference View [BuildingServic <IFC4 Design Transfer View [Unoffici IFC-SG Export Setup R22 	Level of Detail	Advanced	Geographic Reference
	<ul style="list-style-type: none"> <input type="checkbox"/> Export parts as building elements <input type="checkbox"/> Allow use of mixed "Solid Model" representation <input checked="" type="checkbox"/> Use active view when creating geometry <input type="checkbox"/> Use family and type name for reference <input type="checkbox"/> Use 2D room boundaries for room volume <input checked="" type="checkbox"/> Include IFCsite elevation in the site local placement origin <input checked="" type="checkbox"/> Store the IFC GUID in an element parameter after export <input type="checkbox"/> Export bounding box <input checked="" type="checkbox"/> Keep Tessellated Geometry as Triangulation <input type="checkbox"/> Use Type name only for IFCType name <input type="checkbox"/> Use visible Revit name as the IFCEntity name <p data-bbox="821 1130 1045 1159">Entities to Export ...</p>		
	<div style="display: flex; justify-content: space-around;"> Reset OK Cancel </div>		

Modify Setup

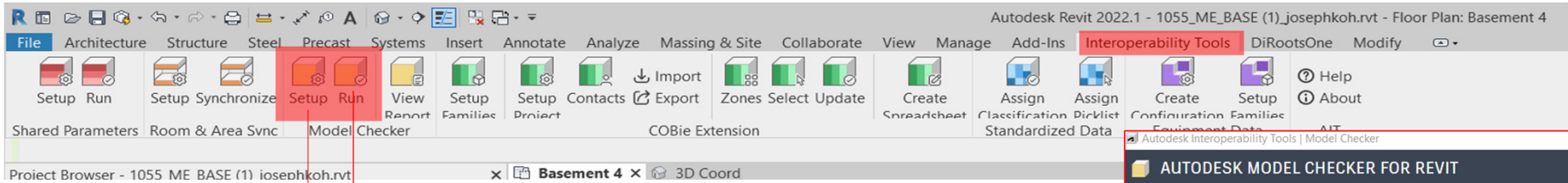


General	Additional Content	Property Sets
Level of Detail	Advanced	Geographic Reference
Level of detail for some element geometrv		Low

Click ok when all the setting is done

Reset OK Cancel

Check IFC parameters



AUTODESK MODEL CHECKER FOR REVIT

Current Checkset

Current Checkset File
C:\Users\c345jk\Documents\IFC-SG_ModelValidationChecks_v1.0.xml

Title: IFC-SG Schema Model Validation Checks
Date: Tuesday, 23 May 2023
Author: Autodesk, Inc.
Description: Checks related to the IFC-SG parameters, v1.0

- Revit 2023 and 2024
 - Architecture (ARC)
 - Mechanical, Electrical, Plumbing (MEP)
 - Structural (STR)
 - External Works
- Revit 2022 and Older
 - Architecture (ARC)
 - Mechanical, Electrical, Plumbing (MEP)
 - Structural (STR)
 - External Works

Cancel Save Save and Close

AUTODESK MODEL CHECKER FOR REVIT

Title: IFC-SG Schema Model Validation Checks
Date: Tuesday, 23 May 2023
Author: Autodesk, Inc.
Description: Checks related to the IFC-SG parameters, v1.0

Models to Be Checked

- 1055_ME_BASE (1)_josephkoh.rvt

Cancel Run Report

Interoperability Tools in Revit

AUTODESK MODEL CHECKER FOR REVIT

1055_ME_BASE (1)_josephkoh.rvt

Check Summary: 586 Checks, 6 (15%) Pass, 33 Fail, 7 Count/List, 540 Not Run
Report Date: Wednesday, 16 August 2023 - 2:35:39 PM
Revit Filepath: C:\Users\c345jk\Documents\BIM project\1055_ME_BASE (1)_josephkoh.rvt
Checkset File: C:\Users\c345jk\Documents\IFC-SG_ModelValidationChecks_v1.0.xml

15%

- Revit 2023 and 2024: 293 Checks, 293 Not Run
 - Architecture (ARC): 106 Checks, 106 Not Run
 - Mechanical, Electrical, Plumbing (MEP): 46 Checks, 46 Not Run
 - Structural (STR): 137 Checks, 137 Not Run
 - External Works: 4 Checks, 4 Not Run
- Revit 2022 and Older: 293 Checks, 6 (15%) Pass, 33 Fail, 7 Count/List, 247 Not Run
 - Architecture (ARC): 106 Checks, 106 Not Run
 - Mechanical, Electrical, Plumbing (MEP): 46 Checks, 6 (15%) Pass, 33 Fail, 7 Count/List
 - IfcExportAs: 7 Checks, 7 Count/List
 - Duct Accessories: 1 Checks, 1 (100%) Pass, 0 Fail
 - Electrical Equipment: 1 Checks, 0 (0%) Pass, 1 Fail
 - Fire Alarm Devices: 1 Checks, 0 (0%) Pass, 1 Fail
 - Generic Models: 4 Checks, 0 (0%) Pass, 4 Fail
 - Mechanical Equipment: 12 Checks, 3 (25%) Pass, 9 Fail
 - Pipe Accessories: 4 Checks, 2 (50%) Pass, 2 Fail
 - Piping Systems: 4 Checks, 0 (0%) Pass, 4 Fail
 - Plumbing Fixtures: 12 Checks, 0 (0%) Pass, 12 Fail

Copy Works HTML Excel Close

Sandbox Mode

Reset

IFC-SG Validator extract data from your IFC Model, and validate for IFC-SG compliance. Processing is executed locally on your machine, the app do not collect, store or send any data. [Click here](#) for more information.

- IFC Configuration - IFC-SG Export Setup R20.json JSON File
- IFC Configuration - IFC-SG Export Setup R21.json JSON File
- IFC Configuration - IFC-SG Export Setup R22.json JSON File
- IFC Configuration - IFC-SG Export Setup R23.json JSON File

1055_ME_BASE.ifc



IFC-SG Validator



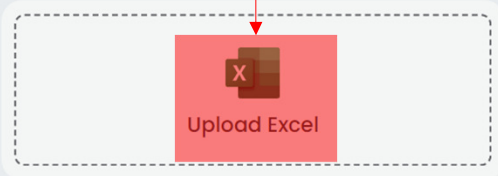
Sandbox Mode

Reset

IFC-SG Validator extract data from your IFC Model, and validate for IFC-SG compliance. Processing is executed locally on your machine, the app do not collect, store or send any data. [Click here](#) for more information.


Configuration

IFC Mapping (Optional)



Upload a custom IFC Mapping Table

Default IFC-SG Mapping Table: 27 April 2023

 ifc-sg-bit-for-ifcexportas-and-ifcobjecttype-(industry-mapping-set)aeb3ff5b10e144f29d861314fdcc16bb.xlsx

Continue

IFC-SG Validator

2XYh3AGh52PrtiiYqZaAP1	1st Storey	Level:8mm Head - Project Datum	0/1	-
2XYh3AGh52PrtiiYqZh0w9	2nd Storey	Level:8mm Head - Project Datum	0/1	-

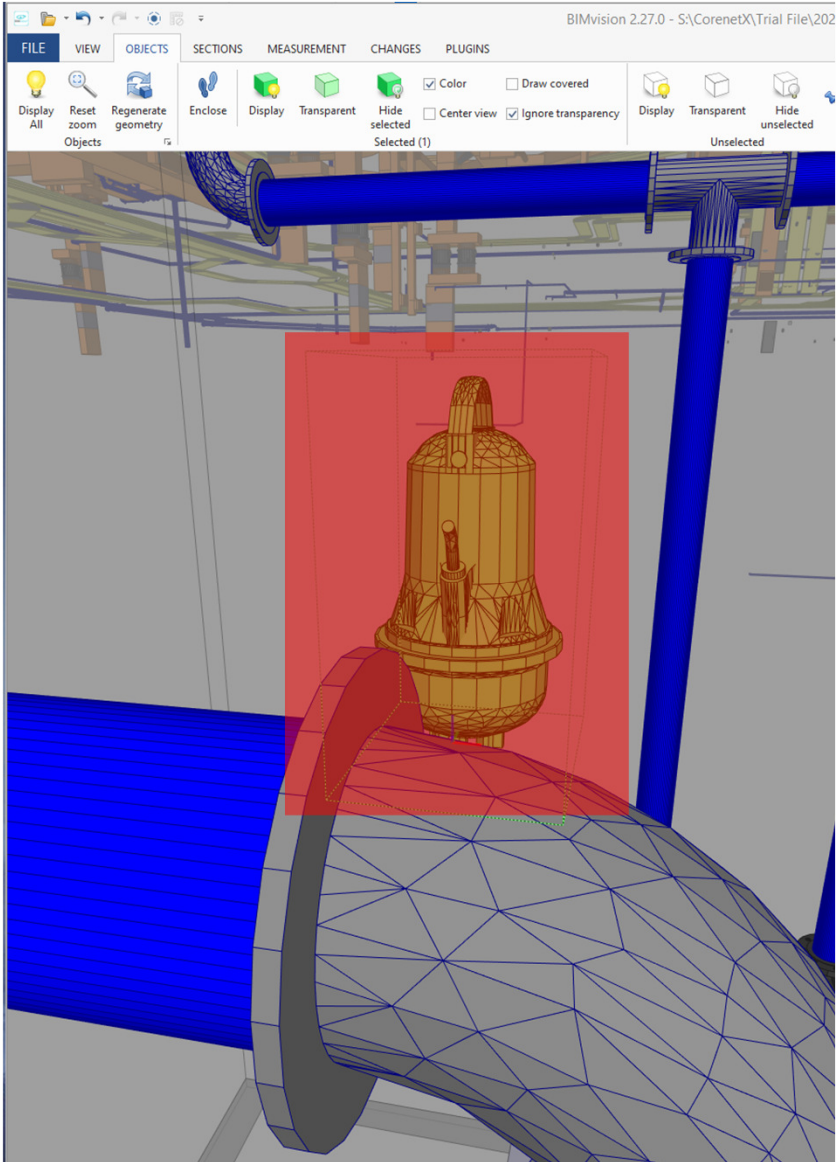
ifcCommunicationsAppliance Showing 2/2

Guid	ElementId/Tag	ObjectType	Result
15MHpKhc17QOI_4BaTuvOx	2797490	DISTRESSBUTTON	0/0
15MHpKhc17QOI_4BaTuvT\$	2797492	DISTRESSBUTTON	0/0

IFC-SG Validator

ifcDamper Showing 10/10

Guid	ElementId/Tag	ObjectType	Result	SGPset_Damper	
				FireRating	
1VVitLPOz4PgGdbdglIind	2039900	FIREDAMPER	0/1	-	
1VVitLPOz4PgGdbdglIinn	2039903	FIREDAMPER	0/1	-	
3r6ecXpOnCW9Kdb_iaXqnz	2043506	FIREDAMPER	0/1	-	
3r6ecXpOnCW9Kdb_iaXqnx	2043508	FIREDAMPER	0/1	-	
3toLW9VzHEKPS9fnTfsQyT	2046972	FIREDAMPER	0/1	-	
3toLW9VzHEKPS9fnTfsQyV	2046974	FIREDAMPER	0/1	-	
1dzrjbT0Tfs9oNTzFytQxa	2058114	FIREDAMPER	0/1	-	
1dzrjbT0Tfs9oNTzFytQxY	2058116	FIREDAMPER	0/1	-	
2N_GVOXlzF7upithPazPE4	2576209	FIREDAMPER	1/1	2	
2N_GVOXlzF7upithPazPFk	2576212	FIREDAMPER	1/1	2	



Types		
Active	Type	Name
<input checked="" type="checkbox"/>	Types	
<input checked="" type="checkbox"/>	+ IfcPipeSegment	
<input checked="" type="checkbox"/>	+ IfcPipeFitting	
<input checked="" type="checkbox"/>	+ IfcValve	
<input checked="" type="checkbox"/>	+ IfcPump	
<input checked="" type="checkbox"/>	+ IfcPumpType	SM_INLINE BOOSTER PUMP (MEDIUM) 1:CRNE 15-2_50_99071571
<input checked="" type="checkbox"/>	+ IfcPumpType	Pump-Submersible-Grundfos_SESLFAM_Concrete_Plate-Master:SL1.85...
<input checked="" type="checkbox"/>	+ IfcPumpType	Plumbing_Pumps_Dab-Pumps_CM-G-100 rev01:CM-G 100-510/A/BAQE...
<input checked="" type="checkbox"/>	+ IfcPumpType	Dab Pumps_FK Pump:FKC 100 15.4 T5 400D
<input checked="" type="checkbox"/>	+ IfcPump	Dab Pumps_FK Pump:FKC 100 15.4 T5 400D:3422945
<input checked="" type="checkbox"/>	+ IfcPumpType	SM_INLINE TRANSFER PUMP (MEDIUM):CRN 64-6-2_50_96123810
<input checked="" type="checkbox"/>	+ IfcPumpType	CRN95-10-DIN_(connection)_Siemens_1PC3006_280S2_B5-65_IE3_3p...
<input checked="" type="checkbox"/>	+ IfcPump	CRN95-10-DIN_(connection)_Siemens_1PC3006_280S2_B5-65_IE3_3p...
<input checked="" type="checkbox"/>	+ IfcPump	CRN95-10-DIN (connection) Siemens 1PC3006_280S2_B5-65_IE3_3p...

Properties		
Location		
Classification		
Relations		
Name	Value	
Element Specific		
Guid	2VUQjwOWXCZujvUCROv2U9	
IfcEntity	IfcPump	
Name	Dab Pumps_FK Pump:FKC 100 15.4 T5 400D:3422945	
ObjectType	SUMPPUMP	
PredefinedType	NOTDEFINED	
Tag	3422945	
Pset_ElectricalDeviceCommon		
NumberOfPoles	4	
Pset_EnvironmentalImpactIndicators		
Reference	-	
Pset_ManufacturerTypeInformation		
Manufacturer	DAB Pumps	
Pset_PumpTypeCommon		
NominalRotationSpeed	230.774667	
Reference	-	
SGPset_Pump		
Capacity	2 L/s	
Standby	No	

BIMvision



Browser Toolbar

- [-] O/D 57
- [-] SDDP 3
- [-] PWP(P) 1
- [-] PWP(P) 6
- [-] PWP(P) 7
- [-] PWP(P) 8
- [-] SDDP 4
- [-] NWP(D) 2
- [-] E/D 55
- [-] PWP(D) 1
- [-] O/D 41
- [-] PWP(D) 11
- [-] O/D 45
- [-] PWP(D) 6
- [-] E/D 53
- [-] PWP(P) 2
- [-] PWP(D) 4
- [-] E/D 67
- [-] PWP(D) 3
- [-] WR 2
- [-] SPK 2
- [-] PWP(D) 5
- [-] E/D 63
- [-] NWP(D) 1
- [-] SPK 5
- [-] E/D 33
- [-] CHR 3
- [-] CHR 6

1055_ME_BASE.ifc

FootPrint - Model

Element Toolbar

Elements | Layers

- [-] IfcBuildingStorey
- [-] IfcCableCarrierFitting
- [-] IfcCableCarrierSegment
- [-] IfcCommunicationsAppliar
- [-] IfcCovering
- [-] IfcDamper
- [-] IfcDistributionChamberEle
- [-] IfcDistributionPort
- [-] IfcDistributionSystem
- [-] IfcDuctFitting
- [-] IfcDuctSegment
- [-] IfcElectricAppliance
- [-] IfcFireSuppressionTerminal
- [-] IfcFlowMeter
- [-] IfcFlowTerminal
- [-] IfcInterceptor
- [-] IfcOutlet
- [-] IfcPipeFitting

Property Toolbar

Element Properties | Properties | Relations

Name	Value	Description
Entity Information		
Type	IfcDistributionSystem	
Internal Type	IfcDistributionSystem	
IFC OID	397331	
GUID	3BAUrcVvj90R3vWJsNPK...	
GUID (readable)	cb29ed66-7f9b-4901-b0...	
Name	PWP(P) 2	
Description	?	
Object Type	POTABLEWATER	
Predefined Type	USERDEFINED	
Layer Name		
Color	---	No Color

FZKViewer

Conclusion

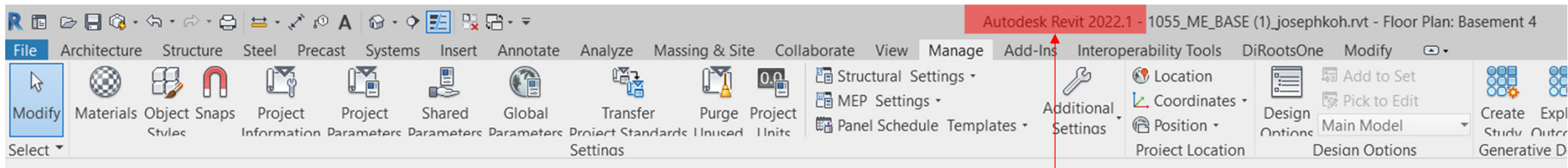
Industry Mapping table is still revising


	A	B	C	D	H	I	J	K	L	M	N	P
1	Agency	Identified Component	Identified parameters	Revit Representation	Discipline	IFC4 Entities	IFC Sub Types (* = USERDEFINED)	Property Set	Property Name	Property Type	Property Unit	Sample Value for Reference
62	PUB	Distribution Chamber	Invert Level	Plumbing Fixtures	MEP	IfcDistributionChamberElement	MANHOLE	mentDimension	InvertLevel	Label	N.A	N.A
64	PUB	Distribution Chamber	Top Level	Plumbing Fixtures	MEP	IfcDistributionChamberElement	MANHOLE	SGPset_DistributionChamberElementDimension	TopLevel	Label	N.A	N.A
65	NEA	Distribution Chamber	N.A	Plumbing Fixtures	MEP	IfcDistributionChamberElement	SUMP	N.A	N.A	N.A	N.A	N.A
66	PUB	Distribution Chamber	Depth	Plumbing Fixtures	MEP	IfcDistributionChamberElement	SUMP	SGPset_DistributionChamberElementDimension	Depth	Length	mm	N.A
74	PUB	Distribution Chamber	Diameter	Plumbing Fixtures	MEP	IfcDistributionChamberElement	SUMP	SGPset_DistributionChamberElementDimension	Diameter	Length	mm	N.A
81	PUB	Distribution Chamber	Invert Level	Plumbing Fixtures	MEP	IfcDistributionChamberElement	SUMP	SGPset_DistributionChamberElementDimension	InvertLevel	Label	N.A	N.A
82	PUB	Distribution Chamber	Length	Plumbing Fixtures	MEP	IfcDistributionChamberElement	SUMP	SGPset_DistributionChamberElementDimension	Length	Length	mm	N.A
83	PUB	Distribution Chamber	Top Level	Plumbing Fixtures	MEP	IfcDistributionChamberElement	SUMP	SGPset_DistributionChamberElementDimension	TopLevel	Label	N.A	N.A
84	PUB	Distribution Chamber	Width	Plumbing Fixtures	MEP	IfcDistributionChamberElement	SUMP	SGPset_DistributionChamberElementDimension	Width	Length	mm	N.A


	A	B	C	D	H	I
1	Agency	Identified Component	Identified parameters	Revit Representation	Discipline	IFC4 Entities
227	PUB	Interceptor	Top Level	Plumbing Fixtures	MEP	IfcInterceptor
228	PUB	Interceptor	Width	Plumbing Fixtures	MEP	IfcInterceptor
229	URA	Mechanical Equipment - Chiller	N.A	Mechanical Equipment	MEP	IfcChiller

	A	B	C	D	H	I	J	K	L	M	N	P
1	Agency	Identified Component	Identified parameters	Revit Representation	Discipline	IFC4 Entities	IFC Sub Types (* = USERDEFINED)	Property Set	Property Name	Property Type	Property Unit	Sample Value for Reference
5	SCDF	Fire Hydrant	Private	Plumbing Fixtures	MEP	IfcFireSuppressionTerminal	FIREHYDRANT	SGPset_FireSuppressionTerminal	Private	Boolean	N.A	TRUE/FALSE
5	SCDF	Fire Hydrant	Public	Plumbing Fixtures	MEP	IfcFireSuppressionTerminal	FIREHYDRANT	SGPset_FireSuppressionTerminal	Public	Boolean	N.A	TRUE/FALSE

PC/Laptop hang when export to IFC



 Autodesk BIM Interoperability Tools 25.8 MB
v9.1.8599.0 for Revit 2022
16/8/2023
9.1.8599.0
Modify Uninstall

 IFC for Revit 2022 13.8 MB
22.6.2.0
23/3/2023
Modify Uninstall

Make sure you have the latest version

Update SG-IFC parameter to your office template

Autodesk Revit 2022.1 - SMtemplateRevit2022IFC.rte - Sheet: M&E -

File Architecture Structure Steel Precast Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins Interoperability Tools DiRootsOne Modify

Modify Materials Object Snaps Project Project Shared Global Transfer Purge Project Structural Settings MEP Settings Panel Schedule Templates Additional Settings Location Coordinates Design Options Main Model Add to Set Pick to Edit

Properties

Sheet

Sheet

Graphics

Visibility/Graphics Overrides Edit...

Scale

Sub-Discipline MEP

Text

COORDINATOR

CENTRAL FILE LOCATION

ARCHITECTURAL LINK FILE

STRUCTURAL LINK FILE

MEP BIM PROJECT TEAM MEM...

Identity Data

Dependency Independent

Referencing Sheet

Referencing Detail

Current Revision Issued

Current Revision Issued By

Current Revision Issued To

Current Revision Date

Current Revision Description

Current Revision

Approved By Approver

Designed By Designer

Checked By Checker

Drawn By Author

Sheet Number M&E

Sheet Name

Parameter Properties

Parameter Type

Project parameter
(Can appear in schedules but not in tags)

Shared parameter
(Can be shared by multiple projects and families, exported to ODBC, and appear in schedules and tags)

Select... Export...

Parameter Data

Name: <No parameter selected>

Discipline:

Type of Parameter:

Group parameter under: Dimensions

Tooltip Description: <No tooltip description. Edit this parameter to write a custom tooltip of 255 characters.>

Add to all elements in the selected categories

Categories

Category name search:

Filter list: <multiple>

Hide un-checked categories

- Air Systems
- Air Terminals
- Analytical Pipe Connections
- Analytical Spaces
- Analytical Surfaces
- Areas
- Assemblies
- Audio Visual Devices
- Cable Tray Fittings
- Cable Tray Runs
- Cable Trays
- Communication Devices
- Conduit Fittings
- Conduit Runs

Shared Parameters

Choose a parameter group, and a parameter.

Parameter group: IFC-SG Properties

Parameters:

- Accessway
- Accreditation_PAS
- ACGeoName
- ACN_ActivityGeneratingUseType
- ACN_CloseTime
- ACN_ConnectivityType
- ACN_IsOpen24hoursToPublic
- ACN_IsPavingSpecified
- ACN_OpenTime
- ACN_PavingSpecification
- AGF_AreaID
- AGF_BonusGFAType
- AGF_DetailedUse
- AGF_DevelopmentUse
- AGF_FacilityType
- AGF_Name
- AGF_Mat...

OK Cancel Help

SM

Project Number

MEMBERS

Autodesk Interoperability Tools | Standardized Data

AUTODESK STANDARDIZED DATA TOOL FOR REVIT

ifc-sg-bit-for-ifcexportas-and-ifcobjecttype-(industry-mapping-set)aeb3ff5b10e144f29d861314fdcc16bb

Space | Element

IFC Class Mappings 4.1

pump Filter Mechanical Equipment

- C2.5.3.1 - IfcPumpType.CIRCULATOR
- C2.5.3.2 - IfcPumpType.ENDSUCTION
- C2.5.3.3 - IfcPumpType.SPLITCASE
- C2.5.3.4 - IfcPumpType.SUBMERSIBLEPUMP
- C2.5.3.5 - IfcPumpType.SUMPPUMP**
- C2.5.3.6 - IfcPumpType.VERTICALINLINE
- C2.5.3.7 - IfcPumpType.VERTICALTURBINE
- C2.5.3.8 - IfcPumpType.USERDEFINED
- C2.5.3.9 - IfcPumpType.NOTDEFINED

IFC Parameters

IfcGUID	3QMyVxA3HEiQtmV74v\$rT1
IfcExportAs	IfcPump
IfcObjectType	
Capacity	GREASE
Duty	INSPECTIONCHAMBER
Standby	SHOWER
Hose_NominalDiameter	SINK
TopLevel	STANDBYFIREHOSE
InvertLevel	
ReferToDrawingNumber	

General

Close Assign

Context Menu:

- Cancel
- Repeat [Navisworks 2022]
- Recent Commands >
- Hide in View >
- Override Graphics in View >
- Create Similar
- Edit Family
- Select Previous
- Select All Instances** > Visible in View
- Delete In Entire Project
- Find in Project Browser
- Find Referring Views
- Zoom In Region
- Zoom Out (2x)
- Zoom To Fit
- Previous Pan/Zoom
- Next Pan/Zoom
- Make Worksets Editable
- Make Elements Editable
- Browsers >
- Properties

Select all instance can shorten the process

Man/day spend for the trial

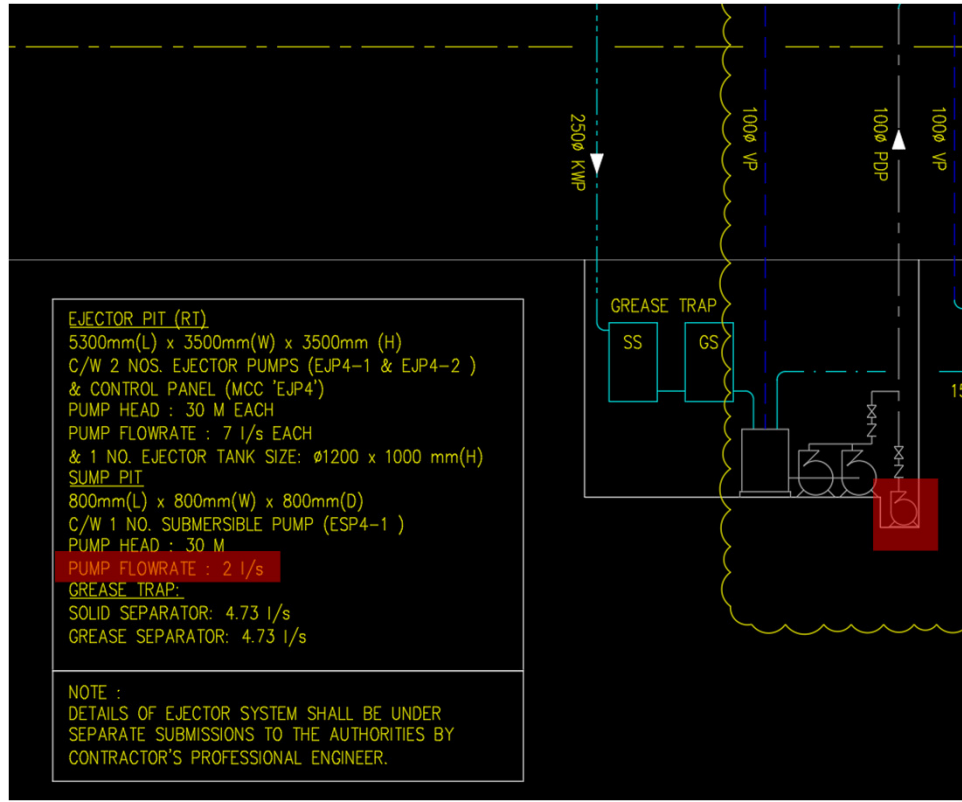
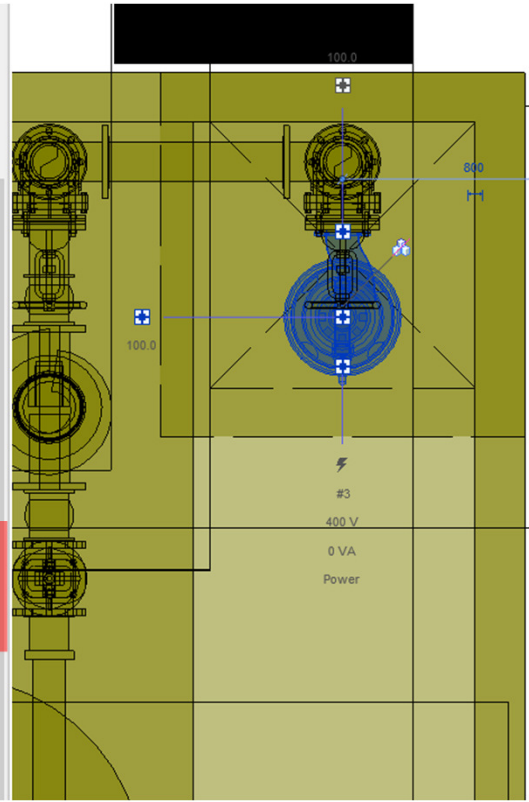
Time spend for B3 and B4 (services involved are Fire Protection, Mechanical Ventilation, EVC, Plumbing and Sanitary) = 8 man/days

Estimated time spend for whole for all service = 11 man/days

Estimated time spend to prepare the schematic for all service = 74 days/days

Manhour spend for the trial

Mechanical	
System Classification	Power,Sanitary,Undefined
System Name	MSP 44
Mechanical Equipment Set	Unassigned
Power	
LEAVING CONDENSER WATER ...	
Mechanical - Flow	
Critical Path	<input checked="" type="checkbox"/>
Identity Data	
Image	
Comments	
Mark	396
Workset	Sanitation
Edited by	
Phasing	
Phase Created	New Construction
Phase Demolished	None
IFC Parameters	
IfcGUID	2VUQjwOWXCZujvUCROv2U9
IfcExportAs	IfcPump
IfcObjectType	SUMPPUMP
Capacity	2 L/s
Duty	<input checked="" type="checkbox"/>
Standby	<input type="checkbox"/>
Hose_NominalDiameter	
TopLevel	
InvertLevel	
ReferToDrawingNumber	
General	
REMARKS	





74 man/day – 11 man/day = 63 man/day

SYSTEMS (A) - MAINS/DC/AV/CLIMATE/CONTROL SYSTEMS (A) - LINE/6
COMMUNICATION (EVO) & BACKGROUND MUSIC SYSTEM (BOM)

DCA

DCA

SM

SM

DCA

SM

DCA

SM

DCA

SM

QnA

1. Autodesk Interoperability [IFC-SG Resources \(autodesk.com\)](#)
2. BCA resource Toolkit [IFC-SG Resource Toolkit | Building and Construction Authority \(BCA\)](#)
3. IFC-SG Validator [IFC-SG Validator \(builtsearch.com\)](#)
4. IFC viewer [Download | BIMvision KIT - IAI - Downloads](#)