

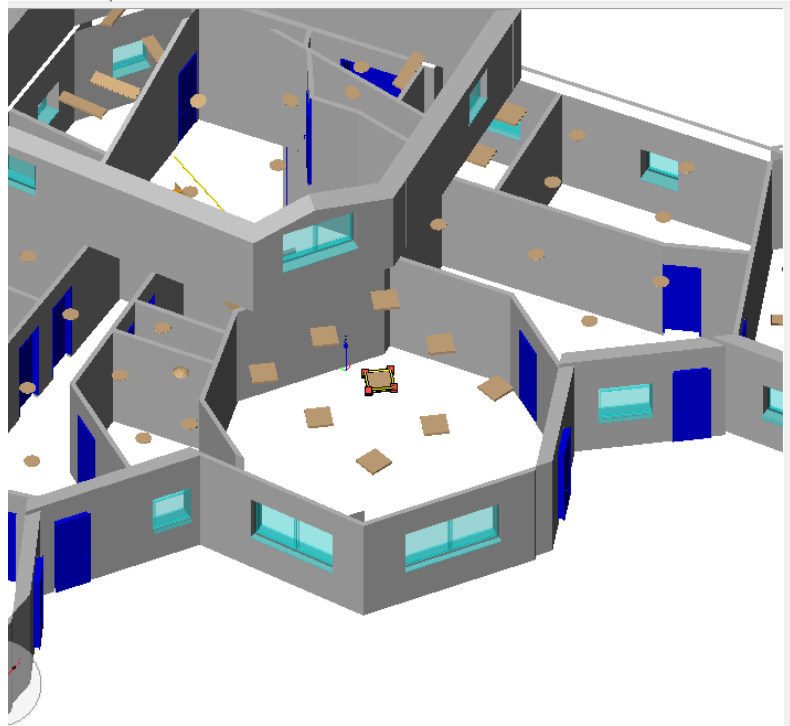
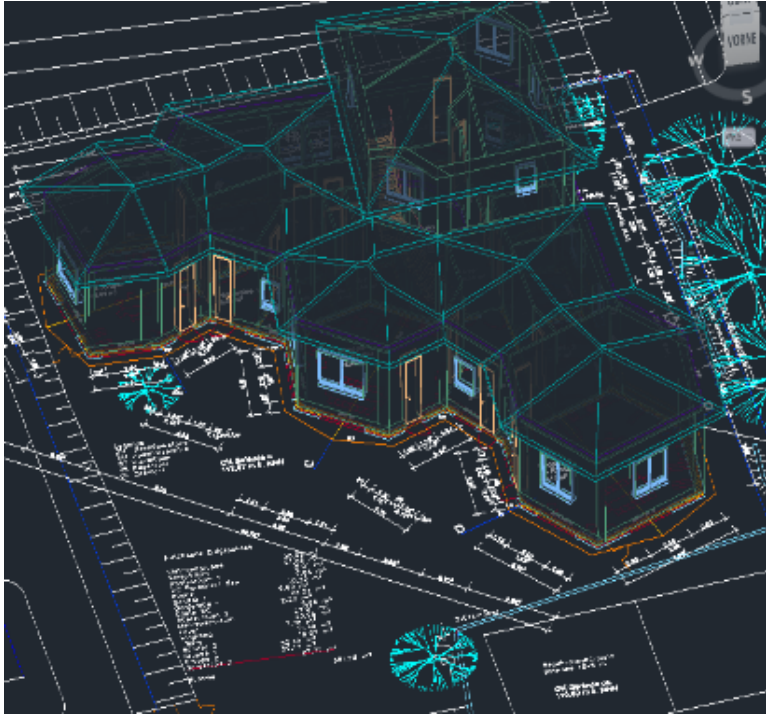
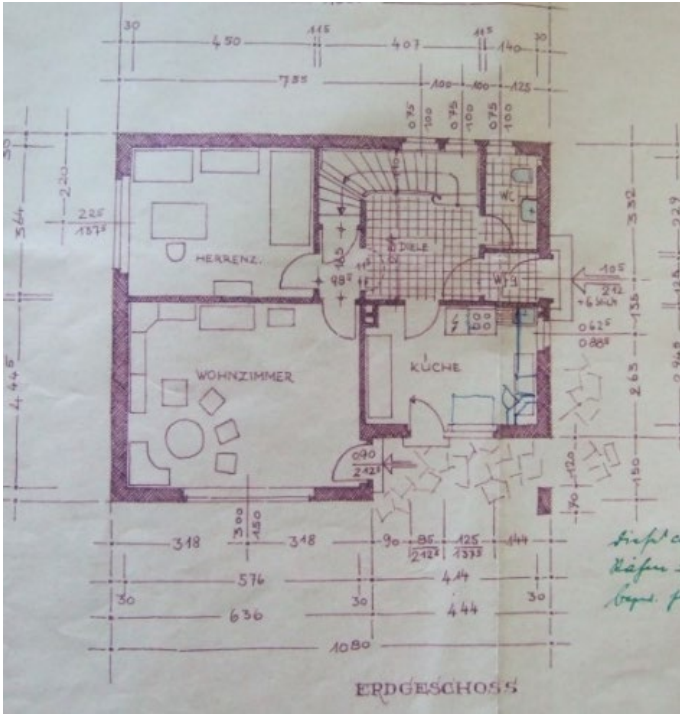
Use of Building Information Modeling in ICT industry Case Study for Ambulatory Care Center

Mohamed Mohie El Din, RCDD

Lead Telecommunication Design Engineer

Dar-Engineering.

Building Design Tool History!



Name	
Entity Infor	
IFC Typ	
Internal	
OID	
GUID	
GUID (r)	
Name	
Descript	
Object	
Layer N	
Color	
Contained i	
Building	
Contained i	
Storey h	
Local Placer	
Position	
X Direct	
Y Direct	
Z Direct	
Geometry	
Body	
Material	
Material	
Entity Type	
OID	
GUID	
GUID (r)	
Name	
Descript	
Predefir	
Represe	
Material	
Calculated V	
Volume	
Surface	

Paper

AutoCAD

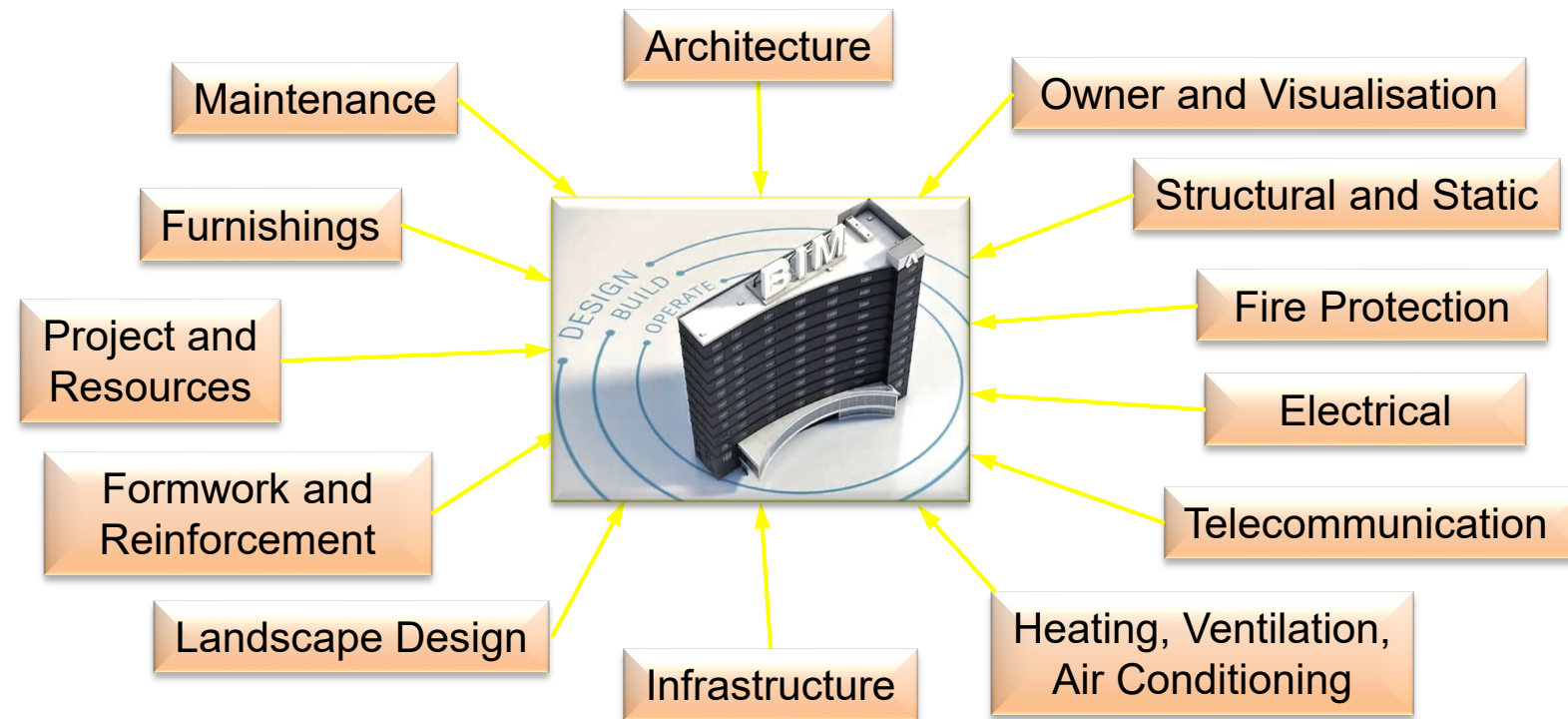
BIM

What is BIM?

Building Information Modeling

- BIM is an intelligent tool in all design and construction stages.
- BIM is not just a 3D model - it is a process.
- Provides a platform for effective collaboration between stakeholders over the buildings lifecycle.

What is BIM?

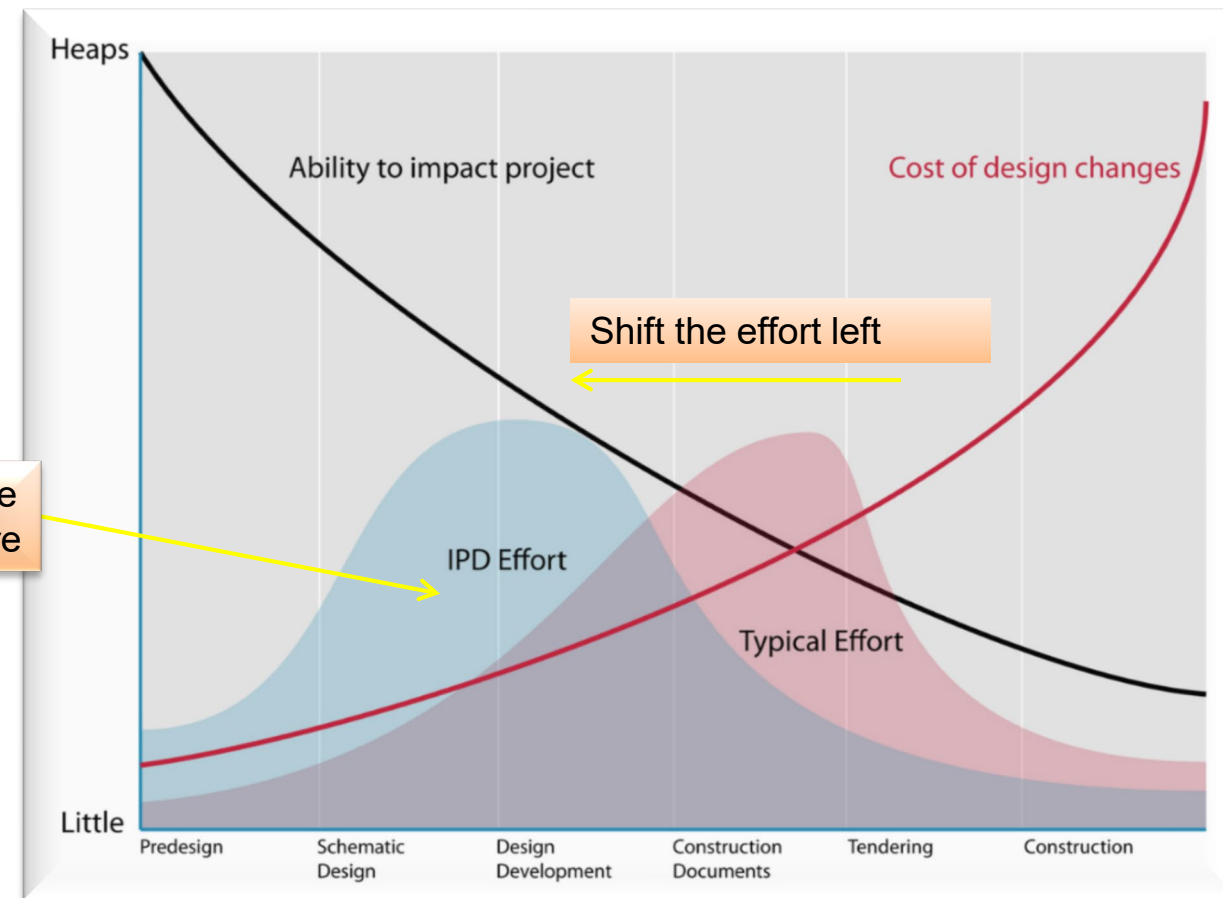


Why BIM?

- BIM will save cost with more detailed and coordinated planning.

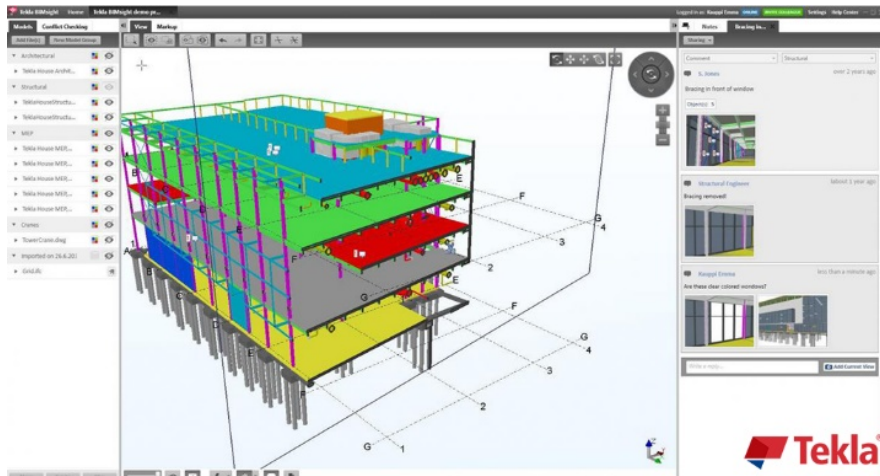


BIM process adds value by moving decision here

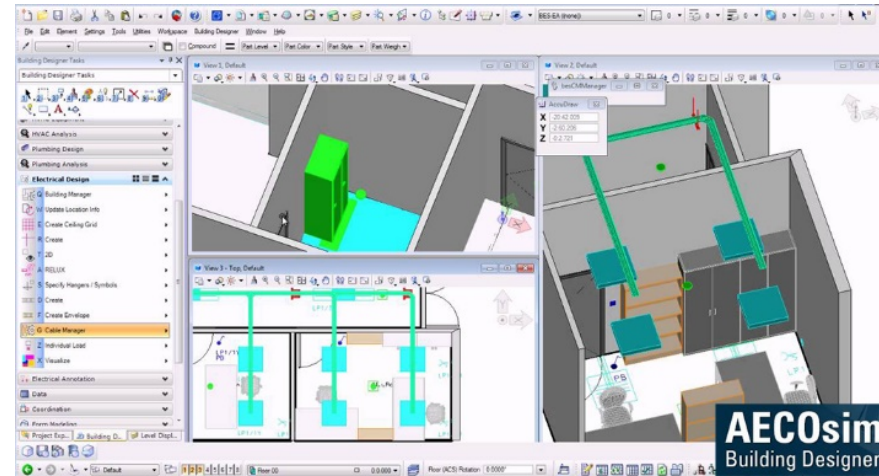


BIM Software

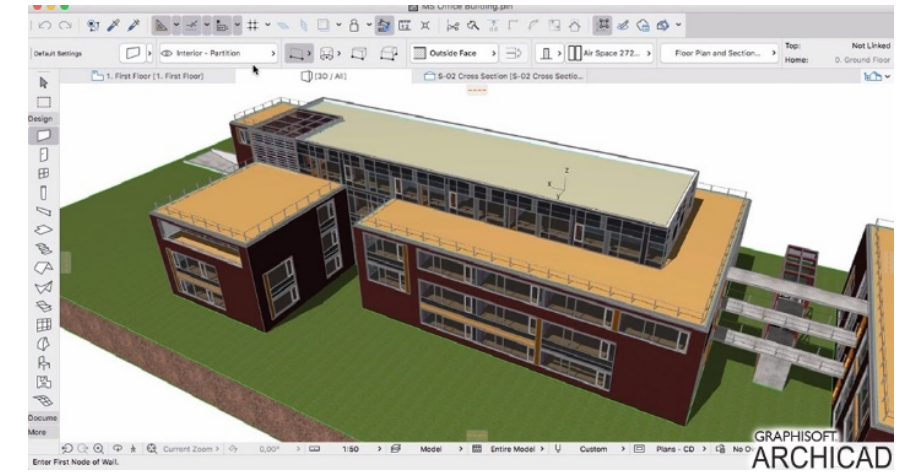
- There are many BIM software on the market such as:-



Tekla BIMsight



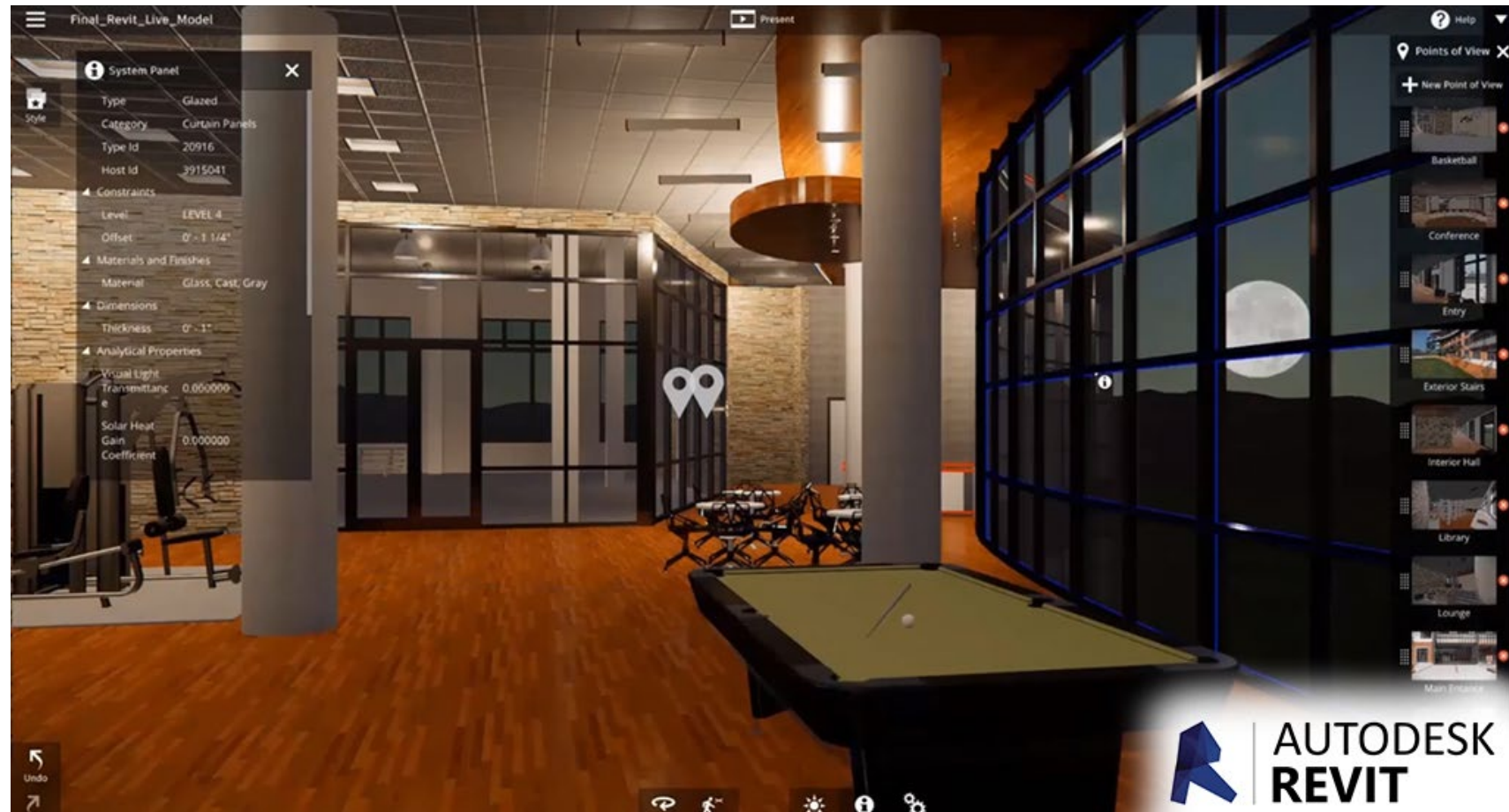
AECOsim



ARCHICAD

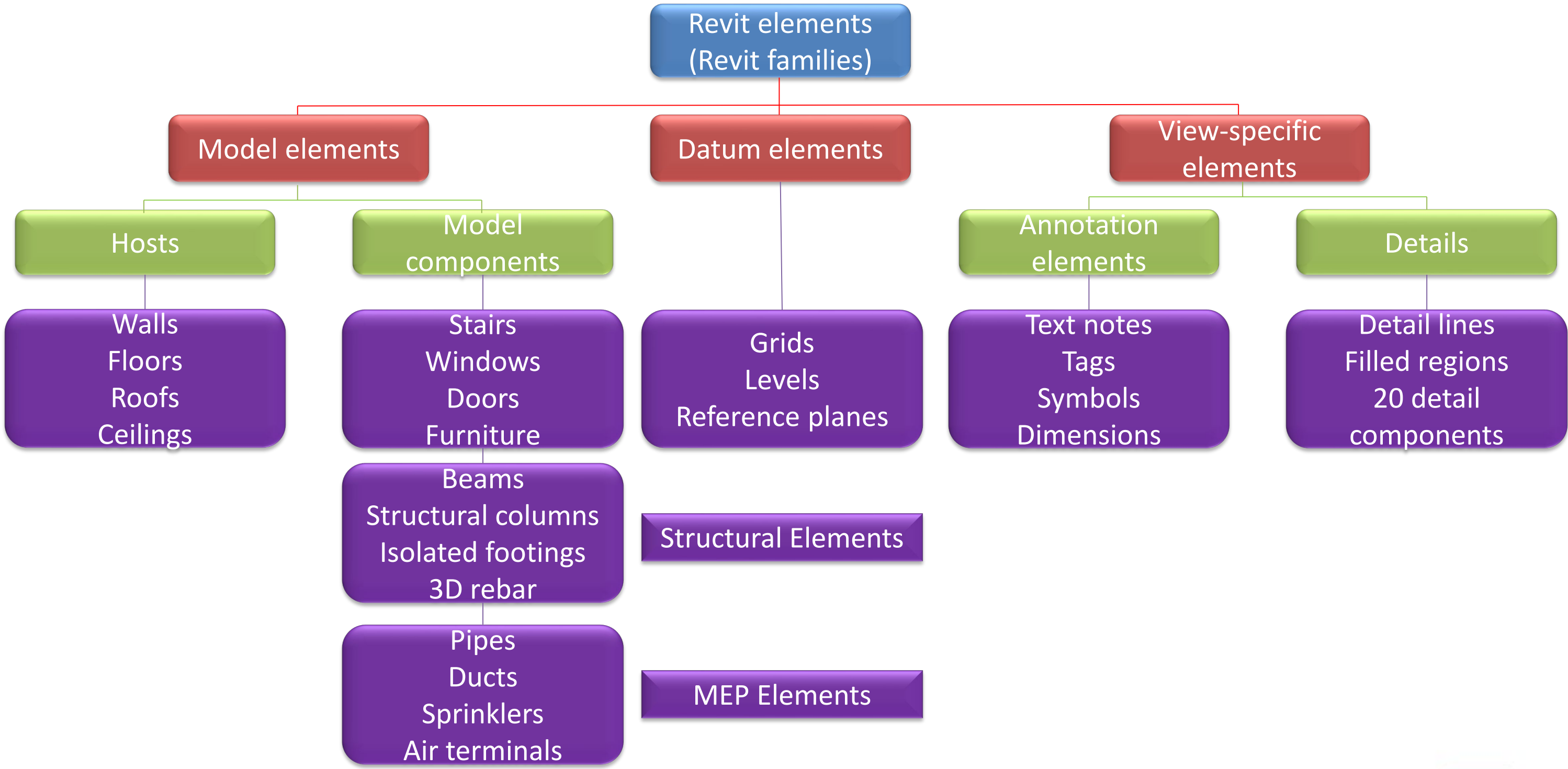
BIM software

Revit®



Revit[®]

- Revit create projects using elements (Families).
- Revit uses 3 types of elements (Families) in the projects.



Creating a New Revit Family

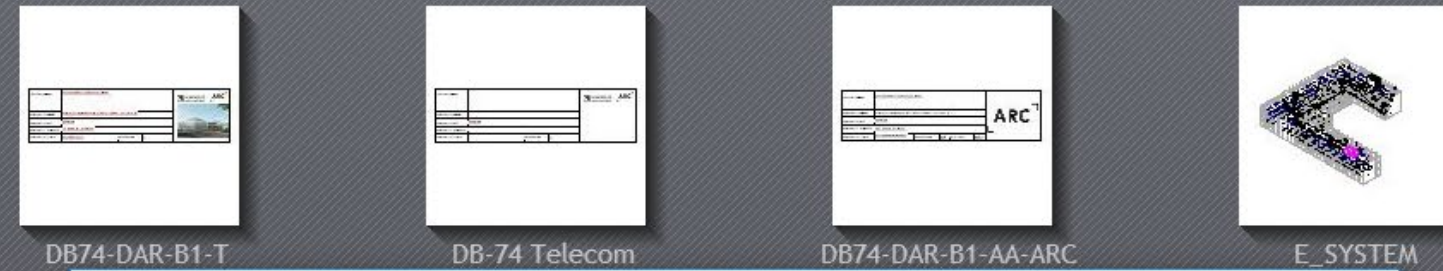
- To create a new family we have to define the following:-
 - ✓ Reference plans.
 - ✓ Dimensions.
 - ✓ Variable parameters.
 - ✓ Extruding geometry.
 - ✓ Connectors.

Projects

- Open...
- New...
- Construction Template
- Architectural Template
- Structural Template
- Mechanical Template

Families

- Open...
- New...
- New Conceptual Mass...



Resources

- What's New?
- Help
- What's New? Videos
- Essential Skills Videos
- Additional Videos
- Autodesk App Store
- Revit Community



Getting Started Video

New Family - Select Template File

Look in: English_I

Name	Date modified	Type
Annotations	11/1/2018 2:11 PM	File folder
Conceptual Mass	11/1/2018 2:09 PM	File folder
Titleblocks	11/1/2018 2:10 PM	File folder
Baluster	1/18/2017 4:26 PM	Revit Famil
Baluster-Panel	1/18/2017 4:26 PM	Revit Famil
Baluster-Post	1/18/2017 4:26 PM	Revit Famil
Casework wall based	1/18/2017 4:26 PM	Revit Famil
Casework	1/18/2017 4:26 PM	Revit Famil
Column	1/18/2017 4:26 PM	Revit Famil
Curtain Panel Pattern Based	1/18/2017 4:26 PM	Revit Famil
Curtain Wall Panel	1/18/2017 4:26 PM	Revit Famil
Data Device Hosted	1/18/2017 4:26 PM	Revit Famil
Data Device	1/18/2017 4:26 PM	Revit Famil
Data Panel	1/18/2017 4:26 PM	Revit Famil
Detail Item line based	1/18/2017 4:26 PM	Revit Famil

File name: Data Device.rft
Files of type: Family Template Files (*.rft)

Preview:

Open Cancel

Modify | Reference Planes

Project Browser - Family2

- Views (all)
 - Floor Plans
 - Ref. Level
 - Ceiling Plans
 - Ref. Level
 - 3D Views
 - View 1
 - Elevations (Elevation 1)
 - Back
 - Front
 - Left
 - Right
- Sheets (all)
- Families
- Groups
- Revit Links

Properties

Reference Planes (1) Edit Type

Construction

Wall Closure

Extents

Scope Box None

Identity Data

Name Center (Front/Back)

Subcategory <None>

Other

Is Reference Center (Front/Back)

Defines Origin

[Properties help](#) Apply

Autodesk Revit 2018 - Family2 - Floor Plan: Ref. Level

File Create Insert Annotate View Manage Add-Ins Modify | Reference Planes

Modify Properties Clipboard Geometry Modify Measure Create

Subcategory: <None> Propagate Extents Load into Project Load into Project and Close

Subcategory Datum Family Editor

Family Types

Allows you to enter parameter values for existing family types, add parameters to the family, or create new types within the family.

In one family, you can create multiple family types, where each type represents a different size or variation within the family. Use the Family Types tool to specify the parameters that define the differences between family types.

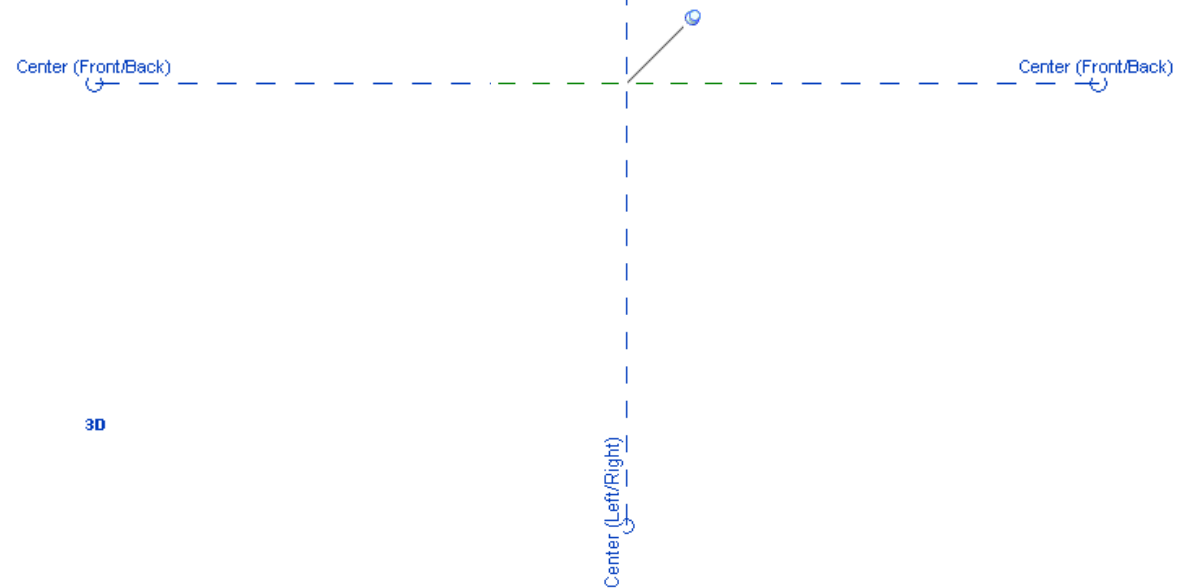
Press F1 for more help

Family Category and Parameters

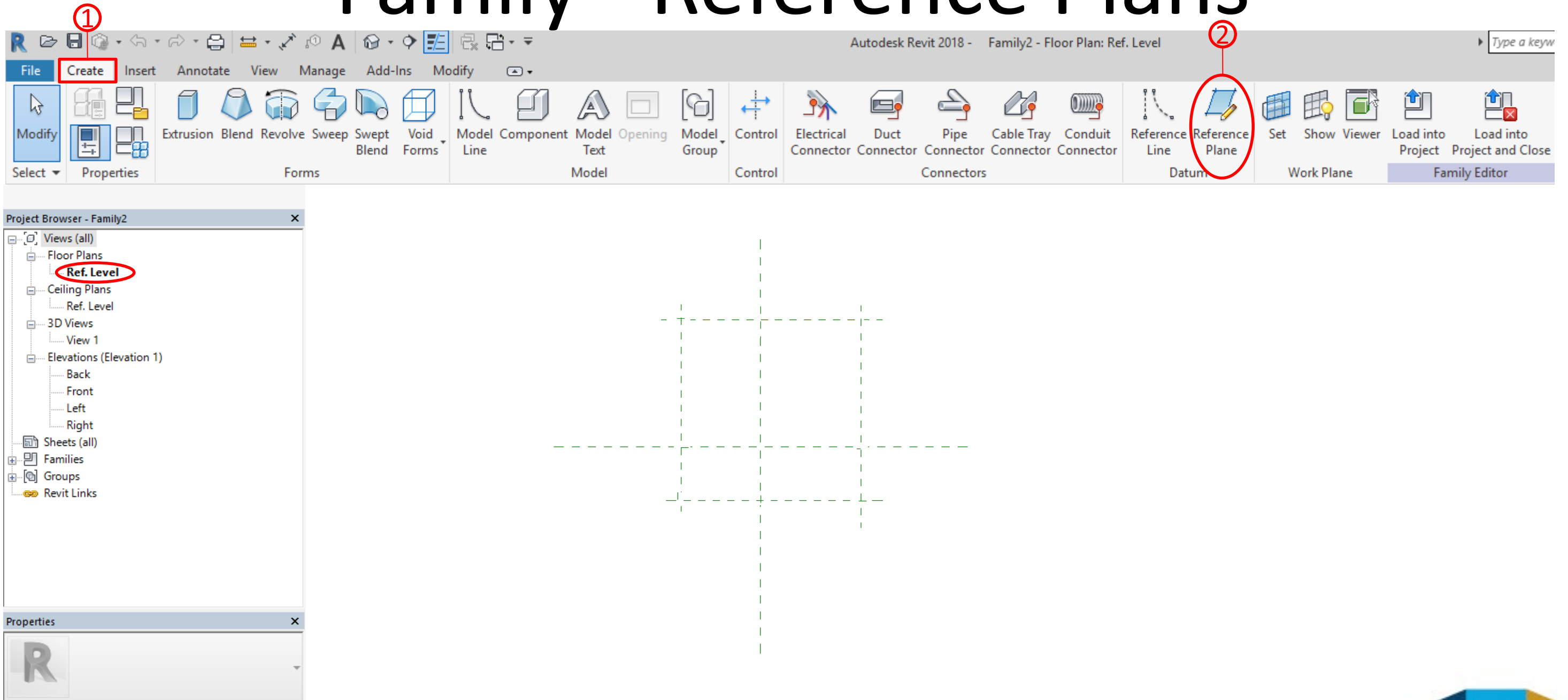
Assigns the properties of a predefined family category to the component you are creating.

The family parameters that are available vary depending on the selected family category.

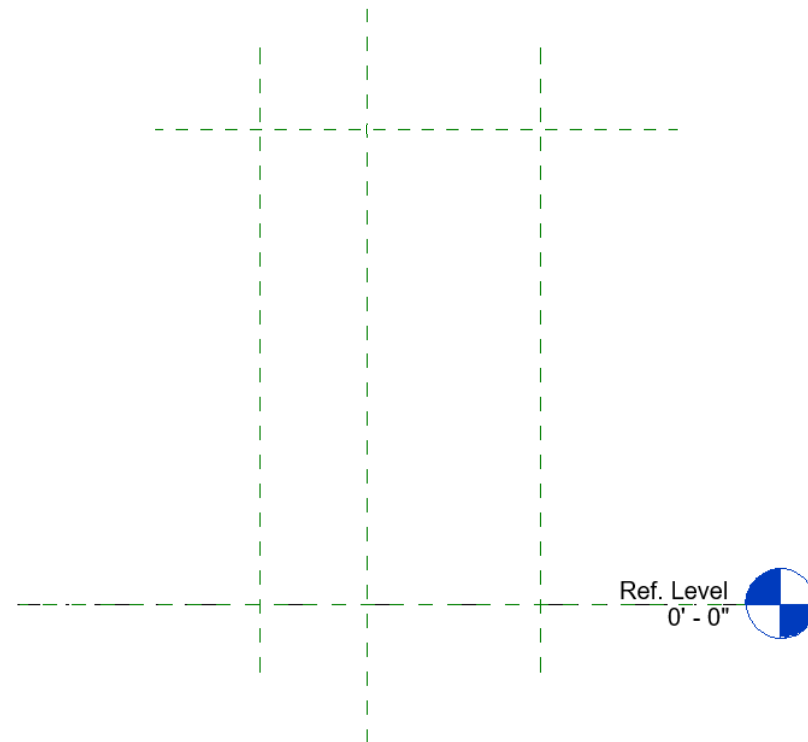
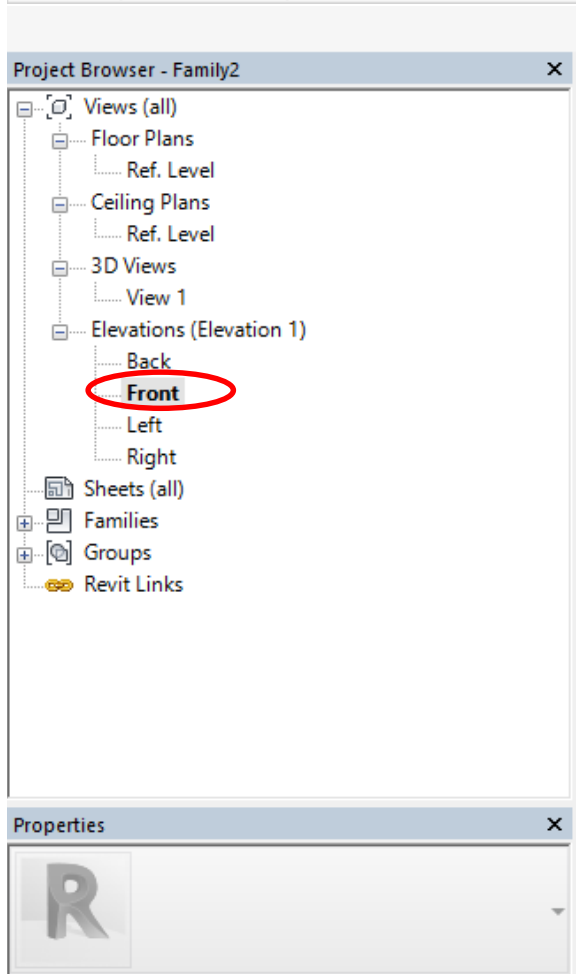
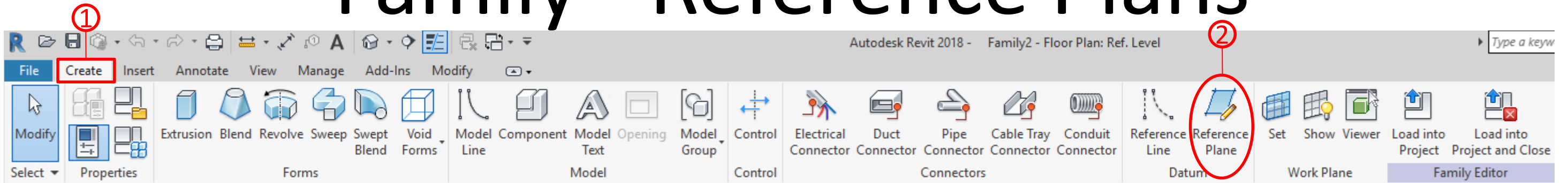
Press F1 for more help



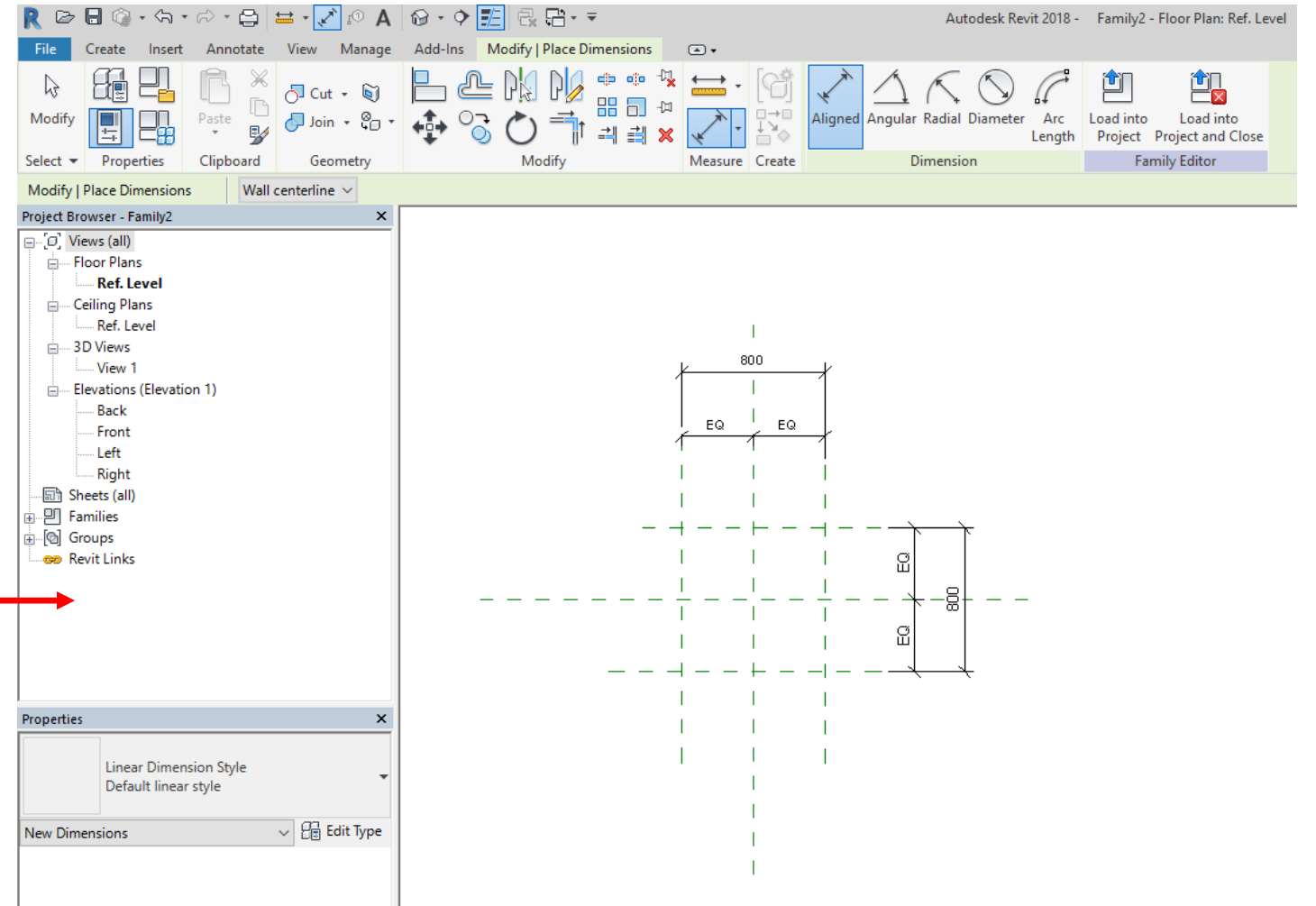
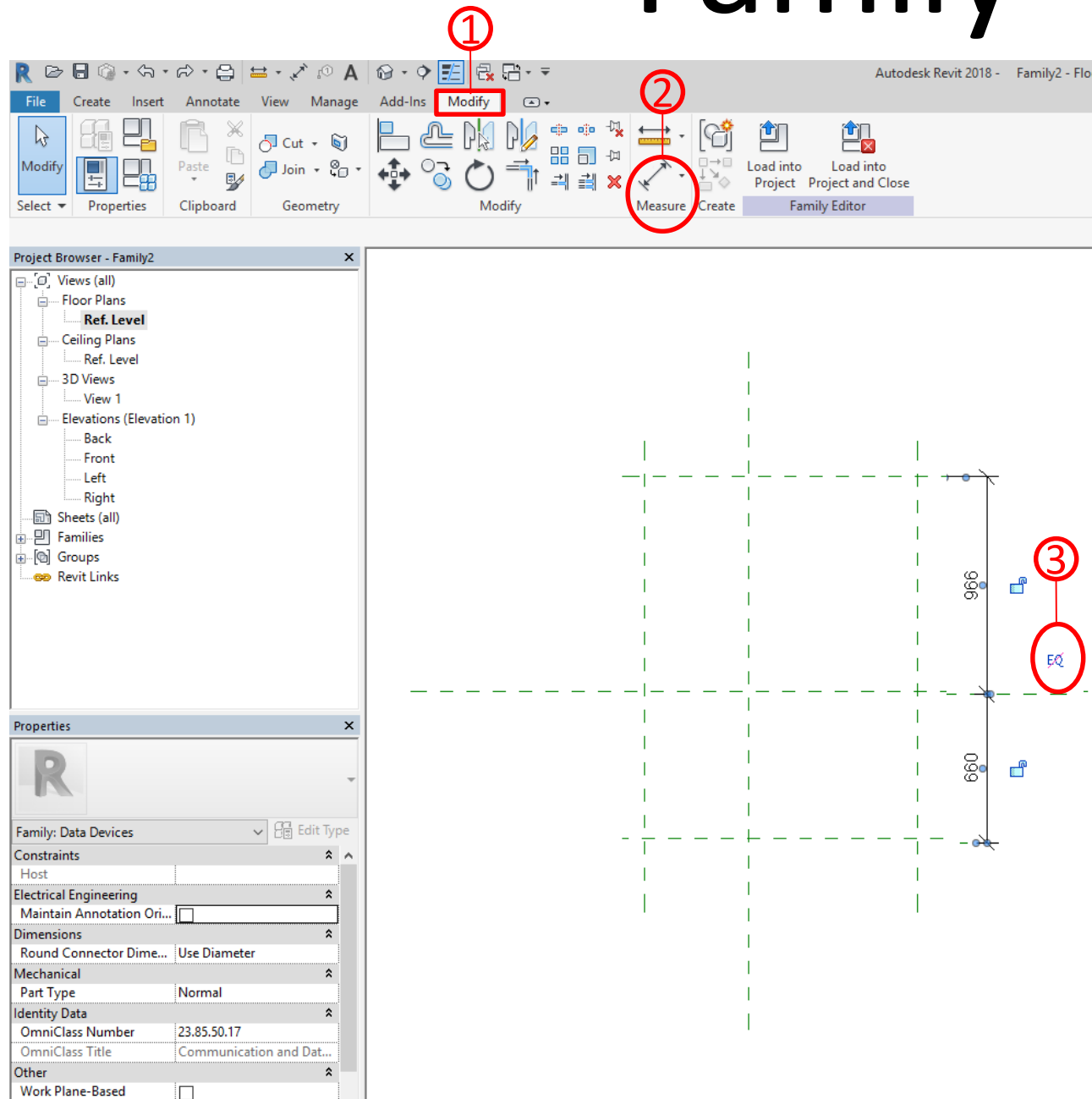
Family - Reference Plans



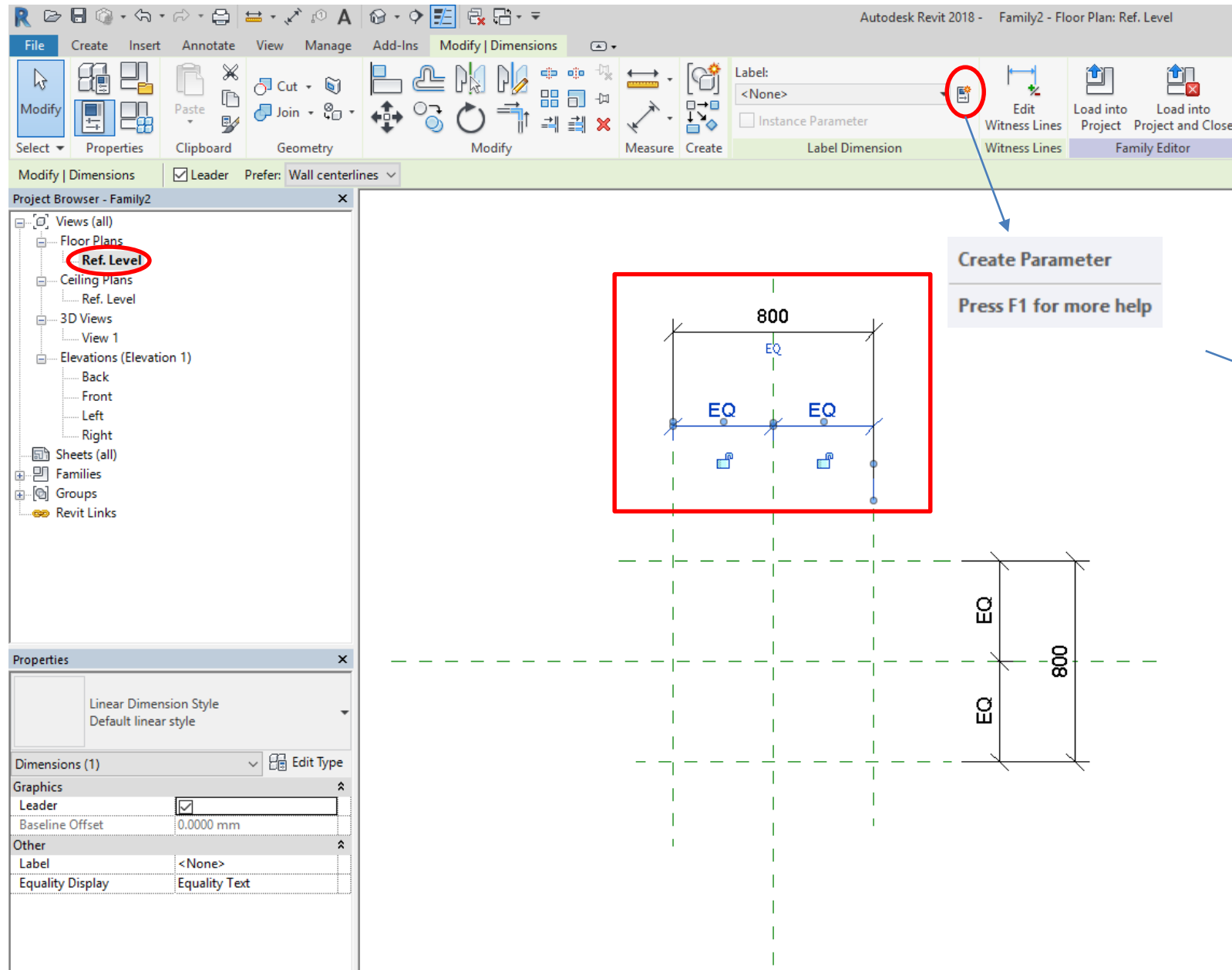
Family - Reference Plans



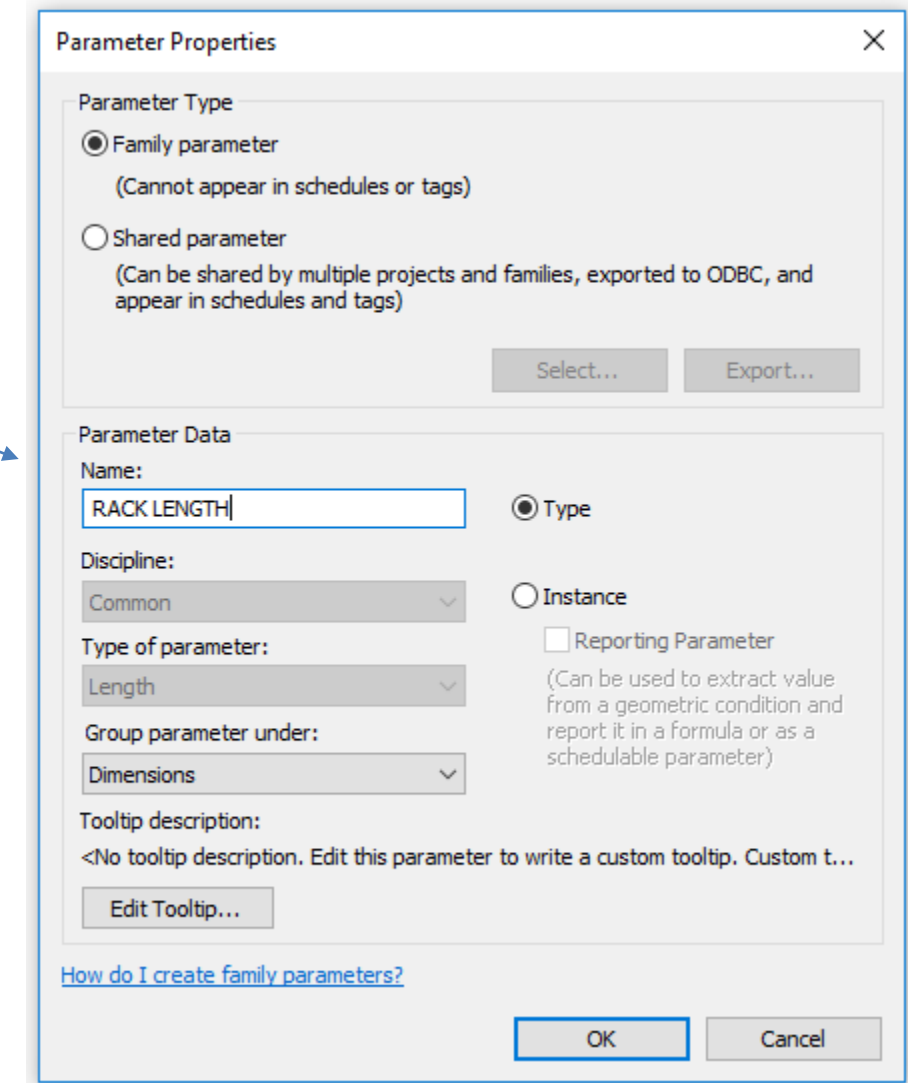
Family - Dimensions



Family – Parameters (Rack Length)



Create Parameter
Press F1 for more help



Family – Parameters (Rack Width)

The screenshot illustrates the process of creating a family parameter in Autodesk Revit 2018. The main window shows a family editor for a floor plan. A dimension line is drawn across the top of a rack, labeled "RACK LENGTH = 800". Below it, a vertical dimension line is drawn, labeled "800", and is highlighted with a red box. A callout box points to the dimension line with the text "Create Parameter" and "Press F1 for more help".

The "Parameter Properties" dialog box is open on the right, showing the following settings:

- Parameter Type:** Family parameter (Cannot appear in schedules or tags), Shared parameter (Can be shared by multiple projects and families, exported to ODBC, and appear in schedules and tags).
- Parameter Data:**
 - Name:** RACK WIDTH
 - Discipline:** Common
 - Type of parameter:** Length
 - Group parameter under:** Dimensions
 - Type:** Type, Instance
 - Reporting Parameter:** Reporting Parameter (Can be used to extract value from a geometric condition and report it in a formula or as a schedulable parameter)
 - Tooltip description:** <No tooltip description. Edit this parameter to write a custom tooltip. Custom t...>

The Properties panel on the left shows the following settings for the dimension:

- Linear Dimension Style:** Default linear style
- Dimensions (1):** Edit Type
- Graphics:**
 - Leader:**
 - Baseline Offset:** 0.0000 mm
- Text:**
 - Value:** 800.0
- Other:**
 - Label:** <None>

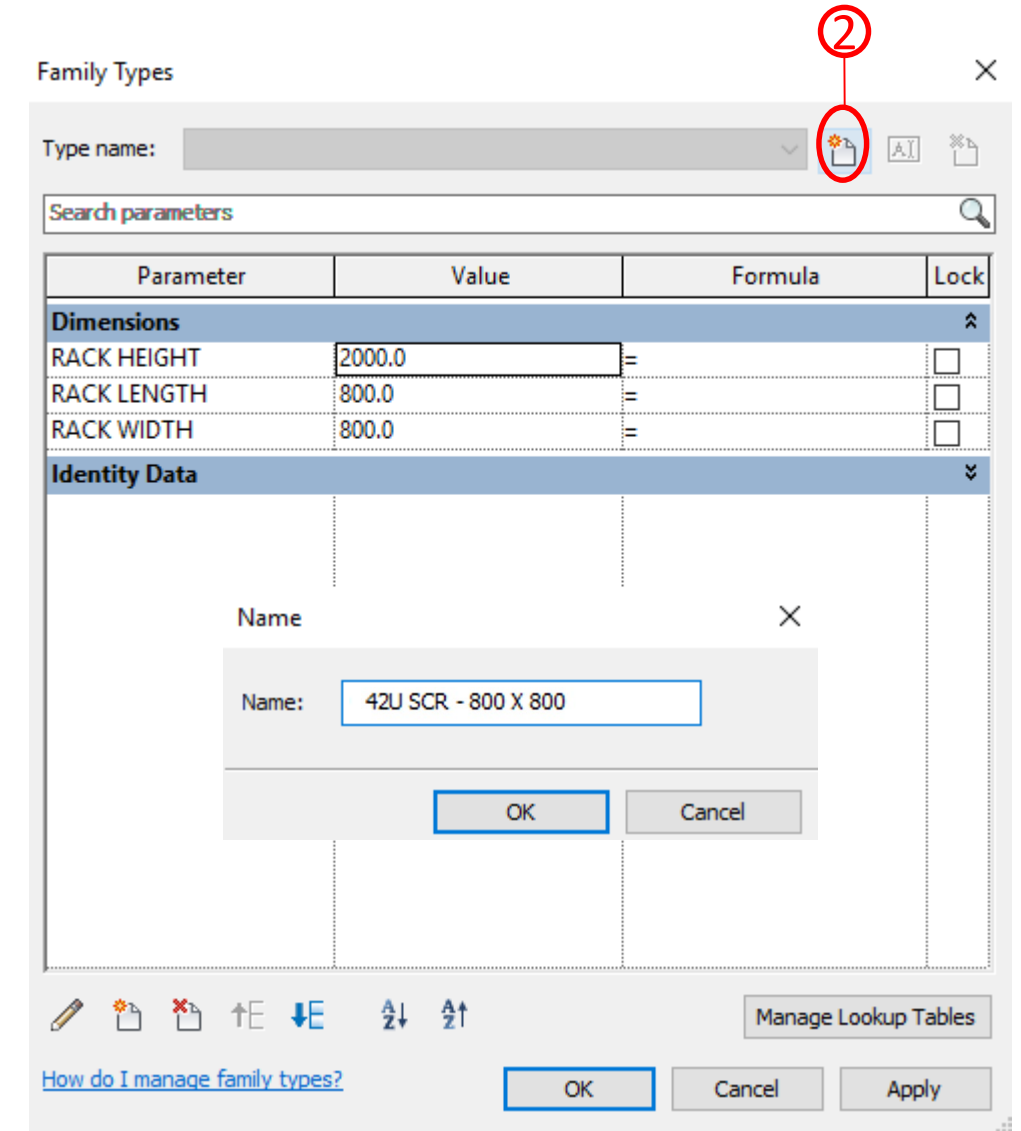
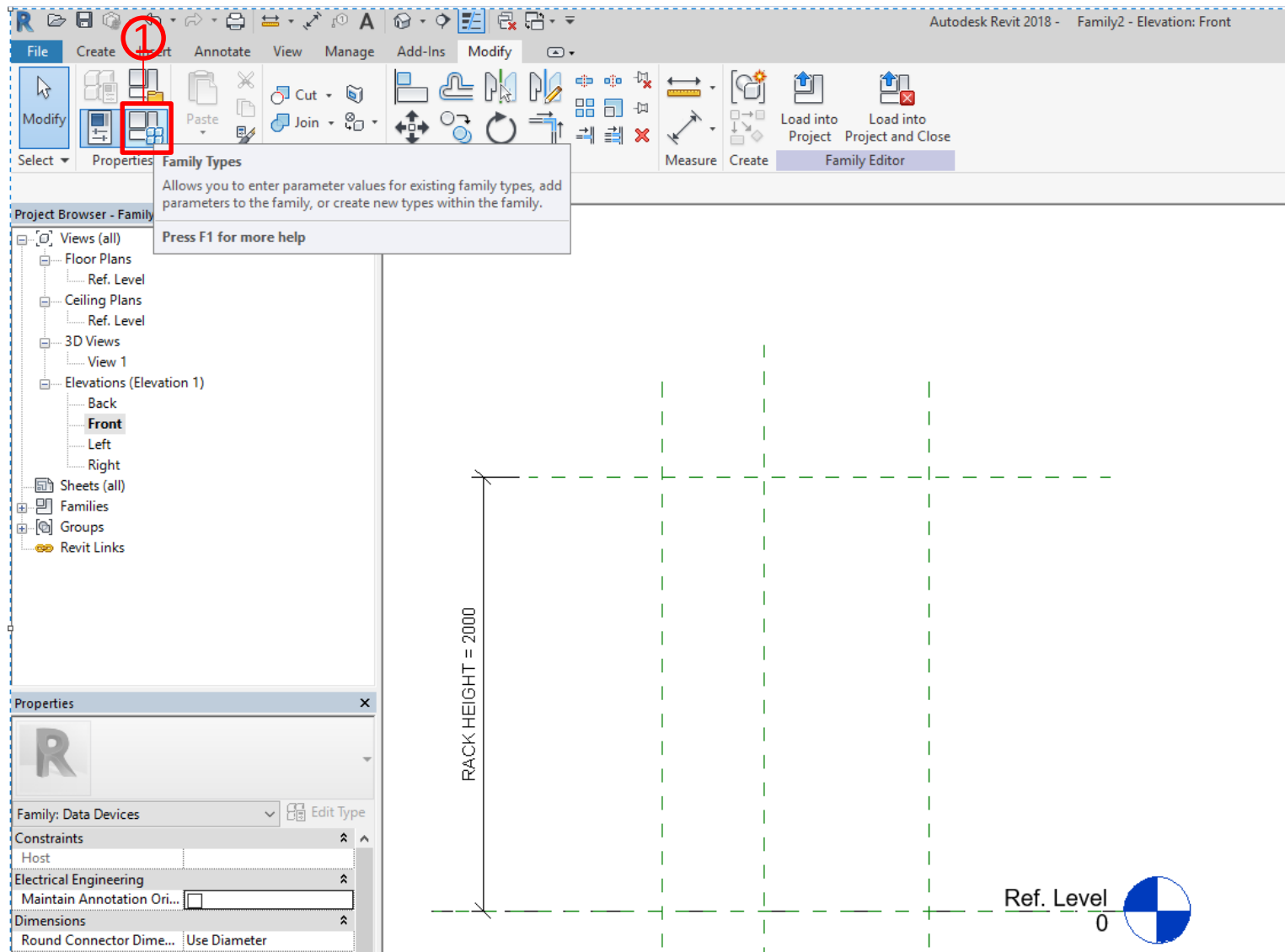
Family – Parameters (Rack Height)

The image shows the Autodesk Revit 2018 interface for creating a family parameter. The main window displays a family elevation with a red rectangular dimension of 2000 units. A callout box points to the 'Create Parameter' button in the ribbon, with the text 'Press F1 for more help'. The 'Parameter Properties' dialog box is open, showing the following settings:

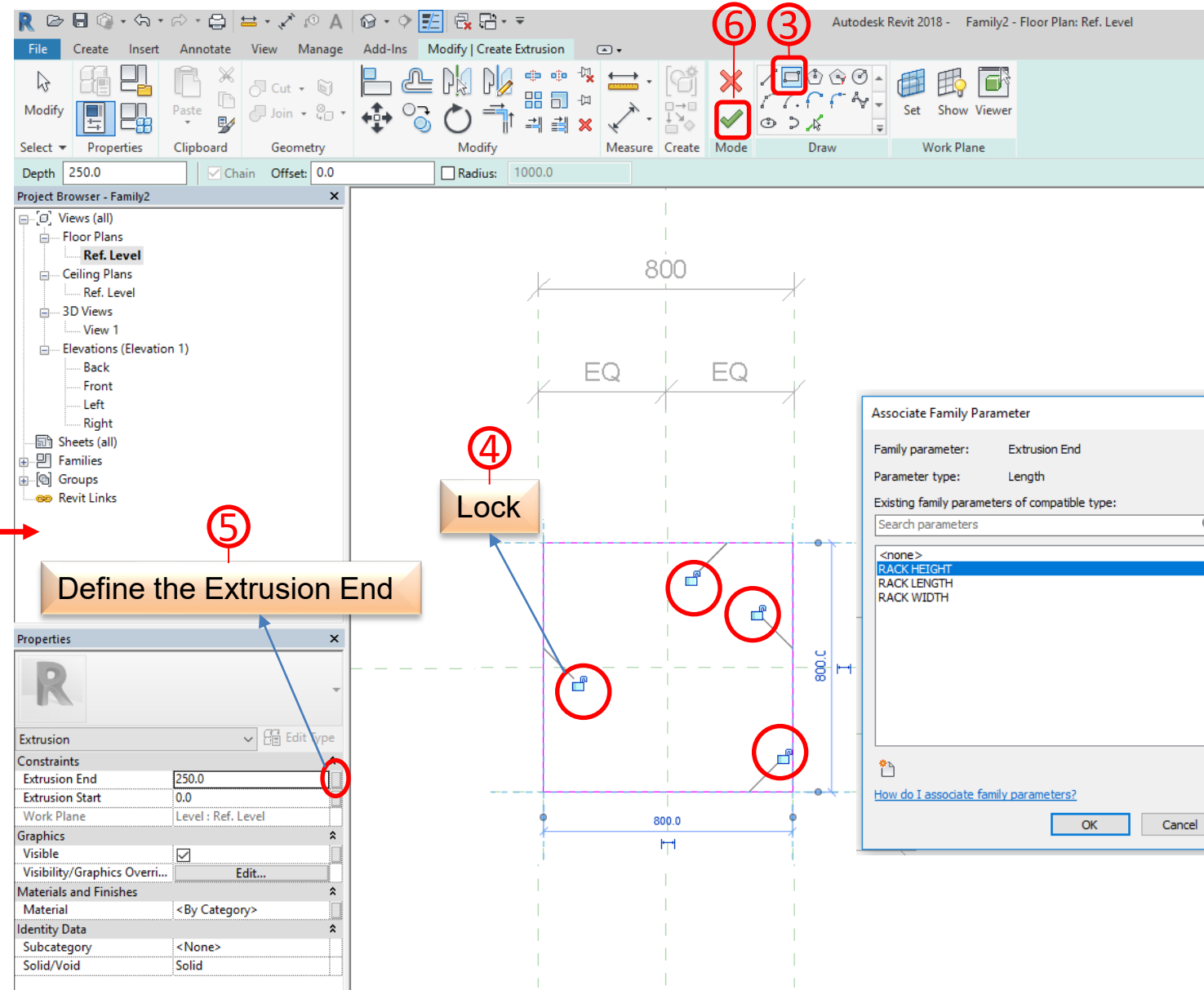
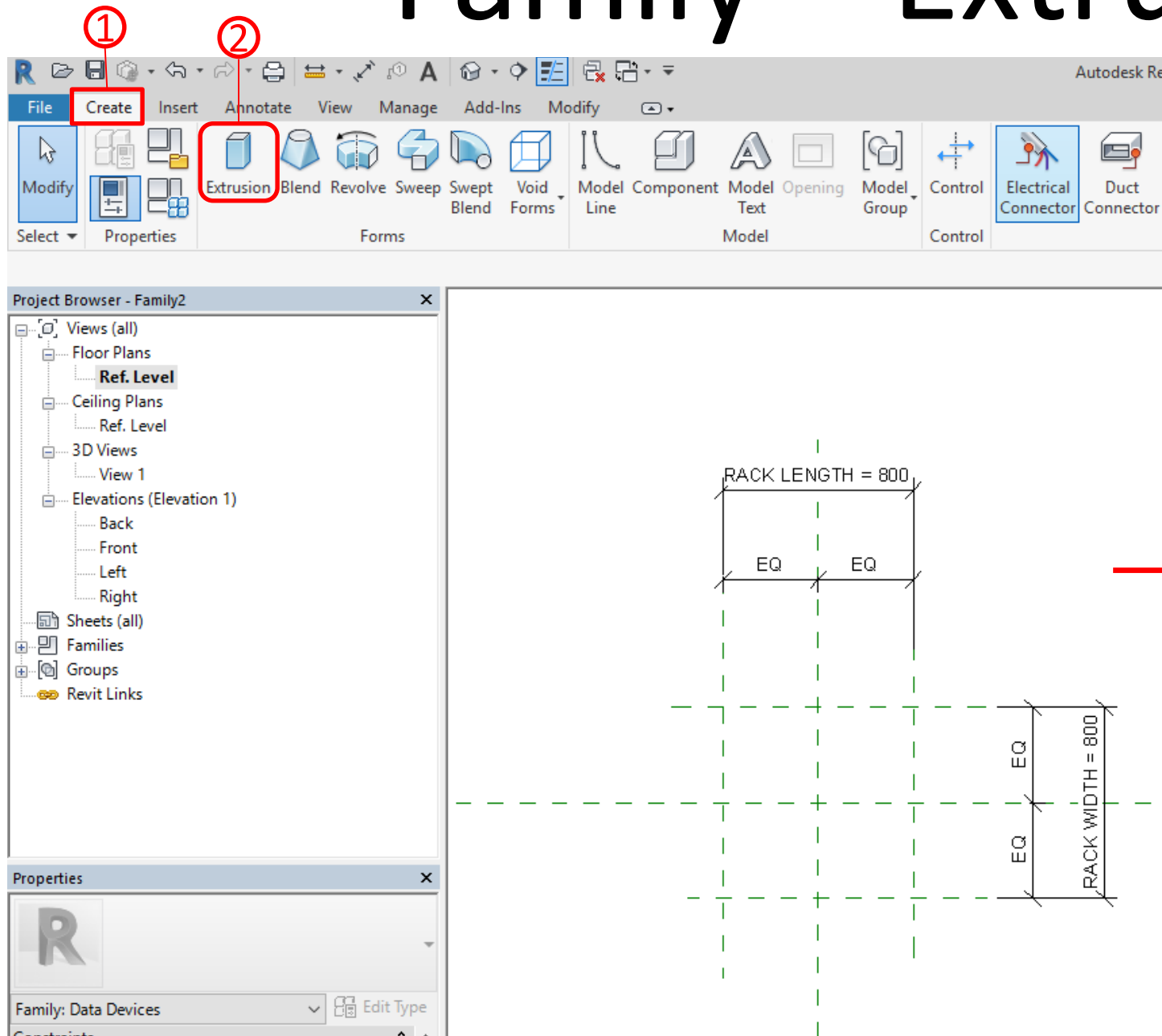
- Parameter Type:** Family parameter (selected), Shared parameter (unselected).
- Parameter Data:** Name: RACK HEIGHT, Discipline: Common, Type of parameter: Length, Group parameter under: Dimensions, Type: Type (selected), Instance (unselected), Reporting Parameter (unselected).

The Properties panel on the left shows the dimension's value as 2000.0 and the label as <None>. The Project Browser on the left shows the 'Front' elevation selected.

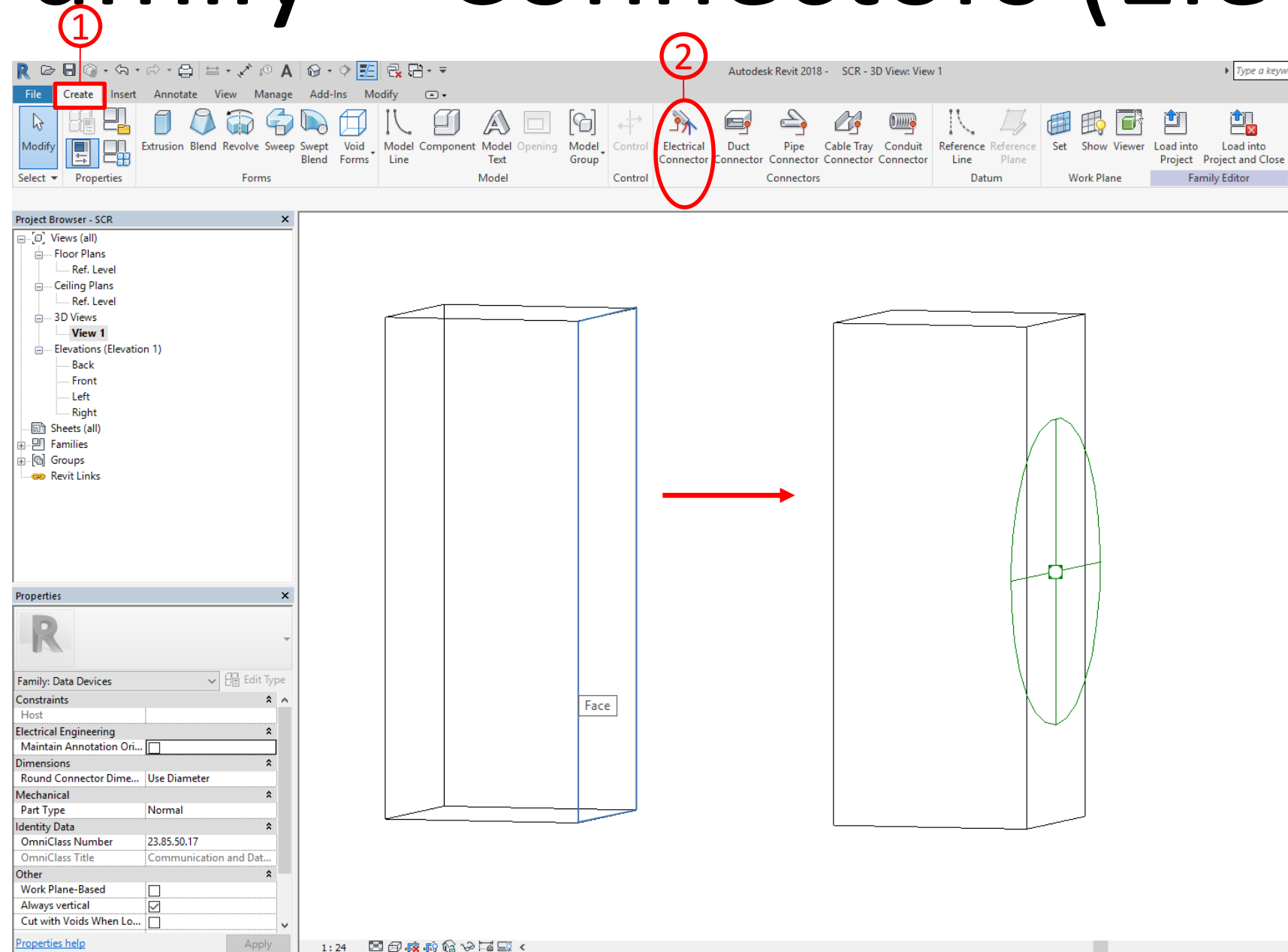
Naming the Family



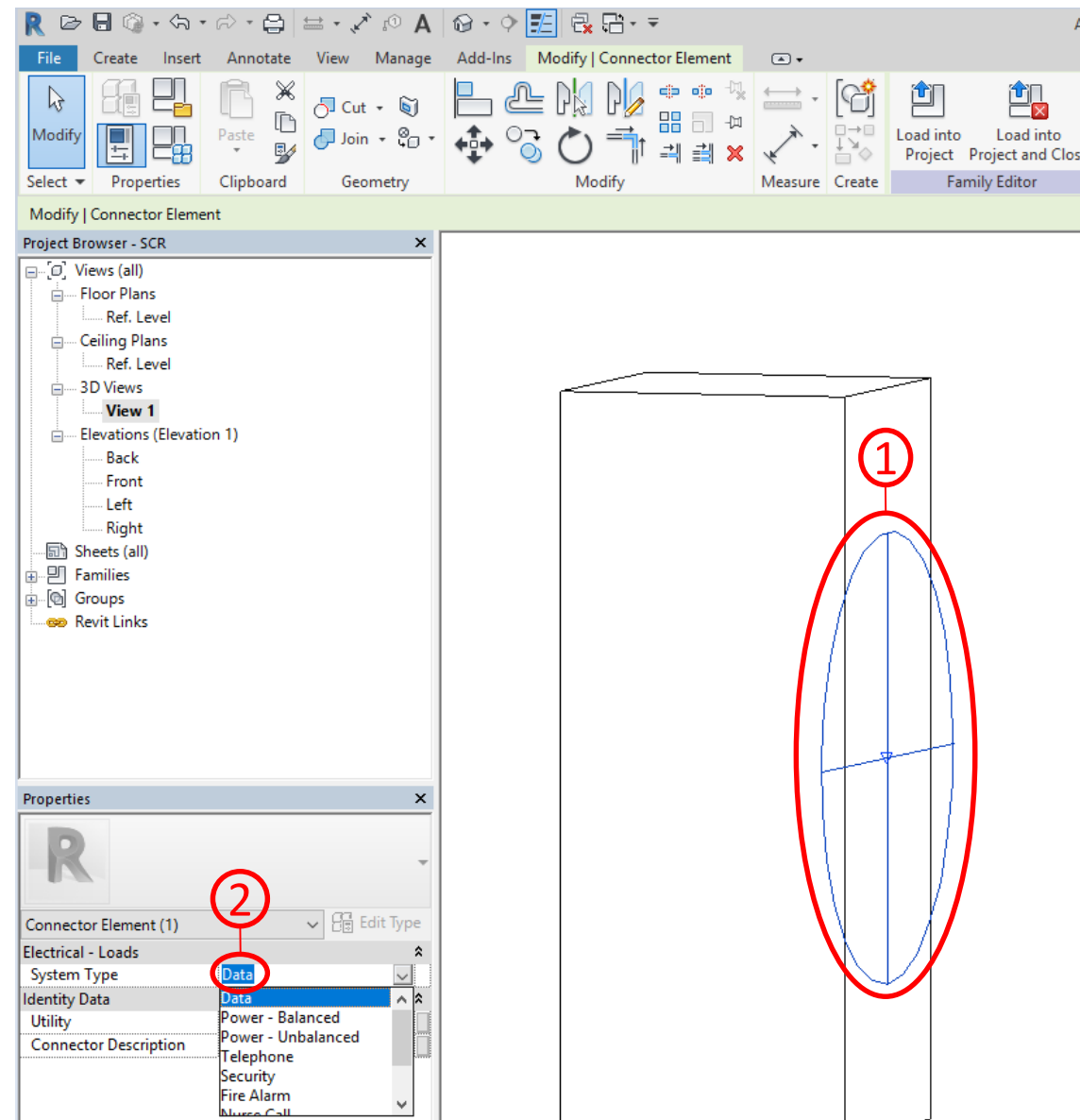
Family – Extruding Geometry



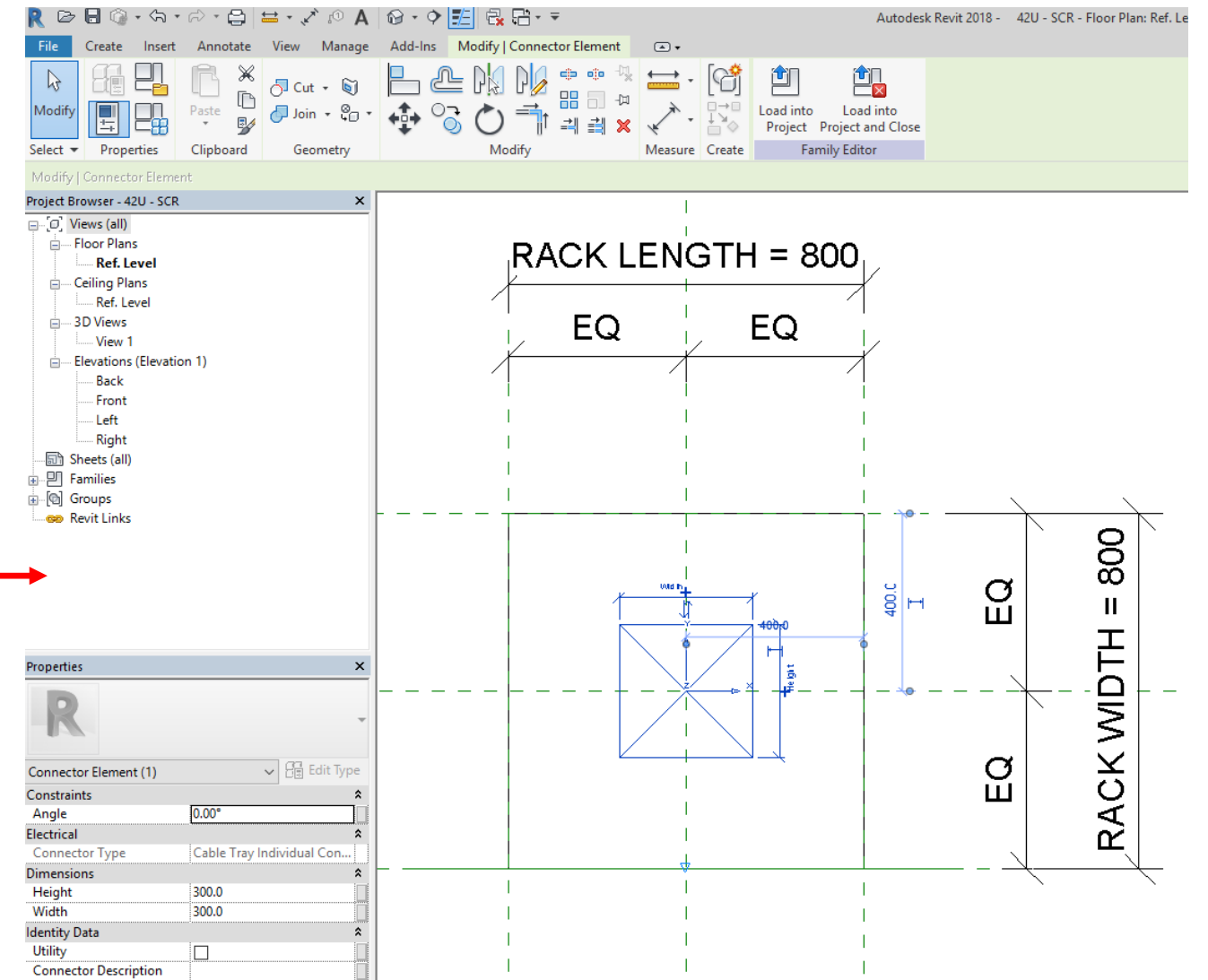
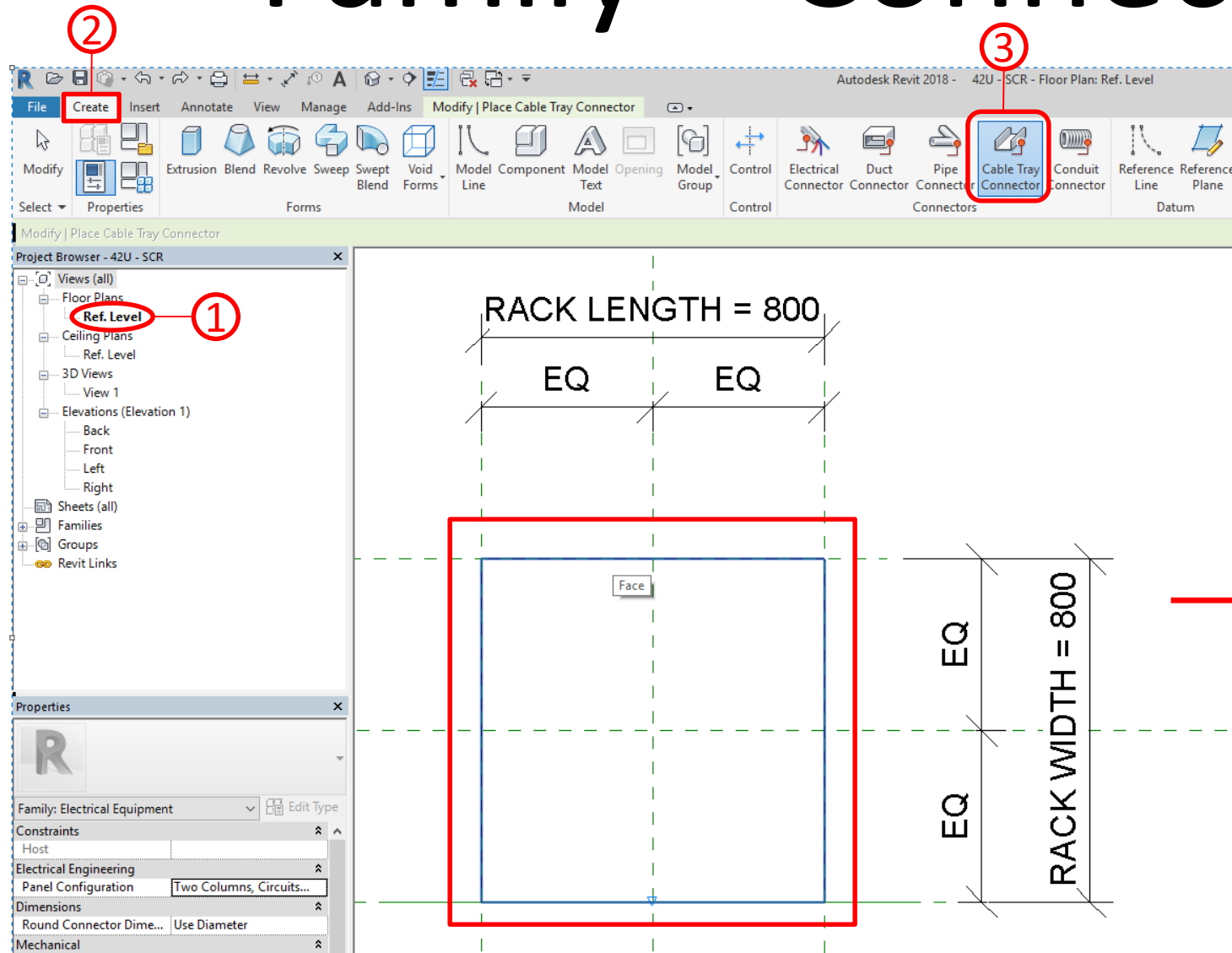
Family – Connectors (Electrical)



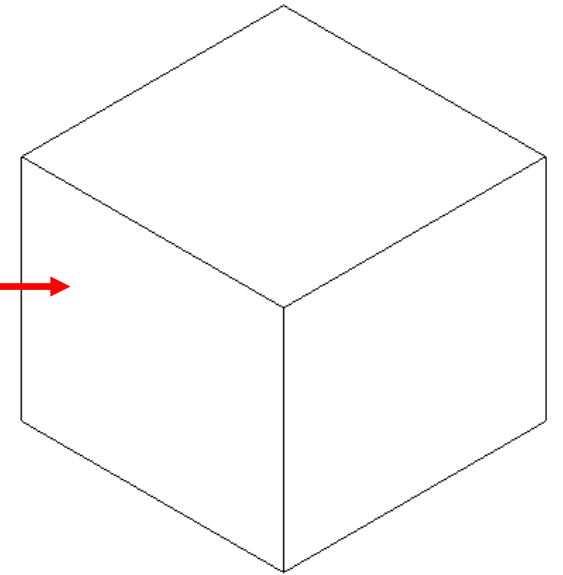
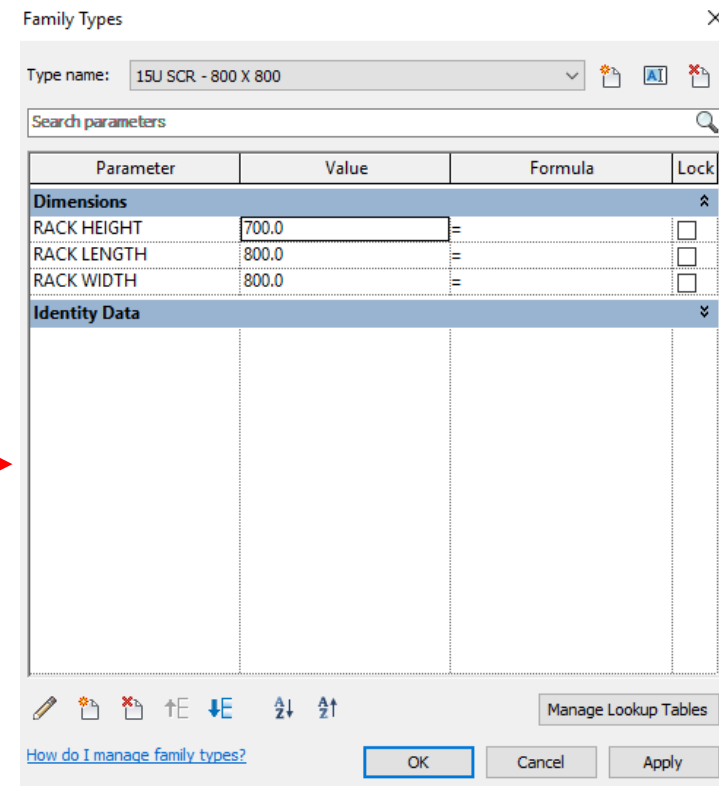
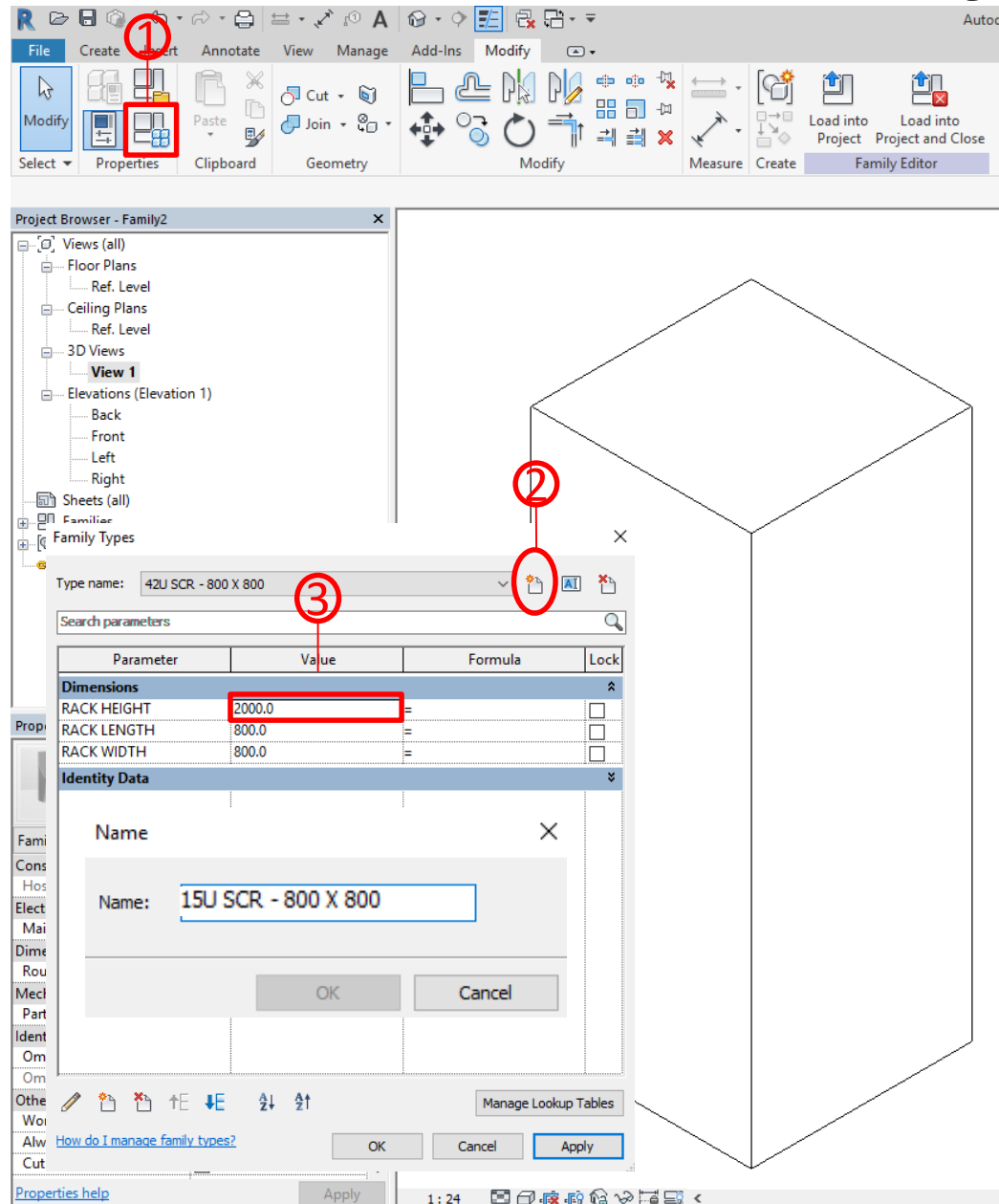
Family – Connectors (Data)



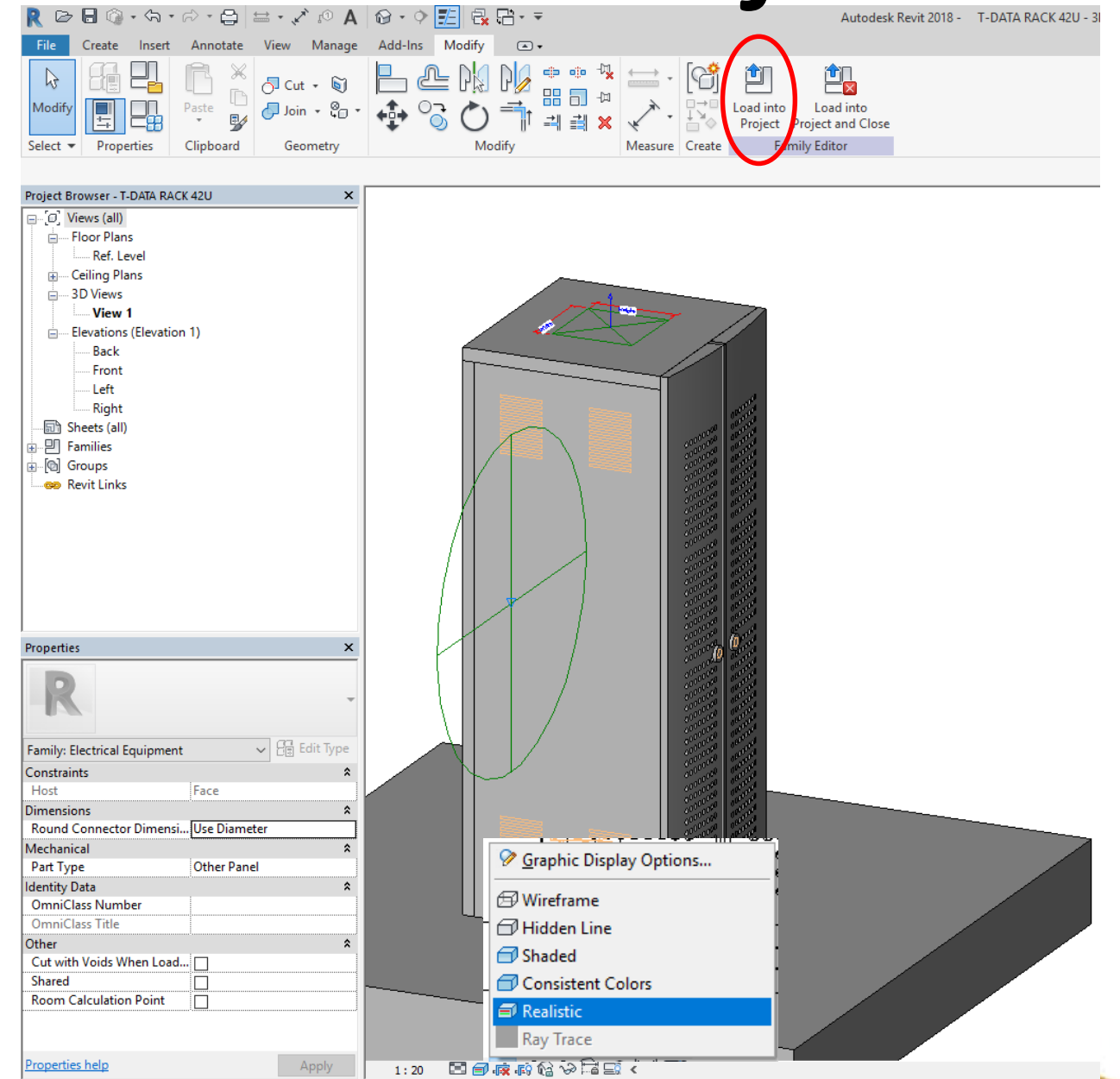
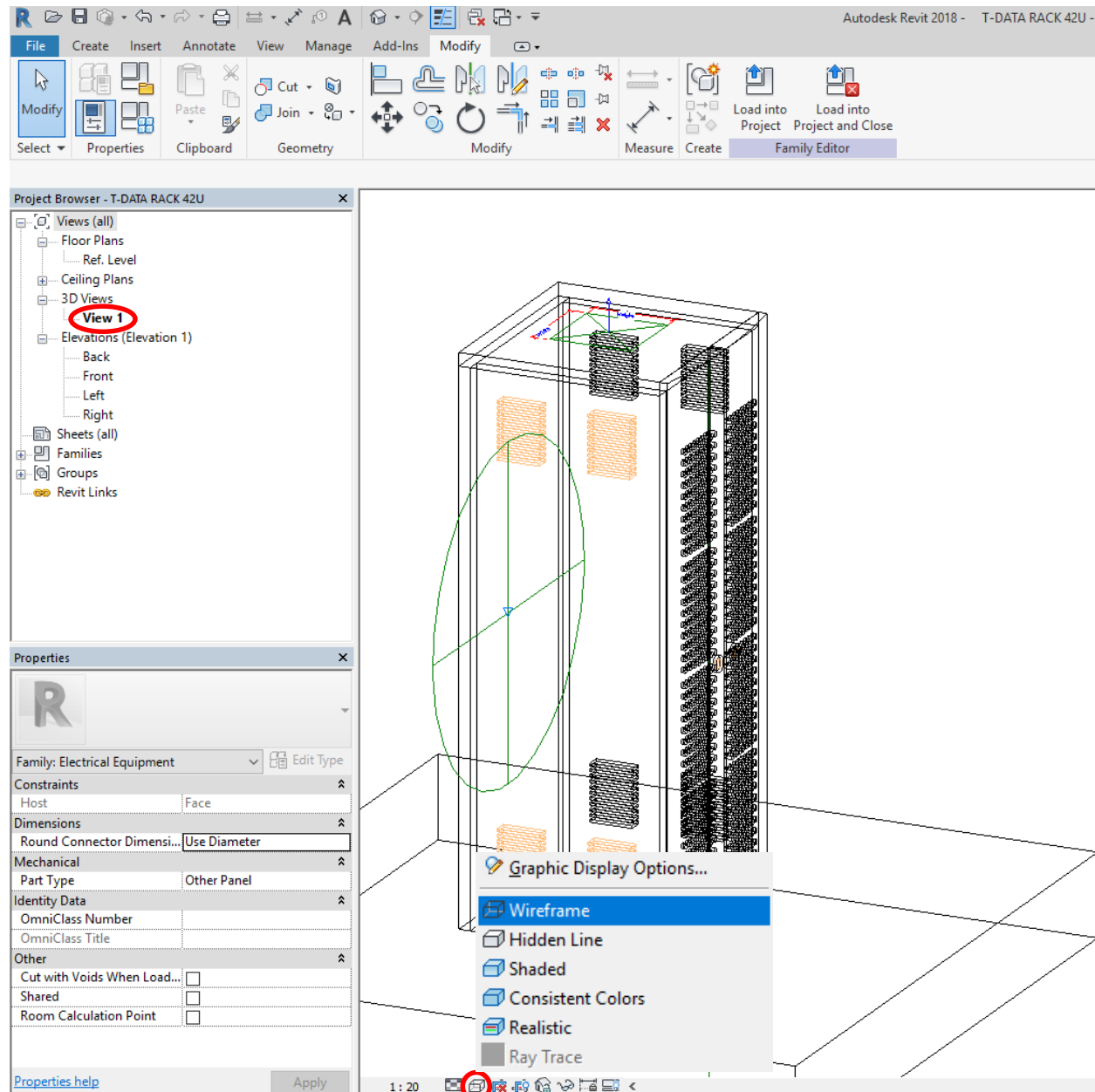
Family – Connectors (Cable tray)



Family From Family

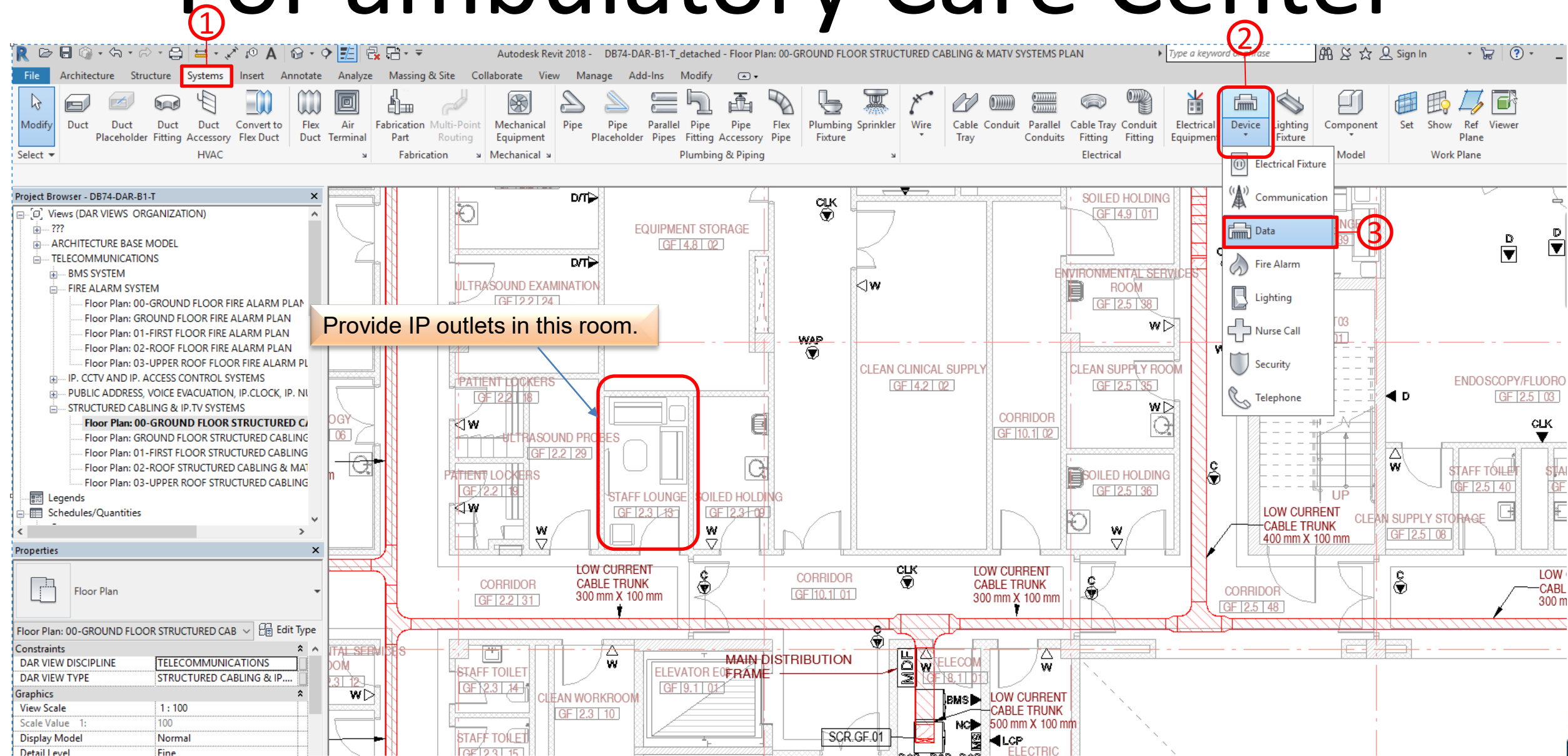


Family 3D view & Load into Project

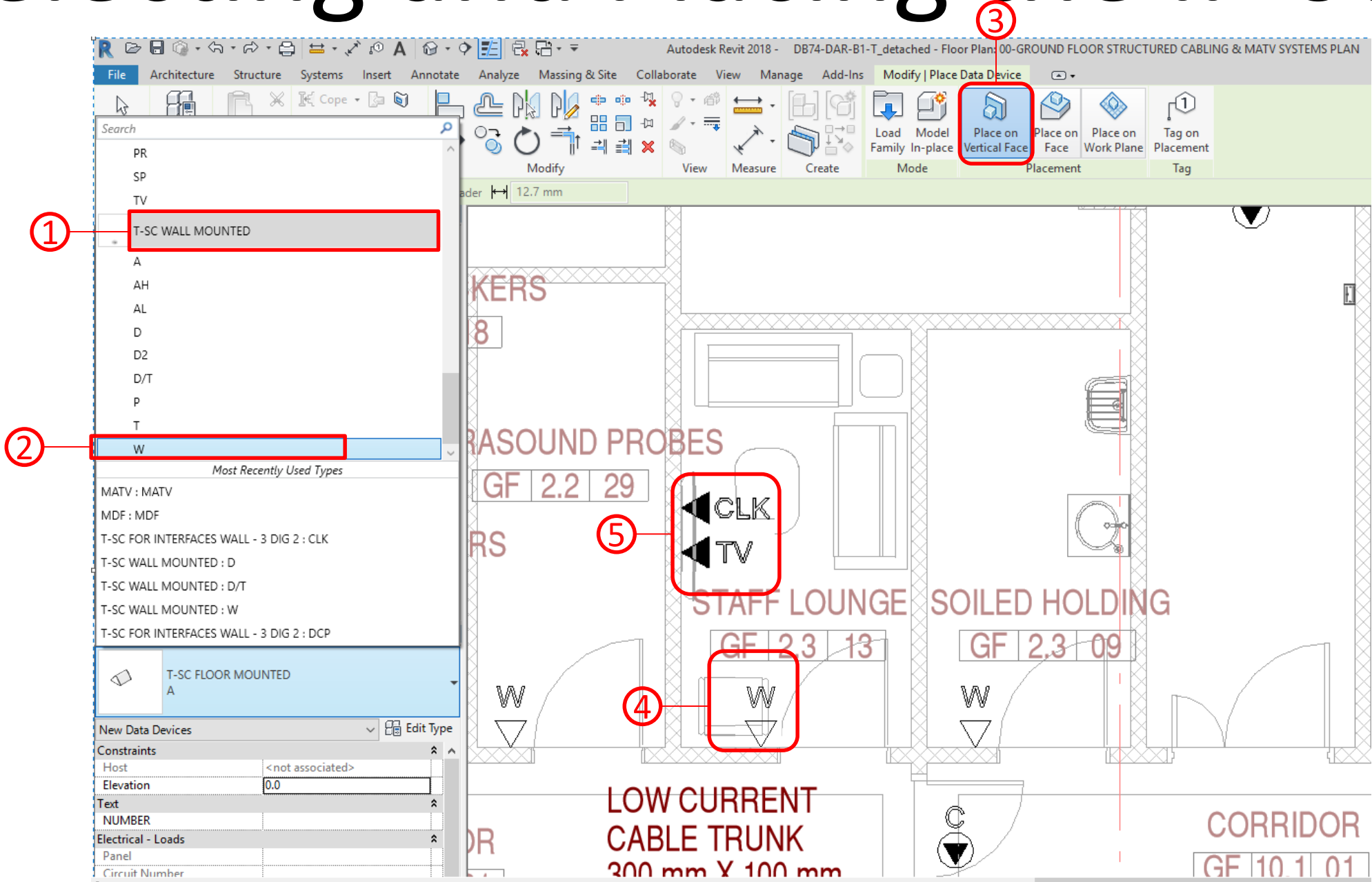


Structured Cabling Network Design

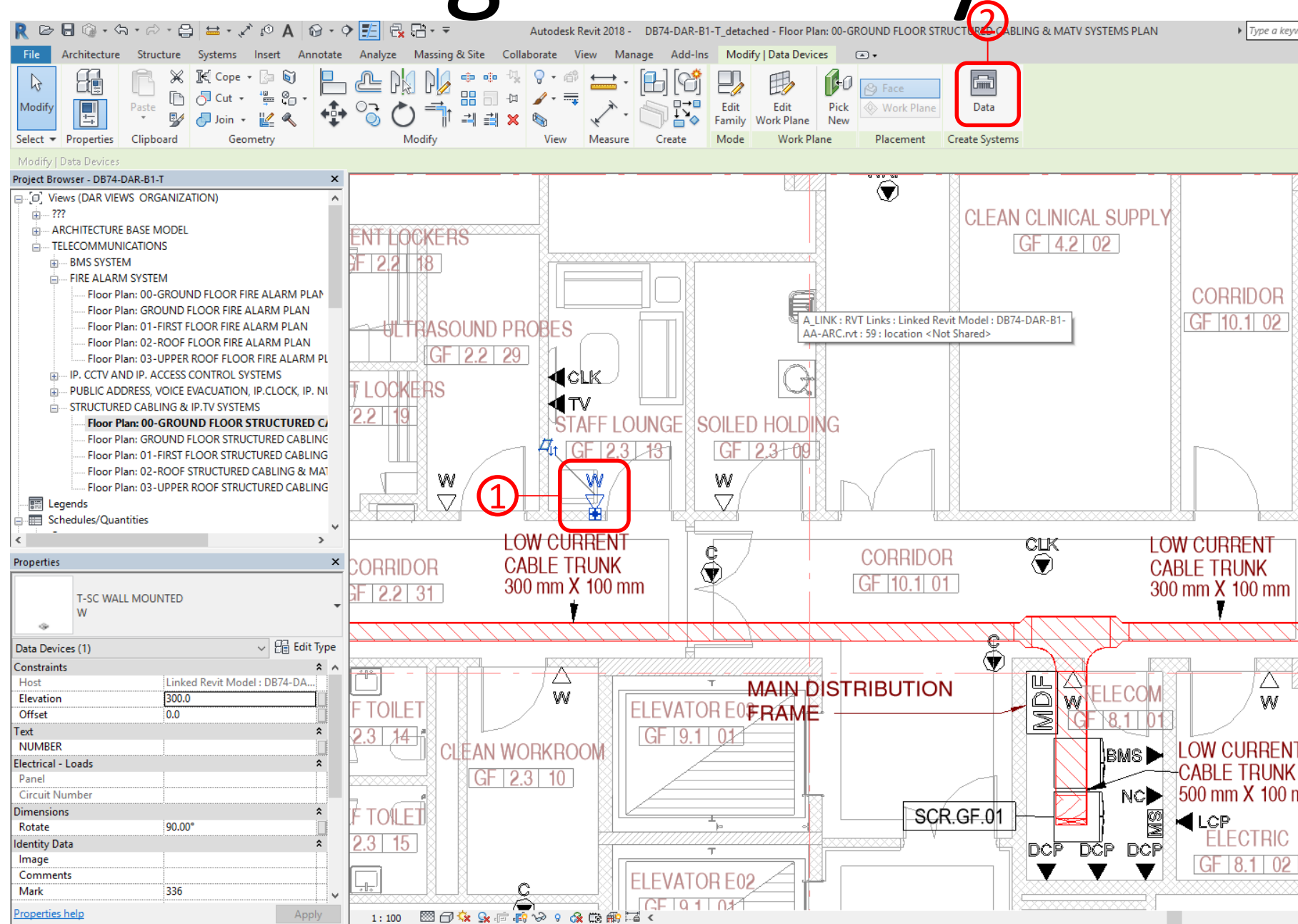
For ambulatory Care Center



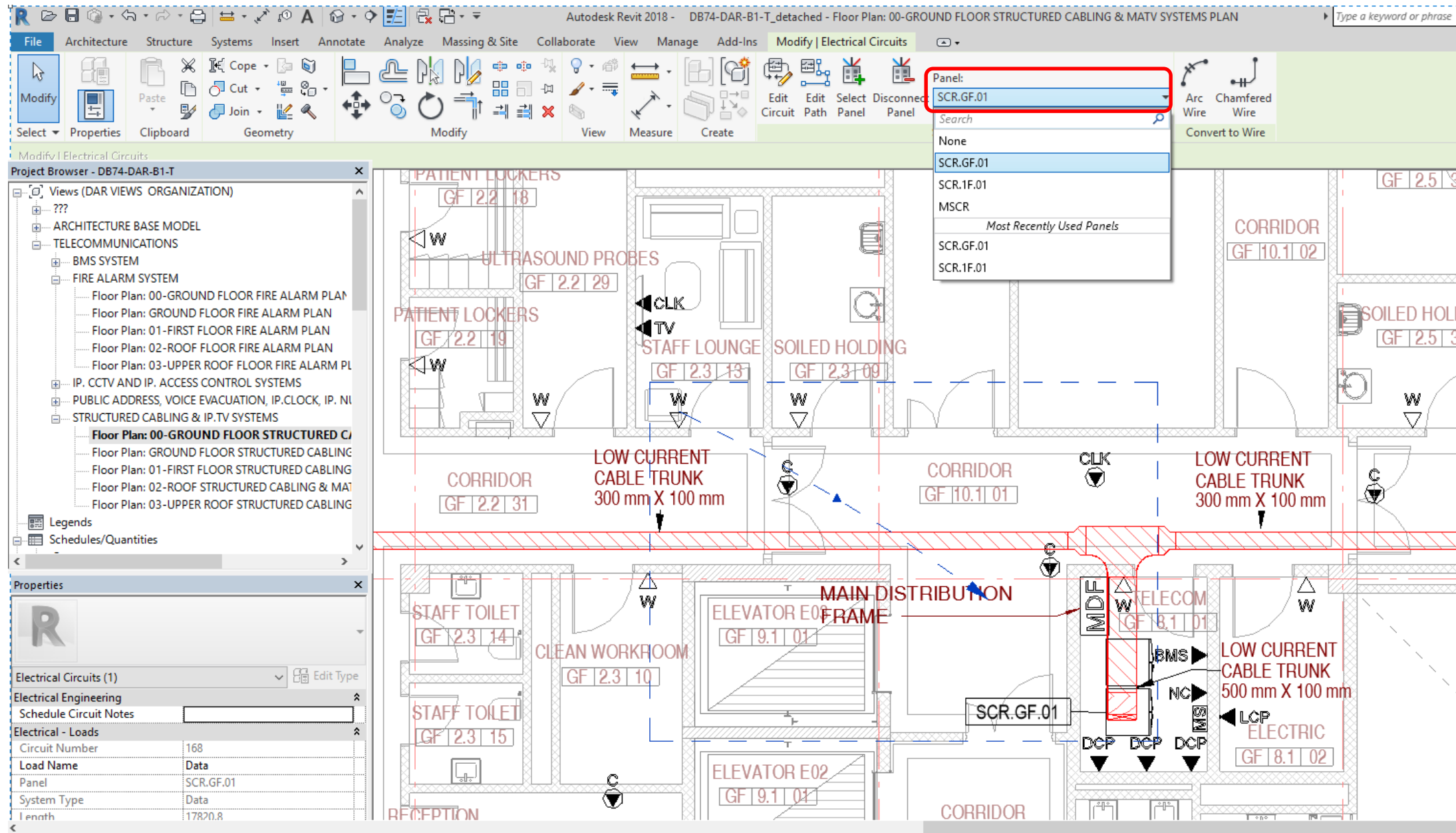
Selecting and Placing the IP outlet



Creating a Data System



Creating the Data System



Structured Cabling Racks Schedule

The image shows the Autodesk Revit 2018 interface with the 'New Schedule' dialog box open. The background is a floor plan titled '00-GROUND FLOOR STRUCTURED CABLING & MATV SYSTEMS PLAN'. The dialog box has the following elements highlighted with red circles and arrows:

- 1:** Project Browser - DB74-DAR-B1-T_detached
- 2:** Schedules/Quantities menu
- 3:** Name field: Structured Cabling Racks Schedule
- 4:** OK button

The 'New Schedule' dialog box includes the following fields and options:

- Filter list: <show all>
- Category: Data Devices
- Name: Structured Cabling Racks Schedule
- Options: Schedule building components, Schedule keys
- Key name: (empty)
- Phase: New Construction
- Buttons: OK, Cancel, Help

The floor plan background shows various rooms and equipment, including 'STAFF LOUNGE', 'CORRIDOR', 'SOILED HOLDING', 'LOW CURRENT CABLE TRUNK', 'ELECTRIC', 'ANTE-ROOM', and 'DISABLED TOILET FEMALE/MALE'. The cable trunks are labeled with dimensions like '300 mm X 100 mm' and '500 mm X 100 mm'.

Structured Cabling Racks Schedule

The image shows a screenshot of Autodesk Revit 2018 with the 'Schedule Properties' dialog box open. The dialog box is titled 'Schedule Properties' and has tabs for 'Fields', 'Filter', 'Sorting/Grouping', 'Formatting', and 'Appearance'. The 'Fields' tab is active, showing 'Available fields' and 'Scheduled fields (in order)'. The 'Scheduled fields (in order)' list includes Panel, Family, Type, Space: Name, and Space: Number. The 'OK' button is highlighted with a red box. A red arrow points from the 'OK' button to the 'Project Browser' window, which shows a tree view of the project structure. The 'Structured Cabling Racks Schedule' table is also visible, showing columns A through E with data for various racks.

<Structured Cabling Racks Schedule>				
A	B	C	D	E
Panel	Family	Type	Space: Name	Space: Number
SCR.1F.01	T-SC WALL MOUN	D/T	OFFICE	4.5.11
SCR.1F.01	T-SC FLOOR MOU	D/T	OUTPATIENT WAIT	4.5.01
SCR.1F.01	T-SC FLOOR MOU	D/T	OUTPATIENT WAIT	4.5.01
SCR.1F.01	T-SC FLOOR MOU	A	OUTPATIENT WAIT	4.5.01
SCR.1F.01	T-SC WALL MOUN	D/T	SPIRITUAL SERVIC	7.3.01
SCR.1F.01	T-SC WALL MOUN	W	STORAGE CABINE	3.1.04
SCR.1F.01	T-SC WALL MOUN	W	STORAGE	4.4.02
SCR.1F.01	T-SC WALL MOUN	D/T	RECEIVING	4.4.01
SCR.1F.01	T-SC WALL MOUN	D/T	RECEIVING	4.4.01
SCR.1F.01	T-SC WALL MOUN	W	SOILED HOLDING	4.4.06
SCR.1F.01	T-SC WALL MOUN	W	STAFF LOCKERS	4.10.01
SCR.1F.01	T-SC WALL MOUN	W	STAFF LOCKERS	4.10.02
SCR.1F.01	T-SC WALL MOUN	W	HOUSEKEEPING M	4.3.01
SCR.1F.01	T-SC WALL MOUN	W	JANITOR'S ROOM	4.3.02
SCR.1F.01	T-SC FLOOR MOU	D/T	SUPERVISOR'S OF	4.3.03
SCR.1F.01	T-SC FLOOR MOU	D/T	SUPERVISOR'S OF	4.3.03
SCR.1F.01	T-SC FLOOR MOU	A	SUPERVISOR'S OF	4.3.03
SCR.1F.01	T-SC WALL MOUN	W	STORAGE AND RE	4.6.01
SCR.1F.01	T-SC WALL MOUN	W	MEP	8.1.09
SCR.1F.01	T-SC WALL MOUN	W	MEP	8.1.09
SCR.1F.01	T-SC WALL MOUN	W	AIR LOCK / LOCKE	4.7.14
SCR.1F.01	T-SC WALL MOUN	W	LOCKERS	4.7.17
SCR.1F.01	T-SC WALL MOUN	W	STORAGE	4.7.08
SCR.1F.01	T-SC WALL MOUN	W	CART DESINFECTI	4.7.10
SCR.1F.01	T-SC WALL MOUN	W		
SCR.1F.01	T-SC WALL MOUN	W	WORKROOM	4.7.13
SCR.1F.01	T-SC WALL MOUN	D/T	SOILED RECEPTIO	4.7.03
SCR.1F.01	T-SC WALL MOUN	A	SOILED RECEPTIO	4.7.03
SCR.GF.01	T-SC CEILING MOU	C	CORRIDOR	2.2.31
SCR.GF.01	T-SC CEILING MOU	C	RECEIVING FACILT	4.2.01
SCR.GF.01	T-SC CEILING MOU	C	CORRIDOR	10.1.01
SCR.GF.01	T-SC CEILING MOU	C	CORRIDOR	7.1.09
SCR.GF.01	T-SC CEILING MOU	C		
SCR.GF.01	T-SC CEILING MOU	C	CORRIDOR	2.2.31
SCR.GF.01	T-SC CEILING MOU	C	CORRIDOR	2.2.31
SCR.GF.01	T-SC CEILING MOU	C		
SCR.GF.01	T-SC CEILING MOU	C		
SCR.GF.01	T-SC CEILING MOU	C	CORRIDOR	2.5.47
SCR.GF.01	T-SC CEILING MOU	C	CORRIDOR	7.1.10
SCR.GF.01	T-SC CEILING MOU	C		
SCR.1F.01	T-SC WALL MOUN	D/T	RECEPTION	6.1.01
SCR.1F.01	T-SC WALL MOUN	D/T	RECEPTION	6.1.01
SCR.1F.01	T-SC WALL MOUN	A	RECEPTION	6.1.01
SCR.1F.01	T-SC FOR INTERFA	TV	MEETING ROOM	5.2.10
SCR.1F.01	T-SC WALL MOUN	D/T	OFFICE	5.2.05

Structured Cabling Racks Schedule

Schedule Properties

Fields Filter Sorting/Grouping Formatting Appearance

Sort by: **Panel** Ascending Descending

Header Footer: Blank line

Then by: (none) Ascending Descending

Header Footer: Blank line

Then by: (none) Ascending Descending

Header Footer: Blank line

Then by: (none) Ascending Descending

Header Footer: Blank line

Grand totals: Blank line

Custom grand total title: Grand total

Itemize every instance

OK Cancel Help

Autodesk Revit 2018 - DB74-DAR-B1-T_detached - Schedule: Structured Cabling Racks Schedule

File Architecture Structure Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins Modify Modify Schedule/Quantities

Properties Parameters Columns Rows Titles & Headers Appearance Element

Project Browser - DB74-DAR-B1-T_detached

Legends Schedules/Quantities

5
BMS SCHEDULE
Communication Device Schedule
Data Device Schedule
Data Device Schedule 2
Data Device Schedule 3
DIVISION 27 (CABLE TRUNKING)
DIVISION 27 (IP CENTRAL CLOCK SYSTEM)
DIVISION 27 (IP NURSE CALL SYSTEM)
DIVISION 27 (IP TELEVISION SYSTEM (IPTV))
DIVISION 27 (PUBLIC ADDRESS SYSTEM)
DIVISION 27 (RACKS)
DIVISION 27 (STRUCTURED CABLING SYSTEM OUTLET)
DIVISION 28 (FIRE ALARM SYSTEM)
DIVISION 28 (IP ACCESS CONTROL SYSTEM)
DIVISION 28 (IP CCTV SYSTEM)
Electrical Circuit Schedule
Fire Alarm Device Schedule

Properties

Schedule: Structured Cabling Racks Schedule

Identity Data

View Template: <None>
View Name: Structured Cabling Racks Sch...
Dependency: Independent
Workset: View "Schedule: Structured C...
Edited by:

Phasing

Phase Filter: Show All
Phase: New Construction

Other

Fields: Edit...
Filter: Edit...
Sorting/Grouping: Edit...
Formatting: Edit...
Appearance: Edit...

Apply

<Structured Cabling Racks Schedule>

Panel	Family	Type	Space Name	Space Number
	T-SC WALL MOUN	D/T	SERVICE MANAGE	5.1.02
	T-SC WALL MOUN	D/T	SERVICE MANAGE	5.1.02
	T-SC WALL MOUN	A	SERVICE MANAGE	5.1.02
SCR.1F.01	T-SC WALL MOUN	D/T	OFFICE	4.5.11
SCR.1F.01	T-SC FLOOR MOU	D/T	OUTPATIENT WAIT	4.5.01
SCR.1F.01	T-SC FLOOR MOU	D/T	OUTPATIENT WAIT	4.5.01
SCR.1F.01	T-SC FLOOR MOU	A	OUTPATIENT WAIT	4.5.01
SCR.1F.01	T-SC WALL MOUN	D/T	SPIRITUAL SERVIC	7.3.01
SCR.1F.01	T-SC WALL MOUN	W	STORAGE CABINE	3.1.04
SCR.1F.01	T-SC WALL MOUN	W	STORAGE	4.4.02
SCR.1F.01	T-SC WALL MOUN	D/T	RECEIVING	4.4.01
SCR.1F.01	T-SC WALL MOUN	D/T	RECEIVING	4.4.01
SCR.1F.01	T-SC WALL MOUN	W	SOILED HOLDING	4.4.06
SCR.1F.01	T-SC WALL MOUN	W	STAFF LOCKERS	4.10.01
SCR.1F.01	T-SC WALL MOUN	W	STAFF LOCKERS	4.10.02
SCR.1F.01	T-SC WALL MOUN	W	HOUSEKEEPING M	4.3.01
SCR.1F.01	T-SC WALL MOUN	W	JANITOR'S ROOM	4.3.02
SCR.1F.01	T-SC FLOOR MOU	D/T	SUPERVISOR'S OF	4.3.03
SCR.1F.01	T-SC FLOOR MOU	D/T	SUPERVISOR'S OF	4.3.03
SCR.1F.01	T-SC FLOOR MOU	A	SUPERVISOR'S OF	4.3.03
SCR.1F.01	T-SC WALL MOUN	W	STORAGE AND RE	4.6.01
SCR.1F.01	T-SC WALL MOUN	W	MEP	8.1.09
SCR.1F.01	T-SC WALL MOUN	W	MEP	8.1.09
SCR.1F.01	T-SC WALL MOUN	W	AIR LOCK / LOCKE	4.7.14
SCR.1F.01	T-SC WALL MOUN	W	LOCKERS	4.7.17
SCR.1F.01	T-SC WALL MOUN	W	STORAGE	4.7.08
SCR.1F.01	T-SC WALL MOUN	W	CART DESINFECTI	4.7.10
SCR.1F.01	T-SC WALL MOUN	W	WORKROOM	4.7.13
SCR.1F.01	T-SC WALL MOUN	D/T	SOILED RECEPTO	4.7.03
SCR.1F.01	T-SC WALL MOUN	A	SOILED RECEPTO	4.7.03
SCR.1F.01	T-SC WALL MOUN	D/T	RECEPTION	6.1.01
SCR.1F.01	T-SC WALL MOUN	D/T	RECEPTION	6.1.01
SCR.1F.01	T-SC WALL MOUN	A	RECEPTION	6.1.01
SCR.1F.01	T-SC FOR INTERFA	T/V	MEETING ROOM	5.2.10
SCR.1F.01	T-SC WALL MOUN	D/T	OFFICE	5.2.05
SCR.1F.01	T-SC WALL MOUN	D/T	MEDICAL DIRECTO	5.2.02
SCR.1F.01	T-SC WALL MOUN	D/T	CHIEF NURSING	5.2.03
SCR.1F.01	T-SC WALL MOUN	D/T	CHIEF MAINTENAN	5.2.04
SCR.1F.01	T-SC WALL MOUN	W	INDIVIDUAL TREAT	2.6.01
SCR.1F.01	T-SC WALL MOUN	W	INDIVIDUAL TREAT	2.6.02
SCR.1F.01	T-SC WALL MOUN	D/T	CONSULTATION E	2.4.10
SCR.1F.01	T-SC WALL MOUN	D/T	CONSULTATION E	2.4.09
SCR.1F.01	T-SC WALL MOUN	W	EQUIPMENT AND S	2.4.19
SCR.1F.01	T-SC WALL MOUN	D/T	CONSULTATION E	2.4.07
SCR.1F.01	T-SC WALL MOUN	D/T	PRE TEST	2.4.16
SCR.1F.01	T-SC WALL MOUN	W	PATIENT CHANGIN	2.6.05

Structured Cabling Racks Schedule

Autodesk Revit 2018 - DB74-DAR-B1-T_detached - Schedule: Structured Cabling Racks Schedule

Project Browser - DB74-DAR-B1-T_detached

Panel	Family	Type	Space Name	Space Number
	T-SC WALL MOUN D/T		SERVICE MANAGE	5.1.02
	T-SC WALL MOUN D/T		SERVICE MANAGE	5.1.02
	T-SC WALL MOUN A		SERVICE MANAGE	5.1.02
SCR.1F.01	T-SC WALL MOUN D/T		OFFICE	4.5.11
SCR.1F.01	T-SC FLOOR MOU D/T		OUTPATIENT WAITI	4.5.01
SCR.1F.01	T-SC FLOOR MOU D/T		OUTPATIENT WAITI	4.5.01
SCR.1F.01	T-SC FLOOR MOU A		OUTPATIENT WAITI	4.5.01
SCR.1F.01	T-SC WALL MOUN D/T		SPIRITUAL SERVIC	7.3.01
SCR.1F.01	T-SC WALL MOUN W		STORAGE CABINE	3.1.04
SCR.1F.01	T-SC WALL MOUN W		STORAGE	4.4.02
SCR.1F.01	T-SC WALL MOUN D/T		RECEIVING	4.4.01
SCR.1F.01	T-SC WALL MOUN D/T		RECEIVING	4.4.01
SCR.1F.01	T-SC WALL MOUN W		SOILED HOLDING	4.4.06
SCR.1F.01	T-SC WALL MOUN W		STAFF LOCKERS	4.10.01
SCR.1F.01	T-SC WALL MOUN W		STAFF LOCKERS	4.10.02
SCR.1F.01	T-SC WALL MOUN W		HOUSEKEEPING M	4.3.01
SCR.1F.01	T-SC WALL MOUN W		JANITOR'S ROOM	4.3.02
SCR.1F.01	T-SC FLOOR MOU D/T		SUPERVISOR'S OF	4.3.03
SCR.1F.01	T-SC FLOOR MOU D/T		SUPERVISOR'S OF	4.3.03
SCR.1F.01	T-SC FLOOR MOU A		SUPERVISOR'S OF	4.3.03
SCR.1F.01	T-SC WALL MOUN W		STORAGE AND RE	4.6.01
SCR.1F.01	T-SC WALL MOUN W		MEP	8.1.09
SCR.1F.01	T-SC WALL MOUN W		MEP	8.1.09
SCR.1F.01	T-SC WALL MOUN W		AIR LOCK / LOCKE	4.7.14
SCR.1F.01	T-SC WALL MOUN W		LOCKERS	4.7.17
SCR.1F.01	T-SC WALL MOUN W		STORAGE	4.7.08
SCR.1F.01	T-SC WALL MOUN W		CART DESINFECTI	4.7.10
SCR.1F.01	T-SC WALL MOUN W		WORKROOM	4.7.13
SCR.1F.01	T-SC WALL MOUN D/T		SOILED RECEPTO	4.7.03
SCR.1F.01	T-SC WALL MOUN A		SOILED RECEPTO	4.7.03
SCR.1F.01	T-SC WALL MOUN D/T		RECEPTION	6.1.01
SCR.1F.01	T-SC WALL MOUN D/T		RECEPTION	6.1.01
SCR.1F.01	T-SC WALL MOUN A		RECEPTION	6.1.01
SCR.1F.01	T-SC WALL MOUN A		RECEPTION	6.1.01
SCR.1F.01	T-SC FOR INTERFA TV		MEETING ROOM	5.2.10
SCR.1F.01	T-SC WALL MOUN D/T		OFFICE	5.2.05
SCR.1F.01	T-SC WALL MOUN D/T		MEDICAL DIRECTO	5.2.02

Properties: Schedule

Identity Data

View Template: <None>

View Name: Structured Cabling Racks Sch...

Dependency: Independent

Workset: View "Schedule: Structured C..."

Edited by:

Phasing: Show All

Autodesk Revit 2018 - DB74-DAR-B1-T_detached - Floor Plan: 01-FIRST FLOOR STRUCTURED CABLING & MATV SYSTEMS PLAN

Project Browser - DB74-DAR-B1-T_detached

Legends

Schedules/Quantities

- BMS SCHEDULE
- Communication Device Schedule
- Data Device Schedule
- Data Device Schedule 2
- Data Device Schedule 3
- DIVISION 27 (CABLE TRUNKING)
- DIVISION 27 (IP CENTRAL CLOCK SYSTEM)
- DIVISION 27 (IP NURSE CALL SYSTEM)
- DIVISION 27 (IP TELEVISION SYSTEM (IPTV))
- DIVISION 27 (PUBLIC ADDRESS SYSTEM)
- DIVISION 27 (RACKS)
- DIVISION 27 (STRUCTURED CABLING SYSTEM OUTLET)
- DIVISION 28 (FIRE ALARM SYSTEM)
- DIVISION 28 (IP ACCESS CONTROL SYSTEM)
- DIVISION 28 (IP CCTV SYSTEM)
- Electrical Circuit Schedule
- Fire Alarm Device Schedule

Properties: T-SC WALL MOUNTED D/T

Data Devices (1)

Constraints (1)

Host: Linked Revit Model: DB74-DA...

Elevation: 300.0

Offset: 0.0

Text

NUMBER

Electrical - Loads

Panel

Circuit Number

Dimensions

Rotate: 180.00°

Identity Data

Image

Comments

Mark: 229

Properties help

Structured Cabling Racks Schedule

Autodesk Revit 2018 - DB74-DAR-
 File Architecture Structure Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins Modify
 Properties Family Format Calculated Combine Insert Delete Resize Hide Unhide All Insert Insert Delete Resize Merge Insert Clear Group Ungroup
 Properties Parameters Columns Rows Titles & Headers
 Modify Schedule/Quantities New Delete
 Project Browser - DB74-DAR-B1-T
 Floor Plan: 03-UPPER ROOF STRUCTURED CABLING
 Schedules/Quantities
 5
 BMS SCHEDULE
 Communication Device Schedule
 Data Device Schedule
 Data Device Schedule 2
 Data Device Schedule 3
 Data Device Schedule 4
 DIVISION 27 (CABLE TRUNKING)
 DIVISION 27 (IP CENTRAL CLOCK SYSTEM)
 DIVISION 27 (IP NURSE CALL SYSTEM)
 DIVISION 27 (IP TELEVISION SYSTEM (IPTV))
 DIVISION 27 (PUBLIC ADDRESS SYSTEM)
 DIVISION 27 (RACKS)
 DIVISION 27 (STRUCTURED CABLING SYSTEM OUTLET)
 DIVISION 28 (FIRE ALARM SYSTEM)
 DIVISION 28 (IP ACCESS CONTROL SYSTEM)
 DIVISION 28 (IP CCTV SYSTEM)
 Electrical Circuit Schedule
 Properties
 Schedule
 Schedule: Structured Cabling Racks Schedule Edit Type
 Identity Data
 View Template <None>
 View Name Structured Cabling Racks Sch...
 Dependency Independent
 Workset View "Schedule: Structured C...
 Edited by
 Phasing
 Phase Filter Show All
 Phase New Construction
 Other
 Fields Edit...
 Filter Edit...
 Sorting/Grouping Edit...
 Formatting Edit...
 Appearance Edit...
 Properties help Apply

A	B	C	D	E
Panel	Family	Type	Space: Name	Space: Number
SCR.1F.01	T-SC WALL MOUN	D/T	OFFICE	4.5.11
SCR.1F.01	T-SC FLOOR MOU	D/T	OUTPATIENT WAIT	4.5.01
SCR.1F.01	T-SC FLOOR MOU	D/T	OUTPATIENT WAIT	4.5.01
SCR.1F.01	T-SC FLOOR MOU	A	OUTPATIENT WAIT	4.5.01
SCR.1F.01	T-SC WALL MOUN	D/T	SPIRITUAL SERVIC	7.3.01
SCR.1F.01	T-SC WALL MOUN	W	STORAGE CABINE	3.1.04
SCR.1F.01	T-SC WALL MOUN	W	STORAGE	4.4.02
SCR.1F.01	T-SC WALL MOUN	D/T	RECEIVING	4.4.01
SCR.1F.01	T-SC WALL MOUN	D/T	RECEIVING	4.4.01
SCR.1F.01	T-SC WALL MOUN	W	SOILED HOLDING	4.4.06
SCR.1F.01	T-SC WALL MOUN	W	STAFF LOCKERS	4.10.01
SCR.1F.01	T-SC WALL MOUN	W	STAFF LOCKERS	4.10.02
SCR.1F.01	T-SC WALL MOUN	W	HOUSEKEEPING M	4.3.01
SCR.1F.01	T-SC WALL MOUN	W	JANITOR'S ROOM	4.3.02
SCR.1F.01	T-SC WALL MOUN	D/T	SUPERVISOR'S OF	4.3.03
SCR.1F.01	T-SC FLOOR MOU	D/T	SUPERVISOR'S OF	4.3.03
SCR.1F.01	T-SC FLOOR MOU	A	SUPERVISOR'S OF	4.3.03
SCR.1F.01	T-SC WALL MOU	W	STORAGE AND RE	4.6.01
SCR.1F.01	T-SC WALL MOUN	W	MEP	8.1.09
SCR.1F.01	T-SC WALL MOUN	W	MEP	8.1.09
SCR.1F.01	T-SC WALL MOUN	W	AIR LOCK / LOCKE	4.7.14
SCR.1F.01	T-SC WALL MOUN	W	LOCKERS	4.7.17
SCR.1F.01	T-SC WALL MOUN	W	STORAGE	4.7.08
SCR.1F.01	T-SC WALL MOUN	W	CART DESINFECTI	4.7.10
SCR.1F.01	T-SC WALL MOUN	W		
SCR.1F.01	T-SC WALL MOUN	W	WORKROOM	4.7.13
SCR.1F.01	T-SC WALL MOUN	D/T	SOILED RECEPTI	4.7.03
SCR.1F.01	T-SC WALL MOUN	A	SOILED RECEPTI	4.7.03
SCR.1F.01	T-SC WALL MOUN	D/T	RECEPTION	6.1.01
SCR.1F.01	T-SC WALL MOUN	D/T	RECEPTION	6.1.01
SCR.1F.01	T-SC WALL MOUN	A	RECEPTION	6.1.01
SCR.1F.01	T-SC FOR INTERFA	TV	MEETING ROOM	5.2.10
SCR.1F.01	T-SC WALL MOUN	D/T	OFFICE	5.2.05
SCR.1F.01	T-SC WALL MOUN	D/T	MEDICAL DIRECTO	5.2.02
SCR.1F.01	T-SC WALL MOUN	D/T	CHIEF NURSING	5.2.03
SCR.1F.01	T-SC WALL MOUN	D/T	CHIEF MAINTENAN	5.2.04
SCR.1F.01	T-SC WALL MOUN	W	INDIVIDUAL TREAT	2.6.01
SCR.1F.01	T-SC WALL MOUN	W	INDIVIDUAL TREAT	2.6.02
SCR.1F.01	T-SC WALL MOUN	D/T	CONSULTATION E	2.4.10
SCR.1F.01	T-SC WALL MOUN	D/T	CONSULTATION E	2.4.09
SCR.1F.01	T-SC WALL MOUN	W	EQUIPMENT AND S	2.4.19
SCR.1F.01	T-SC WALL MOUN	D/T	CONSULTATION E	2.4.07
SCR.1F.01	T-SC WALL MOUN	D/T	PRE TEST	2.4.16
SCR.1F.01	T-SC WALL MOUN	W	PATIENT CHANGIN	2.6.05
SCR.1F.01	T-SC WALL MOUN	W	PATIENT CHANGIN	2.6.06
SCR.1F.01	T-SC WALL MOUN	W	MEDICATION PREP	2.4.12
SCR.1F.01	T-SC WALL MOUN	D/T	CONSULTATION E	2.4.06

Schedule Properties
 Fields Filter Sorting/Grouping Formatting Appearance
 Select available fields from:
 Data Devices
 Available fields:
 Assembly Code
 Assembly Description
 Assembly Name
 Circuit Number
 Comments
 Cost
 Count
 Description
 Electrical Data
 Family and Type
 IfcGUID
 Image
 Keynote
 Level
 Manufacturer
 Scheduled fields (in order):
 Panel
 Family
 Type
 Space: Name
 Space: Number
 Count
 Include elements in links
 OK Cancel Help

Autodesk Revit 2018 - DB74-DAR-B1-T_detached
 File Architecture Structure Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins Modify
 Properties Family Format Calculated Combine Insert Delete Resize Hide Unhide All Insert Insert Delete Resize Merge Insert Clear Group Ungroup
 Properties Parameters Columns Rows Titles & Headers
 Modify Schedule/Quantities New Delete
 Project Browser - DB74-DAR-B1-T
 Floor Plan: 03-UPPER ROOF STRUCTURED CABLING
 Schedules/Quantities
 5
 BMS SCHEDULE
 Communication Device Schedule
 Data Device Schedule
 Data Device Schedule 2
 Data Device Schedule 3
 Data Device Schedule 4
 DIVISION 27 (CABLE TRUNKING)
 DIVISION 27 (IP CENTRAL CLOCK SYSTEM)
 DIVISION 27 (IP NURSE CALL SYSTEM)
 DIVISION 27 (IP TELEVISION SYSTEM (IPTV))
 DIVISION 27 (PUBLIC ADDRESS SYSTEM)
 DIVISION 27 (RACKS)
 DIVISION 27 (STRUCTURED CABLING SYSTEM OUTLET)
 DIVISION 28 (FIRE ALARM SYSTEM)
 DIVISION 28 (IP ACCESS CONTROL SYSTEM)
 DIVISION 28 (IP CCTV SYSTEM)
 Electrical Circuit Schedule
 Properties
 Schedule
 Schedule: Structured Cabling Racks Schedule Edit Type
 Identity Data
 View Template <None>
 View Name Structured Cabling Racks Sch...
 Dependency Independent
 Workset View "Schedule: Structured C...
 Edited by
 Phasing
 Phase Filter Show All
 Phase New Construction
 Other
 Fields Edit...
 Filter Edit...
 Sorting/Grouping Edit...
 Formatting Edit...
 Appearance Edit...
 Properties help Apply

A	B	C	D	E	F
Panel	Family	Type	Space: Name	Space: Number	Count
SCR.1F.01	T-SC WALL MOUN	D/T	OFFICE	4.5.11	1
SCR.1F.01	T-SC FLOOR MOU	D/T	OUTPATIENT WAIT	4.5.01	1
SCR.1F.01	T-SC FLOOR MOU	D/T	OUTPATIENT WAIT	4.5.01	1
SCR.1F.01	T-SC FLOOR MOU	A	OUTPATIENT WAIT	4.5.01	1
SCR.1F.01	T-SC WALL MOUN	D/T	SPIRITUAL SERVIC	7.3.01	1
SCR.1F.01	T-SC WALL MOUN	W	STORAGE CABINE	3.1.04	1
SCR.1F.01	T-SC WALL MOUN	W	STORAGE	4.4.02	1
SCR.1F.01	T-SC WALL MOUN	D/T	RECEIVING	4.4.01	1
SCR.1F.01	T-SC WALL MOUN	D/T	RECEIVING	4.4.01	1
SCR.1F.01	T-SC WALL MOUN	W	SOILED HOLDING	4.4.06	1
SCR.1F.01	T-SC WALL MOUN	W	STAFF LOCKERS	4.10.01	1
SCR.1F.01	T-SC WALL MOUN	W	STAFF LOCKERS	4.10.02	1
SCR.1F.01	T-SC WALL MOUN	W	HOUSEKEEPING M	4.3.01	1
SCR.1F.01	T-SC WALL MOUN	W	JANITOR'S ROOM	4.3.02	1
SCR.1F.01	T-SC WALL MOUN	D/T	SUPERVISOR'S OF	4.3.03	1
SCR.1F.01	T-SC FLOOR MOU	D/T	SUPERVISOR'S OF	4.3.03	1
SCR.1F.01	T-SC FLOOR MOU	A	SUPERVISOR'S OF	4.3.03	1
SCR.1F.01	T-SC WALL MOU	W	STORAGE AND RE	4.6.01	1
SCR.1F.01	T-SC WALL MOUN	W	MEP	8.1.09	1
SCR.1F.01	T-SC WALL MOUN	W	MEP	8.1.09	1
SCR.1F.01	T-SC WALL MOUN	W	AIR LOCK / LOCKE	4.7.14	1
SCR.1F.01	T-SC WALL MOUN	W	LOCKERS	4.7.17	1
SCR.1F.01	T-SC WALL MOUN	W	STORAGE	4.7.08	1
SCR.1F.01	T-SC WALL MOUN	W	CART DESINFECTI	4.7.10	1
SCR.1F.01	T-SC WALL MOUN	W			1
SCR.1F.01	T-SC WALL MOUN	W	WORKROOM	4.7.13	1
SCR.1F.01	T-SC WALL MOUN	D/T	SOILED RECEPTI	4.7.03	1
SCR.1F.01	T-SC WALL MOUN	A	SOILED RECEPTI	4.7.03	1
SCR.1F.01	T-SC WALL MOUN	D/T	RECEPTION	6.1.01	1
SCR.1F.01	T-SC WALL MOUN	D/T	RECEPTION	6.1.01	1
SCR.1F.01	T-SC WALL MOUN	A	RECEPTION	6.1.01	1
SCR.1F.01	T-SC FOR INTERFA	TV	MEETING ROOM	5.2.10	1
SCR.1F.01	T-SC WALL MOUN	D/T	OFFICE	5.2.05	1
SCR.1F.01	T-SC WALL MOUN	D/T	MEDICAL DIRECTO	5.2.02	1
SCR.1F.01	T-SC WALL MOUN	D/T	CHIEF NURSING	5.2.03	1
SCR.1F.01	T-SC WALL MOUN	D/T	CHIEF MAINTENAN	5.2.04	1
SCR.1F.01	T-SC WALL MOUN	W	INDIVIDUAL TREAT	2.6.01	1
SCR.1F.01	T-SC WALL MOUN	W	INDIVIDUAL TREAT	2.6.02	1
SCR.1F.01	T-SC WALL MOUN	D/T	CONSULTATION E	2.4.10	1
SCR.1F.01	T-SC WALL MOUN	D/T	CONSULTATION E	2.4.09	1
SCR.1F.01	T-SC WALL MOUN	W	EQUIPMENT AND S	2.4.19	1
SCR.1F.01	T-SC WALL MOUN	D/T	CONSULTATION E	2.4.07	1
SCR.1F.01	T-SC WALL MOUN	D/T	PRE TEST	2.4.16	1
SCR.1F.01	T-SC WALL MOUN	W	PATIENT CHANGIN	2.6.05	1
SCR.1F.01	T-SC WALL MOUN	W	PATIENT CHANGIN	2.6.06	1
SCR.1F.01	T-SC WALL MOUN	W	MEDICATION PREP	2.4.12	1
SCR.1F.01	T-SC WALL MOUN	D/T	CONSULTATION E	2.4.06	1

Structured Cabling Racks Schedule

Schedule Properties

Fields Filter Sorting/Grouping Formatting Appearance

Sort by: Panel Ascending Descending

Header Footer: Blank line

Then by: Type Ascending Descending

Header Footer: Blank line

Then by: (none) Ascending Descending

Header Footer: Blank line

Then by: (none) Ascending Descending

Header Footer: Blank line

Grand totals: Title, count, and totals

Custom grand total title: Grand total

Itemize every instance

OK Cancel Help



Autodesk Revit 2018 - DB74-DAR-B1-T_detached - Sched

File Architecture Structure Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins Modify Modify Schedule/Quant

Properties Parameters Columns Rows Titles & Headers

Modify Schedule/Quantities New Delete

Project Browser - DB74-DAR-B1-T

Floor Plan: 03-UPPER ROOF STRUCTURED CABLING

Legends

Schedules/Quantities

5

BMS SCHEDULE

Communication Device Schedule

Data Device Schedule

Data Device Schedule 2

Data Device Schedule 3

Data Device Schedule 4

DIVISION 27 (CABLE TRUNKING)

DIVISION 27 (IP CENTRAL CLOCK SYSTEM)

DIVISION 27 (IP NURSE CALL SYSTEM)

DIVISION 27 (IP TELEVISION SYSTEM (IPTV))

DIVISION 27 (PUBLIC ADDRESS SYSTEM)

DIVISION 27 (RACKS)

DIVISION 27 (STRUCTURED CABLING SYSTEM OUTLET)

DIVISION 28 (FIRE ALARM SYSTEM)

DIVISION 28 (IP ACCESS CONTROL SYSTEM)

DIVISION 28 (IP CCTV SYSTEM)

Electrical Circuit Schedule

Properties

Schedule

Schedule: Structured Cabling Racks Schedule Edit Type

Identity Data

View Template <None>

View Name Structured Cabling Racks Sch...

Dependency Independent

Workset View "Schedule: Structured C...

Edited by

Phasing

Phase Filter Show All

Phase New Construction

Other

Fields Edit...

Filter Edit...

Sorting/Grouping Edit...

Formatting Edit...

Appearance Edit...

Properties help Apply

<Structured Cabling Racks Schedule>

Panel	Family	Type	Space: Name	Space: Number	Count
SCR.1F.01	T-SC FLOOR MOU A				13
SCR.1F.01	T-SC WALL MOUN A				7
SCR.1F.01	T-SC FOR INTERFA BMS		TELECOM	8.1.07	1
SCR.1F.01	T-SC CEILING MOU C				23
SCR.1F.01	T-SC CEILING MOU CLK		CORRIDOR		12
SCR.1F.01	T-SC FOR INTERFA CLK				12
SCR.1F.01	T-SC FLOOR MOU D				7
SCR.1F.01	T-SC WALL MOUN D				15
SCR.1F.01	T-SC FLOOR MOU D/T				25
SCR.1F.01	T-SC WALL MOUN D/T				47
SCR.1F.01	T-SC FOR INTERFA DCP		TELECOM	8.1.07	1
SCR.1F.01	T-SC FOR INTERFA LCP		ELECTRIC	8.1.06	1
SCR.1F.01	T-SC FLOOR MOU INC		NURSE STATION	2.4.11	1
SCR.1F.01	T-SC FOR INTERFA NC				2
SCR.1F.01	T-SC CEILING MOU PR		CONFERENCE ROOM	6.1.03	1
SCR.1F.01	T-SC CEILING MOU TV		SELF-SERVICE	4.4.04	2
SCR.1F.01	T-SC FOR INTERFA TV				13
SCR.1F.01	T-SC WALL MOUN W				44
SCR.1F.01	T-SC CEILING MOU WAP				13
SCR.GF.01	T-SC FLOOR MOU A				5
SCR.GF.01	T-SC WALL MOUN A				7
SCR.GF.01	T-SC FOR INTERFA BMS		TELECOM	8.1.01	1
SCR.GF.01	T-SC CEILING MOU C				21
SCR.GF.01	T-SC FOR INTERFA C				16
SCR.GF.01	T-SC CEILING MOU CLK				11
SCR.GF.01	T-SC FOR INTERFA CLK				25
SCR.GF.01	T-SC FLOOR MOU D				20
SCR.GF.01	T-SC WALL MOUN D				48
SCR.GF.01	T-SC FLOOR MOU D/T				13
SCR.GF.01	T-SC WALL MOUN D/T				43
SCR.GF.01	T-SC FOR INTERFA DCP		TELECOM	8.1.01	3
SCR.GF.01	T-SC FOR INTERFA FA		MAIN SECURITY &	7.2.01	1
SCR.GF.01	T-SC FOR INTERFA LCP		ELECTRIC	8.1.02	1
SCR.GF.01	T-SC FLOOR MOU INC				4
SCR.GF.01	T-SC FOR INTERFA NC		TELECOM	8.1.01	1
SCR.GF.01	T-SC FOR INTERFA PA		MAIN SECURITY &	7.2.01	1
SCR.GF.01	T-SC WALL MOUN T				15
SCR.GF.01	T-SC FOR INTERFA TV				12
SCR.GF.01	T-SC WALL MOUN W				50
SCR.GF.01	T-SC CEILING MOU WAP				11
Grand total: 539					

Always Remember

- The power of BIM is the Connector.
- Work on Revit as BIM intelligent tool not as AutoCAD tool.

Thank You!

For follow up questions or more information about BIM or in ICT field, Please feel free to contact me.

Mohamed Mohie El Din, RCDD

Lead Telecommunication Design Engineer

e: mohamed.mohieeldin@dar-engineering.com