




























Object Styles Used

	Data Devices	For all data, communication and AV outlets including data cabinets		Generic Annotations	Allows for amendments of the lineweights and colours of all the linework within the symbols and leaders.
	Clearance Zones	Clearance zones for the cabinets		Data Symbols	
	Electrical Equipment	For all electrical boards		Electrical Symbols	
	Clearance Zones	Clearance zones for the cabinets		Symbol Leaders	
	Electrical Fixtures	For all powerpoints and powerpoint switches		Detail Items	Allows for amendments of the lineweights and colours of all the linework within the real-size electrical and data boards symbols.
	Lighting Devices	For all light switches		Data Boards	
				Electrical Boards	



Symbolic Plan Representation

The symbolic representations can be edited to suit other standards.

North America


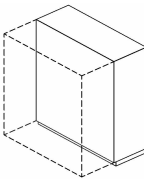
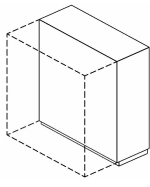
Switch	Switch (Dimmer)	Powerpoint (Single)	Powerpoint (Duplex)	Powerpoint (Appliance)	Powerpoint (3 Phase unswitched)	Powerpoint (3 Phase switched)	Comms Outlet	AV Outlet
								
								
Meter Board	Distribution Board	Main Switch Board	Data Cabinets	Demarcation Frame				

Detail Levels - All Outlets and Switches

		
Coarse	Medium	Fine

The socket and switch details are created with model lines. They will show on 3ds and elevations when the views visual style is set to wireframe, hidden, shaded, consistent colours or realistic and the detail level is set to "Fine"


Detail Levels - Boards

		
Coarse:	Medium:	Fine:


Model and clearance zones show in Medium and Fine modes
Symbol shows in Medium and Coarse modes
Outline shows in 3d Coarse mode

Common Instance Parameters

Refer to the Light Switches section for comprehensive additional parameter explanations



ELEC - Power Outlet
Duplex Vertical Decora GFCI

Electrical Fixtures (1) 

Constraints

Host: Basic Wal...

Elevation: 35.000

Offset: 0.000

Graphics

Plan Symbol Leader: ☐

Plan Symbol Offset Factor: 0.125

Plan Symbol Offset Left: ☐

Plan Symbol Offset Right: ☐

Text

Reported Elevation: 12.000

Show Reported Elevation: ☐

Electrical

Electrical - Loads

Identity Data

Phasing

Electrical - Circuiting

Other

Allow Cut Plane Extensions: ☐





Cut Plane Extension DOWN: 8.000



Cut Plane Extension UP: 60.000


Schedule Level: POWERO...

Properties help

Apply







RCP Cut Plane


Floor Cut Plane


Plan Symbol Offsets and Leaders allow you to correctly document switches and outlets that are aligned vertically.


The Revit standard "Elevation" parameter cannot currently be used in labels, tags or schedules. To overcome this limitation use the "Reported Elevation" parameter. The RevitWorks Elevation Reporter add-in (for Premium users only) ensures that the "Elevation" and the "Reported Elevation" parameters are always synchronised. If this add-in is not loaded you will need to manually update it.

Cut Plane Extensions allow you to show low level components on your Reflected Ceiling Plans and high level components on your Floor Plans.

Outlet Type Parameters

Family: ELEC - Power Outlet 

Type: Duplex Vertical Decora USB 



Type Parameters

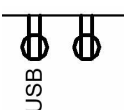
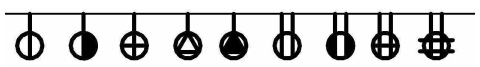
Parameter	Value
Constraints	
Construction	
Graphics	
Show Blank Symbol	<input type="checkbox"/>
Show Horizontal Line Single	<input type="checkbox"/>
Show Horizontal Line Double	<input type="checkbox"/>
Show Leg Double	<input checked="" type="checkbox"/>
Show Leg Single	<input type="checkbox"/>
Show Triangle	<input type="checkbox"/>
Symbol Fill	<input type="checkbox"/>
Text	
Fixture Label	USB
Show Label	<input checked="" type="checkbox"/>
Materials and Finishes	
Electrical	
Electrical - Loads	
Identity Data	

<< Preview

OK

Cancel

Apply




All outlets come with symbol fill options allowing for more graphical differentiation where required.

"Show Fixture Label" shows the "Fixture Label" text parameter as an annotation label within the family. These labels are in a set position relative to the symbol and rotate with the family while staying readable. Alternatively, you could turn this off and tag your family which gives greater flexibility in the positioning and orientation of the label.

Switching Instance Parameters

All switches have additional switching instance parameters to suit different documentation methodologies.
Refer Page 2 for common instance parameter explanations

Properties

ELEC - Light Switch 2Gang Standard

Lighting Devices (1)

Constraints

Graphics

Text

Electrical - Lighting

Electrical - Loads

Show Individual Switches

Plan Symbol Offset Right

Plan Symbol Offset Left

Plan Symbol Offset Factor

Plan Symbol Leader

Fixture and Elevation Label Offset

Turn Off Fixture Label

Show Reported Elevation

Reported Elevation

Show Individual Switch Labels

1_Switch Label

2_Switch Label

Apparent Load

2_Load Classification

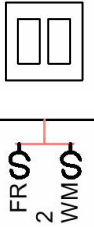
1_Load Classification

Panel

Circuit Number

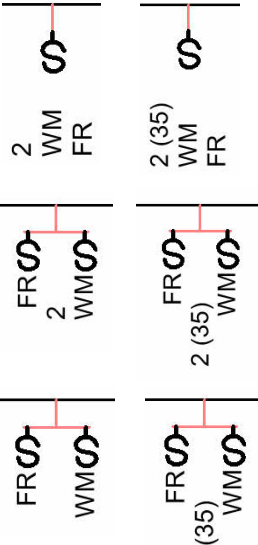
Apply

This example is based on a 2 gang switch. The parameter concept carries through for all the other switches (i.e. 4 gang switches have "3_Switch Label" and "4_Switch Label" parameters etc)



Individual switches can be shown, allowing them to be labeled separately....

Common switching /fixture labeling variants:



Switching Type Parameters:

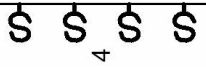
Graphics

Extend Leg Through Symbol

Switch Symbol Spacing

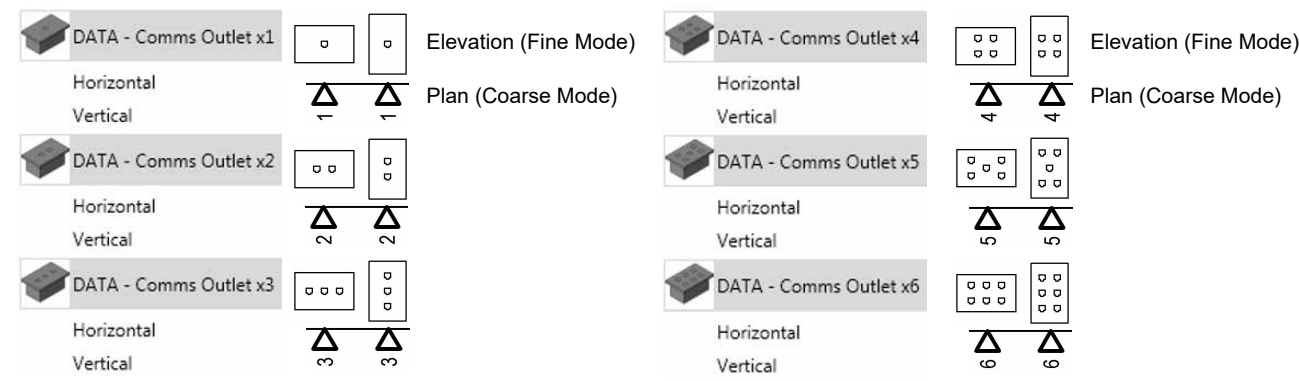
0.125

Distance between the individual switch symbols (project wide setting for this family) - setup correctly for your standard view scale



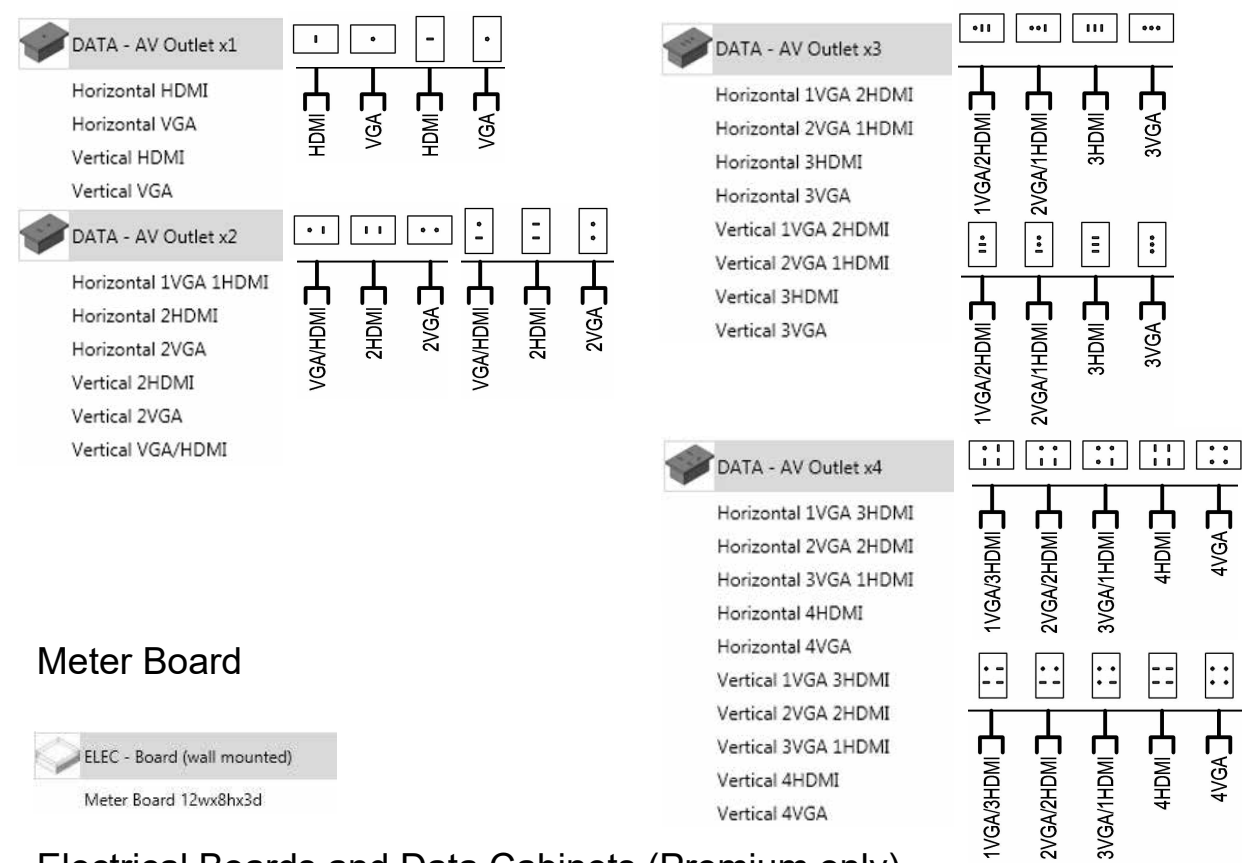
Allows for further graphical differentiation if required

Data Outlets



AV Outlets

Outlet ports shown symbolically (round or rectangular).
Duplicate and create new types as required.
(i.e. USB ports could be shown with the symbolic rectangular port etc.)



Meter Board



Electrical Boards and Data Cabinets (Premium only)

Refer page 1 for explanation of how symbols work at different detail levels.

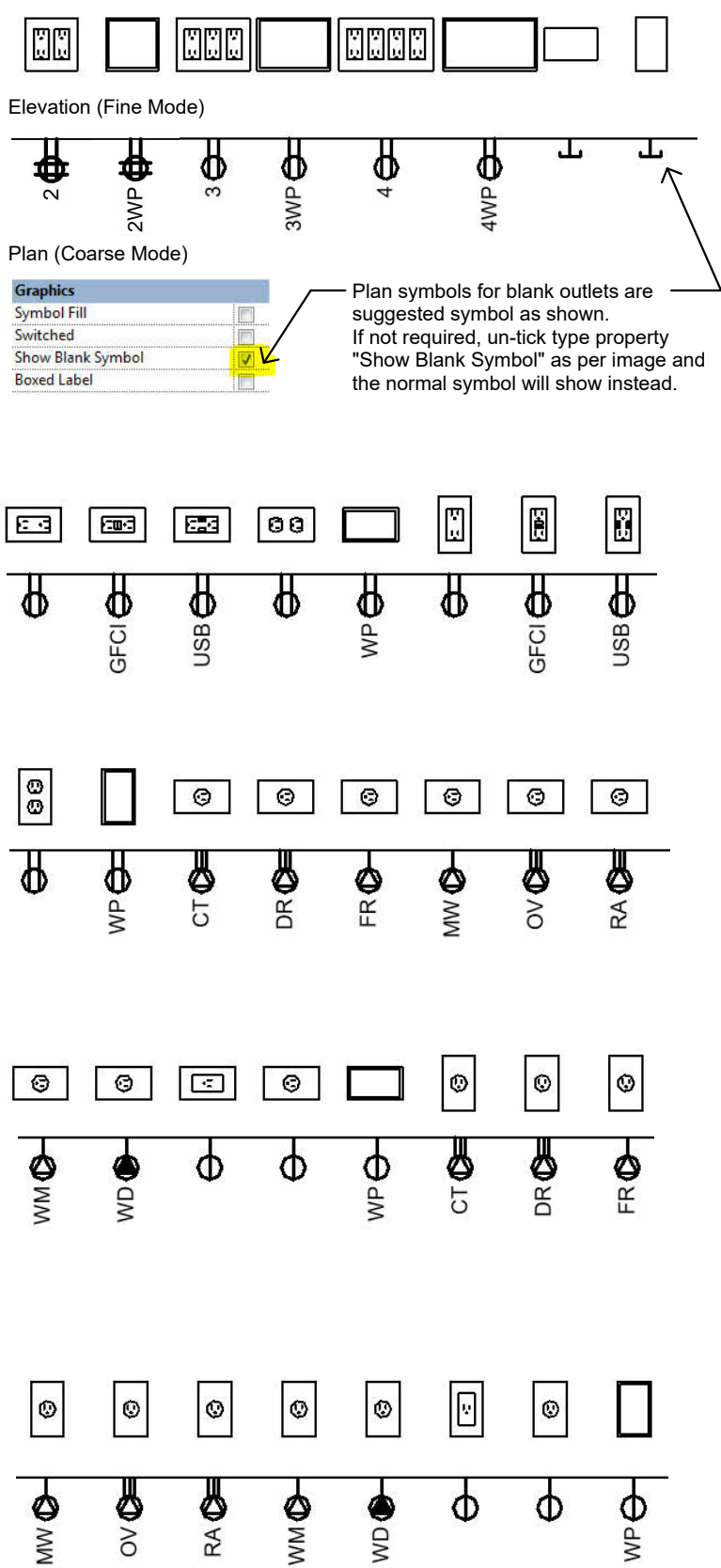


The "wall mounted" families are facebased allowing them to host to walls so they attach and move with them.
If placed on floors they will be tipped over; hence the inclusion of the "freestanding" components.

Power Outlets

- 

ELEC - Power Outlet
- 2Gang Vertical Decora
 - 2Gang Vertical Decora GFCI
 - 2Gang Vertical Decora GFCI Night Light
 - 2Gang Vertical Waterproof
 - 3Gang Vertical Decora
 - 3Gang Vertical Waterproof
 - 4Gang Vertical Decora
 - 4Gang Vertical Waterproof
 - Blank Horizontal
 - Blank Vertical
 - Duplex Horizontal Decora
 - Duplex Horizontal Decora GFCI
 - Duplex Horizontal Decora GFCI Night Light
 - Duplex Horizontal Decora USB
 - Duplex Horizontal Standard
 - Duplex Horizontal Weatherproof
 - Duplex Vertical Decora
 - Duplex Vertical Decora GFCI
 - Duplex Vertical Decora GFCI Night Light
 - Duplex Vertical Decora USB
 - Duplex Vertical Standard
 - Duplex Vertical Weatherproof
 - Single Horizontal Appliance Cooktop
 - Single Horizontal Appliance Dryer
 - Single Horizontal Appliance Fridge
 - Single Horizontal Appliance Microwave
 - Single Horizontal Appliance Oven
 - Single Horizontal Appliance Range
 - Single Horizontal Appliance Washing Machine
 - Single Horizontal Appliance Waste Disposal
 - Single Horizontal Decora
 - Single Horizontal Standard
 - Single Horizontal Waterproof
 - Single Vertical Appliance Cooktop
 - Single Vertical Appliance Dryer
 - Single Vertical Appliance Fridge
 - Single Vertical Appliance Microwave
 - Single Vertical Appliance Oven
 - Single Vertical Appliance Range
 - Single Vertical Appliance Washing Machine
 - Single Vertical Appliance Waste Disposal
 - Single Vertical Decora
 - Single Vertical Standard
 - Single Vertical Waterproof



(continues next page)


Outlets and Switches Specification

Light Switches

Refer to the next page for additional switching parameters

Light switches are on the "Lighting Devices" category and the load classification parameters are preset to "Lighting"

Electrical - Loads	
Apparent Load	0.00 VA
1_Load Classification	Lighting

**ELEC - Light Switch 1Gang**

Decora

Decora Dimmer

Decora Dimmer Slide

Decora Dimmer Switched

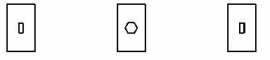
Decora PIR Sensor

Decora Timer Screen

Standard

Standard Dimmer

Standard Dimmer Slide



\$


\$

\$


D

TI

PIR


**ELEC - Light Switch 1Gang Stacked**

Decora




\$

s


**ELEC - Light Switch 2Gang Stacked**

Decora



\$

2s


**ELEC - Light Switch 2Gang**

Decora

Decora Switch + Dimmer Switch

Decora Switch + PIR Sensor

Standard



\$

\$

\$


\$

2

2

2-SE

2-D

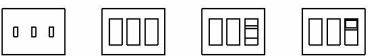
**ELEC - Light Switch 3Gang**

Decora

Decora Switch + Dimmer Switch

Decora Switch + PIR Sensor

Standard



\$

\$

\$


\$

3

3

3-D

3-SE

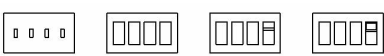
**ELEC - Light Switch 4Gang**

Decora

Decora Switch + Dimmer Switch

Decora Switch + PIR Sensor

Standard



\$

\$

\$


\$

4

4

4-D

4-SE

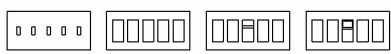
**ELEC - Light Switch 5Gang**

Decora

Decora Switch + Dimmer Switch

Decora Switch + PIR Sensor

Standard



\$

\$

\$


\$

5

5

5-D

5-SE

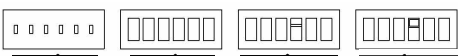
**ELEC - Light Switch 6Gang**

Decora

Decora Switch + Dimmer Switch

Decora Switch + PIR Sensor

Standard



\$

\$

\$

\$


6

6


6-D


6-SE


PIR Light Switches (Premium only)

**ELEC - Light Switch Ceiling PIR Sensor**


4"






**ELEC - Light Switch PIR Sensor Directional**

2.5"w x4"d





Power Outlets (continued...)

Power Outlet Switches

Refer to page 3 for switching parameters
Power outlet switches are on the "Electrical Fixtures" category and the load classification parameter is preset to "Power"

Electrical - Loads	
Apparent Load	0.00 VA
1_Load Classification	Power



ELEC - Power Outlet Switch

1 Phase Industrial Vertical Single

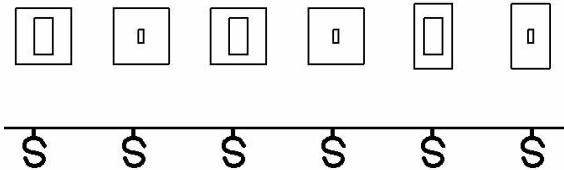
1 Phase Industrial Vertical Single Toggle


3 Phase Industrial Vertical Single

3 Phase Industrial Vertical Single Toggle

Vertical Single

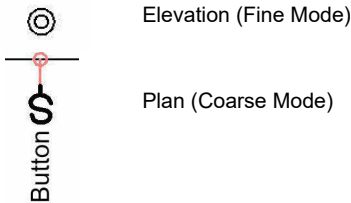
Vertical Single Toggle





ELEC - Power Outlet Switch Button


Button Switch



Power Outlet Double Switches

Refer to page 3 for switching parameters
Switches are on the "Electrical Fixtures" category and the load classification parameters are preset to "Power"

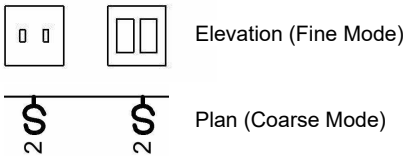
Electrical - Loads	
Apparent Load	1800.00 VA
2_Load Classification	Power
1_Load Classification	Power



ELEC - Power Outlet Switch 2Gang

Decora

Standard



Power Outlet + Switch

Refer to page 3 for switching parameters
Switches are on the "Electrical Fixtures" category and the load classification parameters is preset to "Power", but can be amended to "Lighting" if required

Electrical - Loads	
Apparent Load	1800.00 VA
2_Load Classification	Power
1_Load Classification	Power



ELEC - Power Outlet + Switch

Decora

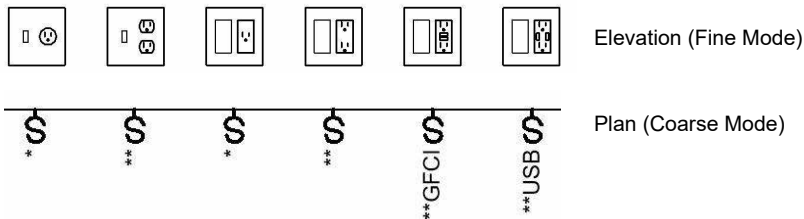
Decora Duplex

Decora Duplex GFCI

Decora Duplex USB

Standard






























Standard Duplex



Outlets and Switches Specification

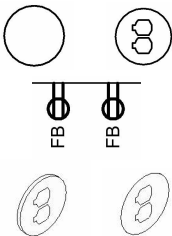
Power Outlets (continued...)

Industrial Outlets (Premium only)

 ELEC - Power Outlet Industrial	
1 Phase 2Plex Standard	
1 Phase 3Plex Duplex Standard + Single Standard	
1 Phase 4Plex Decora	
1 Phase 4Plex Duplex Standard + Duplex Decora	
1 Phase 4Plex Standard	
1 Phase Blank Cover	
1 Phase Duplex Decora	
1 Phase Duplex Decora Switched	
1 Phase Duplex Standard	
1 Phase Duplex Standard Switched	
1 Phase Duplex Waterproof	
1 Phase Single Standard	
1 Phase Single Standard Switched	
1 Phase Single Waterproof	
3 Phase 2Plex Standard	
3 Phase 3Plex Duplex Standard + Single Standard	
3 Phase 4Plex Decora	
3 Phase 4Plex Duplex Standard + Duplex Decora	
3 Phase 4Plex Standard	
3 Phase Blank Cover	
3 Phase Duplex Decora	
3 Phase Duplex Decora Switched	
3 Phase Duplex Standard	
3 Phase Duplex Standard Switched	
3 Phase Duplex Waterproof	
3 Phase Single Standard	
3 Phase Single Standard Switched	
3 Phase Single Waterproof	

Floor Outlet Boxes

 ELEC - Floor Box
Flush
Top Mounted



Elevation
(Coarse/Medium & Fine Mode)

Plan (Coarse Mode)

3D View (Flush or Top Mounted)