Outlets and Switches Specification

Object Styles Used

- **Data Devices**: For all data, communication and AV outlets including data cabinets
- **Electrical Equipment**: For all electrical boards
- **Electrical Fixtures**: For all powerpoints and powerpoint switches
- **Lighting Devices**: For all light switches

Symbolic Plan Representation
The symbolic representations can be edited to suit other standards. This document uses the New Zealand plan symbols for graphical examples.

<table>
<thead>
<tr>
<th>New Zealand (based on NZS/AS1102)</th>
<th>Powerpoint (3 phase switched)</th>
<th>Powerpoint (3 phase unswitched)</th>
<th>Comms outlet</th>
<th>AV outlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch</td>
<td>Powerpoint (unswitched)</td>
<td>Powerpoint ( appliance)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia (based on AS1102)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switch</td>
<td>Powerpoint (unsswitched)</td>
<td>Powerpoint ( appliance)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Electrical Boards**
- Meter Board
- Distribution Board
- Main Switch Board

**Data Cabinets**
Data cabinet symbol complies with AS/NZS3085.1

**Detail Levels - All Outlets and Switches**
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"

- Coarse
- Medium
- Fine

**Detail Levels - Boards**

**ELEVATIONS AND 3D DETAIL LEVELS**
To achieve the real size checkerboard representation (as shown below in Fine Mode) requires checkerboard elements that show in 3d and elevation views. To turn off these elements, set the 3d and/or elevation views detail level to "Medium" (or use visibility graphic overrides).
Outlets and Switches Specification

Common Instance Parameters
Refer to the Light Switches section for comprehensive additional parameter explanations

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.

Common Type Parameters - (for all Outlets and Switches)

All outlets and switches 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.

www.revitworks.com
Outlets and Switches Specification

Data Outlets

Outlet ports shown symbolically (round or rectangular). Duplicate and create new types as required.

AV Outlets

Elevation (Fine Mode)

Data Outlets

AV Outlets

Outlet ports shown symbolically (round or rectangular). Duplicate and create new types as required.

Elevation (Fine Mode)

Plan (Coarse Mode)

Data Outlets

AV Outlets

Outlet ports shown symbolically (round or rectangular). Duplicate and create new types as required.

Plan (Coarse Mode)

Data Outlets

AV Outlets

Outlet ports shown symbolically (round or rectangular). Duplicate and create new types as required.

Plan (Fine Mode)

Data Outlets

AV Outlets

Outlet ports shown symbolically (round or rectangular). Duplicate and create new types as required.

Plan (Fine Mode)

Data Outlets

AV Outlets

Outlet ports shown symbolically (round or rectangular). Duplicate and create new types as required.

Plan (Fine Mode)

Data Outlets

AV Outlets

Outlet ports shown symbolically (round or rectangular). Duplicate and create new types as required.

Plan (Fine Mode)

Data Outlets

AV Outlets

Outlet ports shown symbolically (round or rectangular). Duplicate and create new types as required.

Plan (Fine Mode)

Data Outlets

AV Outlets

Outlet ports shown symbolically (round or rectangular). Duplicate and create new types as required.

Plan (Fine Mode)

Data Outlets

AV Outlets

Outlet ports shown symbolically (round or rectangular). Duplicate and create new types as required.

Plan (Fine Mode)

Data Outlets

AV Outlets

Outlet ports shown symbolically (round or rectangular). Duplicate and create new types as required.

Plan (Fine Mode)

Data Outlets

AV Outlets

Outlet ports shown symbolically (round or rectangular). Duplicate and create new types as required.

Plan (Fine Mode)

Data Outlets

AV Outlets

Outlet ports shown symbolically (round or rectangular). Duplicate and create new types as required.
Outlets and Switches Specification

Power Outlets

- Blank Horizontal
- Blank Horizontal narrow
- Blank Vertical
- x1 Horizontal
- x1 Horizontal (narrow)
- x1 Horizontal (unswitched)
- x1 Horizontal Appliance Permanent
- x1 Horizontal Appliance Permanent (unswitched)
- x1 Vertical
- x1 Vertical (unswitched)
- x1 Vertical Appliance Permanent
- x1 Vertical Appliance Permanent (unswitched)
- x2 Horizontal
- x2 Horizontal (narrow)
- x2 Vertical
- x4 Horizontal
- x5 Horizontal

Plan symbols for blank outlets are not covered by AS/NZS1102. Suggested symbol as shown. If not required, un-tick type property "Show Blank Symbol" as per image and the normal symbol will show instead.

Industrial Outlets (Premium only)

- 1 Phase x1 (switch above)
- 1 Phase x1 (switch beside)
- 1 Phase x1 (unswitched)
- 1 Phase x2 Horizontal (unswitched)
- 1 Phase x2 Vertical (unswitched)
- 3 Phase 3pin x1 (switch above)
- 3 Phase 3pin x1 (switch beside)
- 3 Phase 3pin x1 (unswitched)
- 3 Phase 3pin x2 Horizontal (unswitched)
- 3 Phase 3pin x2 Vertical (unswitched)
- 3 Phase 4pin x1 (switch above)
- 3 Phase 4pin x1 (switch beside)
- 3 Phase 4pin x1 (unswitched)
- 3 Phase 4pin x2 Horizontal (unswitched)
- 3 Phase 4pin x2 Vertical (unswitched)
- 3 Phase 5pin x1 (switch above)
- 3 Phase 5pin x1 (switch beside)
- 3 Phase 5pin x1 (unswitched)
- 3 Phase 5pin x2 Horizontal (unswitched)
- 3 Phase 5pin x2 Vertical (unswitched)

(continues next page)
Outlets and Switches Specification

Power Outlets (continued...)

Outlet Switches
Refer to the next page for additional switching parameters

Light Switches
Refer to the next page for additional switching parameters

PIR Light Switches (Premium only)
Outlets and Switches Specification

Additional Switching Instance Parameters

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

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....

.... also allowing the type of circuit to be graphically shown (and/or combinations of both) if required.

Additional Switching Type Parameters:

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.