

Potius Panels Product Guide

1. Potius Panels Description

Potius Panels are a fabricated panel system built predominantly from engineered timber, resulting in a structurally efficient system with high dimensional accuracies. Often, Potius Panels will provide the structural, thermal and fire performance requirements of a building system and sometimes also provide the acoustical and air barrier systems, depending on the design.



Figure 1: Nelson College - A two storey classroom teaching block with a Potius midfloor.

2. Timelines and Project Pipe Line

Potius must receive reasonable notice of changes in the project design, changes to the Potius Panels and/or construction program which may affect the agreed supply dates. Agreed changes are made subject to availability of space in the fabrication schedule at that time. If your project overlaps with another project in our fabrication schedule then this may result in delivery delays.

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3. Shop Drawings

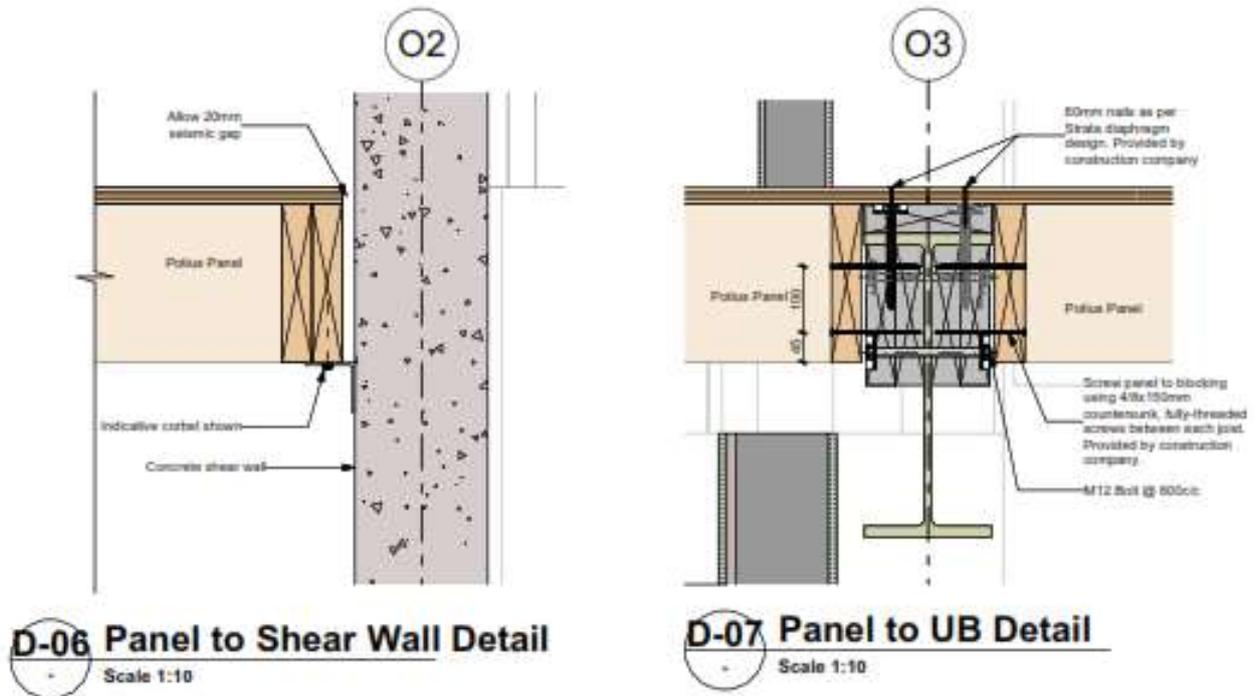


Figure 2: Shop drawing of Potius details to concrete and steel gravity structure

Potius produces shop drawings for design and consent drawings and further detailed shop drawings for fabrication. Shop drawings are produced on request (recommended) and are available in 3D and 2D images for coordination with the other design disciplines. It is important that the shop drawings are co-ordinated with the rest of the building structure to ensure there is suitable tolerances for site fitting.

4. Shop Drawing and Fabrication Tolerances

Potius builds in a tolerance of 5mm into its shop drawings to allow for fitting on site. Further to this our fabrication process has a tolerance of +/- 2mm during manufacture in the factory. Moisture incurred on the panels during transit, storage and erection can affect the tolerances of the panels. If your panels do not fit on site, please contact us before cutting or adapting the panels.

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5. Storage of Potius Panels



Figure 3: Storage on a flat level site under a roof, on gluts

When unloading panels check all packs to ensure panels have not shifted or been damaged in transit. Take photos for insurance purposes. The panels shall be stored in their packs on level flat 100x100 gluts with no twist. The panels should never be placed on uneven ground, even for a short period. The wrapping shall be maintained over the panels to keep rain out and/or ideally under cover. If a roof is not available use tarps as a primary protection against the elements. Adequate ventilation and ground clearance must be maintained to ensure moisture does not build up within the packs under the plastic. Panels should not get wet as this may cause swelling, distortion and discolouration.

6. Before Erecting Panels

Before erecting the panels check the foam insulation (where applicable) has not contracted leaving gaps in insulation. For minor holes – fill with PU foam such as Sika®Boom or similar. If excessive shrinkage of the foam has occurred contact Potius immediately. Check the Panel is straight and that there are no bowed elements. If there is significant distortion (more than 2-3mm) contact Potius. Check the panel for water damage. If water damage has occurred contact Potius. Check the moisture

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content of the panels before enclosing. Framing timber should have a moisture content less than 16%.

7. Lifting and Installing Potius Panels

Lifting and manoeuvring panels must be undertaken by appropriately qualified people and equipment in accordance with all Health and Safety legislative requirements and relevant site H&S management systems. Potius panels can come preinstalled with lifting screws (such as the Rothoblaas Wasp lifting system) on request. If a panel does not fit as it should DO NOT FORCE IT. Check the panel dimensions. Do not alter the panel without prior approval from Potius. Do not drill holes greater than 25mm without prior approval from Potius. If a panel distorts after it has been installed contact Potius.

8. Appearance of Potius Panels

Potius Panels are made from Structural engineered wood products, which are visually attractive, however can contain manufacturing marks, resin marks, knot holes and other timber related defects. Sanding the panels, either during prefabrication (by request) or on site can enhance the visual appearance of the panels. If the panels are to be exposed in the finished building, then we recommend that the panels are sealed with an appropriate paint or clear coat sealer.



Figure 4: Lifting in a residential midfloor using lifting hooks (Wasp)

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9. Weather Exposure and Durability during Construction

Where possible limit the amount of exposure of Potius panels to the exterior environment. Moisture and UV sunlight can both discolour but also affect the dimensional tolerances of the panels. In a horizontal situation, where water may pool on the panels, it is recommended that the water is swept off the panels or the panels are covered before a roof is installed. The panels can handle a certain amount of weathering without affecting their structural performance because we use materials such as crossbanded LVL with a marine grade adhesive, PU foam insulation and fabrication adhesive and mechanical fasteners.



Figure 5: These Potius Panels have had long term exposure to weather resulting in swelling, discolouration and some splitting.