**Insulated Roof & Wall Panels** Australia

Architectural Wall Panel Installation Guide

Vertically Laid

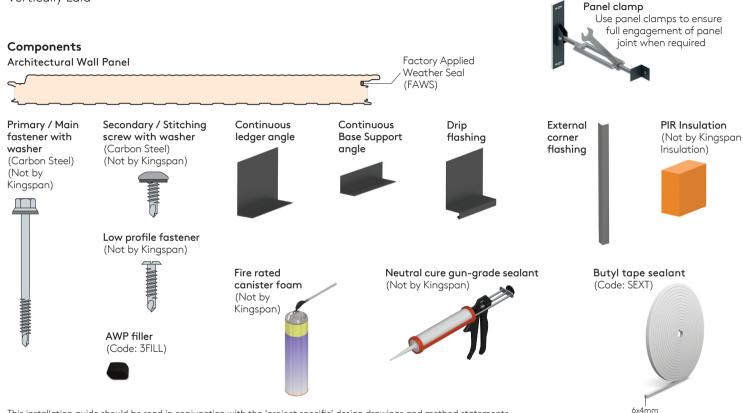




Second Issue | 27/06/2024

# Architectural Wall Panel

Vertically Laid



This installation guide should be read in conjunction with the 'project specific' design drawings and method statements.

Although this installation guide is deemed to be correct at the time of publication, Kingspan reserve the right to amend the information at any time in the future. Installation Guides are available for the full range of Kingspan Insulated Roof, Wall and Facade Systems.

Please call Kingspan Technical Services on: Aus Tel: (02) 8889 3000

#### Note:

- Ensure steelwork is suitably lined, levelled and within tolerance.
- Visually check internal liner joint to ensure panels are joined fully.
- Check panel cover width module as works progress to ensure "creep" does not occur, particularly important when windows are incorporated into the elevation.
- Joints need to be aligned correctly during installation to prevent the 'saw tooth' effect at the drip.
- Tape sealant referred to is butyl tape sealant.
- All fasteners to be carbon steel to maintain panel warranty.
- Gun-grade sealant type neutral cure gun-grade sealant.
- Number of fasteners must be calculated based on project spans and wind loads.
- See specific details for high humidity applications.
- Protective film to be removed from external weather face of panel & internal liner where applicable prior to installation.
- Clean swarf off panels immediately when created.
- Ensure panel joints are pulled tight to adjacent panels to close any gaps as works progress.
- This installation guide provides generic guidance on installation methods, however, should be read in conjunction with project specific specifications and construction details.
- Install fasteners with recommended screw gun speed selection for type of steel, use correct socket and drive bit, including depth – locating nose piece, unless fastener has feature to prevent overdriving, in line with fastener manufacturers.
- Use panel clamps to ensure full engagement of panel joint when required.



#### Please contact Kingspan Technical Services Department for guidance:

- Internal air seals
- High humidity & hygiene internal environments
- Project specific advise
- Cyclonic regions and areas of high localised suction

Note: Ensure steelwork is suitable for panels and is within tolerance Min. bearing face for intermediate support is 60mm

Apply 6x4mm butyl sealant or neutral cure gun-grade sealant to drip flashing and head detail to provide perimeter air seal

Line, level and fix drip flashing using low profile fasteners. Joints in the drip flashing to incorporate butt straps sealed with two runs of neutral cure gun-grade sealant

Fix the Continuous ledger angle, through the drip flashing and into the continuous base support angle, with low profile fasteners. The ledger angle will help to keep the panels plumb and prevent sawtooth effect at the base.

Line, Level, fix and seal continuous base support angle to structure. Ensure Joints in base support angle are sealed. Apply 6x4mm butyl sealant or neutral cure gun-grade sealant to the front face of the continuous base support angle.

Continuous base Continuous run of 6x4mm butyl sealant

Pef rod sealed with silicone sealant (Not supplied by Kingspan)

support angle (Not supplied by Kingspan) Continuous ledger angle Drip flashing

5 Install internal corner flashing or galvanised support with low profile fasteners

Apply 6x4mm butyl sealant or neutral cure gun-grade sealant to corner flashing to connect with previously installed perimeter air sealants applied to drip flashing and head detail.

**P1** 

Direction of lay

#### 7

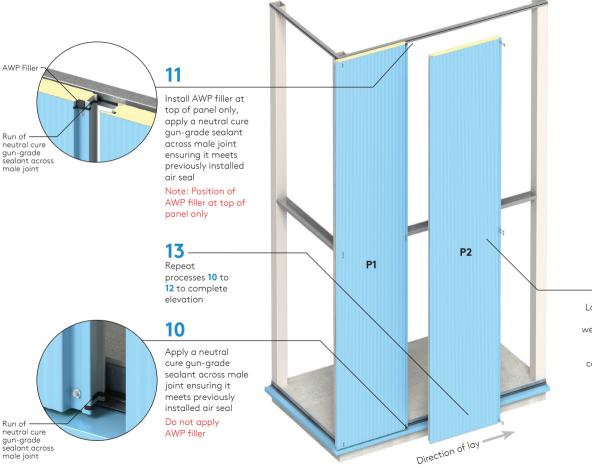
Locate first panel (**P1**) ensuring it is correctly positioned lined and levelled ensuring a minimum of 6mm gap between the external edge of the panel and drip flashing. 8 Install primary fasteners through the male joint at the top and bottom, and primary fasteners at intermediate locations

Note: Installations may require additional fasteners depending on wind loadings/ specification. Check project specific details

At corner positions through fix primary fasteners into female panel joint at each horizontal rail location

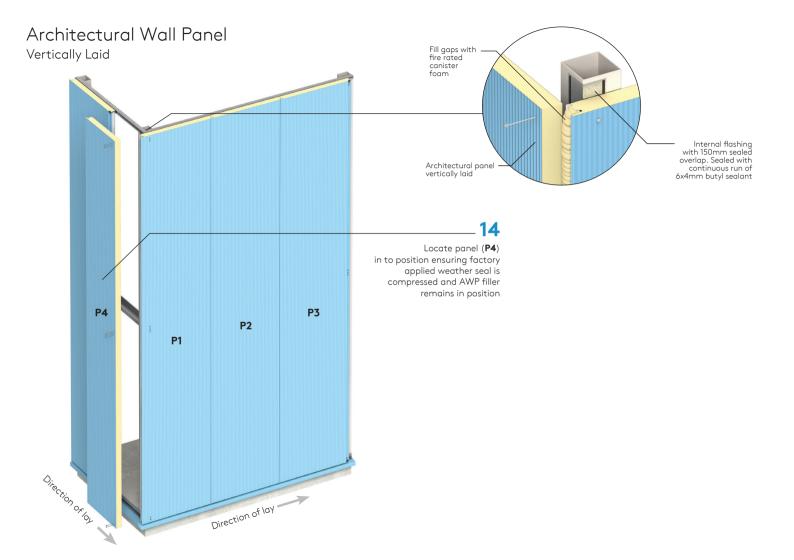
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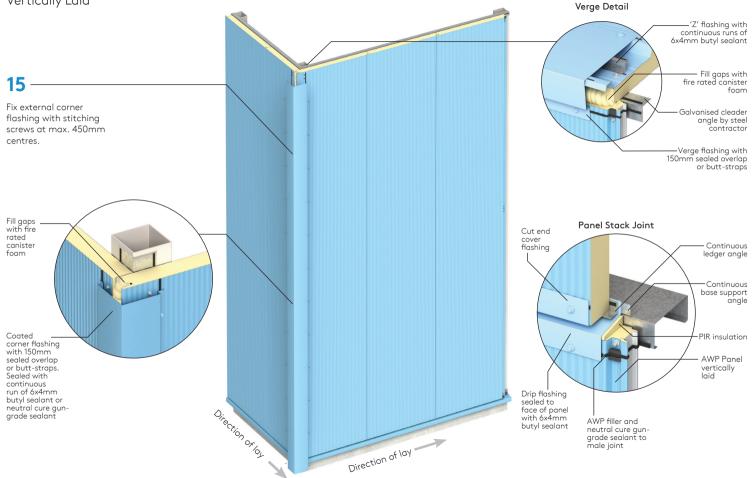
Note: Main fasteners to be suitably located to ensure they are covered by external corner flashing



# 12

Locate next panel (**P2**) into position ensuring that the factory applied weather seal is compressed and that the AWP filler remains in position. Ensure panel is lined and levelled correctly in line with adjacent panel and fix as per item **8** 





## Panel Handling

Appropriate personnel protective equipment should always be worn to avoid cuts and abrasions to installers and panels.

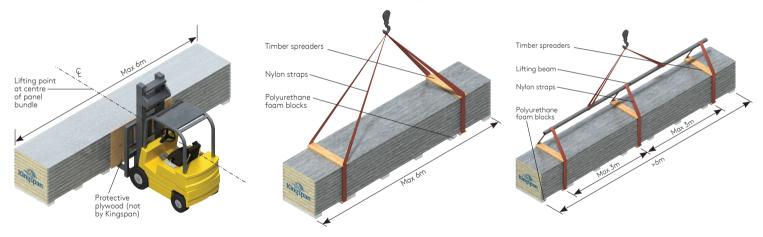
Individual panels should always be lifted from a pack and not dragged over others.

The weight of individual panels for lifting can be determined from the information on the packing slip.

For larger panels the contractor would normally arrange to use appropriate material installation equipment to help lift the panels into position.

#### Protecting Film

When panels are supplied with a plastic protective film this should be removed during site installation.

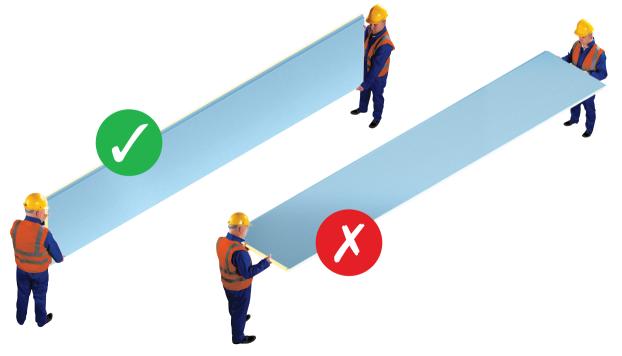


The recommended loading / unloading method for bundles less than or equal to 6m is to use a single forklift with widely spaced forks placed under the centre of the bundle as shown. The recommended lifting method for bundles no more than or equal to 6m can be handled with a crane by using nylon straps and timber spreaders as shown. The recommended lifting method for bundles more than 6m, by crane, is by using three points of support. To prevent damage from nylon straps, use timber spreaders at top and bottom at lifting locations as shown.

### Panel Handling Correct and Incorrect Panel Handling

#### Caution

Individual panels should never be moved in a flat position as excessive flexing may result. Excessive flexing ruptures a panel's core, permanently distorts the facings and may lead to thermal blistering. When moving a panel, it must be turned on its edge first, then supported at each end with as many men as necessary to safely handle.




Installation guides are available for most of Kingspan insulated roof and wall panels. For the most up to date version of this Installation guide please click here or scan the QR code below. Alternatively, please call Kingspan on:

AUS: +61 2 8889 3000 www.kingspanpanels.com.au



For the product offering in other markets please contact your local sales representative or visit www.kingspanpanels.com

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Please scan for the most up to date version of this Installation Guide.

