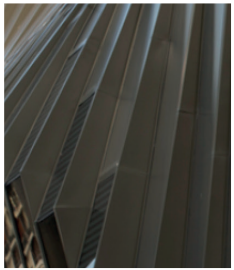
Insulated Roof & Wall Panels
Australia & New Zealand

Protected by Kingspan WARRANTY

Evolution
Axis - Multigroove - Recess
Installation Guide

Vertically Laid

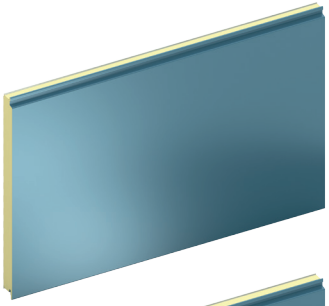


Kingspan

January 2020

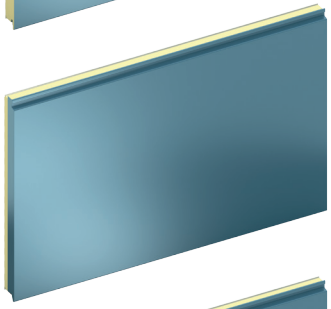
Evolution - Axis - Multigroove - Recess - KS600/900/1000 (EVO)

Vertically Laid



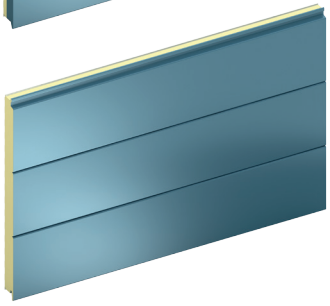
Evolution Axis is a highly streamlined, sleek, unprofiled insulated panel system; the perfect solution if you are looking to achieve a minimalist facade on buildings with large, flat surface areas.

Length: 2.0 - 13.7 m
Width: 600/900/1000 mm



Evolution Recess features depth and dimension through the folding of the panel edge and the insertion of a 10mm or 20mm gsket between the panels, creating a unique 3D effect.

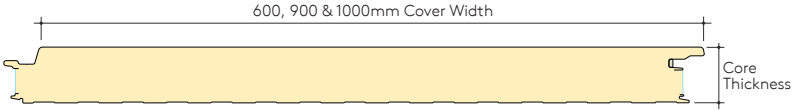
Length: 2.0 - 7.0 m
Width: 600/900/1000mm



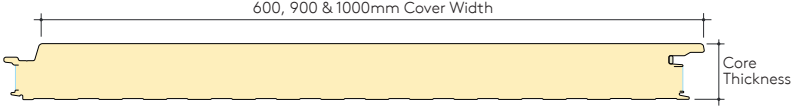
Evolution Multi-Groove is a premium flat panel that has one, two or three grooves engineered into its surface, creating subtle shadow lines on the building's facade and an illusion of smaller panel widths without the installation time constraints.

Length: 2.0 - 13.7 m
Width: 900/1000 mm

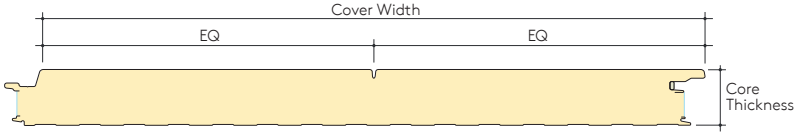
Evolution Axis



Evolution Recess

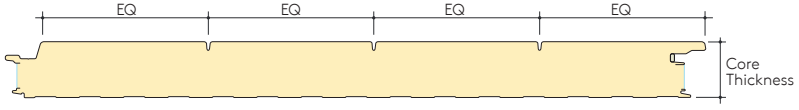


Evolution Multi-Groove - One Groove



Evolution Multi-Groove - Two Groove

Evolution Multi-Groove - Three Groove



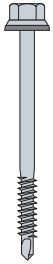
Evolution - Axis - Multigroove - Recess - KS600/900/1000 (EVO)

Vertically Laid

Components

Evolution - Axis - Multigroove - Recess - KS600/900/1000 EVO Wall Panel

Primary / Main fastener (Carbon Steel)



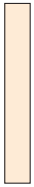
Neutral cure gun-grade sealant

Gun-grade sealant type - Selleys Permasil 626 or equivalent

Fire-rated canister insulation

External corner flashing

PIR insulation



Continuous ledger angle

Butyl tape sealant

Secondary / Stitching screw

AWP filler

Drip flashing

Low profile fastener

Push-In EPDM Gasket (For Evo Recess Only)

Continuous Base Support angle

Roller - Gasket Installation

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
NZ Tel: +64 3-260 5530

Evolution - Axis - Multigroove - Recess - KS600/900/1000 (EVO)

Vertically Laid

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.

This is a generic EVO installation guide, however details may differ from project to project. Project specific construction details must be used, please contact Kingspan Technical Services for further information.

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.

Contact Kingspan Technical Services for project specific advice.

Contact Kingspan Technical Services for cyclone regions and areas of high localised suction.

Evolution - Axis - Multigroove - Recess - KS600/900/1000 (EVO)

Vertically Laid

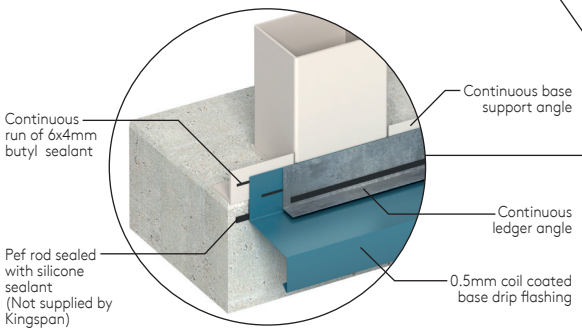
Note: Ensure steelwork is suitable for panels and is within tolerance
Min. bearing face for intermediate support is 50mm

b

Apply 6x4mm butyl sealant or gun grade sealant

a

Line, level and fix drip flashing using low profile fasteners. Joints in the drip flashing to incorporate 150mm overlap or butt straps sealed with two runs of gun-grade sealant



Architectural Wall Panels KS1000 (AWP)

Vertically Laid

c
Install internal corner flashing with low profile fasteners

d
Apply 6x4mm butyl sealant or gun grade sealant

e
Locate first panel (**P1**) ensuring it is correctly positioned lined and levelled

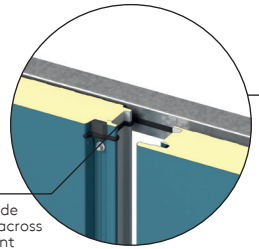
f
Install min. 1 No. main fastener through the male joint at the top and bottom, and min. 2No. main fastener at intermediate locations

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

g
At corner positions through fix min. 2 No. main fasteners into female panel joint at each horizontal rail location

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

Vertically Laid



Run of gun-grade air seal across male joint

i

AWP filler at top of panel only, run a gun-grade air seal across male joint ensuring it meets previously installed air seal

Note: Position of AWP filler at top of panel

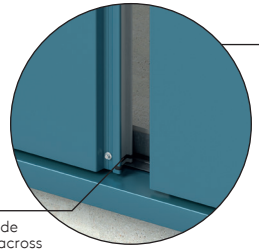
k

Repeat processes **h** to **j** to complete elevation

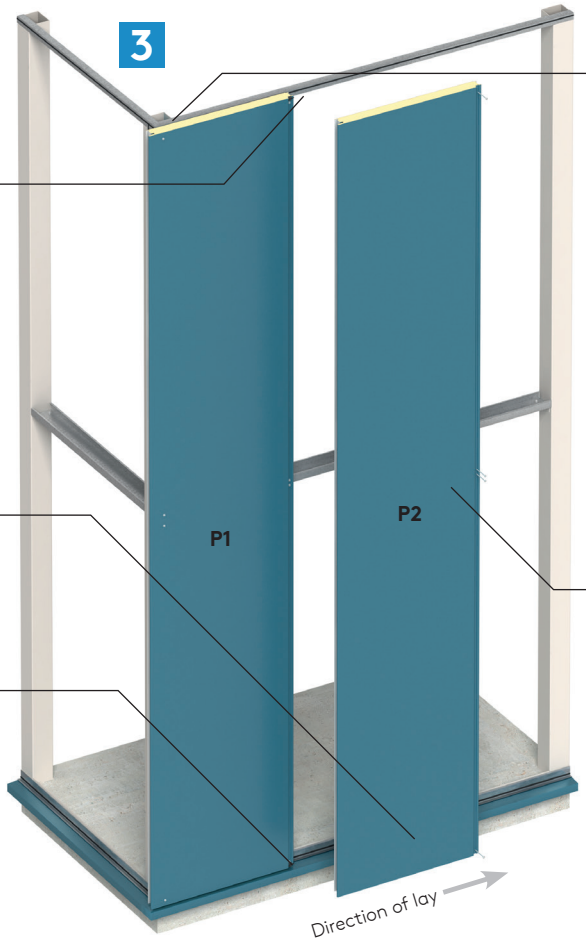
h

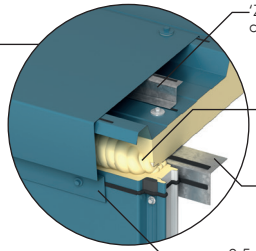
Run a gun-grade air seal across male joint ensuring it meets previously installed air seal

Do not apply AWP filler



Run of gun-grade air seal across male joint





'Z' flashing with continuous runs of 6x4mm butyl sealant

Fill gaps with FR canister Insulation

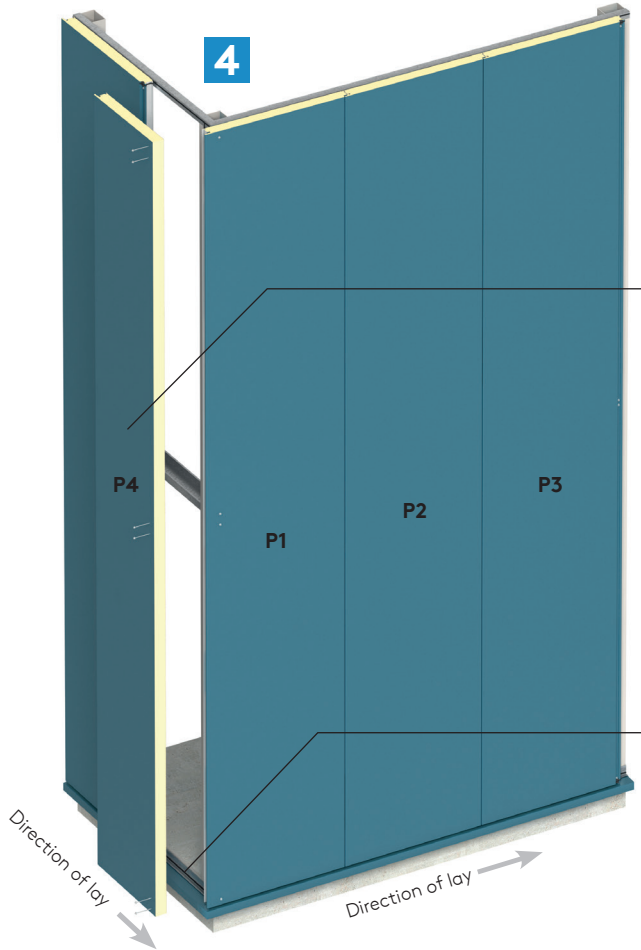
Galv cleader angle by steel contractor

0.5mm coil coated verge flashing with 150mm sealed overlap or butt-straps

j

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 **f**

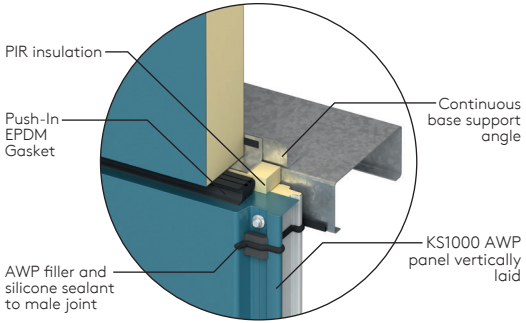
Vertically Laid



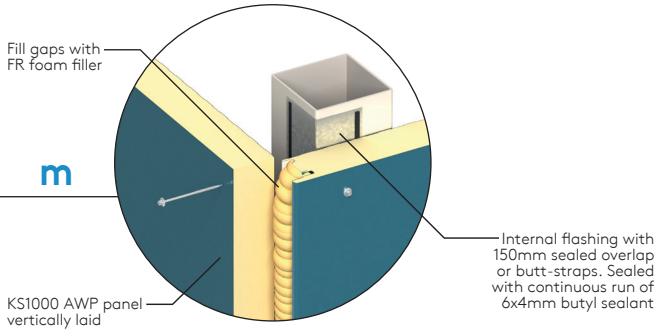
l

Locate panel (**P4**) in to position ensuring factory applied weather seal is compressed and AWP filler remains in position

Panel Stack Joint
(EVO - Recess Only)



m



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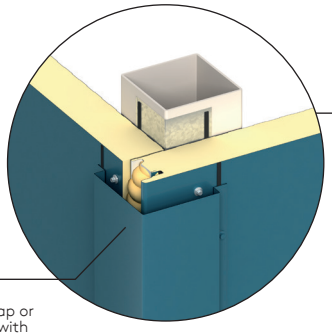


0.5mm coil coated corner flashing with 150mm sealed overlap or butt-straps. Sealed with continuous run of 6x4mm butyl sealant

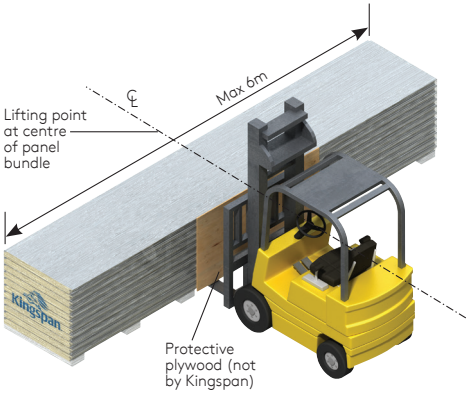
n

Fix external corner flashing with stitching screws at max. 450mm centres. Joints in the corner flashing to incorporate butt straps sealed with two runs of gun-grade sealant

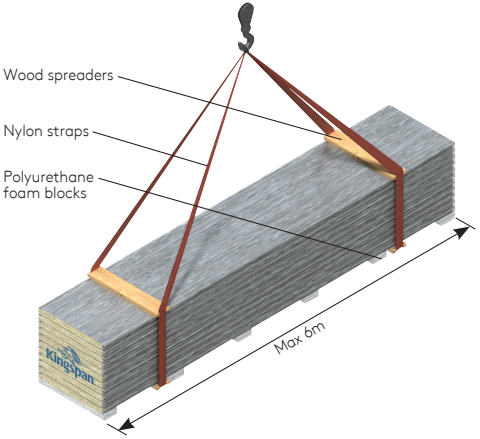
Panel Handling

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.

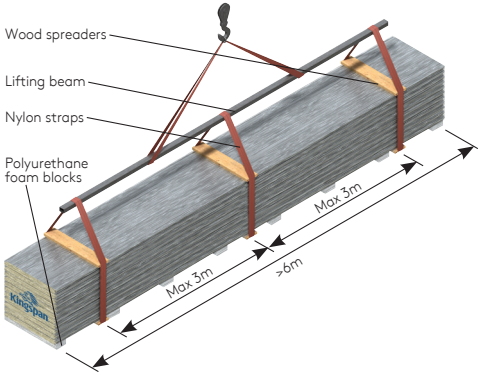
Protecting Film
When panels are supplied with a plastic protective film this should be removed during site installation.



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 wood 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 wood spreaders at top and bottom at lifting locations as shown.

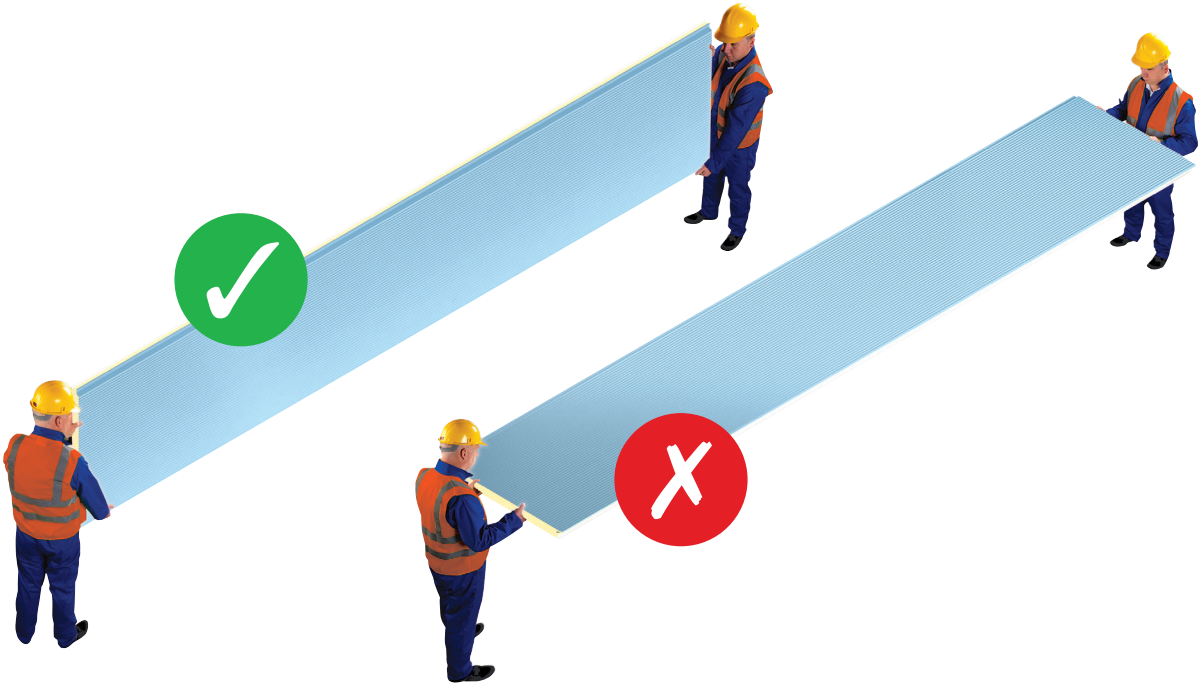
For illustration purposes only

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.



Notes

Installation guides are available for most of Kingspan insulated roof and wall panels.

Please call Kingspan on:
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