



Architectural Wall
Panels (AWP) KS600
-1000 CX/EB/FL/FL-S/
MR/MM/PL/WW
KS1000 CW/LV/TL

Vertically Laid

Insulated
Roof & Wall
Panels

Installation
Guide



November 2017

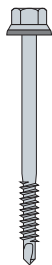
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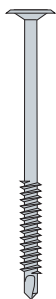
Architectural Wall Panel



Primary /
Main fastener



Counter
sunk main
fastener



Non-setting
gun-grade
butyl
sealant



Silicone
sealant



Fire-rated
canister
insulation



External
corner
flashing



Low profile
fastener



PIR
insulation



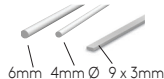
Closure
flashing



Secondary /
Stitching screw



Butyl tape
sealants



AWP
filler



Drip flashing



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 reserves the right to amend the information at any time in the future. Installation guides are available for most of Kingspan insulated roof and wall panels.

Please call Kingspan Technical Services on:

UK Tel: +44 (0)1352 716101 or Freephone: 0800 587 0090

IRL Tel: +353 (0) 42 9698529

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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.

Fasteners to suit project specification requirements i.e. carbon / stainless steel.

Gun-grade sealant referred to are: - non-setting butyl sealant
- silicone sealant

Tape sealant referred to is butyl tape sealant.

Note: As an alternative to using butyl air sealants, a PVC foam tape (SVG25) can be used for an air seal.

Please refer to Technical Update EU87 on Internal Air Seals and consult with our Kingspan Technical Services for further guidance.

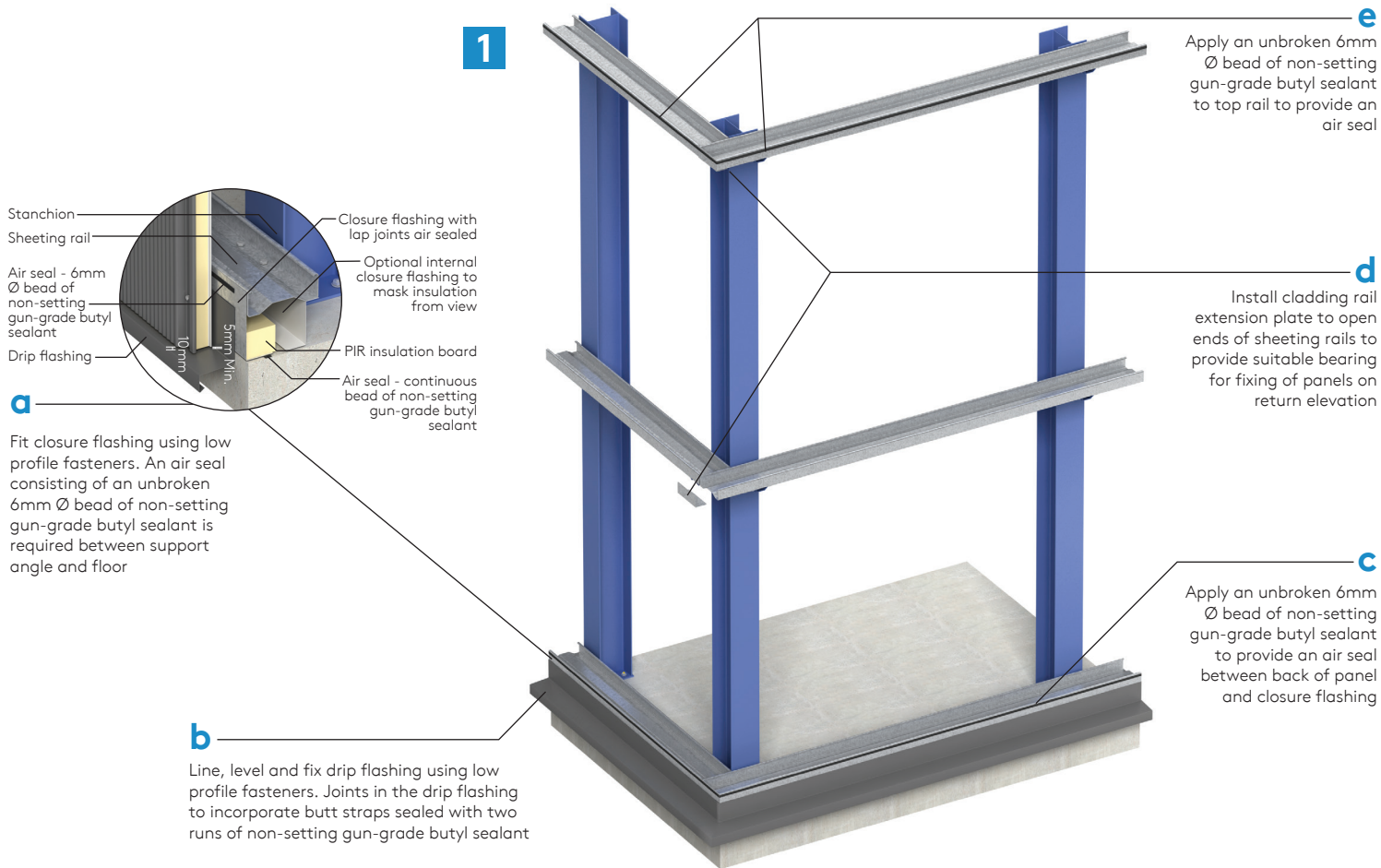
All sealants to suit project specification requirements.

This is a generic AWP 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.

Low air leakage rates can be achieved, for further information contact Kingspan Technical Services



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2

f

Install internal corner flashing with low profile fasteners

g

Apply an unbroken 6mm Ø bead of non-setting gun-grade butyl sealant to internal corner flashing ensuring it meets the previously installed air seals

h

Locate first panel (**P1**) ensuring it is correctly positioned lined and levelled and a minimum of 5mm off the drip flashing at the back, as illustrated in item **a**

i

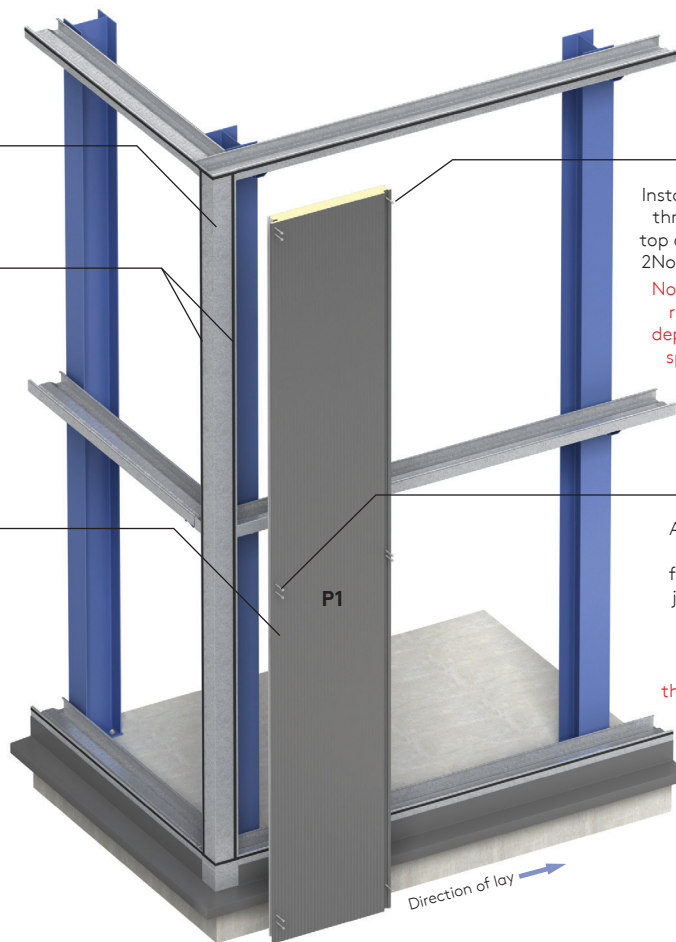
Install min. 1No. main fastener through the male joint at the top and bottom, and also min. 2No. at intermediate locations

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

j

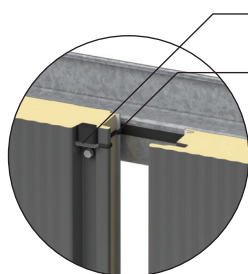
At corner positions through fix min. 2 No. countersunk fasteners into female panel joint at each horizontal rail location

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



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AWP filler bedded on silicone sealant at every horizontal panel joint
Run of non-setting gun-grade butyl sealant across male joint

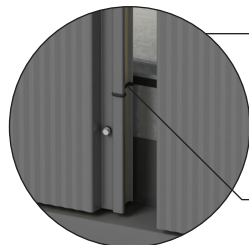
l

Bed an AWP filler in silicone sealant at top of panel only, and run a non-setting gun-grade butyl sealant across male joint ensuring it meets previously installed air seal

Note: Position of AWP filler at top of panel (parapet/bottom of window) needs to reflect project specific details in order to achieve airtightness performance

k

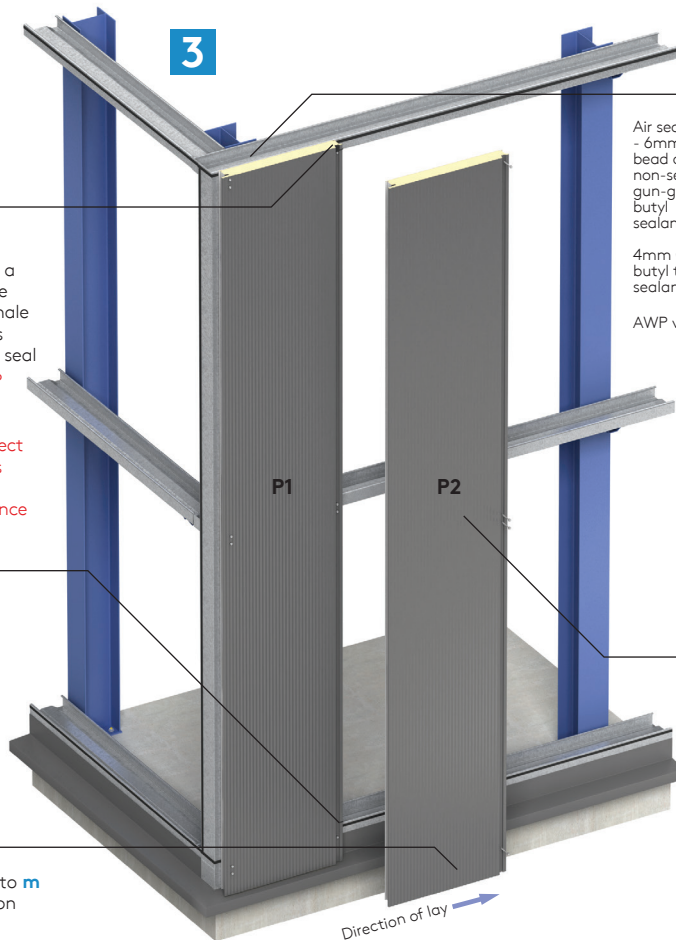
Run a non-setting gun-grade butyl sealant across male joint ensuring it meets previously installed air seal



Run of non-setting gun-grade butyl sealant across male joint

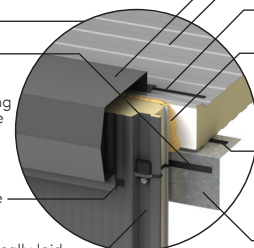
n

Repeat processes **k** to **m** to complete elevation

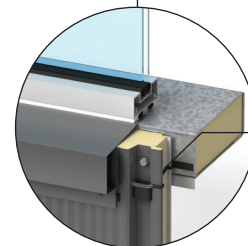


Air seal - 6mm Ø bead of non-setting gun-grade butyl sealant
4mm Ø butyl tape sealant

AWP vertically laid



Verge flashing with 150mm sealed butt straps
KS1000 LP insulated roof panel
9 x 3mm butyl tape sealant
Site-applied PIR insulation or gun applied fire-rated canister insulation
Air seal - 8mm Ø approx. non-setting gun-grade butyl sealant
Cleader angle by steel sub-contractor with air seal film backed butyl tape sealant applied at joints



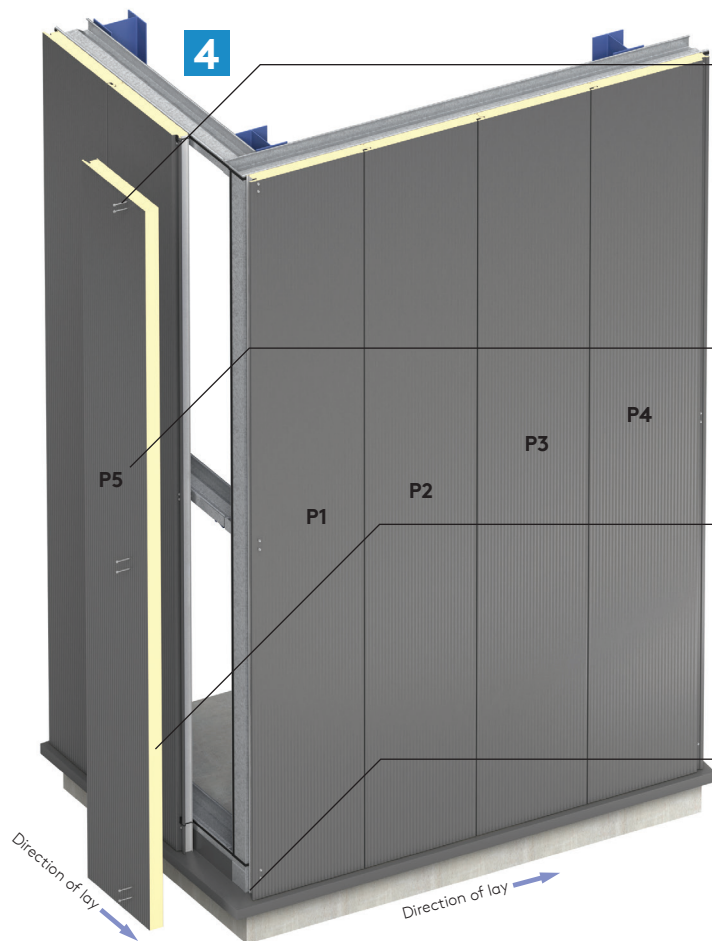
Air seal - 6mm Ø bead of non-setting gun-grade butyl sealant, as per item **l**

m

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

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At corner positions, through-fix min. 2No. countersunk fasteners into panel (P5) cut edge, at each horizontal rail location

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

q

Locate panel (P5) into position ensuring factory-applied weather seal is compressed and AWP filler remains in position

p

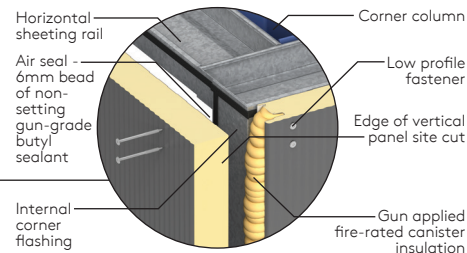
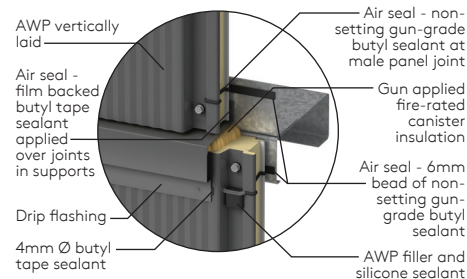
Cut panel (P5) to size using an Evolution type circular saw, ensuring it meets the outside edge of (P1)

Note: Do not use abrasive wheel cutter. All cutting should be done at ground level

o

Install site-applied PIR insulation board and gun applied fire-rated canister insulation into female joint to fill the gap between panels (P1) and (P5) to ensure continuity of insulation

Stack Joint Detail



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5

- 9 x 3mm butyl tape sealant
- Verge flashing with 150mm sealed butt straps
- 4mm Ø butyl tape sealant
- Air seal - 6mm Ø non-setting gun-grade butyl sealant
- AWP vertically laid
- KS1000 LP insulated roof panel
- Site-applied PIR insulation or gun applied fire-rated canister insulation
- Air seal - 8mm Ø approx. non-setting gun-grade butyl sealant
- Cleader angle by steel sub-contractor with air seal film backed butyl tape sealant applied at joints

- 4mm Ø butyl tape sealant
- Stitching screws at max. 450mm centres

t

Fix external corner flashing with low profile stitching screws at max. 450mm centres positioned as shown on detail. Joints in the corner flashing should incorporate butt straps, sealed with two runs of non-setting gun-grade butyl sealant



S

Apply 4mm Ø butyl tape sealant (site-applied) to the internal legs of external corner flashing and ensure sealant is positioned weather side of fasteners

