

Installation Guide

KS600/900/1000 Optimo™ Wall Panel
Horizontally Laid



Note: Panels can be installed in either a tiered or coarsed sequence.

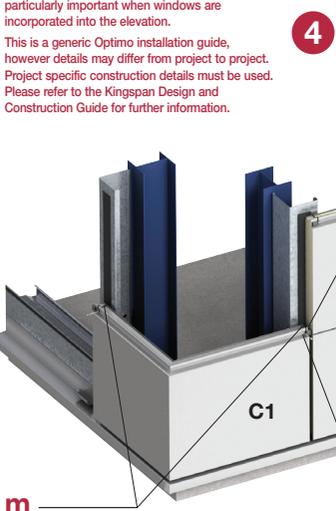
Visually check internal liner joint to ensure panels are joined fully.

Check panel cover width module as works progress to ensure "creep" does not occur, particularly important when windows are incorporated into the elevation.

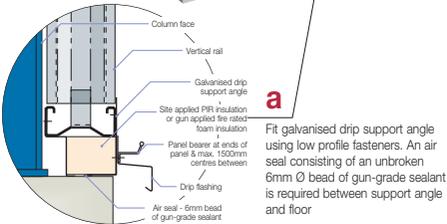
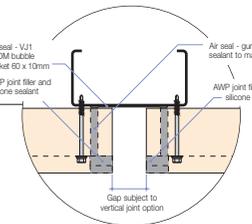
This is a generic Optimo installation guide, however details may differ from project to project. Project specific construction details must be used. Please refer to the Kingspan Design and Construction Guide for further information.

m
Install air seals and AWP filler at panel ends as previous. Refer to items **j**

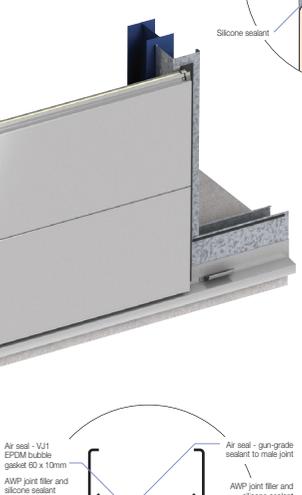
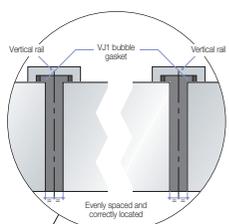
Note: Ensure steelwork is suitably lined, levelled and within tolerance.
Min. bearing face for vertical joint steelwork is subject to joint option, this guide shows joint option C with 120mm bearing face. Refer to Kingspan Design and Construction Guide.
Min. bearing face for intermediate support is 60mm.
Where long runs of integrated ribbon windows are installed in conjunction with horizontal laid architectural wall panels, the vertical panel joints should terminate above and continue below the window units. Contact Kingspan *envirocare*™ technical services for shoe and deflector details.
Gun-grade sealant type - non-setting butyl sealant - silicone sealant.



l
Locate the preformed corner panel (C1) on panel bearers ensuring panel is evenly spaced and correctly positioned between the vertical joint centres and install main fasteners through the male joint

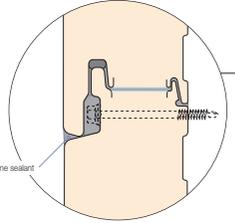


a
Fit galvanised drip support angle using low profile fasteners. An air seal consisting of an unbroken 6mm Ø bead of gun-grade sealant is required between support angle and floor

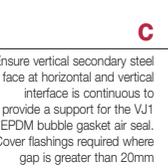


n
The gap between the panel ends is to be filled with PIR insulation board or gun applied fire rated canister insulation to a depth to suit the top hat section. If PIR board is used, ensure that continuity of insulation is achieved by filling any gaps with fire rated canister applied insulation

Note: There are several types of vertical joint options. This guide assumes that an Option C top hat detail is being used.



p
Prior to installation of the top hat apply a silicone sealant to horizontal panel joint at panel ends in line with AWP filler

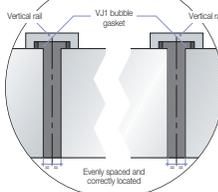
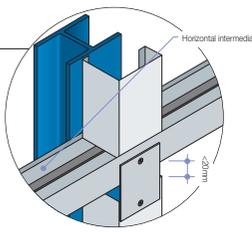


c
Ensure vertical secondary steel face at horizontal and vertical interface is continuous to provide a support for the VJ1 EPDM bubble gasket air seal. Cover flashings required where gap is greater than 20mm



h
Install main fasteners through the male joint at panel end into each vertical rail location

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



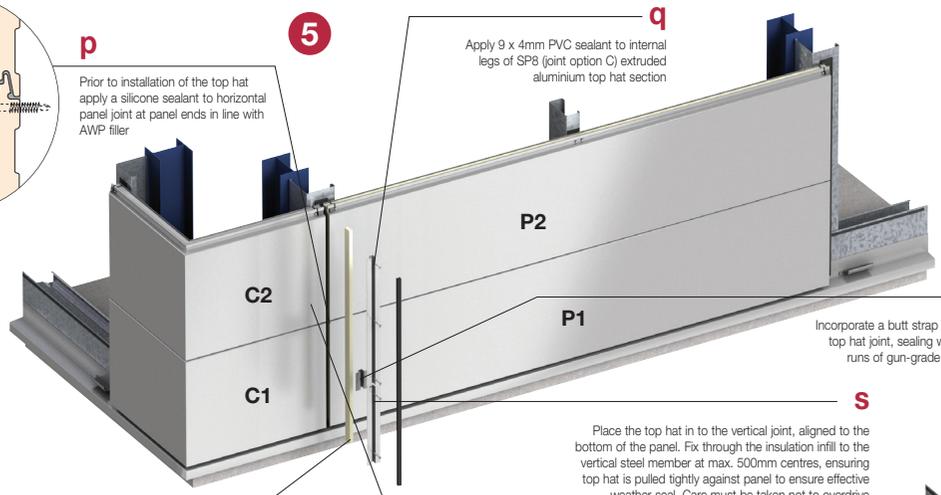
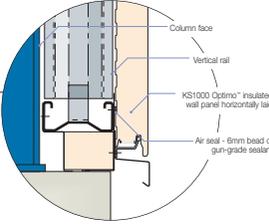
i
Install 2 No. main fasteners at intermediate support position (minimum)

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



g
Locate first panel (P1) on panel bearers ensuring panel is evenly spaced and correctly positioned between vertical joint centres

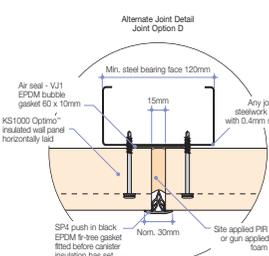
f
Apply an unbroken 6mm Ø bead of gun-grade sealant to provide an air seal between back of panel and drip support angle. This air seal should meet the previously installed bubble gasket



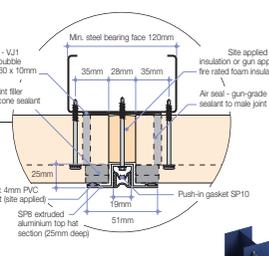
q
Apply 9 x 4mm PVC sealant to internal legs of SP8 (joint option C) extruded aluminium top hat section

r
Incorporate a butt strap into the top hat joint, sealing with two runs of gun-grade sealant

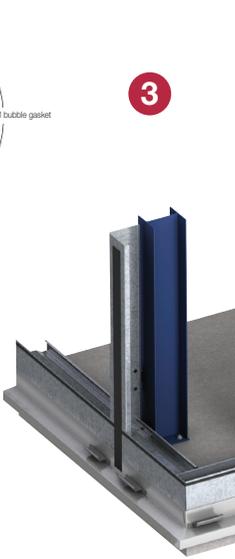
s
Place the top hat in to the vertical joint, aligned to the bottom of the panel. Fix through the insulation infill to the vertical steel member at max. 500mm centres, ensuring top hat is pulled tightly against panel to ensure effective weather seal. Care must be taken not to overdrive



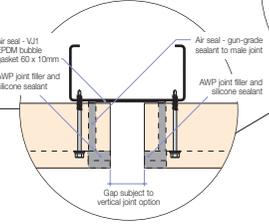
t
Push fit joint option C gasket (SP10) into position



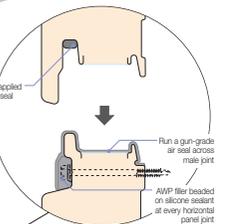
Note: For firewall specifications an internal fastener at maximum 250mm centres is required. Refer to *envirocare*™ update EU38 revision A for further information. *envirocare*™ updates can be found on our website at www.kingspanpanels.com.



k
Lower the next panel (P2) into position ensuring that the factory applied weather seal is compressed and that the AWP filler remains in position. Ensure that the panel is evenly spaced and correctly positioned between vertical joint centres. Install main fasteners at each panel end and intermediate vertical steel member as previous



j
Bed an AWP filler in silicone sealant at panel ends, and run a gun-grade air seal across male joint



Components KS1000 Optimo™ Wall Panel

- Primary/Main Fastener
- Silicone Sealant
- Gun-Grade Sealant
- SP8
- Push-in gasket SP10
- Low Profile Fastener
- Drip Flashing
- Fire-rated Canister Insulation
- PIR Insulation
- Galvanised Drip Support Angle
- AWP Filler
- VJ1 EPDM Bubble Gasket
- Butyl Rubber Tape Sealants
- 9 x 4mm 6mm Ø
- Butt Strap

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 Façade Systems.

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