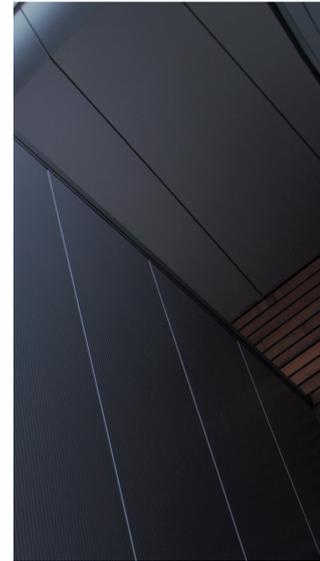


Insulated Roof & Wall Panels  
UK & Republic of Ireland



# QuadCore® AWP Wall Panel Installation Guide

Vertical Installation



*The AWP Wall Panel range consists of 9 distinct architectural profiles, allowing design flexibility*

This installation guide is also applicable to QuadCore AWP LEC Wall Panel

**QuadCore<sup>LEC</sup>**  
LOWER EMBODIED CARBON SOLUTIONS



# QuadCore® AWP Wall Panel

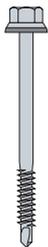
## Vertical Installation

### Components

#### QuadCore® AWP Wall Panel



Primary / main fastener



Counter sunk main fastener



Non-setting gun-grade butyl sealant



Low module neutral cure silicone sealant

Please contact our Tech-eXchange team for recommended sealant reference and supplier



B1 Fire rated canister foam



Low profile fastener



Rigid insulation board



Panel clamp



Secondary / Stitching screw



Please contact our Tech-eXchange team for recommended stitching screw reference and supplier

Butyl tape sealants



AWP filler



Drip flashing



Galvanised drip support angle



PVC foam tape (SGV15P 20X9 PVC)



Internal corner galvanised support



External corner flashing



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

# QuadCore® AWP Wall Panel

## Vertical Installation

### Note

This installation guide provides generic guidance on installation methods however should be read in conjunction with project specific specifications and construction details. For further information please contact our Tech-eXchange team.

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.

Use panel clamps to ensure full engagement of panel joint when required.

Fasteners to suit QuadCore® panel specification requirements: Stainless Steel or Carbon steel subject to project requirements.

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 & NFRC Guidance Note GN01 recommendations.

Gun-grade sealant referred to are:

Non-setting gun-grade butyl sealant.  
Low module neutral cure silicone sealant.

Tape sealant referred to is butyl tape sealant.

All sealants to suit project specification requirements.

Low air leakage rates can be achieved, for further information contact Kingspan Tech-eXchange team.

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.

Low air leakage rates can be achieved, for further information contact our Tech-eXchange team.

Protective film to be removed from external weather face of panel & internal liner, where applicable, prior to installation.

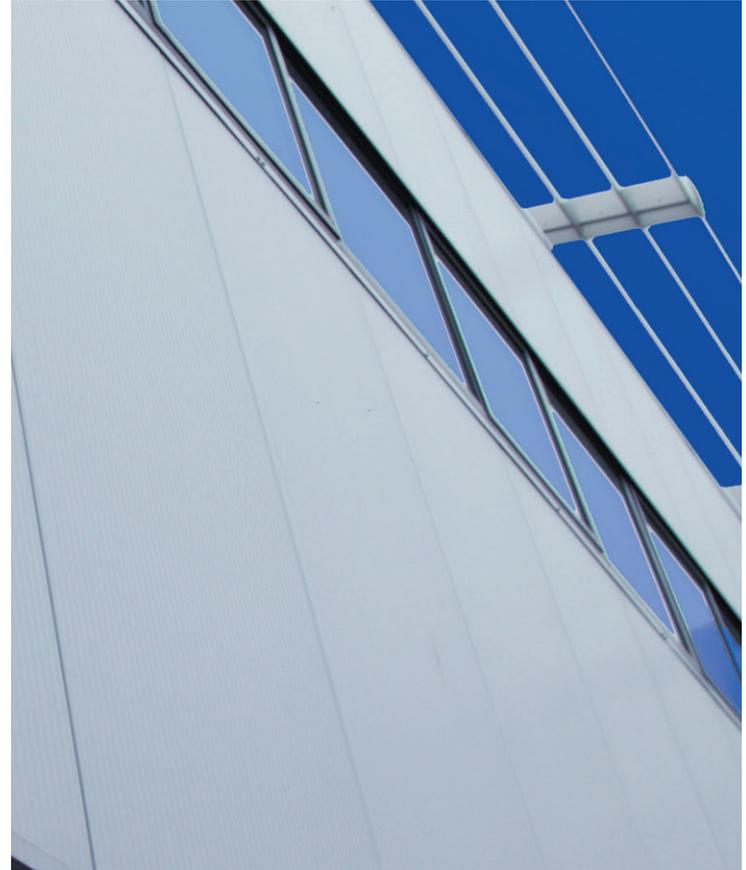
For many years sealant suppliers have advised caution when using sealants in temperatures less than +5°C.

For high humidity, hygiene internal environments, etc, please contact the Kingspan Tech-eXchange team for specification guidance.

We recommend the use of mechanical handling systems for the movement & lifting of panels into position.

This installation guide is also applicable to QuadCore AWP LEC Wall Panel

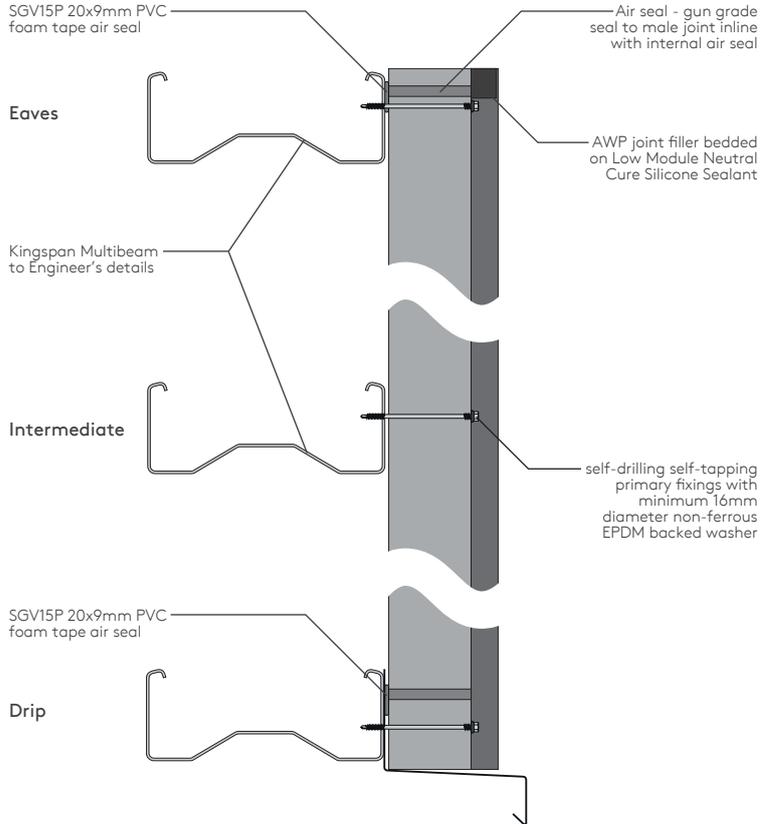
**QuadCore**LEC  
LOWER EMBODIED CARBON SOLUTIONS



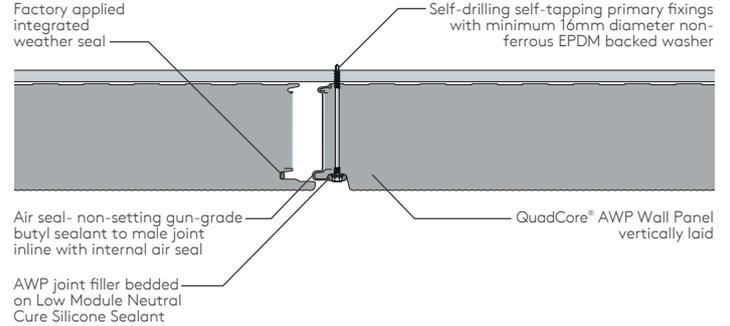
# QuadCore® AWP Wall Panel

## Vertical Installation

### Rail Fastener Location



### Side Joint Fastener Location

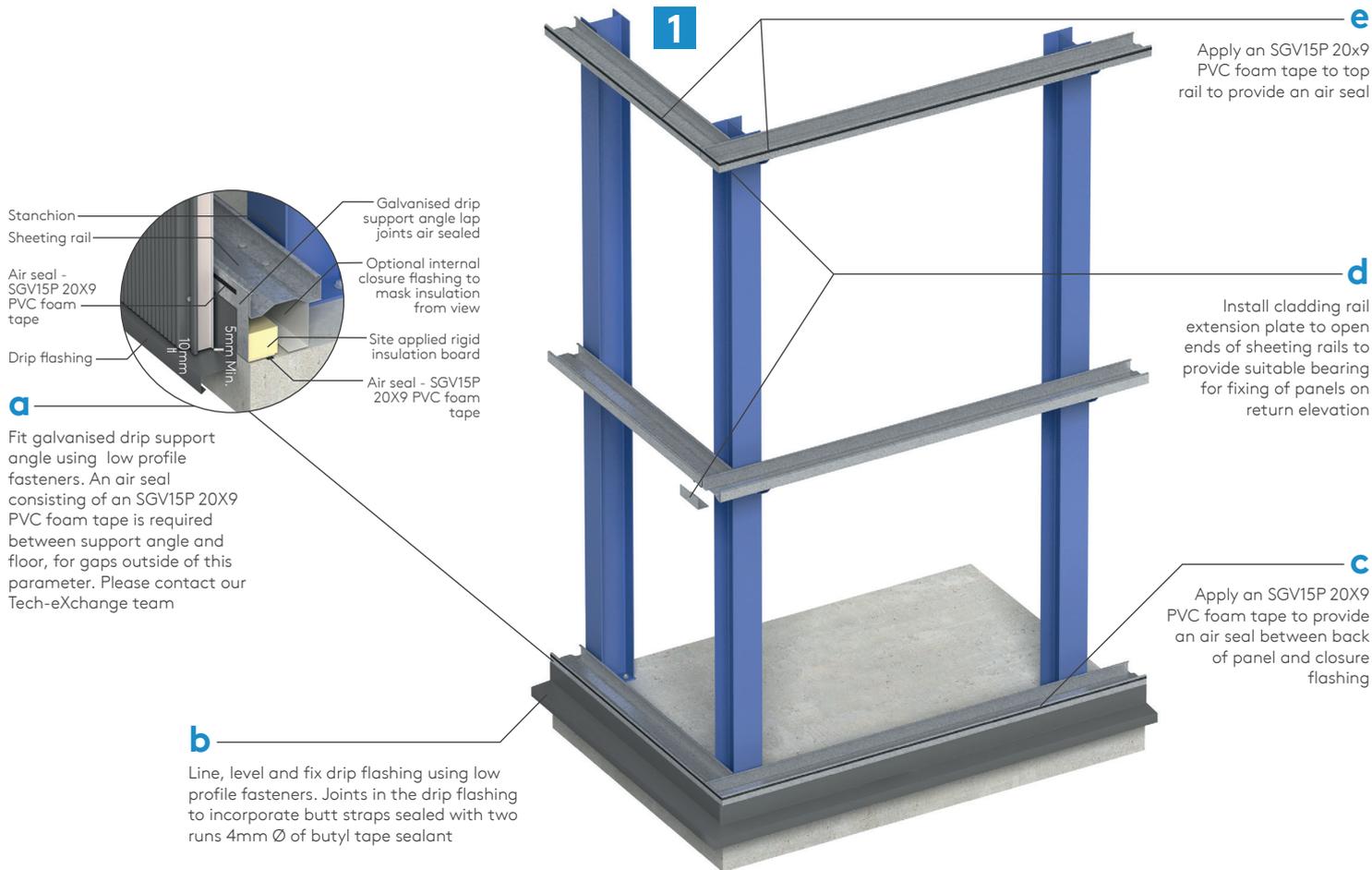


**Note:** Minimum number of fasteners as illustrated. Good practice would recommend that a wind load calculation be carried out for each project, to determine whether additional fasteners are required to meet local wind uplift requirements.

The fixing pattern shown is the minimum requirement only based on air and weather testing. For fixing patterns for LPCB certification or FM approval as well as project specific wind loading guidance, please contact Kingspan Insulated Panels Technical department (0800 587 0090).

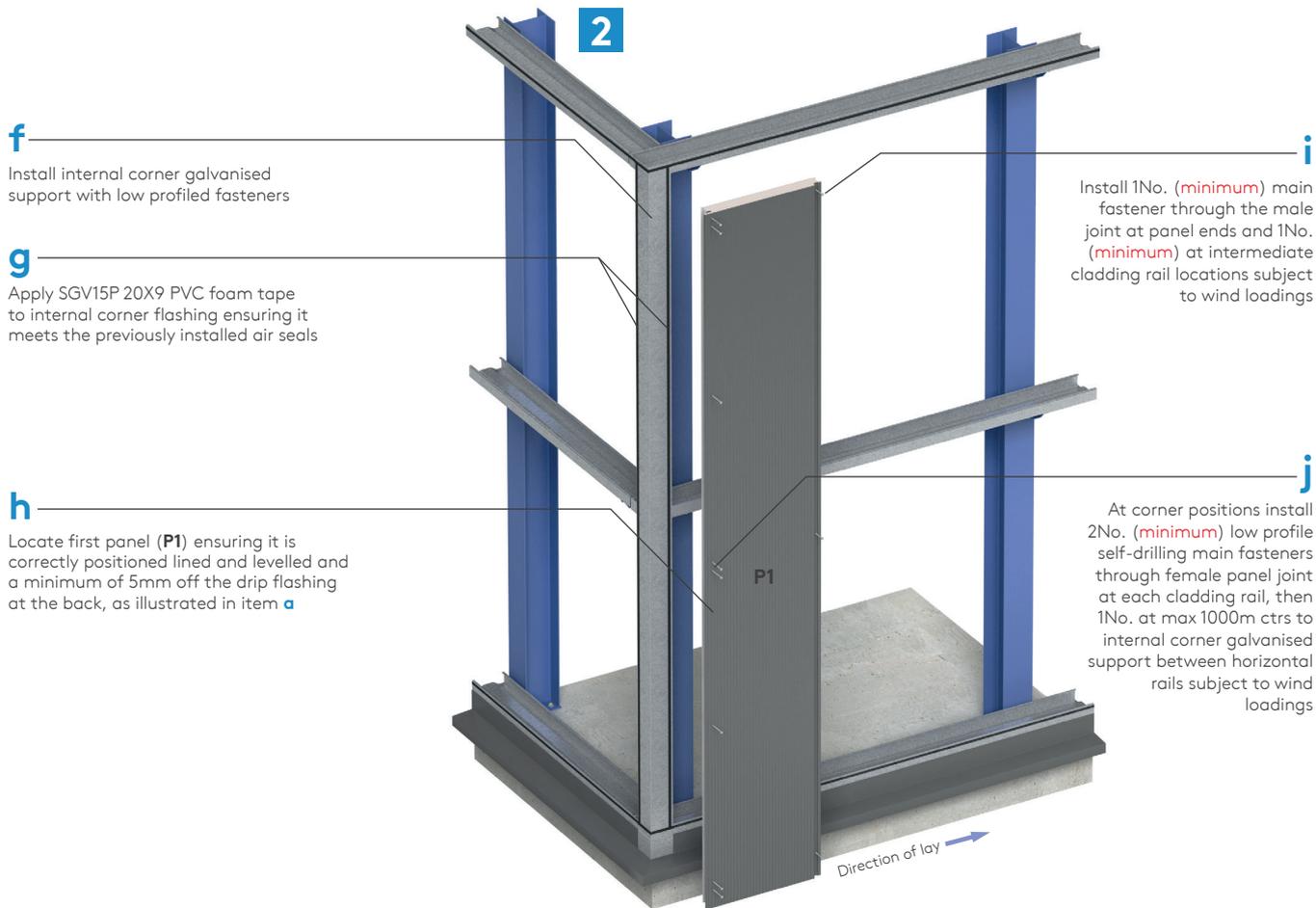
# QuadCore® AWP Wall Panel

## Vertical Installation



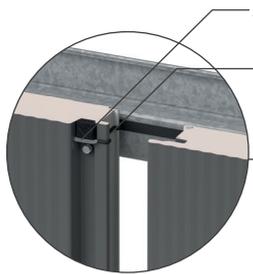
# QuadCore® AWP Wall Panel

## Vertical Installation



# QuadCore® AWP Wall Panel

## Vertical Installation



AWP filler bedded on low module neutral cure silicone sealant at every horizontal panel joint

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

l

Bed an AWP filler in low module neutral cure 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

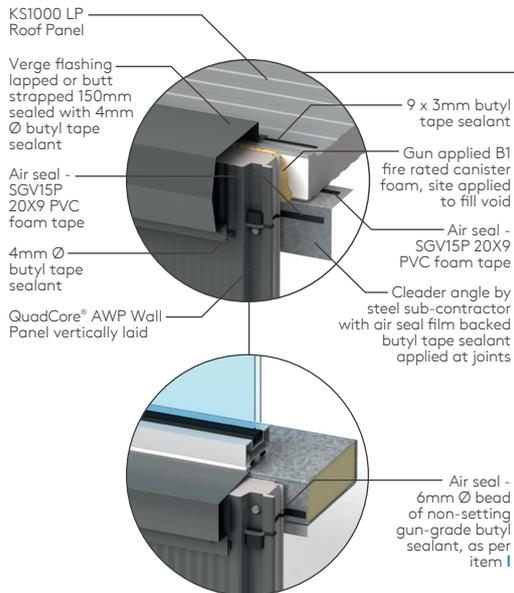
Run a non-setting gun-grade butyl sealant across male joint ensuring it meets previously installed air seal

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



# QuadCore® AWP Wall Panel

## Vertical Installation



**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 1No. main fastener (**minimum**) through the male joint at the panel ends and 1No. (**minimum**) at intermediate cladding rail locations subject to wind loadings



**n**

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

# QuadCore® AWP Wall Panel

## Vertical Installation

4



r

At corner positions install 2No. (**minimum**) low profile self-drilling main fasteners through panel (**P5**) cut edge at each cladding rail, then 1No. at max 1000m ctrs to internal corner galvanised support between horizontal rails subject to wind loadings

q

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

p

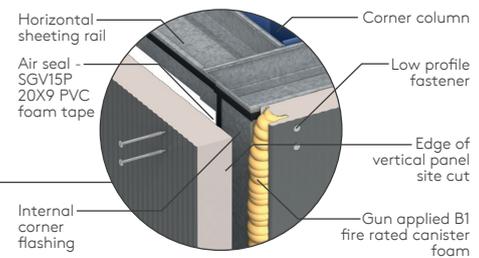
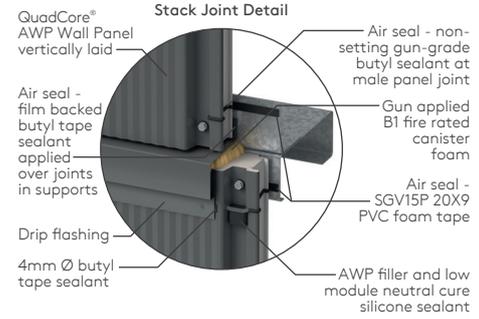
Cut panel (**P5**) to size using an Evolution type circular saw, ensuring it meets the outside edge of (**P1**)

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

o

Install site-applied rigid insulation board and gun applied B1 fire rated canister foam into female joint to fill the gap between panels (**P1**) and (**P5**) to ensure continuity of insulation

### Stack Joint Detail

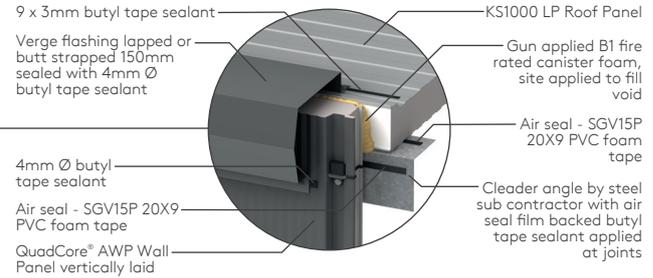


Direction of lay

Direction of lay

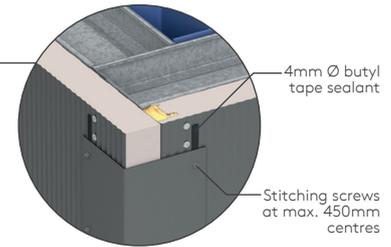
# QuadCore® AWP Wall Panel

## Vertical Installation



**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 be lapped or butt strapped 100mm sealed with 4mm Ø butyl tape 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

# QuadCore® AWP Wall Panel

## Vertical Installation



**For information on Fire Resistance please contact Kingspan Tech-eXchange for panel, fastener and installation specification requirements**

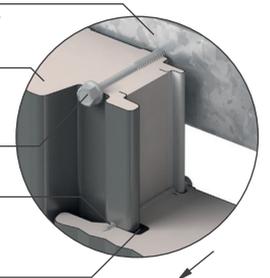
'Firewall Rail System' to offer an equal or greater period of fire resistance than the panels. Refer to Kingspan Tech-exchange for maximum support centre dimensions

QuadCore® AWP Wall Panel horizontally laid. Refer to Kingspan Tech-eXchange for min. panel thickness - QuadCore® insulation only (panel specified with a 0.5mm thick steel internal liner sheet)

Self-drilling self-tapping primary fixings with minimum 16mm diameter non-ferrous EPDM backed washer

**Internal panel fixing - stitch male and female joint at 250mm centres - fixing length to be max. 5mm shorter than panel thickness. Refer to Kingspan Tech-eXchange for fastener diameter**

Factory fitted AWP1 Edge Seal (QCFW panel spec only)



Direction of fire resistance - internal to external

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Installation guides are available for most of Kingspan insulated roof and wall panels.  
Please call Kingspan Tech-eXchange team on the numbers below.  
For the most up to date version of this Installation guide please scan the relevant QR codes below.

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[www.kingspanpanels.com](http://www.kingspanpanels.com)

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