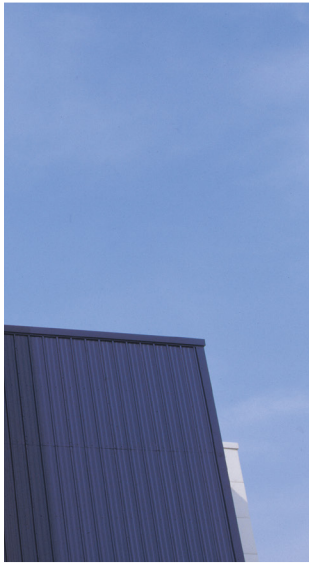
Insulated Roof & Wall Panels
Australia

K-Clad Wall Panel Installation Guide



Vertically Laid

Kingspan®

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K-Clad Wall Panel

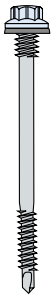
Vertically Laid

Components

K-Clad Wall Panel

Profiled filler

Primary fastener with washer
(Carbon Steel)
(Not by Kingspan)



Stitching screw with washer
(Carbon Steel)
(Not by Kingspan)

Fire rated canister foam
(Not by Kingspan)

Neutral cure gun-grade butyl sealant
(Not by Kingspan)

External corner flashing

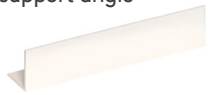
Drip flashing

Zed support

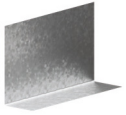
Butyl tape sealant
(Code: SEXT)

PIR insulation
(Not by Kingspan)

Continuous base support angle



Galvanised Ledger Angle



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.

K-Clad Wall Panel

Vertically Laid

Notes

- Ensure steelwork is suitably lined, levelled and within tolerance.
- Panels must be installed in a tiered sequence only.
- The end lap support position is critical, check location and straightness.
- Cover plates required where gap in s support steel is greater than 20mm.
- All fasteners to be carbon steel to maintain panel warranty
- Cut side of panel to suit required width at ground level before installation of corner panels P7 and P8 to suit.
- Gun-grade sealant type – neutral cure gun-grade sealant.
- The end lap support position is critical, check location and straightness.
- 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.
- Please contact Kingspan Technical Services Department for guidance
  – Internal air seals
  – High humidity & hygiene internal environments
  – Project specific advise
- 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.

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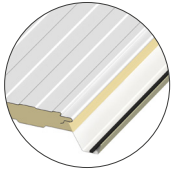
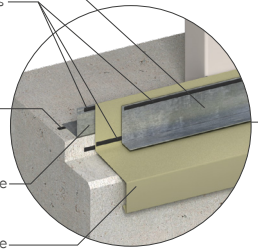
Vertically Laid

SIDELAP
A Factory Applied Weather Seal (FAWS) is applied to the panels, on the under side of the sidelap, before they leave the factory.

Sidelap rotated 180°





Note: The ledger angle prevents the panel from sitting on the drip flashing

1

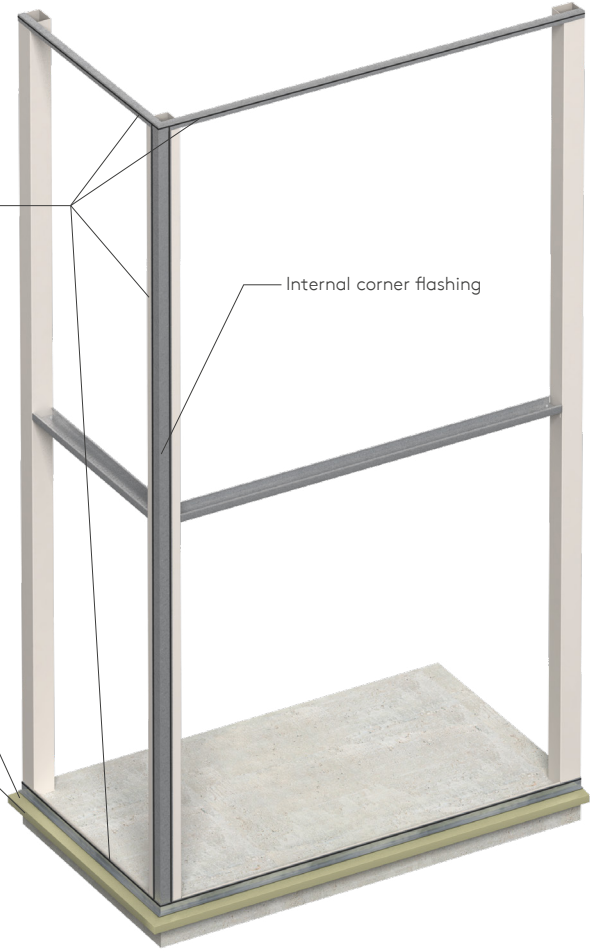
Apply continuous runs of 6x4mm butyl sealant or runs of neutral cure gun-grade butyl sealant to provide internal perimeter air seals

2

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

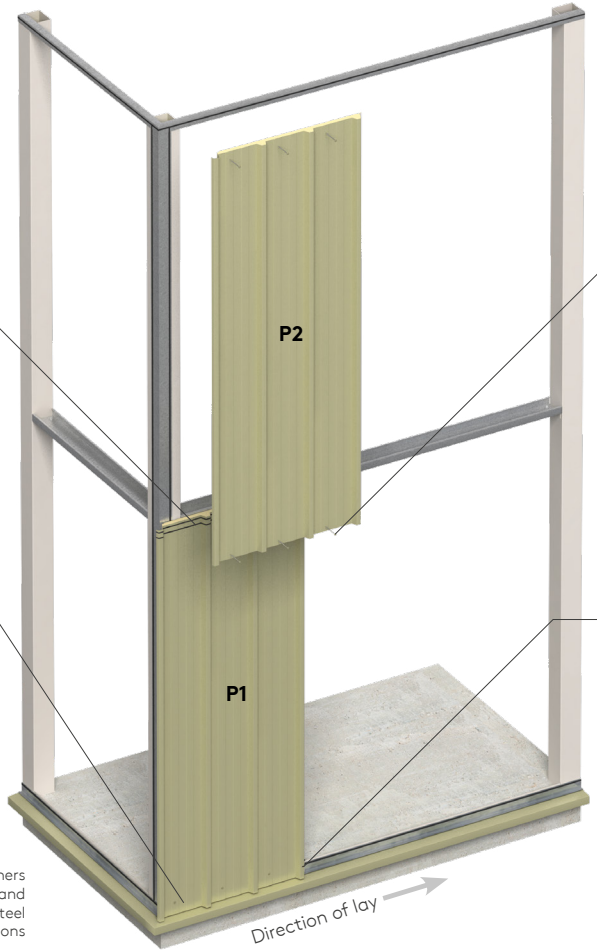
3

Fit ledger angle through drip flashing, into continuous base support angle, using low profile fasteners. An air seal consisting of continuous run of 6x4mm butyl sealant or bead of neutral cure gun-grade butyl sealant is required between drip flashing and ledger angle, and between ledger angle and K-Clad Wall Panel



K-Clad Wall Panel

Vertically Laid



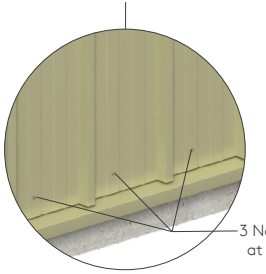
5

Apply two continuous runs of 6x4mm butyl sealant across full width of panel at end lap position

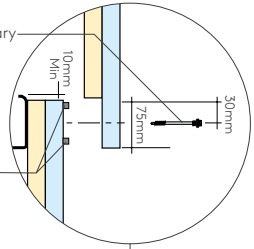
4

Install first panel (**P1**) with min. 3No. primary fasteners (minimum), into panel valley at each steel support location ensuring panel is vertically plum.

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

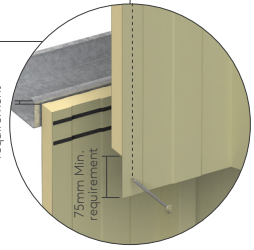


3 No. primary fasteners at each panel end and intermediate steel support locations



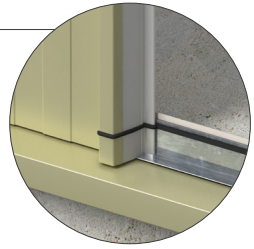
7

Install second panel (**P2**) with min. 3No. primary fasteners (minimum), into panel valley, at each steel support location, ensuring the primary fasteners fix through lower panel (**P1**) and inbetween the two runs of 6x4mm butyl sealant



6

Apply 6 mm dia neutral cure gun-grade butyl sealant to side of panel. Engage with previously installed perimeter air sealant on steel work to meet FAWS on proceeding panel



K-Clad Wall Panel

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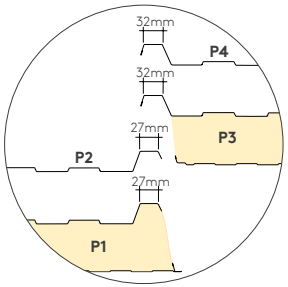
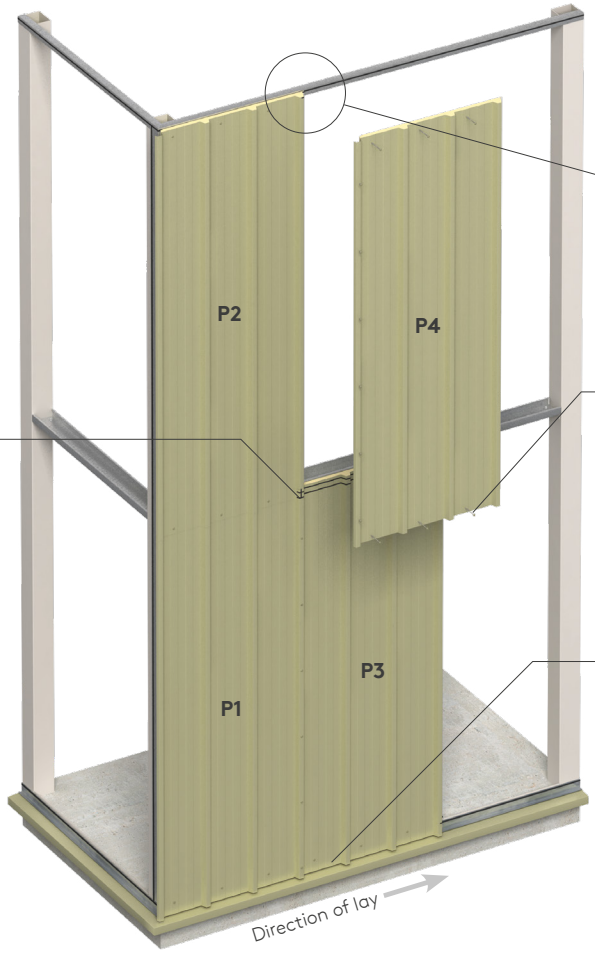
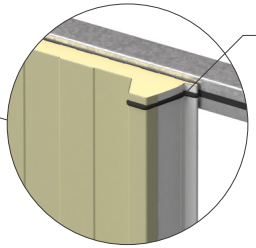
Enlargement of Overlap







8

Apply 6 mm dia neutral cure gun-grade butyl sealant to side of panel. Engage with previously installed perimeter air sealant on steel work to meet FAWS on proceeding panel

11

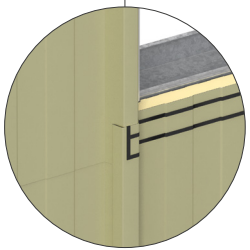
Install fourth panel (**P4**) ensuring side lap correctly engages and panel correctly aligns with external profile. Fix panel with min. 3No. primary fasteners (minimum), into panel valleys, at each steel support location as per item **7**

9

Install third panel (**P3**) ensuring side lap correctly engages and panel correctly aligns with external profile. Fix panel with 3No. primary fasteners (minimum), into panel valley, at each sheeting rail location. Install sealant as per item **6**

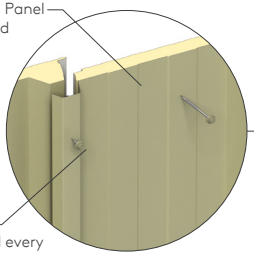
10

Repeat processes **5** and **7**. An additional 75mm run of 6x4mm butyl sealant is required at top of panel (**P3**) on the side lap



K-Clad Wall Panel

Vertically Laid



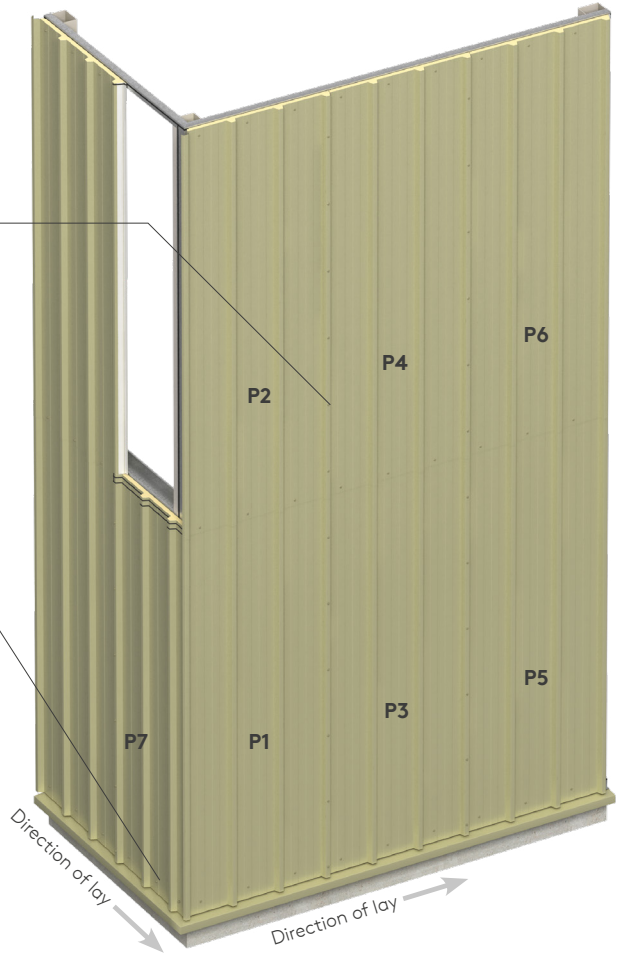
12

Install stitching screws along side lap at maximum 450mm centres commencing 50mm from panel end

13

Cut panel (**P7**) to size using a metal cutting type circular saw. Install with min. 3No. primary fasteners (minimum), into panel valley, at each steel support location.

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



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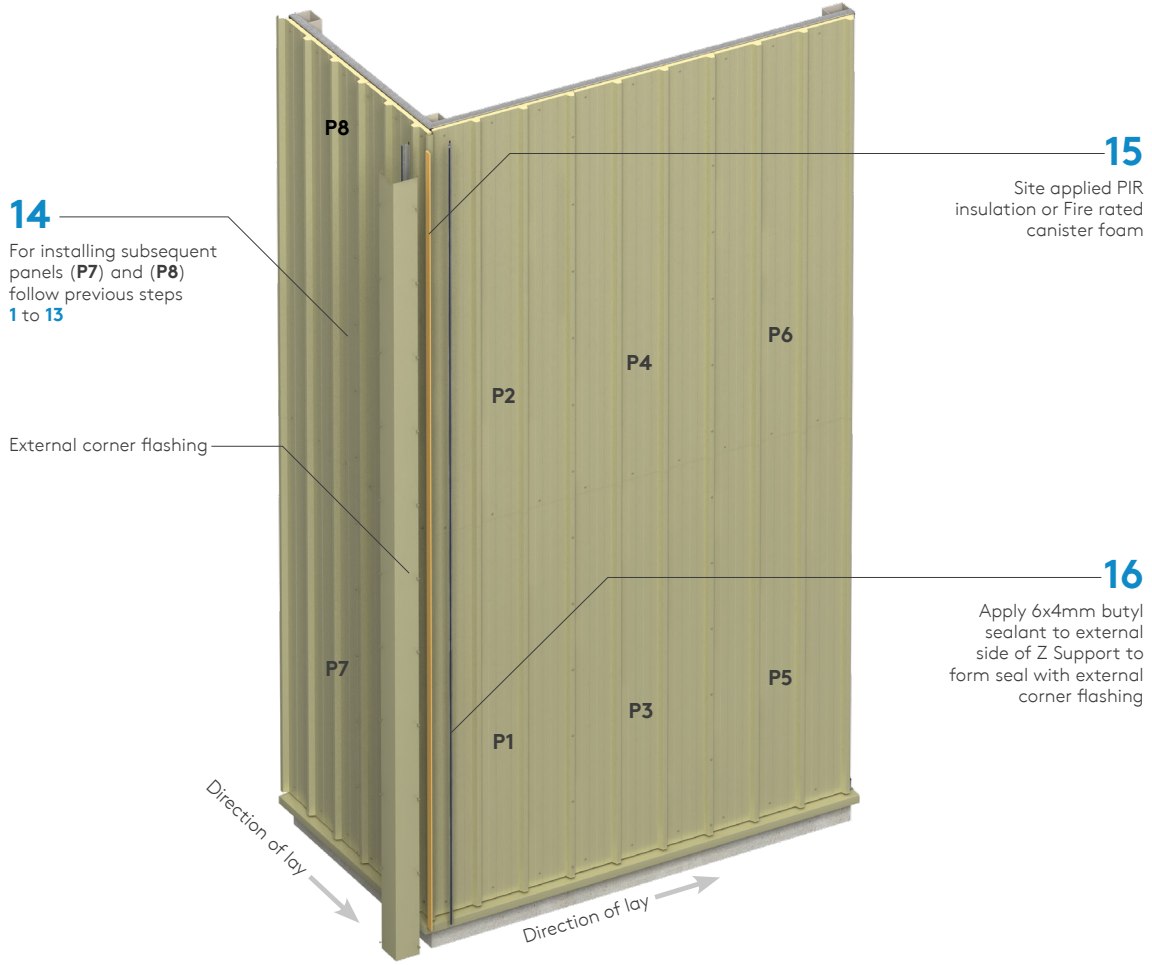


14

For installing subsequent panels (**P7**) and (**P8**) follow previous steps **1** to **13**

External corner flashing

15

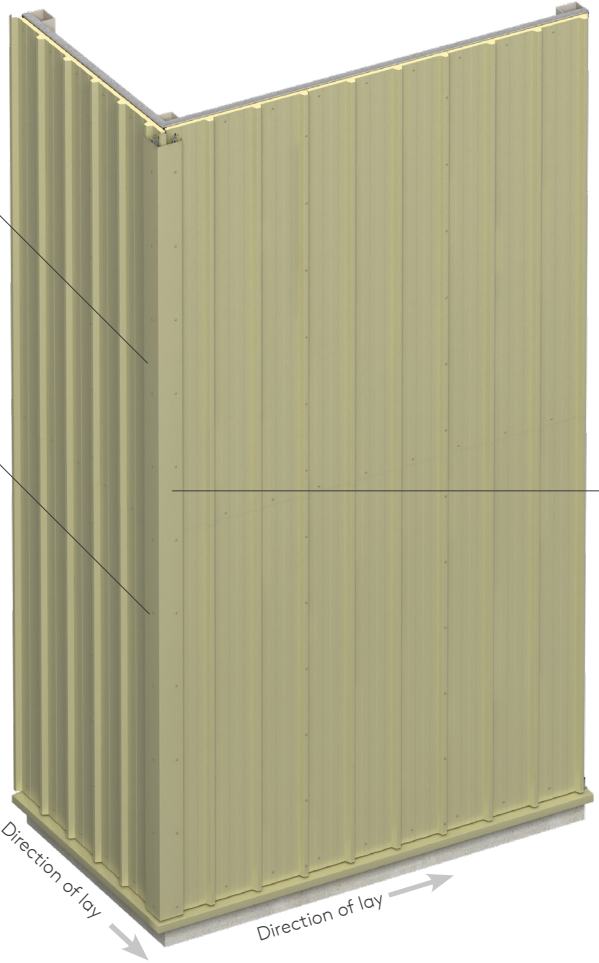
Site applied PIR insulation or Fire rated canister foam

16

Apply 6x4mm butyl sealant to external side of Z Support to form seal with external corner flashing

K-Clad Wall Panel

Vertically Laid

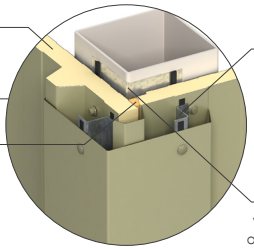


17

Corner flashing with 150mm sealed overlap or butt straps. Sealed with continuous runs of neutral cure gun-grade butyl sealant

18

Corner flashing to be stitched at 450mm centres into Z support



K-Clad Wall Panel vertically laid

Gaps filled with PIR insulation or Fire rated canister foam

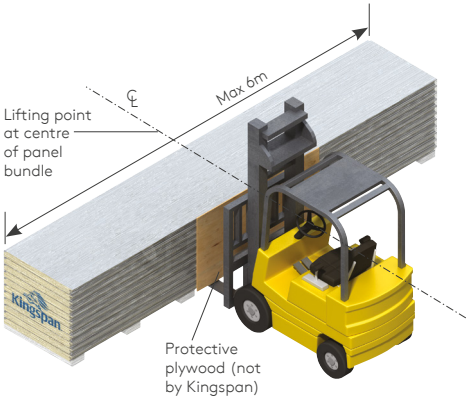
Z support sealed with 6x4mm butyl sealant

Internal flashing with 150mm sealed overlap. Sealed with continuous run of 6x4mm butyl sealant

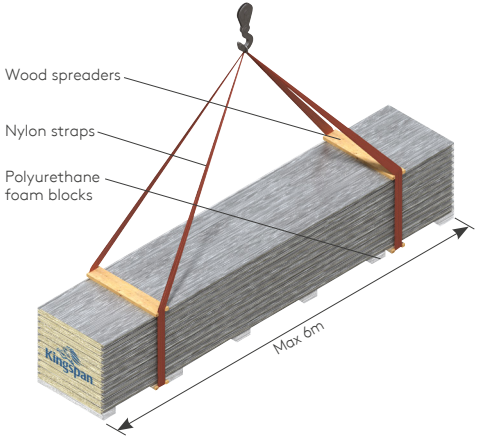
Panel Handling

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.

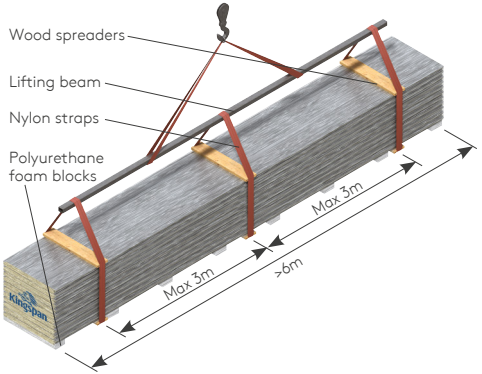
Protecting Film
When panels are supplied with a plastic protective film this should be removed during site installation.



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.

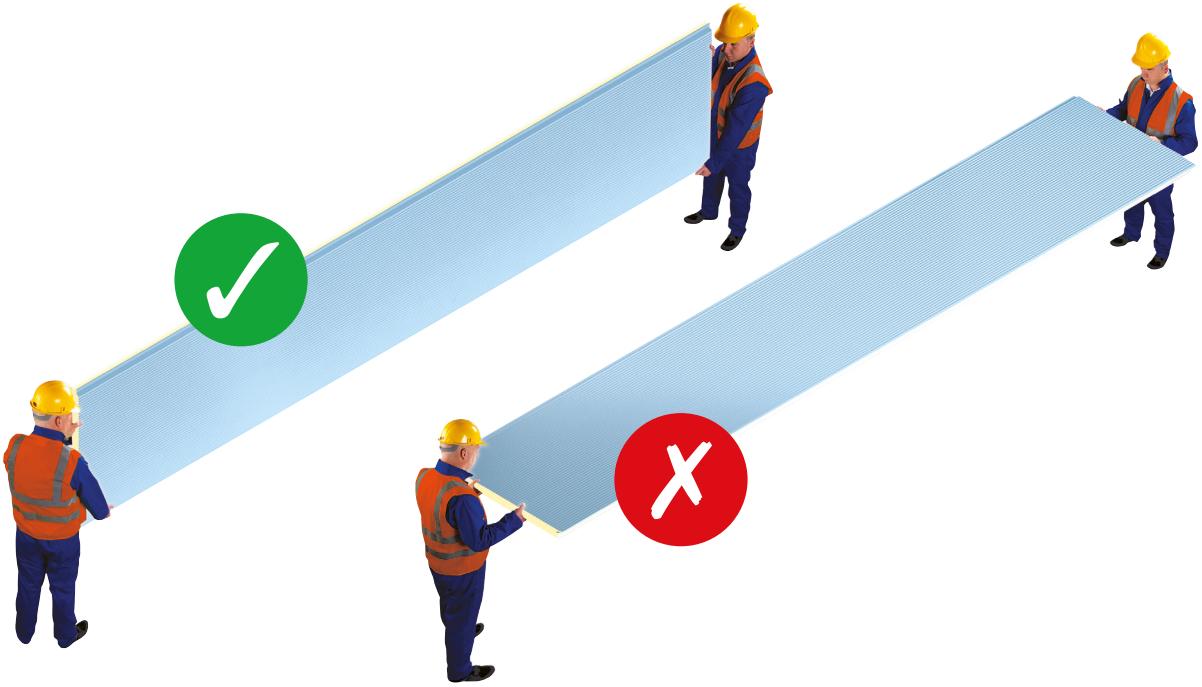
For illustration purposes only

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.
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:

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