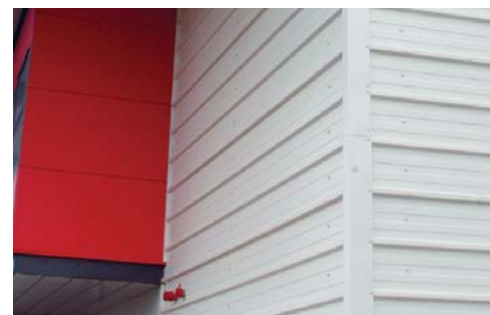
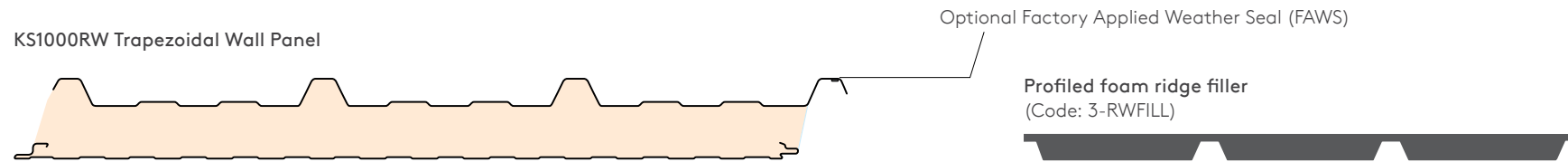


KS1000RW Trapezoidal Wall Panel Installation Guide Horizontally Laid

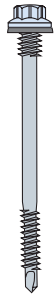


KS1000RW Trapezoidal Wall Panel - Horizontally Laid

Components



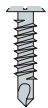
Primary fastener with washer
(Carbon Steel with minimum 19mm embossed washer)
NOT BY KINGSPAN



Stitching screw with washer
(Carbon Steel with minimum 15mm embossed washer)
NOT BY KINGSPAN



Low profile fastener
(Carbon Steel)
NOT BY KINGSPAN



Canister applied fire-rated PU foam
NOT BY KINGSPAN



Gun-grade butyl sealant
NOT BY KINGSPAN



Butyl tape sealant
(Code: SEXT)



6x4mm

This installation guide should be read in conjunction with the 'project specific' design drawings and Kingspan standard details.

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 and Wall Systems.

KS1000RW Trapezoidal Wall Panel - Horizontally Laid

Notes

This is a generic KS1000RW installation guide. Details may differ from project to project. Project specific construction details must be used unless those details are contrary to the principles of the Kingspan details; in which case specific instruction should be sought.

Sequence

The panels are ordered for either 'Right to Left' or 'Left to Right' installation. Kingspan does not recommend 'back-laying' of the panels.

If there are panel end laps then the panels must be installed in a tiered sequence only.

Support Structure

Ensure steelwork is suitably plumb, level and within tolerance before starting the installation of the panels. If the panels are end lapped then check the bearing width, location and straightness of the structural support at that location.

The minimum bearing face for intermediate supports is 60mm. The minimum bearing width at panel end to panel end lap junctions differ, refer to Kingspan details.

The support must provide a full bearing surface for the panel

Install

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

When practical, cut panels on ground prior to installation. Clean any swarf from the panel immediately

The protective film is to be removed from the external weather face of panel & internal liner before to installation.

Gun-grade sealant is butyl sealant for air seals and neutral cure silicone for weather seals.

Fixings

The number of fasteners must be calculated based on spans, wind loads and fastener capacity.

All fasteners to be minimum Class 4 Carbon steel with coloured heads, refer to the specification. Check that the fixing thread and drill tip is correct for connection to the structure.

Install fasteners with the recommended screw gun speed selection. Use correct socket and drive, including depth-locating nose piece to prevent over driving. Refer to the fastener manufacturer's recommendations.

Fixings may be installed either in the panel crown or on the panel pan. For walls confirm with the designer which method is to be used before ordering of the fixings and panel installation.

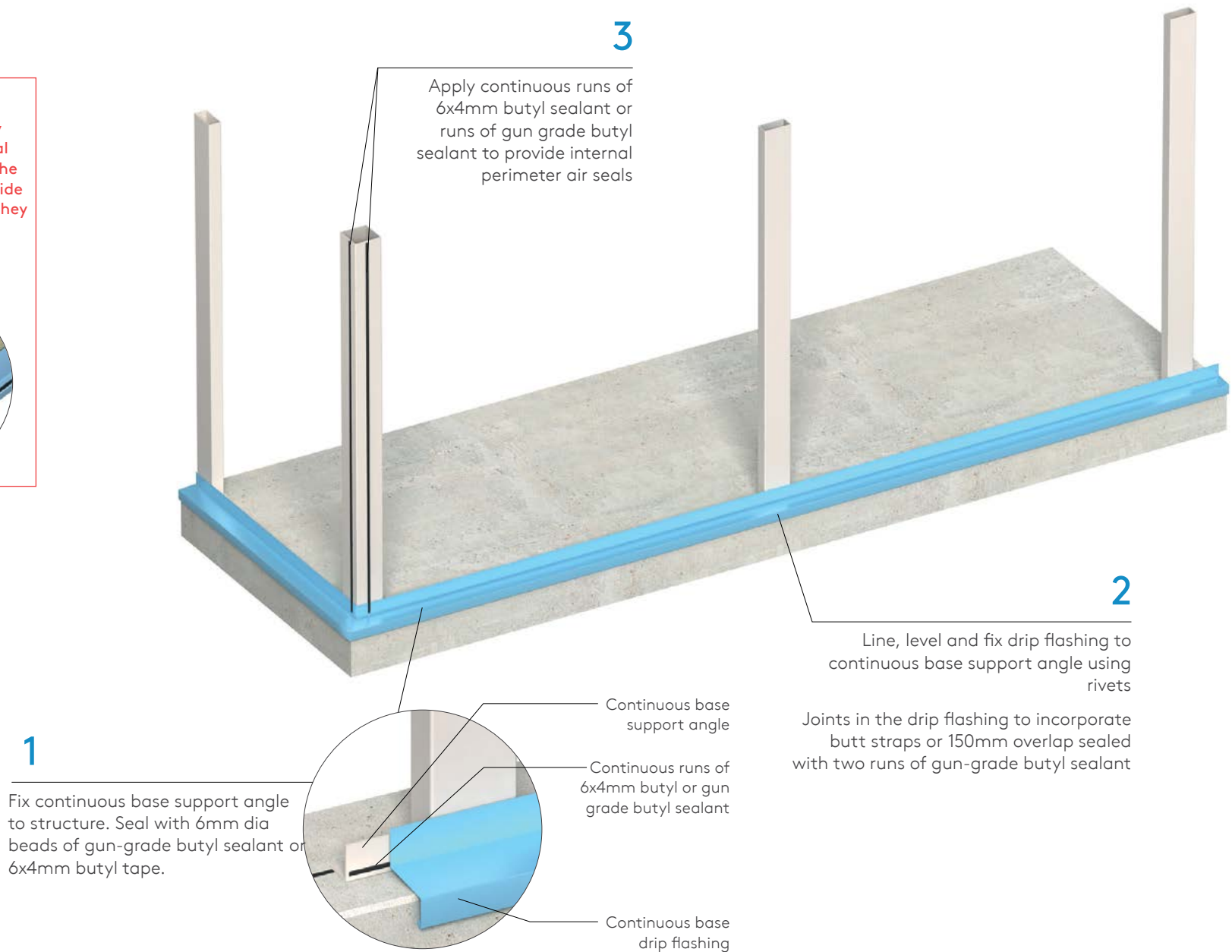
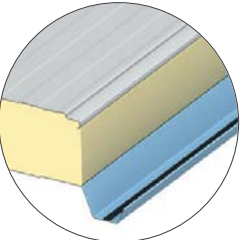
Contact Kingspan Technical Services for project specific advice on High Humidity buildings and cyclonic regions.



SIDELAP

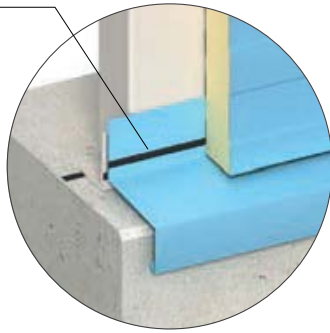
An optional Factory Applied Weather Seal (FAWS) is applied to the panels, on the under side of the sidelap, before they leave the factory

Sidelap rotated 180°



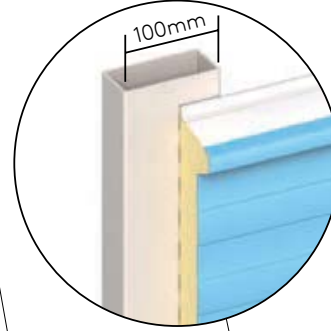
Note: Minimum bearing face for steelwork is 100mm for panel overlap vertical joint option; 140mm for alternative top hat detail.

Continuous runs of 6x4mm butyl or gun grade butyl sealant



4

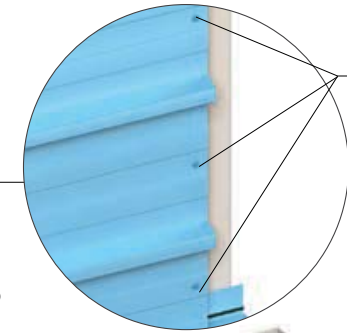
Apply a continuous run of 6x4mm bead of butyl sealant or gun-grade butyl sealant to provide an air seal between back of panel and front of drip flashing



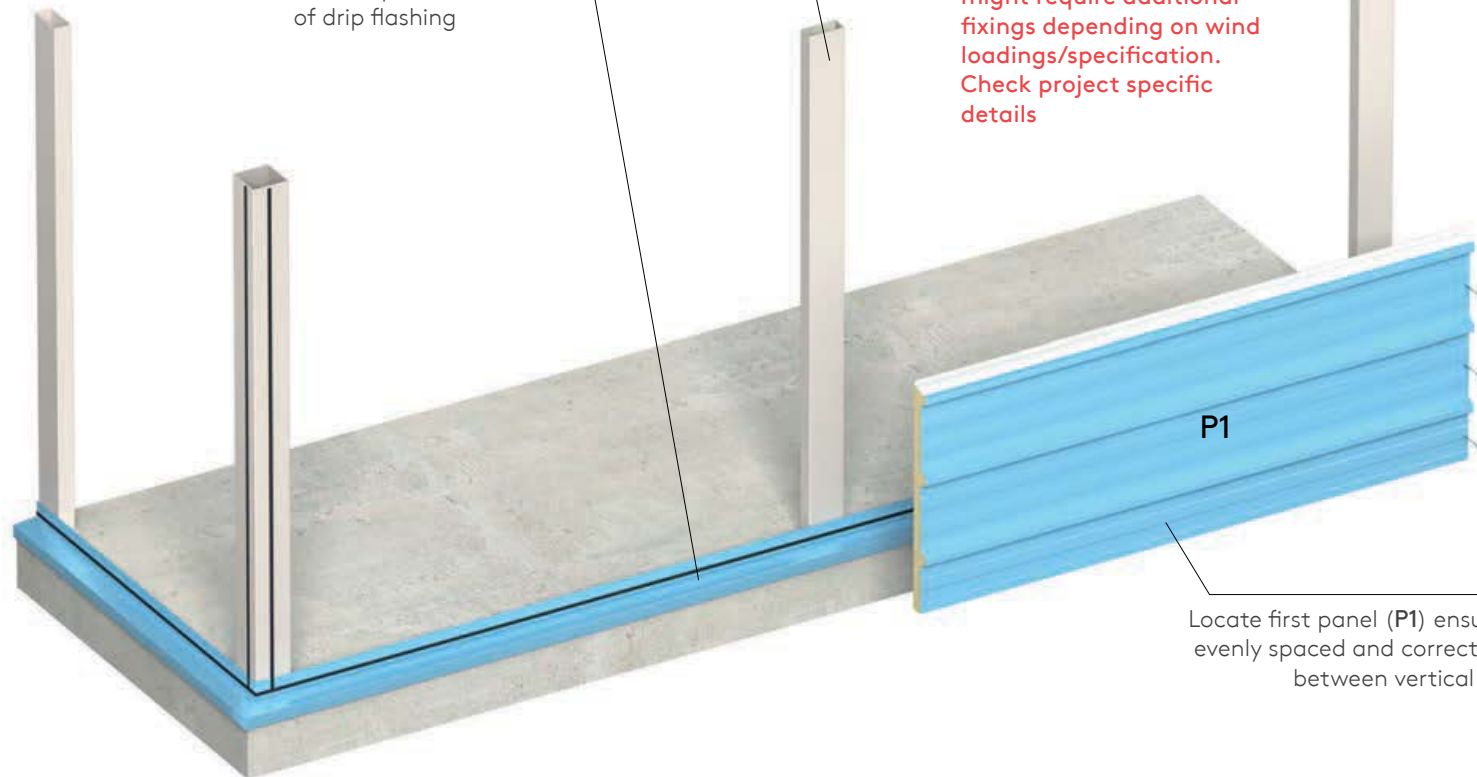
6

Install 3 No. (minimum) primary fasteners into panel valleys, at each vertical steel support location

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



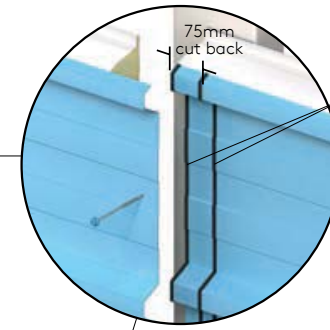
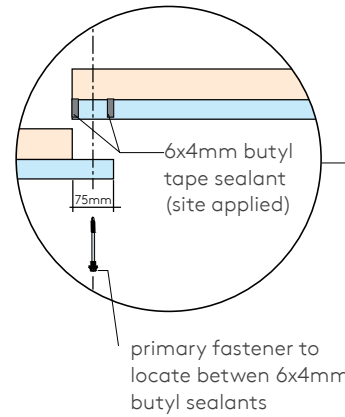
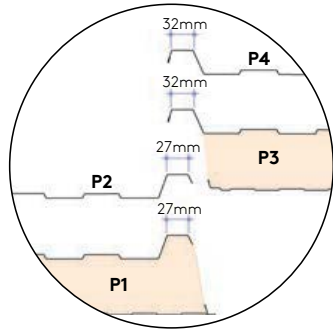
3 No. primary fasteners at each panel end



5

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

Enlargement of Overlap

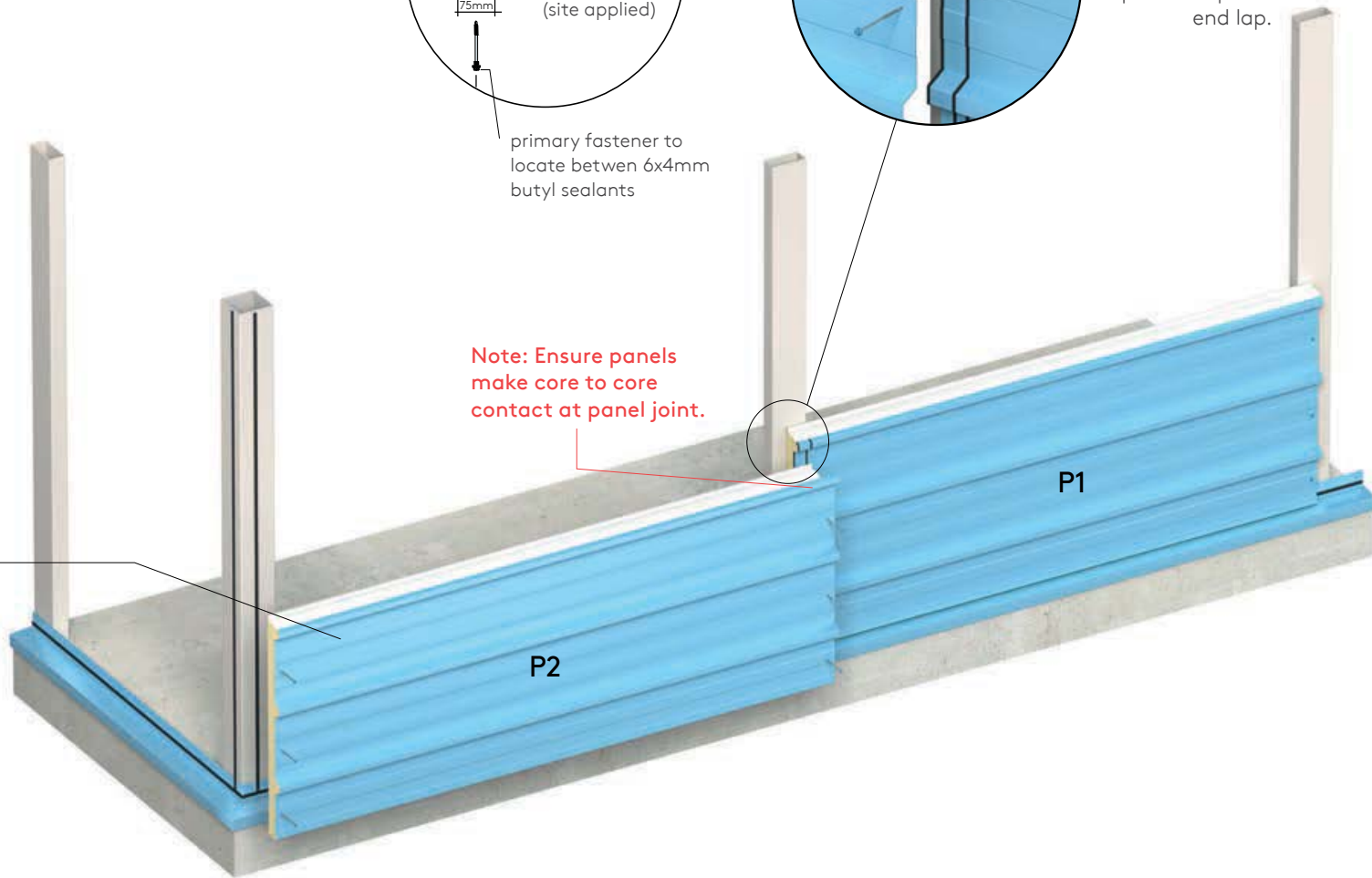


7
Apply two runs of 6x4mm butyl tape to the panel end lap.

Note: Ensure panels make core to core contact at panel joint.

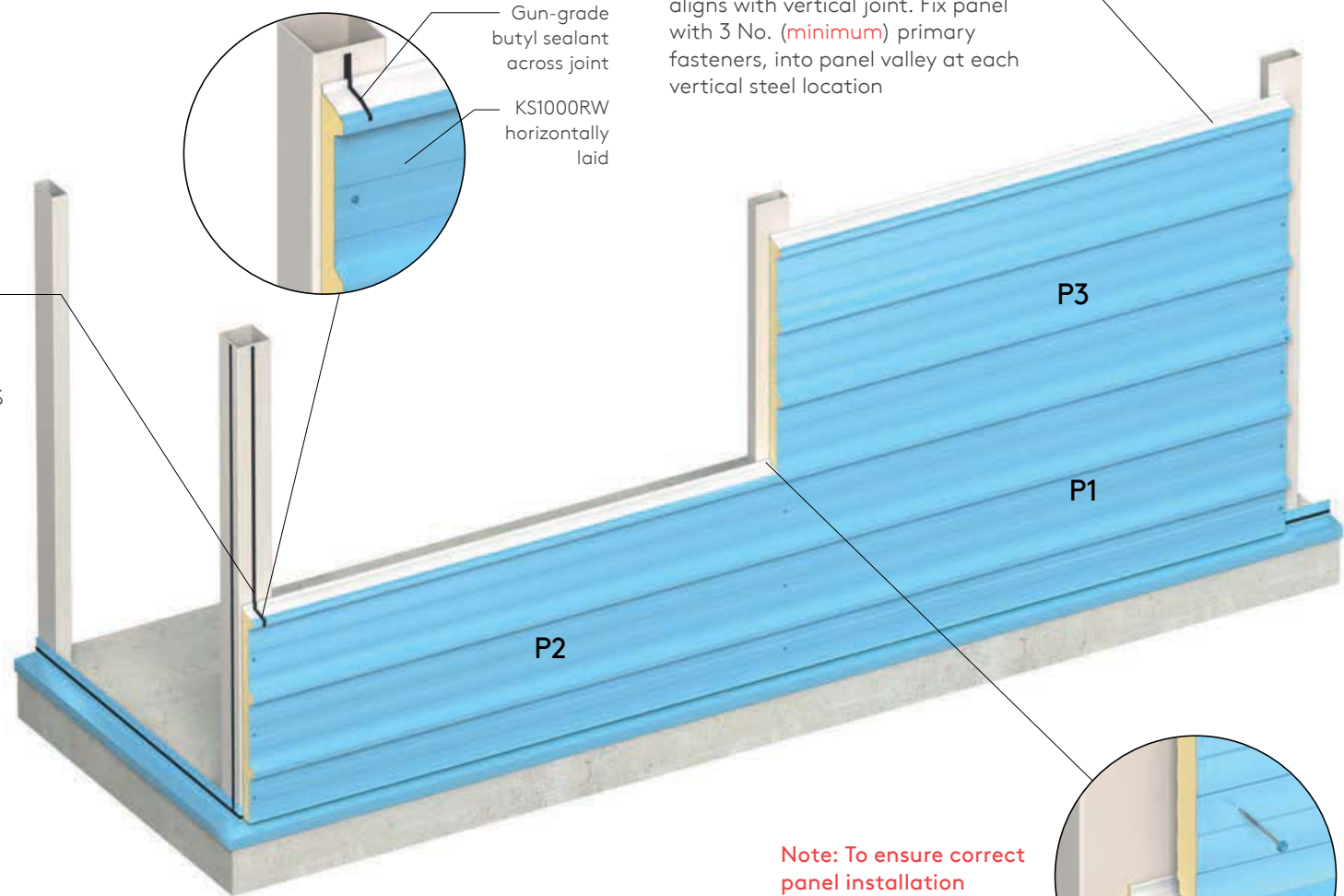
8

Install second panel (P2) with 3 No. (minimum) primary fasteners, into the panel valley at each vertical steel support location, ensuring it is evenly spaced and correctly positioned between vertical joint centres



10

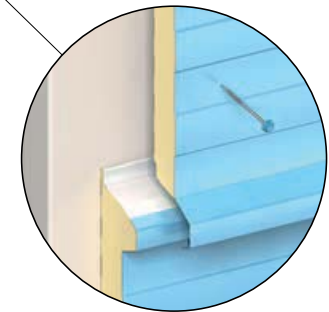
Apply 6 mm dia gun-grade butyl sealant to side of panel. Engage with previously installed perimeter air seal on steel work to meet FAWS on proceeding panel above



9

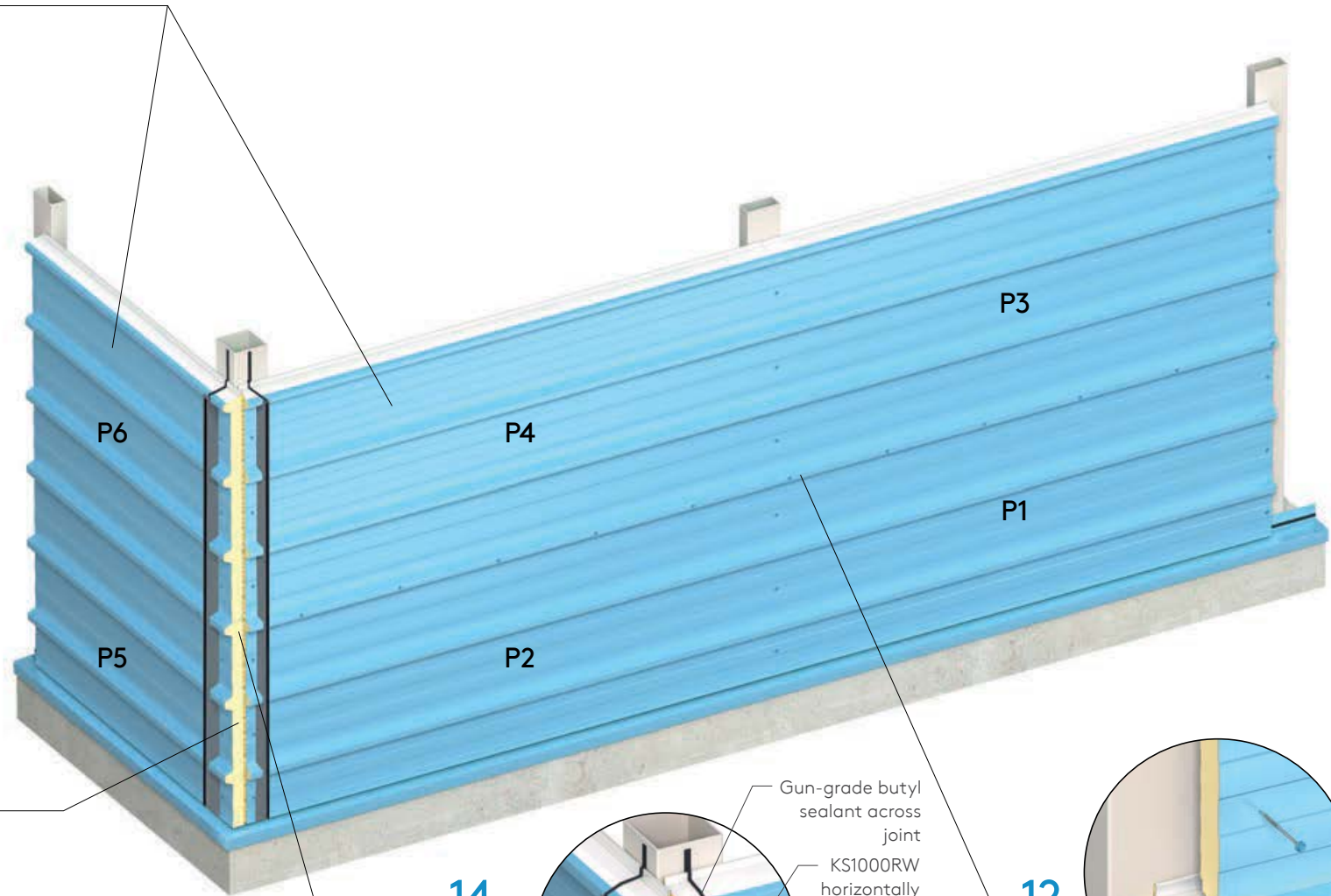
Install third panel (P3) ensuring sidelap correctly engages and panel aligns with vertical joint. Fix panel with 3 No. (minimum) primary fasteners, into panel valley at each vertical steel location

Note: To ensure correct panel installation sheeting rails must be correctly aligned prior to insertion of fixings



11

Install and fix panels (P3 & P4) and (P5 & P6) as per items 5-7

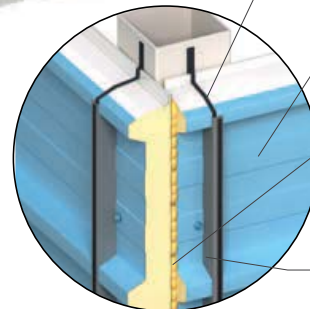


13

Gaps between insulation to be filled with canister applied fire rated PU foam

14

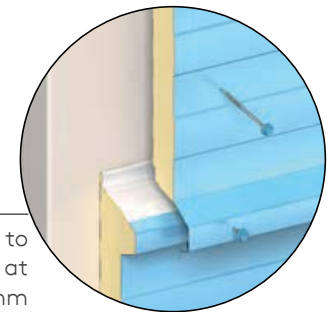
Set profiled fillers minimum of 70mm from either edge of the corner flashing, sealed top and bottom with gun-grade butyl sealant

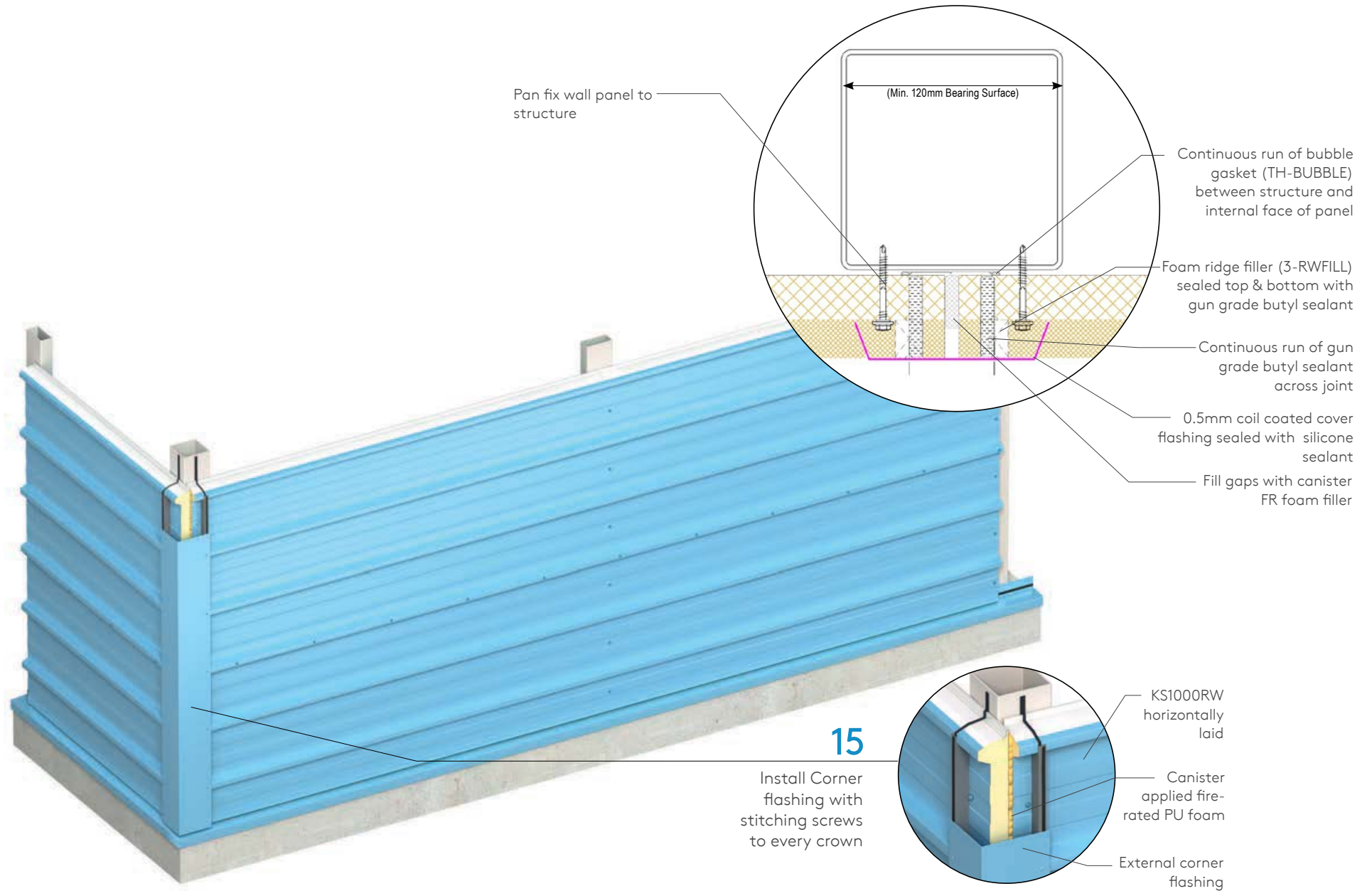


- Gun-grade butyl sealant across joint
- KS1000RW horizontally laid
- Canister applied fire-rated PU foam
- Profiled filler

12

Side laps to be stitched at max. 450mm centres





KS1000RW Trapezoidal Wall Panel - Horizontally Laid

Panel Handling

Appropriate personnel protective equipment should always be worn to avoid cuts and abrasions to installers and panels.

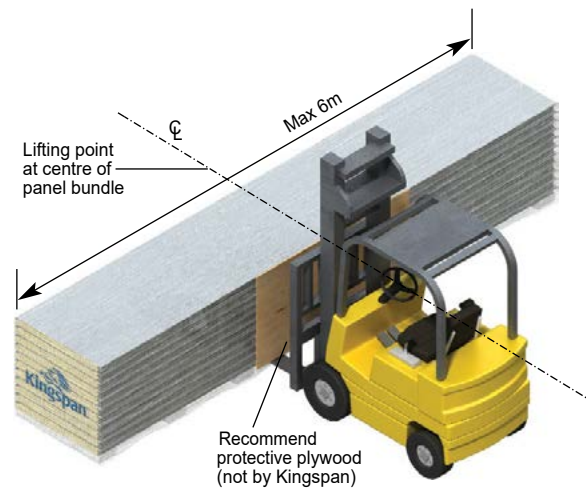
Individual panels should always be lifted from a pack and not dragged over others.

The weight of individual panels for lifting can be determined from the information on the packing slip.

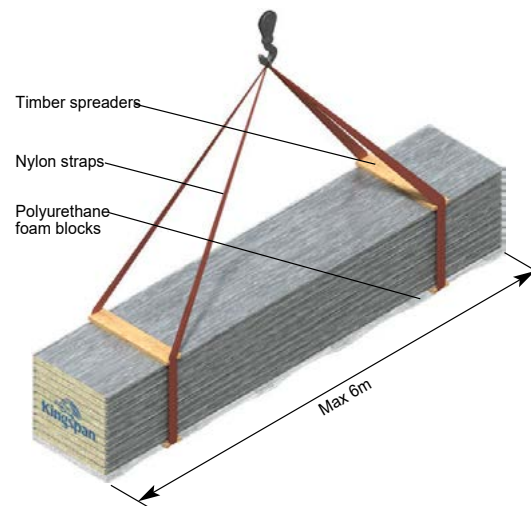
For larger panels the contractor would normally arrange to use appropriate material installation equipment to help lift the panels into position.

Protecting Film

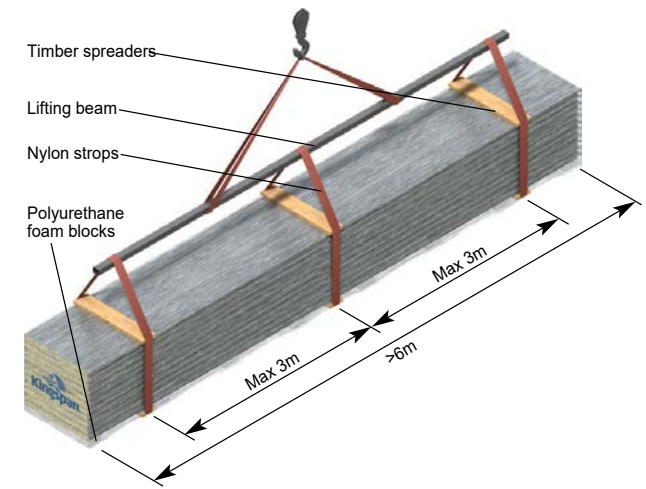
When panels are supplied with a plastic protective film this should be removed prior to site installation.



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 more than or equal to 6m can be handled with a forklift spreader or a crane by using nylon straps and timber 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.

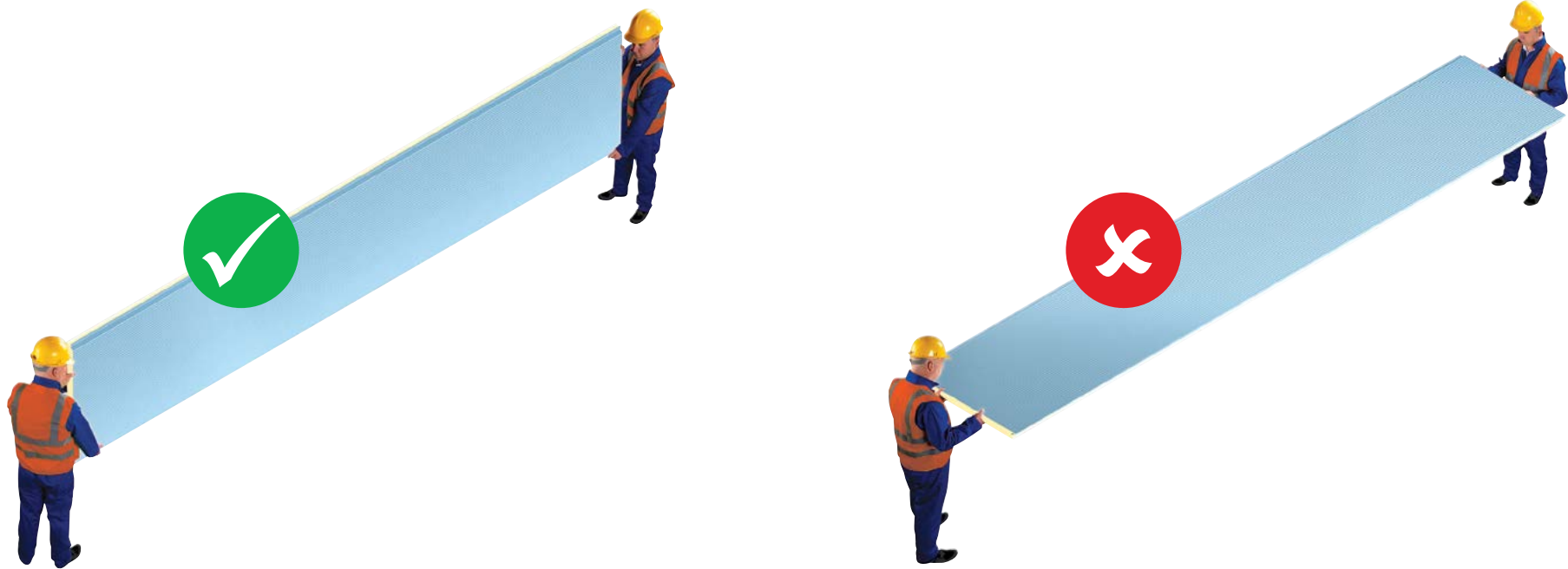
For illustration purposes only

KS1000RW Trapezoidal Wall Panel - Horizontally Laid

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.



Contact Details

New Zealand

Kingspan Limited

97 Montreal Street | Christchurch 8023

T: 0800 12 12 80 or +64 (0) 3 260 5530

E: info@kingspanpanels.co.nz

www.kingspanpanels.co.nz

For the product offering in other markets please contact your local sales representative or visit www.kingspanpanels.com

Care has been taken to ensure that the contents of this publication are accurate, but Kingspan Limited and its subsidiary companies do not accept responsibility for errors or for information that is found to be misleading. Suggestions for, or description of, the end use or application of products or methods of working are for information only and Kingspan Limited and its subsidiaries accept no liability in respect thereof.

To ensure you are viewing the most recent and accurate product information, please visit: <https://www.kingspan.com/content/dam/kingspan/kip-west/wall-panels/ks1000rw-wall-panel/kingspan-ks1000rw-trapezoidal-wall-panel-installation-guide-horizontal-en-nz.pdf>

© Kingspan and the Lion Device are Registered Trademarks of the Kingspan Group plc in the UK, Ireland and other countries. All rights reserved.

