Height Safety Solutions

Fall Protection Systems

Safepro2, Saferidge & Safetraxx

Kingspan®
Insulated Panels

Fall Protection Systems

Kingspan offers a range of personal fall protection systems including Safepro2, Saferidge and Safetraxx. All these systems provide proven, effective and discreet fall protection solutions for working at height.

Kingspan safety systems allow quick and efficient installation, eliminating the need to access the underside of the roof.

These are the only personal fall protection systems approved by Kingspan for installation on Kingspan panels, as they are designed to minimise or dissipate the dynamic loads applied to the roof in a fall arrest event. Each has been proven on the current specification of panels and will not affect the guarantee offered by Kingspan for the roof.

All three systems are quality approved, supplied and installed to AS NZS 1891.2 and AS NZS 1891.4.

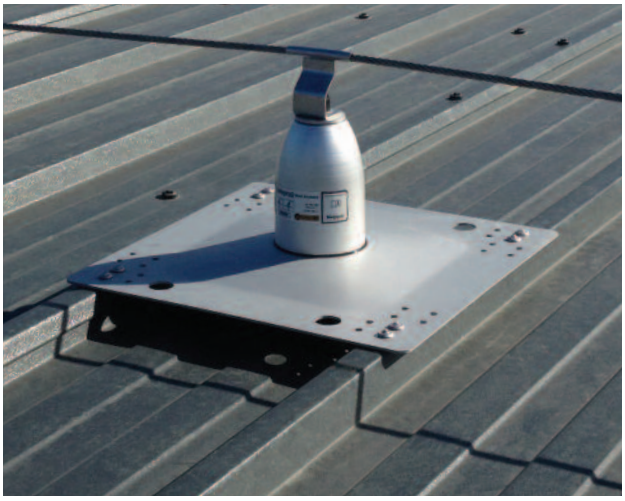
Contents

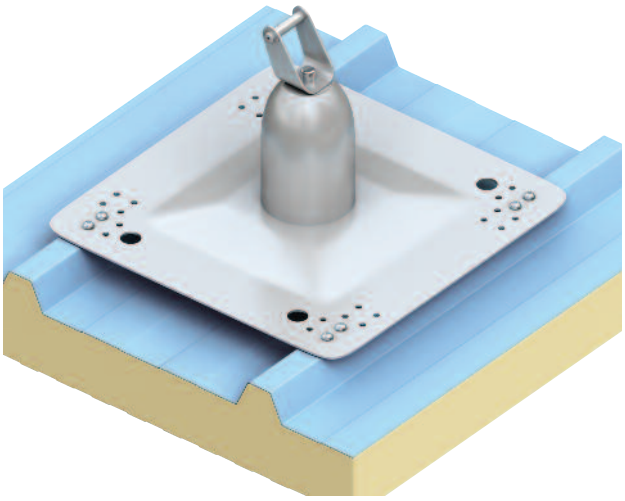
Kingspan Insulated Panels

Product Range

Kingspan Safepro2

Kingspan Safepro2 is a new innovative fall protection system, designed to protect both the worker and the roof to which it is fixed. Kingspan Safepro2 is the only horizontal life line approved by Kingspan for installation on Kingspan insulated panels.





Safepro2 comprises a high-strength stainless steel cable, supported on energy-absorbing roof anchor posts. Safepro2 is certified to AS NZS 1891.2 & 1891.4, EN 795 and OHSA 1926.

Safepro2 roof anchors incorporate Force Minimisation Technology, which limits the load transferred to the roof, in a fall arrest event, to less than 6kN. This is a significant improvement over older types of force control posts which applied 10kN or more to the roof.

Safepro2 has fixing and sealing details specifically for Kingspan Trapezoidal, Foilback, Lo-Pitch and Kingspan K-Dek insulated panels. Safepro2 is the only such system tested and proven with current Kingspan insulated panel specifications.

Safepro2 can be installed during or after construction to most roof systems, without access to the underside of the roof. For Trapezoidal, Foilback and Lo-Pitch panels Safepro2 is fixed into the panel outer skin only, using a small number of high strength rivets. There is no penetration of the insulation within the roof construction and, as the fasteners only fix into the top skin, there is no thermal bridging.

Safepro2 is highly suitable for providing safe access to roof-mounted PV and other solar systems.

The Kingspan Safepro2 system is available globally including Australia, New Zealand, United Kingdom, Ireland, Europe, North America and Canada, the Middle East and Hong Kong.

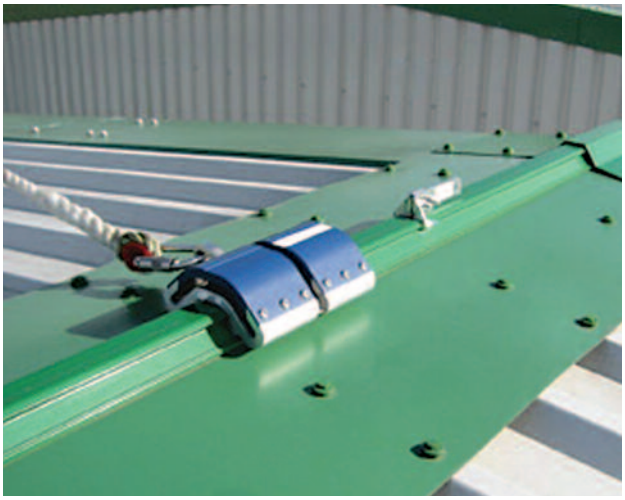
Features & Benefits

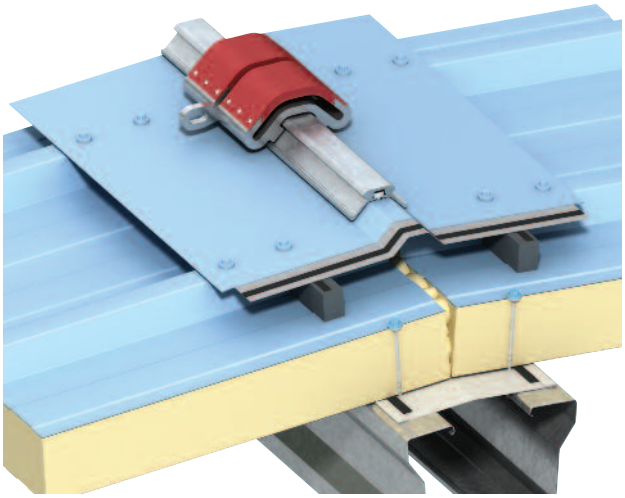
- Compliance with national and international standards – providing the highest levels of protection and compliance with regulatory requirements.
- Approved by Kingspan and an integral part of the Kingspan insulated panel system – ensuring compatibility with roof system and not affecting roof guarantees.
- High-grade stainless steel and aluminium components – offering superior corrosion resistance, durability and service life.
- Improved energy absorbency of anchor posts, reduces loads generated during fall arrest event – requiring fewer fixings and reducing potential damage to roof panels.
- Advanced fixings design – allowing efficient installation without access to underside of roof and with no thermal bridging.
- All fixings and accessories are supplied by Kingspan – guaranteeing correct and compatible materials are used.
- Located anywhere on roof – ensuring most practicable solutions can be offered for each roof.
- Highly-evolved design – offering one of the simplest to design, most efficient to install and easiest to use systems available.
- Technical support is available directly from Kingspan – allowing designers, installers and users to maximise the potential of these systems.

Product Range

Kingspan Saferidge

Kingspan Saferidge is a unique fall protection system, integrated into the roof apex cap detail. Kingspan Saferidge is the only such system approved by Kingspan for installation on Kingspan insulated panels.





Saferidge comprises a high-grade precision-extruded aluminium rail, factory-fitted to a steel apex cap bespoke fabricated for each roof. Saferidge is certified to AS NZS 1891.2 & 1891.4, EN 795 and OHSA 1926.

Saferidge is designed to dissipate fall arrest forces across a wide roof area, minimising potential damage to the roof in a fall arrest event.

Saferidge has fixing and sealing details specifically for Kingspan Trapezoidal, Foilback and Lo-Pitch panels. Saferidge is tested and proven with current Kingspan panel specifications.

Saferidge is usually installed during construction to most roof systems, without access to the underside of the roof. It is fixed to the panel outer skin only, using high performance screws. There is no penetration of the insulation within the roof construction and, as the fasteners only fix into the top skin, there is no thermal bridging.

Saferidge has a very low profile and can be colour matched or contrasted to the roof finish, for a discreet or feature finish.

Saferidge's low profile also makes it highly resistant to high wind and snow loading.

Saferidge is highly suitable for providing safe access to roof-mounted PV and other solar systems.

The Kingspan Saferidge system is available globally including Australia, New Zealand, United Kingdom, Ireland, Europe, North America and Canada, the Middle East and Hong Kong.

Features & Benefits

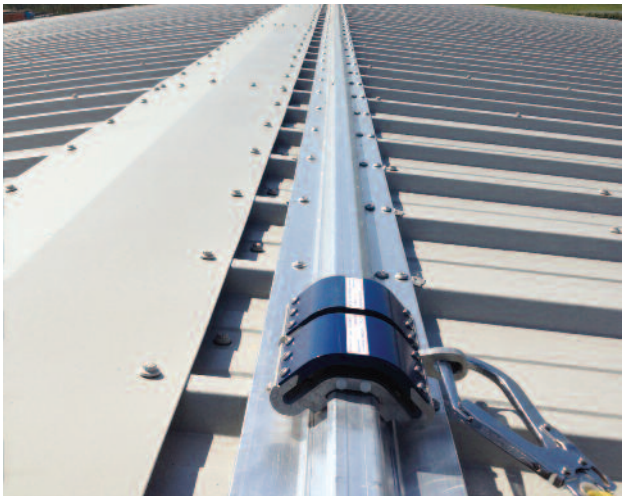
- Compliance with national and international standards – providing the highest levels of protection and compliance with regulatory requirements.
- Approved by Kingspan and an integral part of the Kingspan insulated panel system – ensuring compatibility with roof system and not affecting roof guarantees.
- High-grade stainless steel and aluminium components – offering superior corrosion resistance, durability and service life.
- Fixed continuously across large roof dissipating forces – minimising deformation of system and potential damage to roof.
- Advanced fixings design – allowing efficient installation without access to underside of roof and with no thermal bridging.
- All fixings and accessories are supplied by Kingspan – guaranteeing correct and compatible materials are used.
- Located on ridge line – providing protection to whole roof area.
- Discreet low profile – minimising aesthetic impact of system.
- Highly-evolved design – offering one of the simplest to design, most efficient to install and easiest to use systems available.
- Technical support is available directly from Kingspan – allowing designers, installers and users to maximise the potential of these systems.

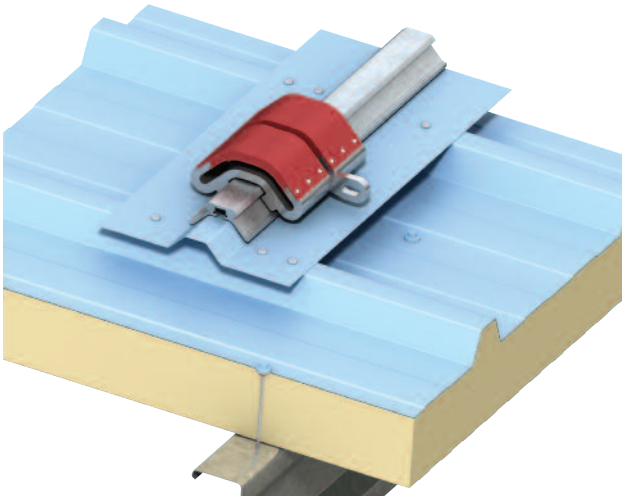
Kingspan Insulated Panels

Product Range

Kingspan Safetraxx

Kingspan Safetraxx is a robust and discreet fall protection system. Kingspan Safetraxx is the only such system approved by Kingspan for installation on Kingspan insulated panels.





Safetraxx comprises a high-grade precision-extruded aluminium rail, designed to be fixed in a variety of different roof locations. Safetraxx is certified to AS NZS 1891.2 & 1891.4, EN 795 and OHSA 1926.

Safetraxx is designed to dissipate fall arrest forces across a wide roof area, minimising potential damage to the roof in a fall arrest event.

Safetraxx is fixed from the top and eliminates the need to access the underside of the roof for installation. Safetraxx has fixing and sealing details specifically for Kingspan Trapezoidal, Foilback and Lo-Pitch insulated panels. Safetraxx is tested and proven with current Kingspan insulated panel specifications.

Safetraxx can be installed during or after construction to most roof systems, without access to the underside of the roof. It is fixed to the panel outer skin only, using high strength rivets and/or screws depending on panel type. There is no penetration of the insulation within the roof construction and, as the fasteners only fix into the top skin, there is no thermal bridging.

Safetraxx has a very low profile and can be colour matched or contrasted to the roof finish, for a discreet or feature finish.

Safetraxx is highly suitable for providing safe access to roof-mounted PV and other solar systems.

The Kingspan Safetraxx system is available globally including Australia, New Zealand, United Kingdom, Ireland, Europe, North America and Canada, the Middle East and Hong Kong.

Features & Benefits

- Compliance with national and international standards – providing the highest levels of protection and compliance with regulatory requirements.
- Approved by Kingspan and an integral part of the Kingspan insulated panel system – ensuring compatibility with roof system and not affecting roof guarantees.
- High-grade stainless steel and aluminium components – offering superior corrosion resistance, durability and service life.
- Fixed continuously across large roof dissipating forces – minimising deformation of system and potential damage to roof.
- Advanced fixings design – allowing efficient installation without access to underside of roof and with no thermal bridging.
- All fixings and accessories are supplied by Kingspan – guaranteeing correct and compatible materials are used.
- Located at a variety of positions – providing protection to whole roof area.
- Discreet low profile – minimising aesthetic impact of system.
- Highly-evolved design – offering one of the simplest to design, most efficient to install and easiest to use systems available.
- Technical support is available directly from Kingspan – allowing designers, installers and users to maximise the potential of these systems.

Roof Safety System Layouts

Personal Fall Protection Systems (PFPS) should be laid-out to allow 'Work Restraint' protection whenever reasonably practicable.

However, these systems, including anchor posts, should always be mechanically capable of 'fall arrest' due to the potential for foreseeable mis-use of the system.

For PFPSs fixed directly to roofs, i.e. not fixed directly to the primary structure, anchor posts should absorb energy to reduce the load applied to the roof, or rails should be used which dissipate loads over a large roof area.

These anchor posts should also deploy to reduce their height and minimise rotation of their base plate, which will minimise tensile forces applied to the fasteners.

For roofs with slopes greater than 15°, rigid rails are preferred. They are not prone to deployment due to incidental loading from pulling on ropes while walking up or down the roof.

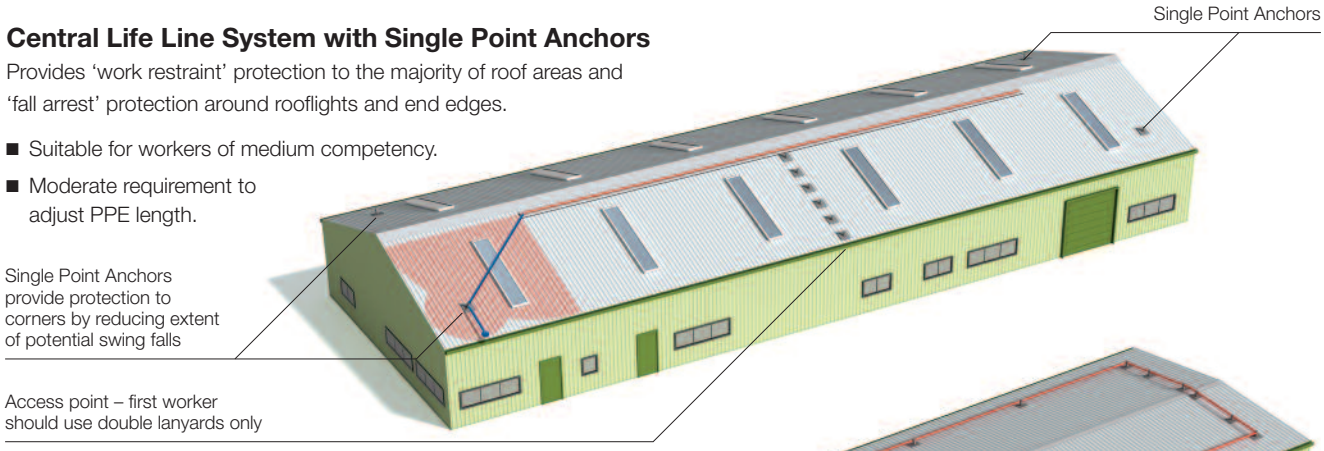
The fastening detail used should be proven with each roof type it is used on.

Shown below are three different scenarios requiring specific safety system solutions.

Central Life Line System with Single Point Anchors

Provides 'work restraint' protection to the majority of roof areas and 'fall arrest' protection around rooflights and end edges.

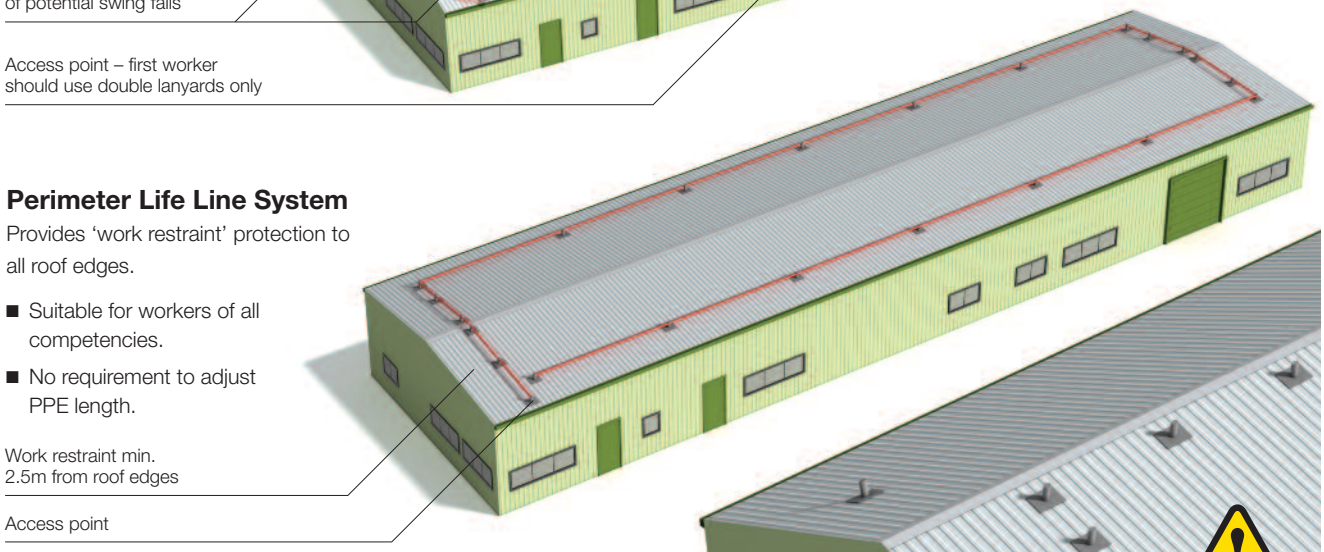
- Suitable for workers of medium competency.
- Moderate requirement to adjust PPE length.



Perimeter Life Line System

Provides 'work restraint' protection to all roof edges.

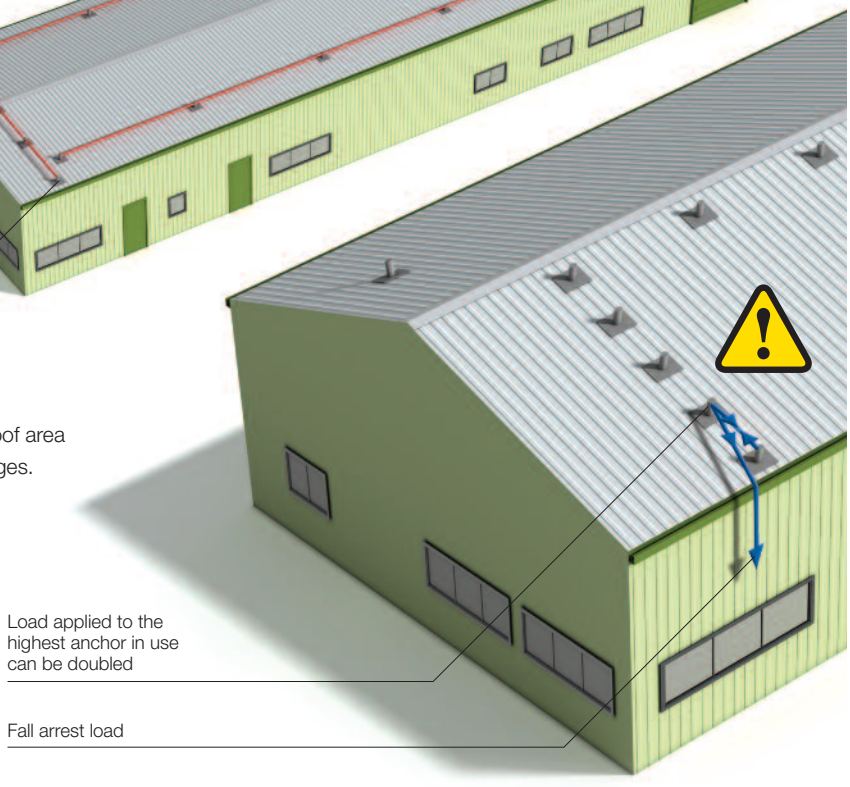
- Suitable for workers of all competencies.
- No requirement to adjust PPE length.



Single Point Anchors only

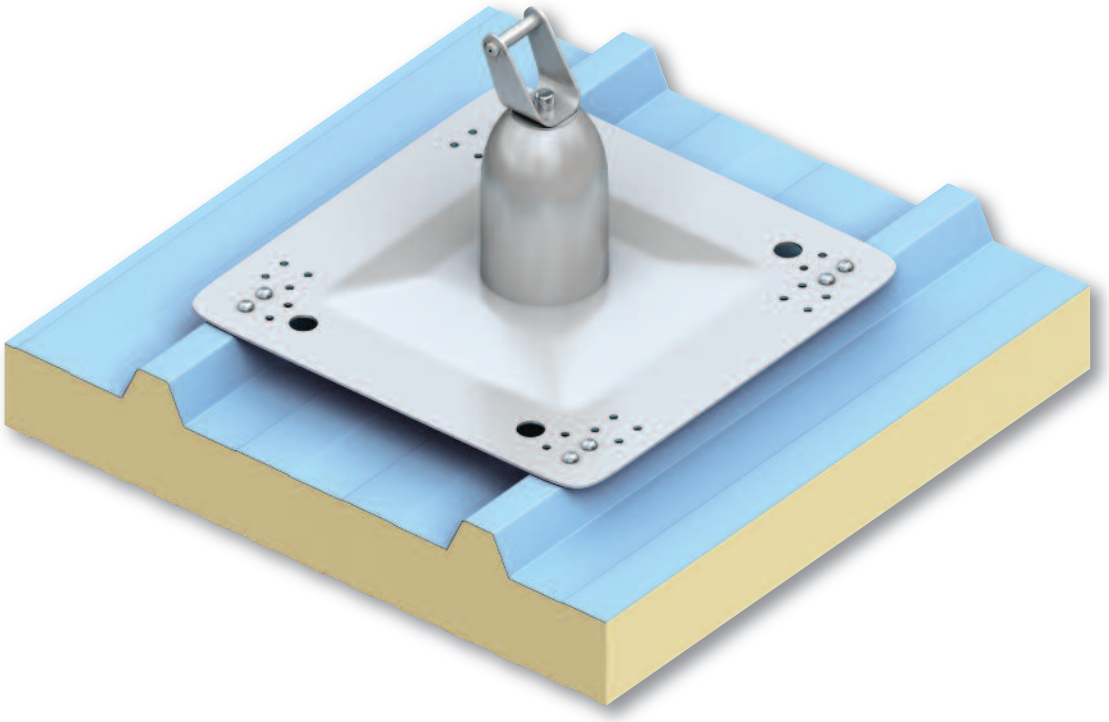
Provides 'work restraint' protection to the central roof area and 'fall arrest' protection around rooflights and edges.

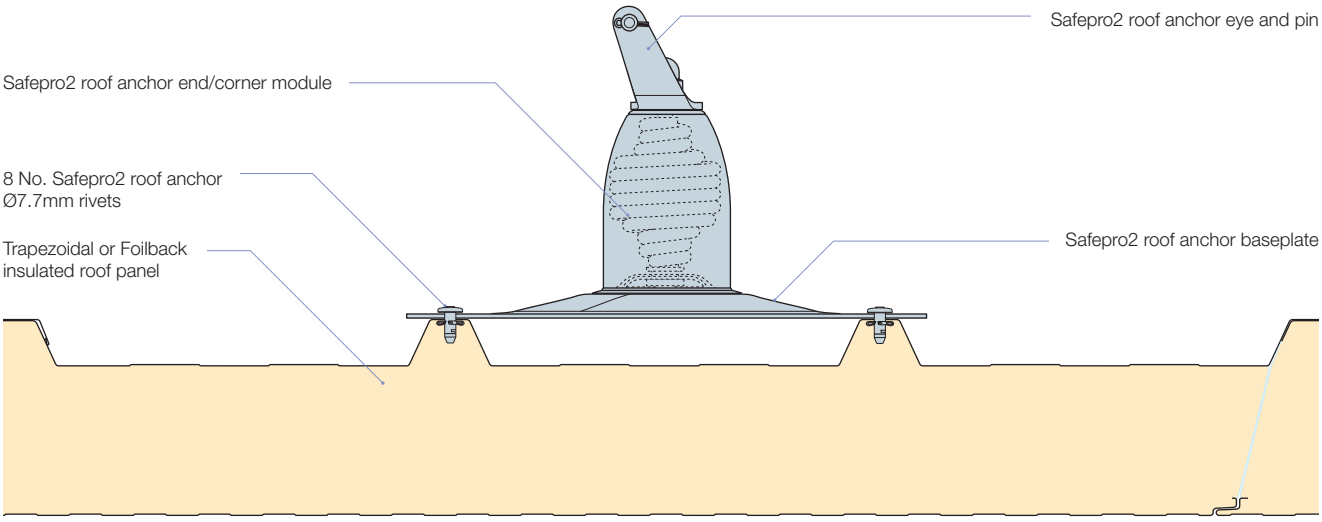
- Only suitable for workers of high competency.
- Onerous requirement to adjust PPE length frequently.
- Danger of excessive loading of anchors, as shown in the sketch. When a rope is looped through an anchor point, there will be tension in the rope on both sides of the anchor, effectively doubling the applied load.



Kingspan Insulated Panels

Trapezoidal / Foilback Application

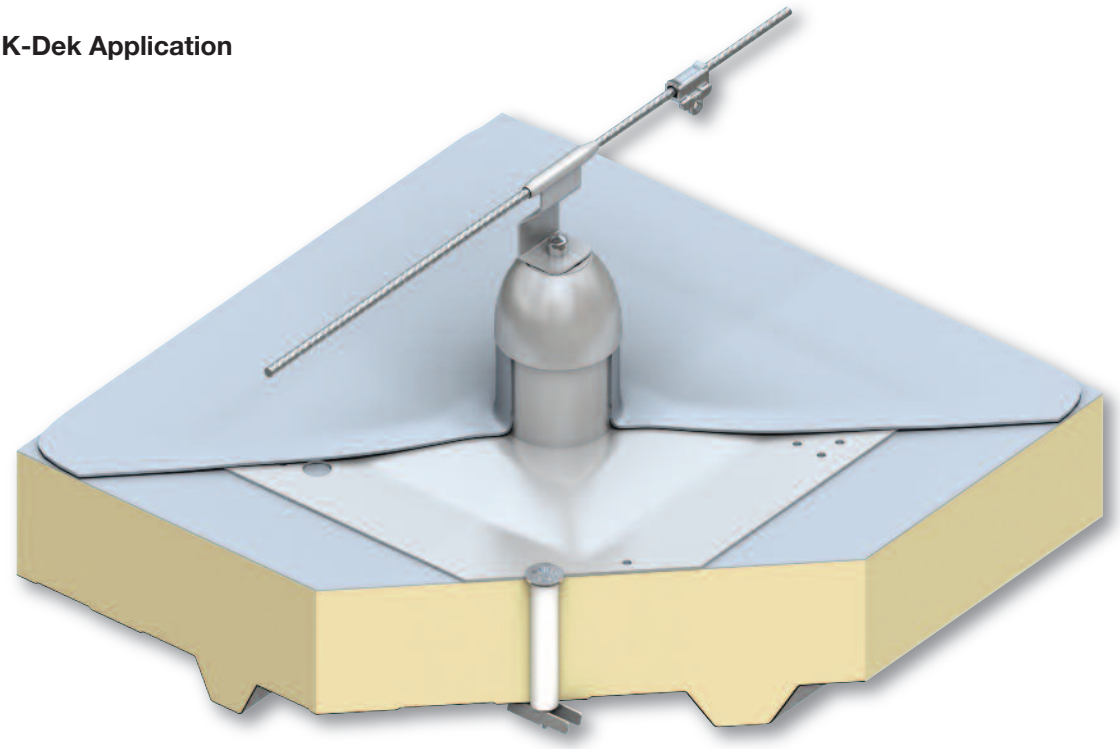


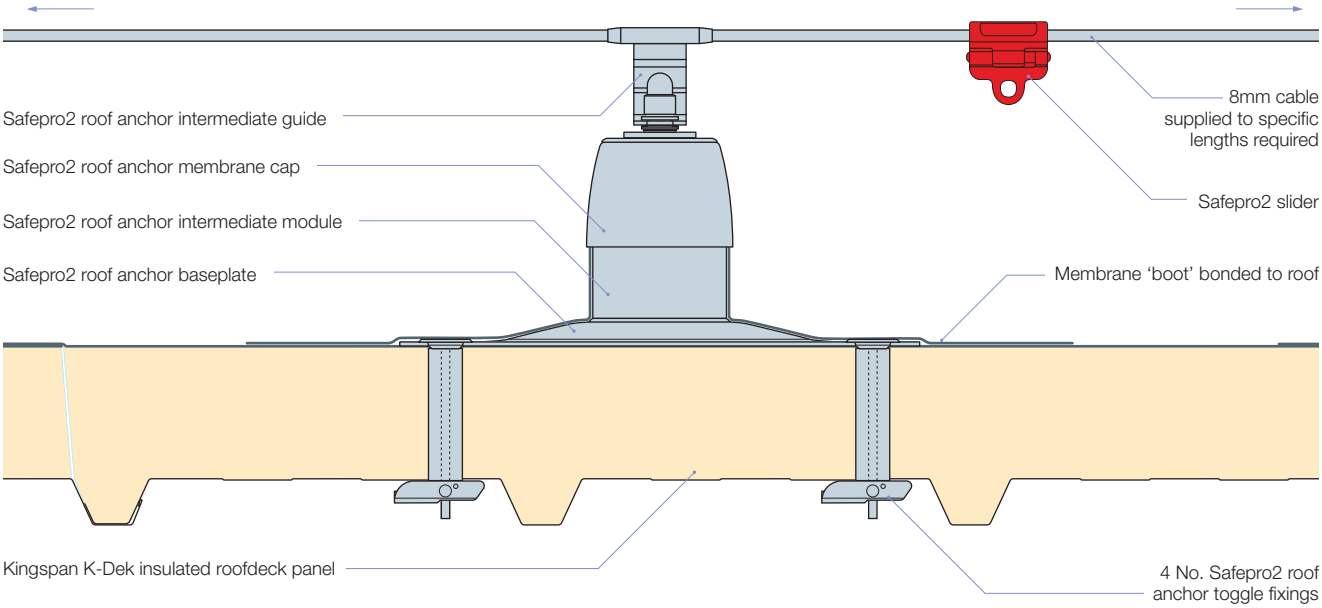


Construction Details

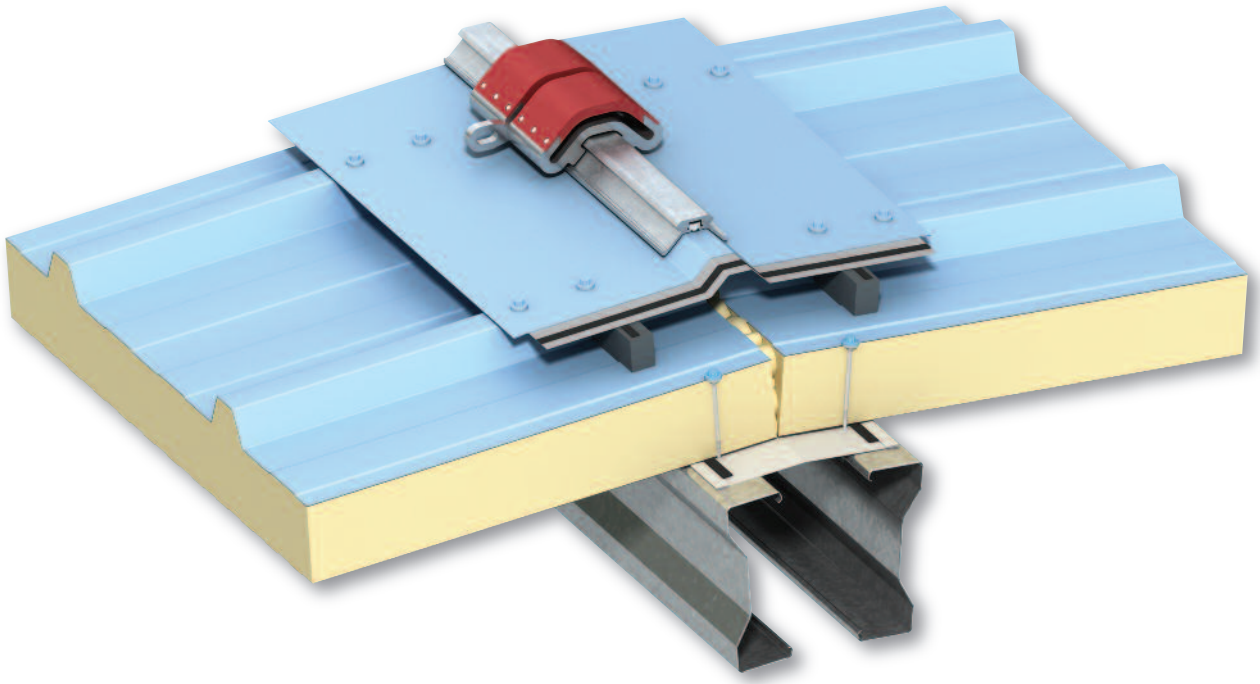
Kingspan Safepro2

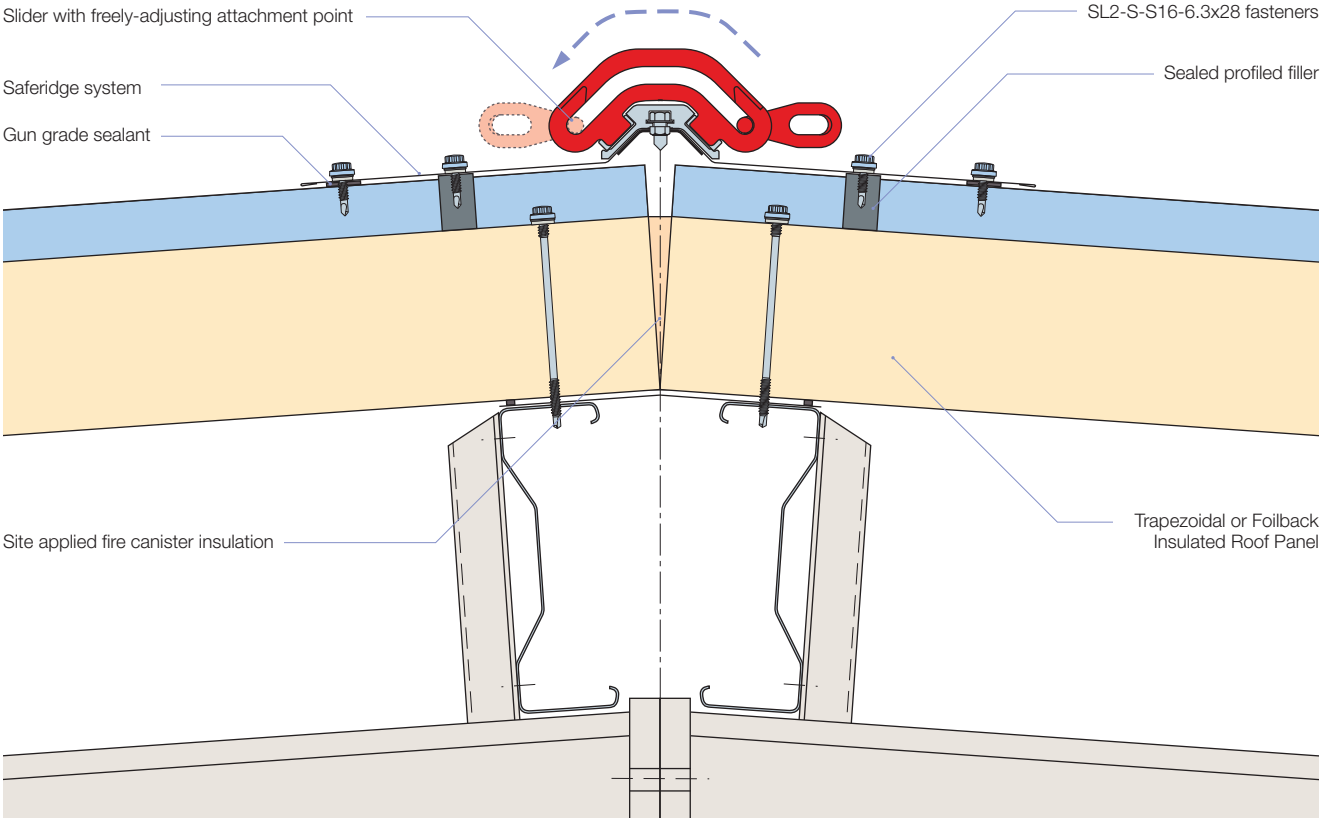
Kingspan K-Dek Application



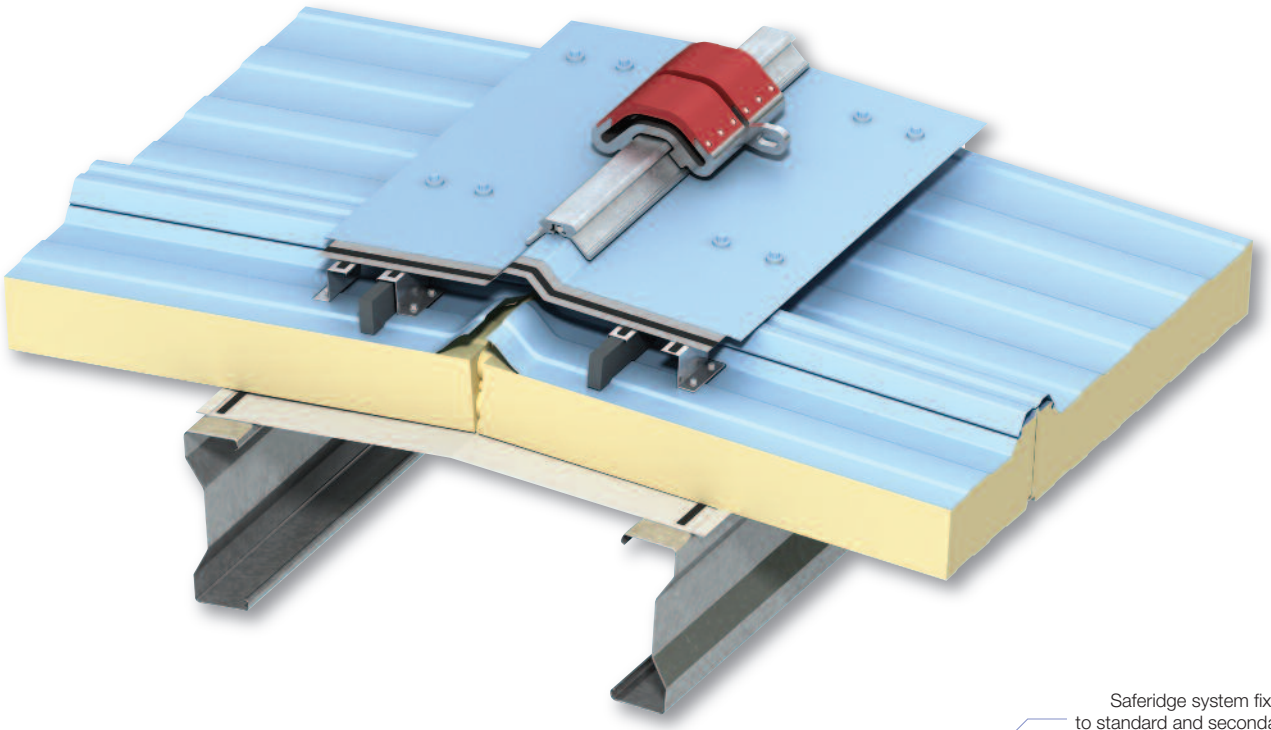


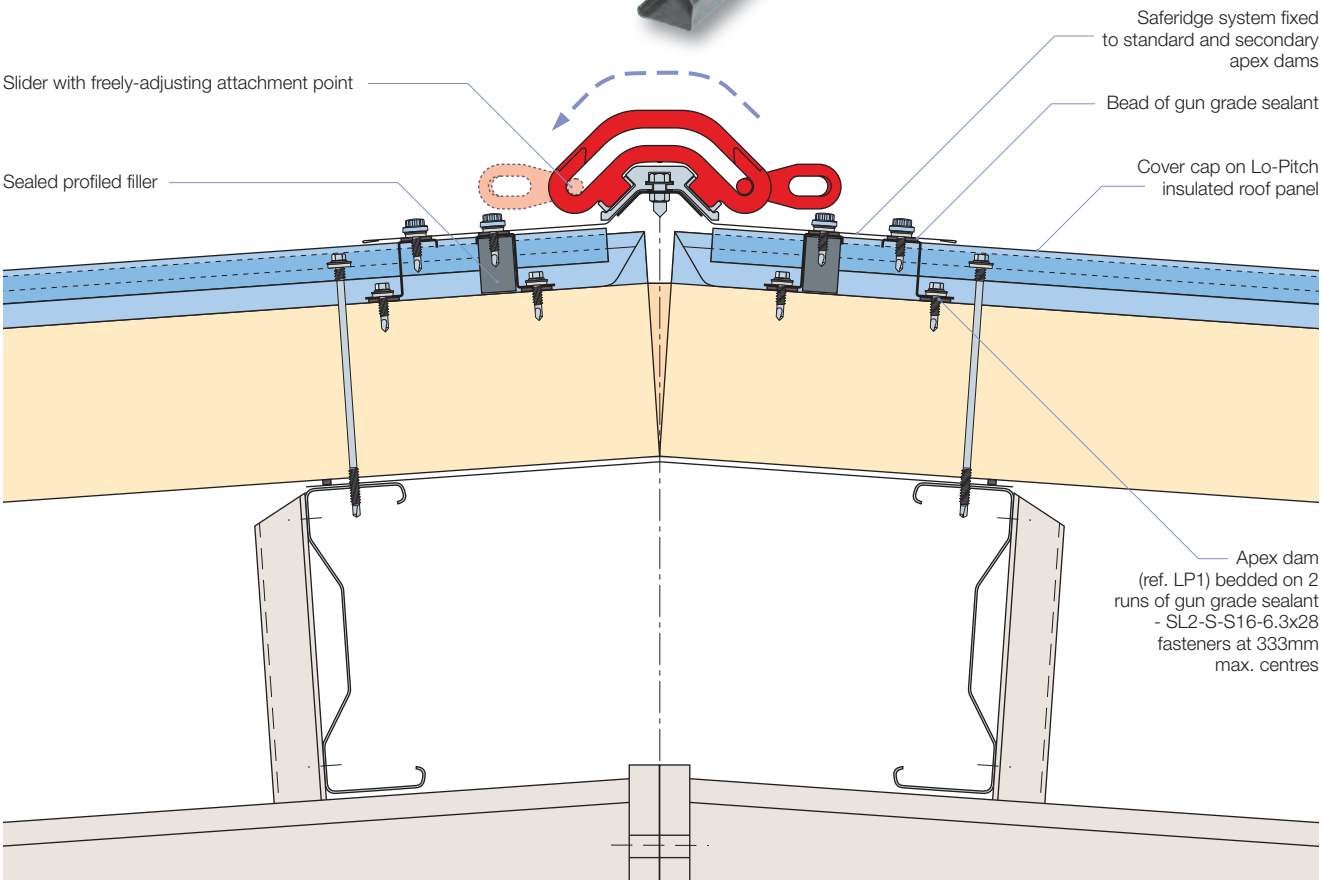
Trapezoidal / Foilback Application



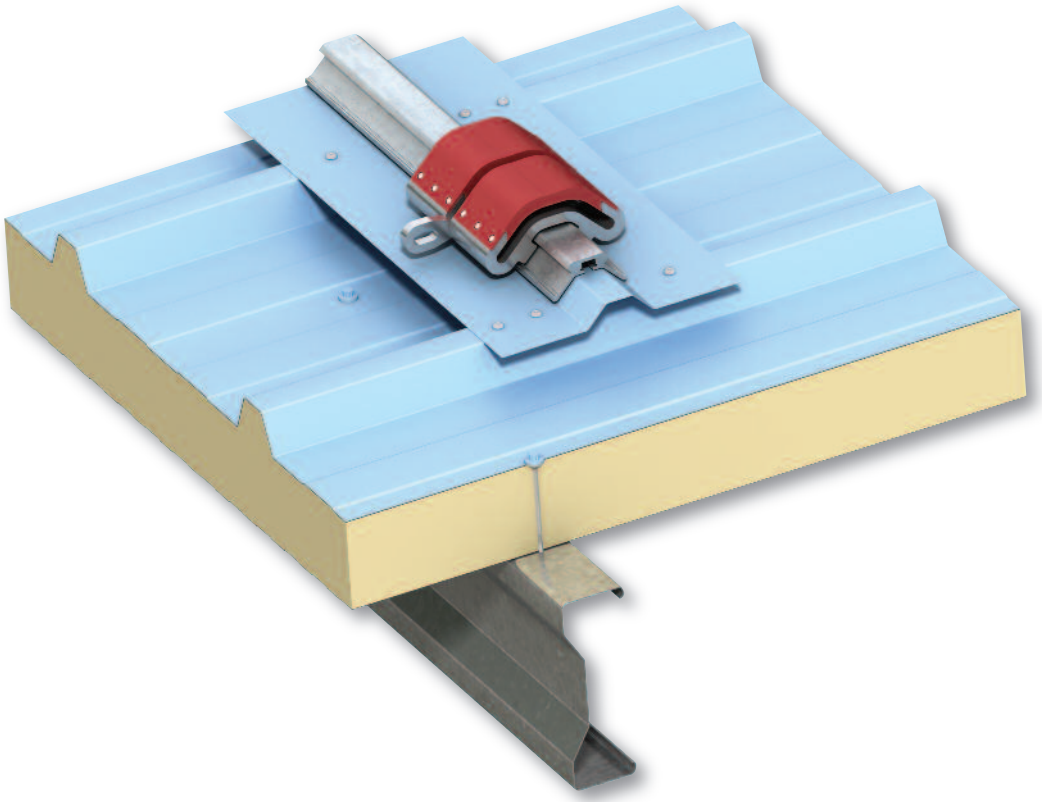


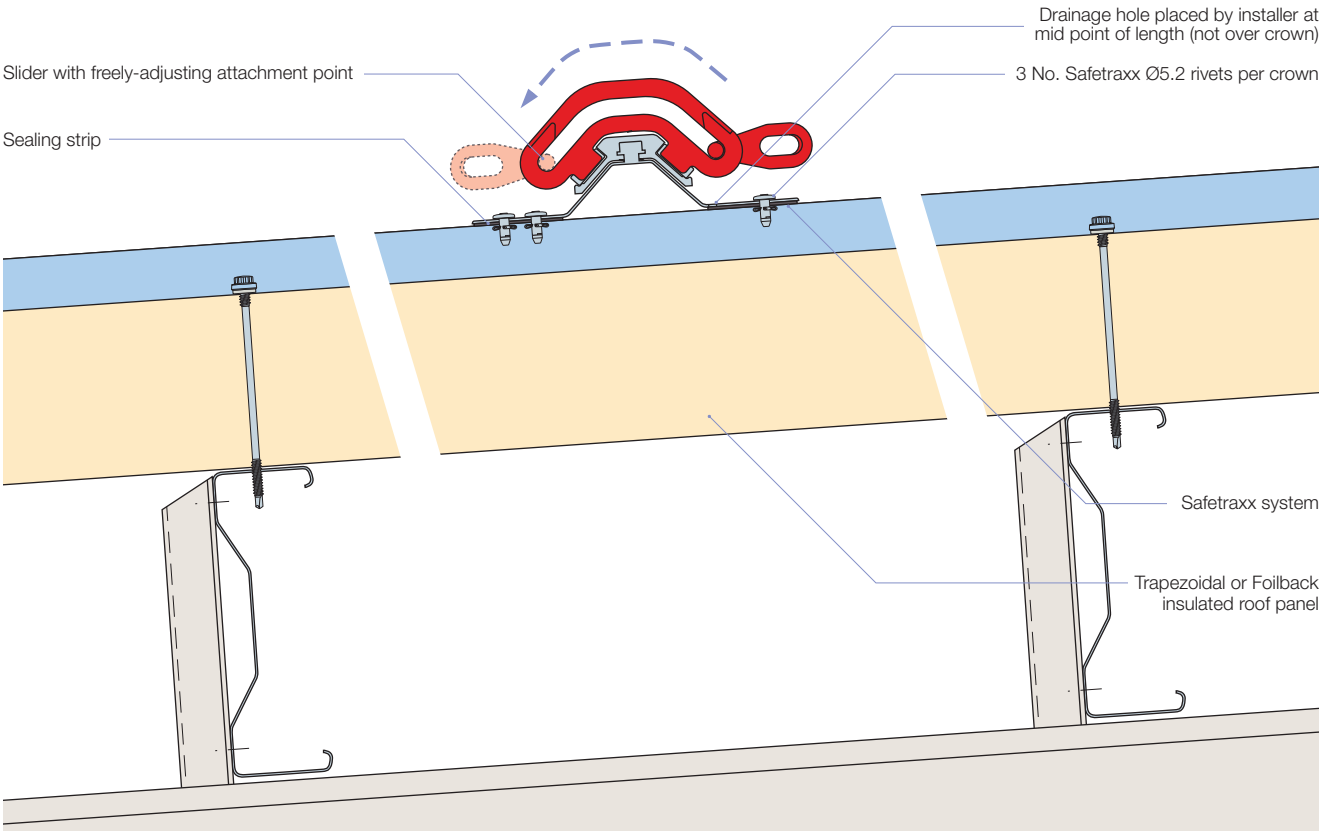
Lo-Pitch Application



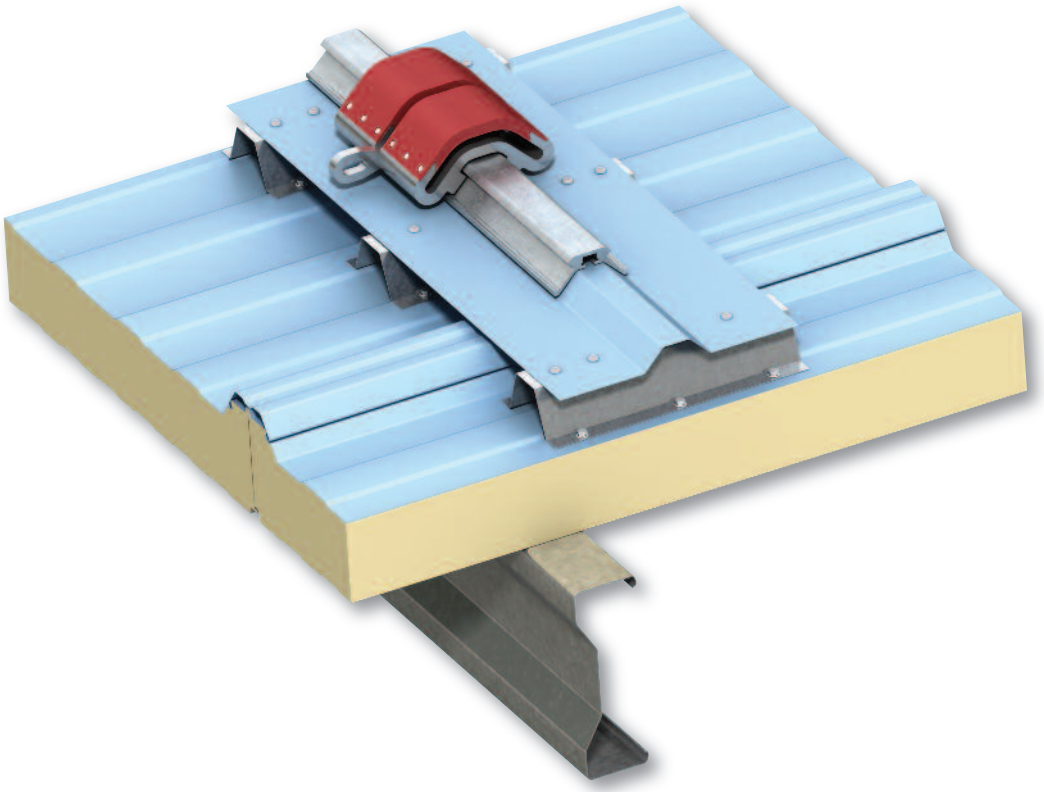


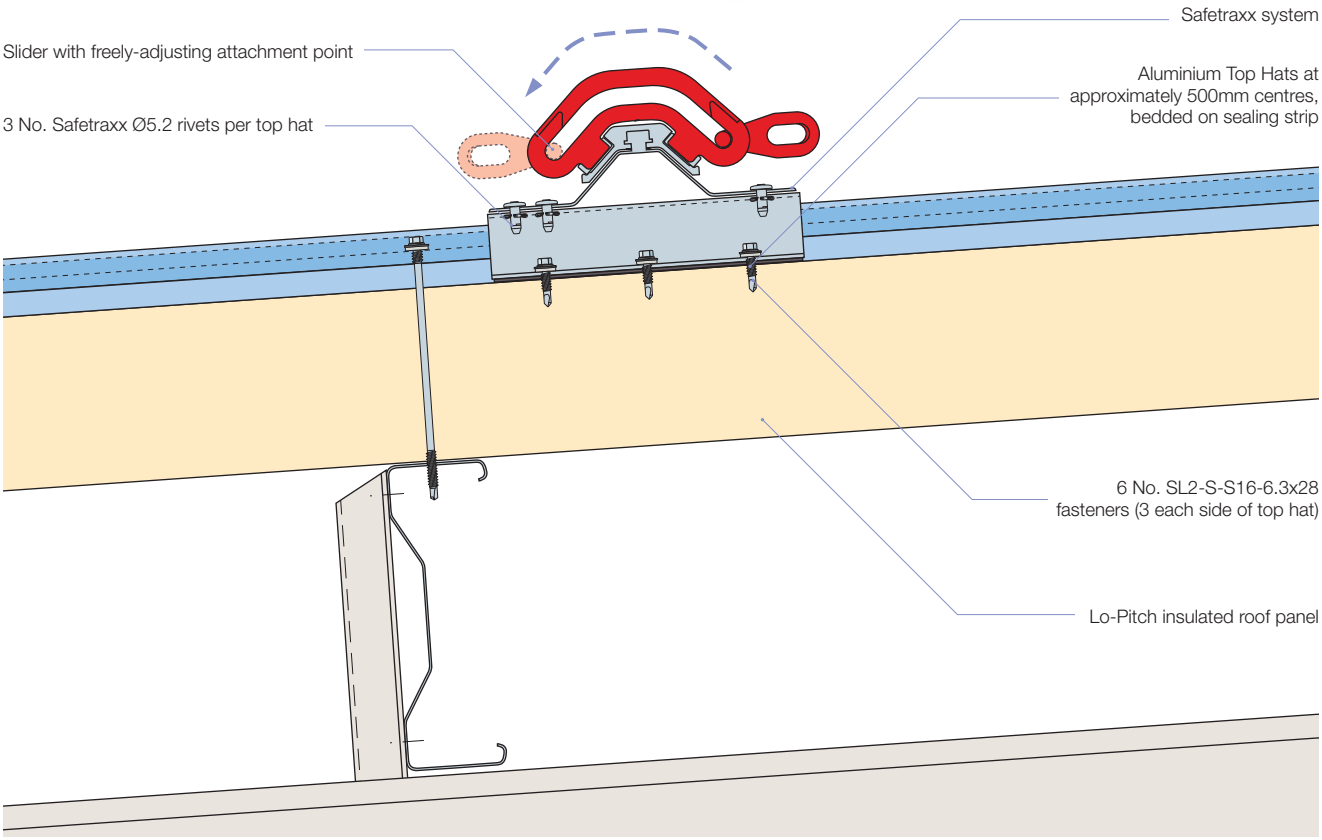
Trapezoidal / Foilback Application





Lo-Pitch Application





Kingspan Insulated Panels

Insulated Roof & Wall Panels

Product Range at a Glance

Insulated Roof Panels

Trapezoidal - KS1000 RW
Roof pitches 4° and above.
(For lower pitches contact Kingspan Technical Support).

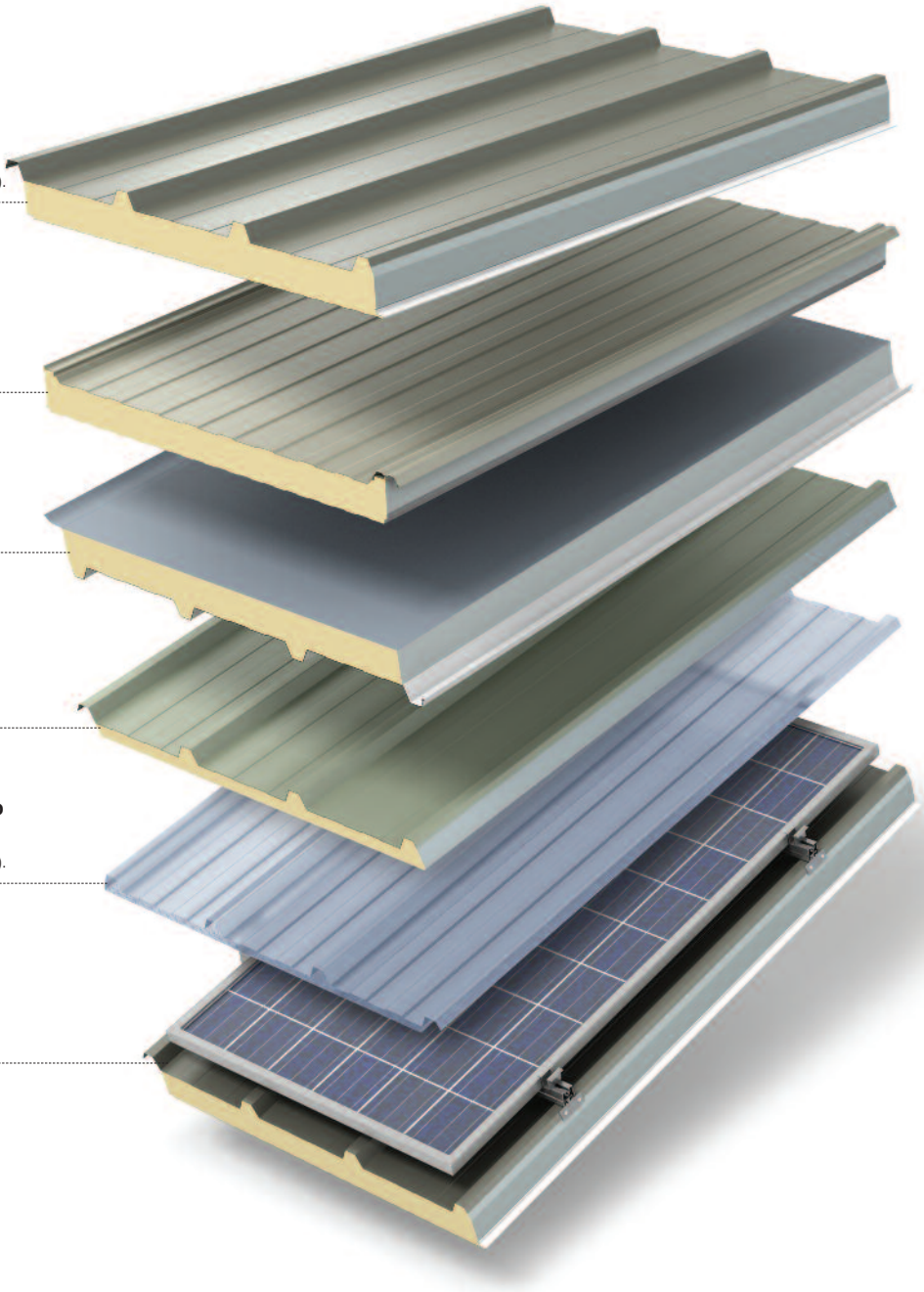
Lo-Pitch - KS1000 LP*
Roof pitches 1.5° and above.

Kingspan K-Dek - KS1000 KD
Roof pitches 0.72° and above.
Single-ply membrane roofdeck.

Foilback - KS1000 FB
Roof pitches 4° and above.
With reflective foil liner.

Polycarb Rooflight - KS1000 Polycarb
Roof pitches 4° and above.
(For lower pitches contact Kingspan Technical Support).

Roof Mounted PV System
Solar Photovoltaic Solution.

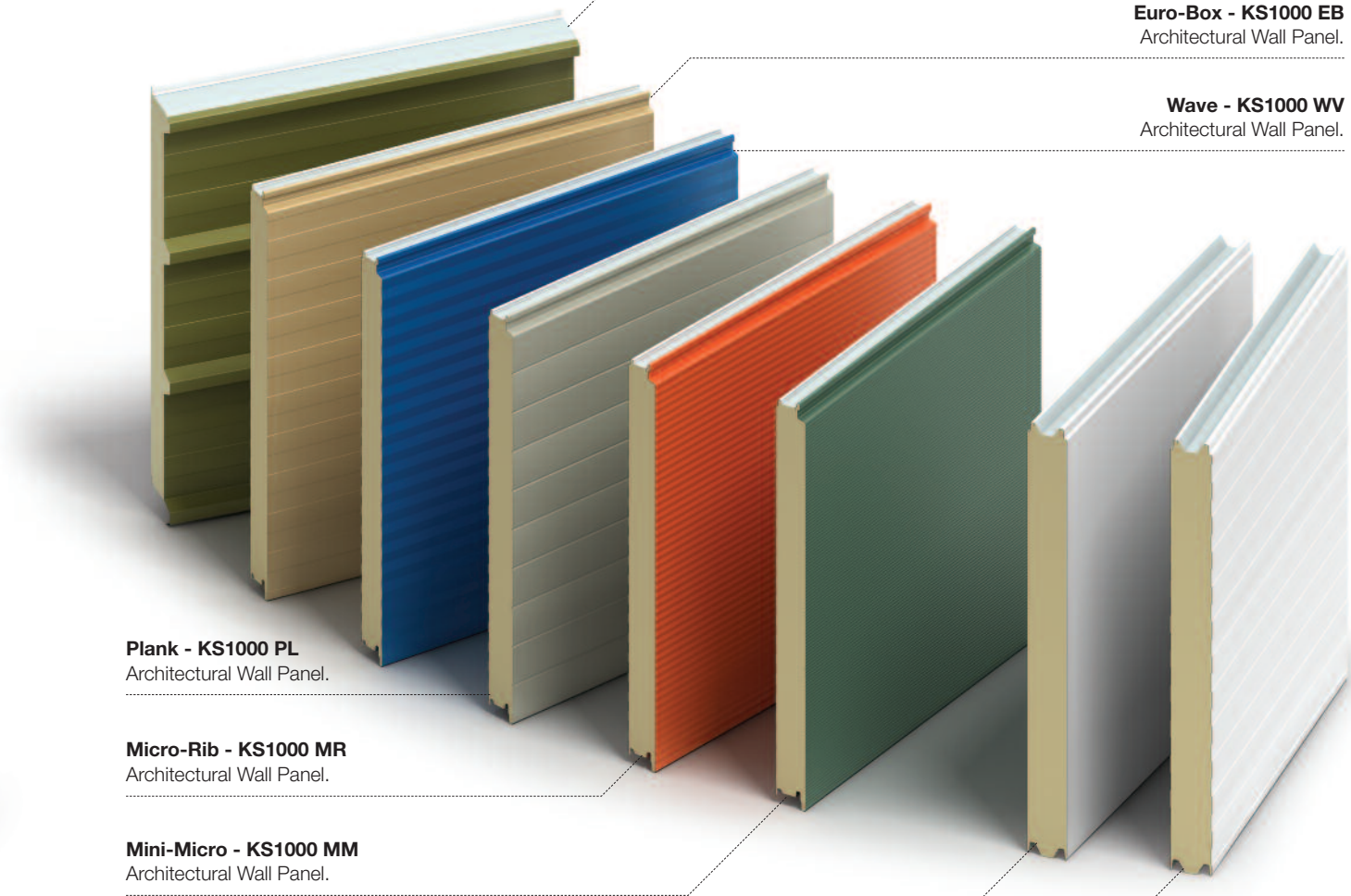


* UK manufacture.

Insulated Roof & Wall Panels

Product Range at a Glance

Insulated Wall Panels (horizontally or vertically laid)



Trapezoidal - KS1000 RW

Euro-Box - KS1000 EB
Architectural Wall Panel.

Wave - KS1000 WV
Architectural Wall Panel.

Plank - KS1000 PL
Architectural Wall Panel.

Micro-Rib - KS1000 MR
Architectural Wall Panel.

Mini-Micro - KS1000 MM
Architectural Wall Panel.

Controlled Environment Panels

Flat - KS1100 CS
Wall & ceiling panel.

Rib - KS1100 CS
Wall & ceiling panel.

All Kingspan panels are manufactured to order with varying core thicknesses depending on the spanning and thermal requirements of the project.

Kingspan roof and wall panels are available in a wide range of colours.

Kingspan Insulated Panels

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

Kingspan®
Insulated Panels

02/2014