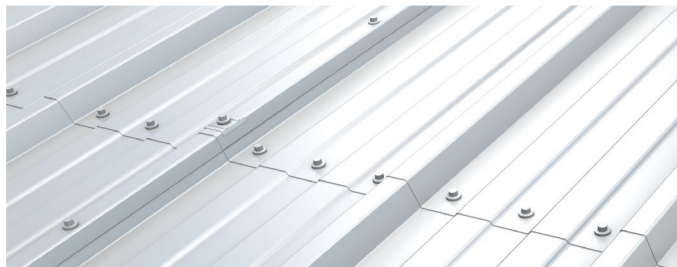


Insulated Roof & Wall Panels
UK & Republic of Ireland



QuadCore® KS1000RW Roof Panel Installation Guide

Multiple Panels Eaves to Ridge
75mm End Lap



Factory Applied Weather Seal
(FAWS) to side laps only

This installation guide is also applicable
to QuadCore KS1000 RW LEC Roof Panel

QuadCore[®]LEC
LOWER EMBODIED CARBON SOLUTIONS


Kingspan[®]

QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 75mm End Lap

Components

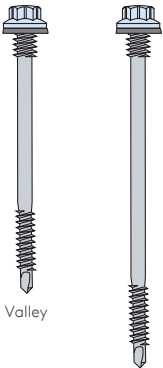
QuadCore® KS1000RW Roof Panel



Profiled ridge filler



Primary / main fastener



Valley

3/4 way crown

Secondary / stitching screws



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

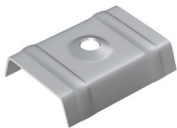
B1 Fire rated canister foam



Non-setting gun-grade butyl sealant



Storm washer

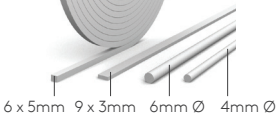


Storm 35-23 (RW)

Butyl tape sealants



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



Cordless screw driver



Depth locator

Film backed butyl tape



PVC foam tape (SGV15P 20X9 PVC)



Butyl co-laminate tape sealant



50mm x 6mm butyl tape with PE foam co-laminate centre

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

QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 75mm End Lap

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 suitable for panels and is within tolerance.

Ensure lower panel is bearing on to purlin by a minimum of 50mm.

Sealant application is to Class A requirements.

Apply SGV15P 20X9 PVC foam tape air seal to ridge, verge & eaves positions.

Gun-grade sealant referred to is: – non-setting butyl sealant.

End lap 50 x 6mm butyl tape with PE foam co-laminate centre.

Side lap FAWS Factory Applied Weather Seal, including 6 x 5mm butyl tape sealant for closing off 50 x 6mm co-laminate butyl tape sealant end lap.

All sealants to suit project specification requirements.

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.

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.

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.

Colour of sealants within this installation guide are for illustration purposes.

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

This installation guide is also applicable to QuadCore KS1000 RW LEC Roof Panel

QuadCore[®] LEC
LOWER EMBODIED CARBON SOLUTIONS



QuadCore® KS1000RW Roof Panel

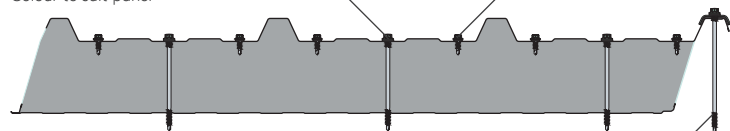
Multiple Panels Eaves to Ridge - 75mm End Lap

Fastener Layouts QuadCore®

End / Side Lap

Self-drilling self-tapping primary fixings with minimum 19mm Ø non-ferrous EPDM backed washer 40mm upslope from panel end. Colour to suit panel

End lap tail stitching screws 2 per valley, 40mm upslope from panel end. Colour to suit panel



Additional main panel crown fixing with minimum 16mm Ø washer and storm washer at 3 & 4-way lap joints only

Standard Intermediate & Side Lap

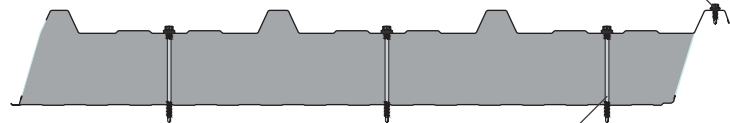
Stitching screws at 500mm centres. Colour to suit panel



Minimum 2 no Self-drilling self-tapping primary fixings with minimum 19mm Ø non-ferrous EPDM backed washer. Colour to suit panel

Standard Eaves, Ridge & Side Lap

Stitching screws at 500mm centres. Colour to suit panel



Self-drilling self-tapping primary fixings with minimum 19mm Ø non-ferrous EPDM backed washer. Colour to suit panel

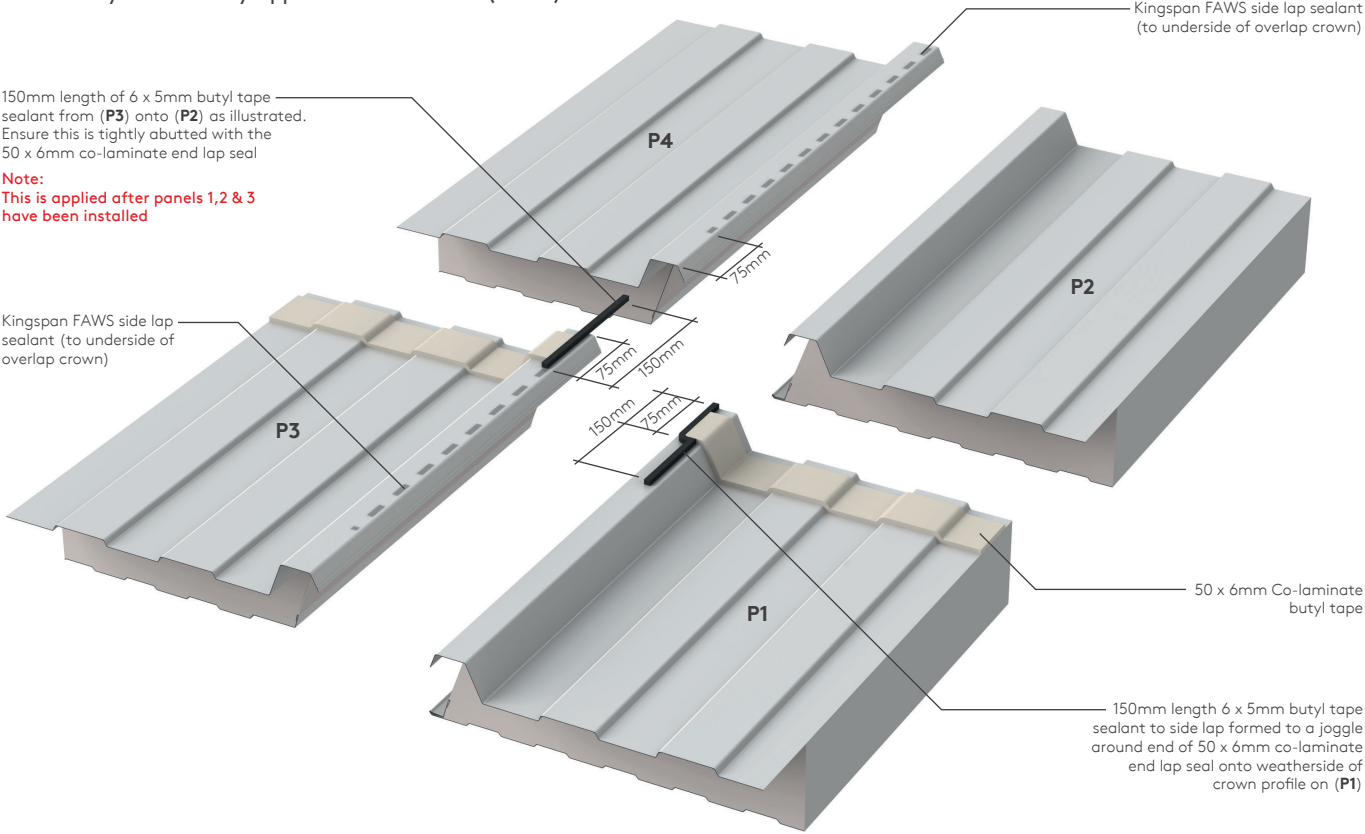
Note: Minimum number of fasteners as illustrated. Good practice would recommend that a wind load calculation be carried out for each project, to determine whether additional fasteners are required to meet local wind uplift requirements.

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® KS1000RW Roof Panel

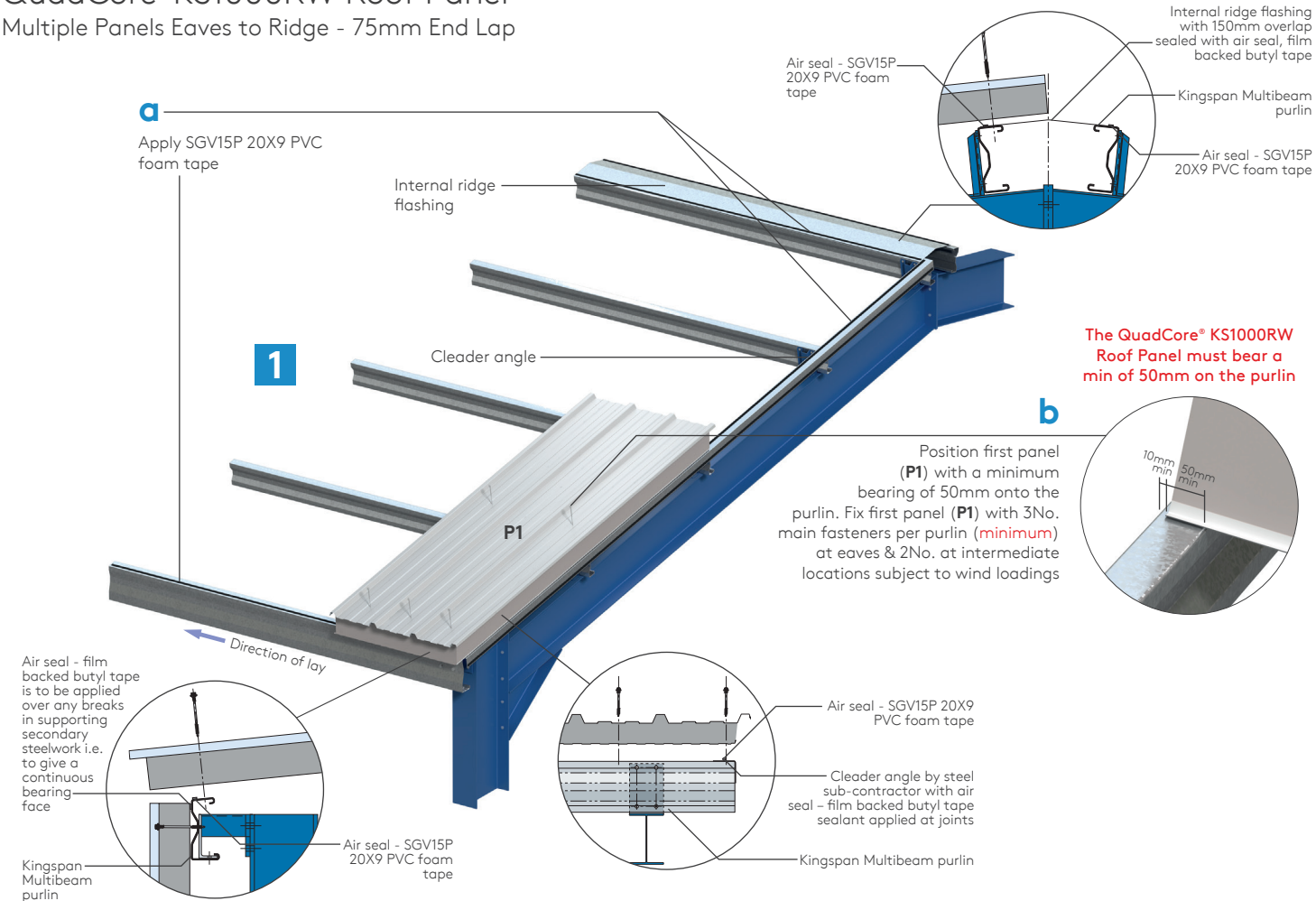
Multiple Panels Eaves to Ridge - 75mm End Lap

Sealant Layout - Factory Applied Weather Seals (FAWS)



QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 75mm End Lap



QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 75mm End Lap

C

Apply 1 strip of 50 x 6mm co-laminate butyl tape sealant horizontally across the end lap. The strip sealant should be positioned 10mm nominal up from the end lap edge and should commence / terminate either end leaving sufficient area to apply a 6 x 5mm butyl tape sealant in order to complete the end lap detail.

Care should be taken to ensure the butyl tape sealant is not stretched and is firmly placed into the corners of the trapezoidal profile before removal of the release paper

e

Apply 150mm length of 6 x 5mm butyl tape sealant formed to a joggle around end of 50 x 6mm co-laminate end lap seal onto the weatherside of the crown profile on (P1) as illustrated.

Ensure this is tightly abutted with the 50 x 6mm co-laminate end lap seal

End lap tail stitching screws 2 per valley

50 x 6mm co-laminate PE foam face down, continuous & unbroken (do not join)

Kingspan Multibeam purlin

Position 3No. main valley fixings with 19mm Ø washer, 1No. per valley

2

P2

P1

Direction of lay

Position & fix second panel (P2) with 3No. main fasteners per purlin minimum at panel end lap & ridge position & 2No. minimum at intermediate locations subject to wind loadings

d

Apply 75mm length 6 x 5mm butyl tape sealant ensuring this is tightly abutted with the 50 x 6mm co-laminate end lap seal

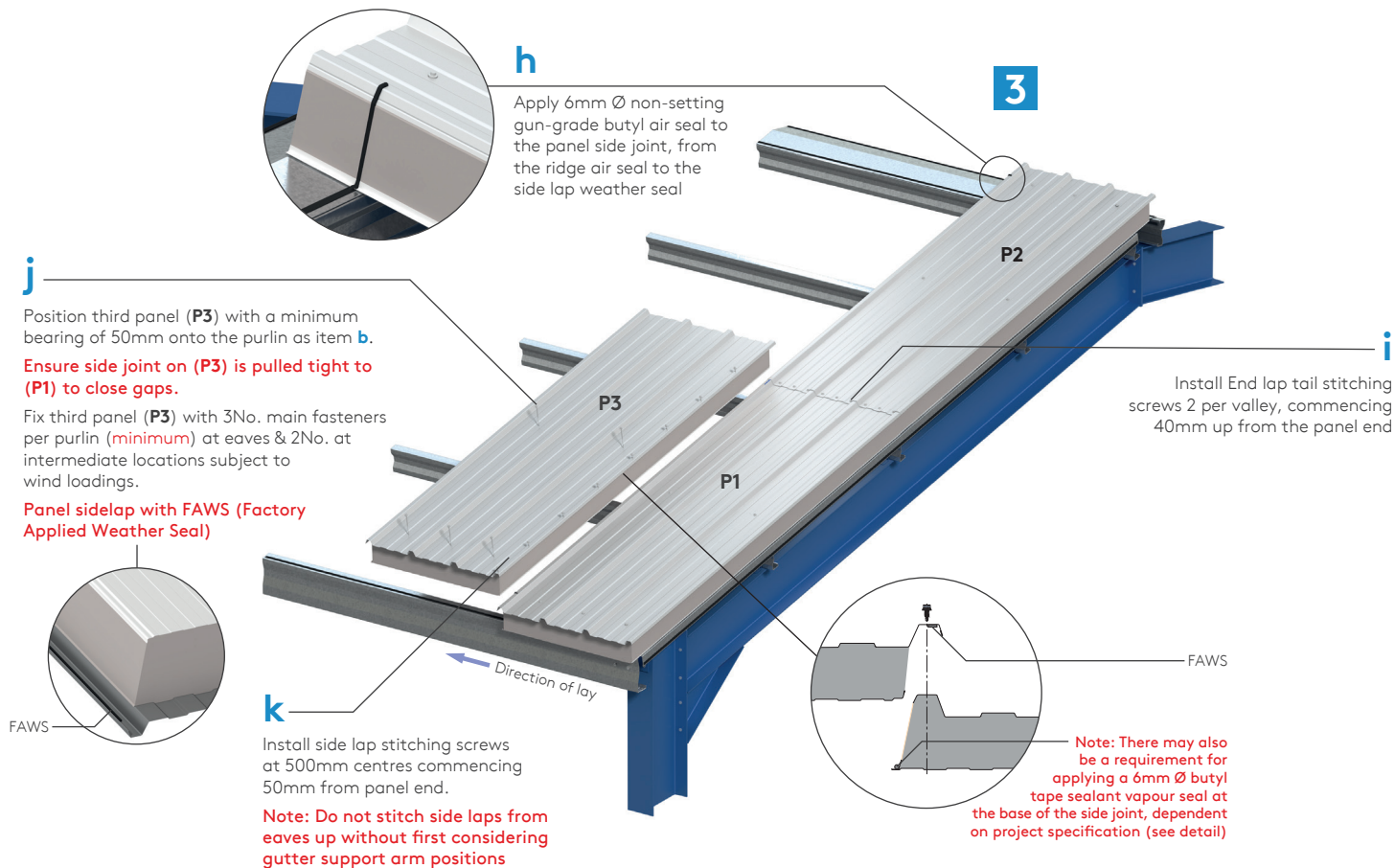
g

Apply 6mm Ø non-setting gun-grade butyl air seal to the panel side joint, from the eaves air seal to the side lap weather seal

f

QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 75mm End Lap



QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 75mm End Lap

I

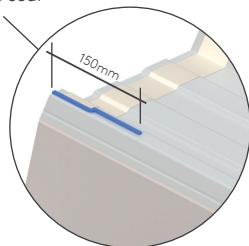
Apply 1 strip of 50 x 6mm co-laminate butyl tape sealant horizontally across the end lap. The strip sealant should be positioned 10mm nominal up from the end lap edge and should commence / terminate either end leaving sufficient area to apply a 6 x 5mm butyl tape sealant in order to complete the end lap detail.

Care should be taken to ensure the butyl tape sealant is not stretched and is firmly placed into the corners of the trapezoidal profile before removal of the release paper

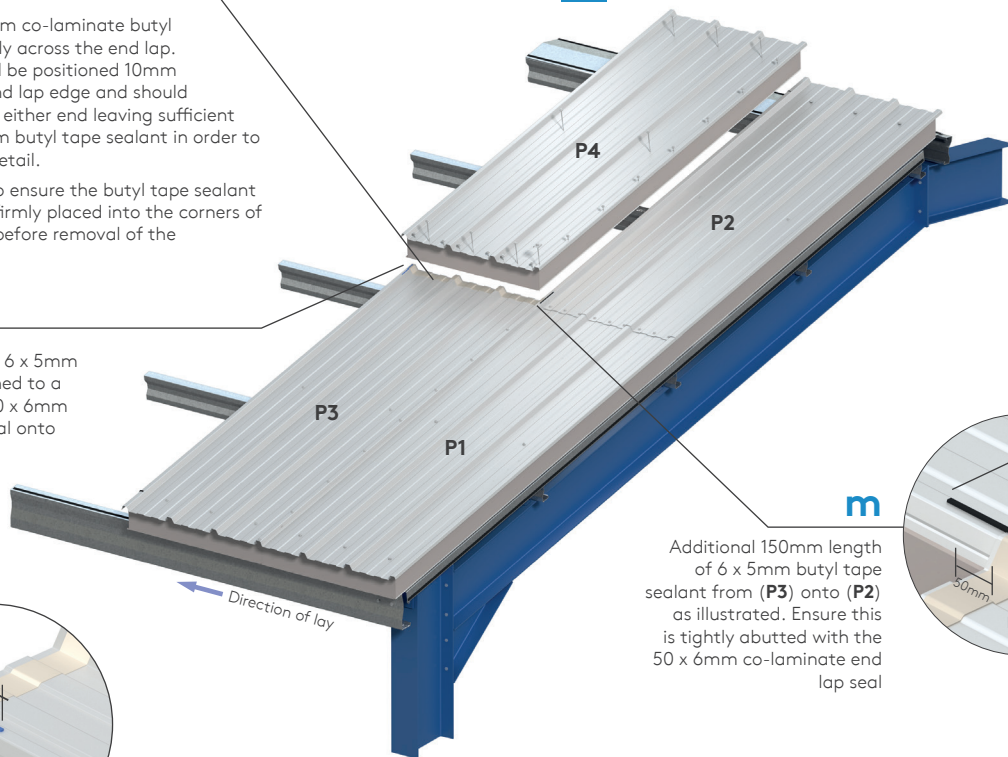
n

Apply 150mm length of 6 x 5mm butyl tape sealant formed to a joggle around end of 50 x 6mm co-laminate end lap seal onto the weatherside of the crown profile on **(P3)** as illustrated.

Ensure this is tightly abutted with the 50 x 6mm co-laminate end lap seal

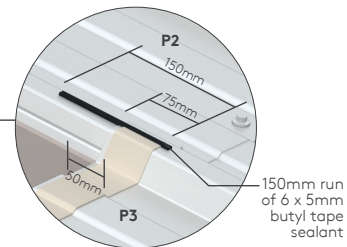


4_a



m

Additional 150mm length of 6 x 5mm butyl tape sealant from **(P3)** onto **(P2)** as illustrated. Ensure this is tightly abutted with the 50 x 6mm co-laminate lap seal

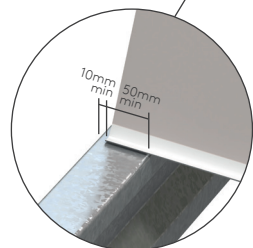
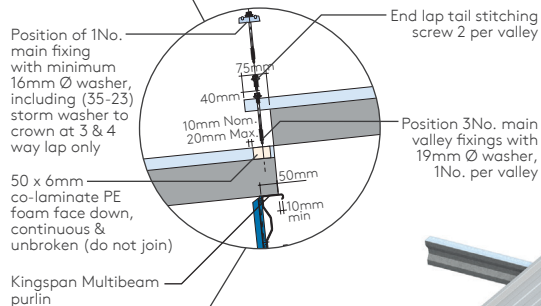


QuadCore® KS1000RW Roof Panel

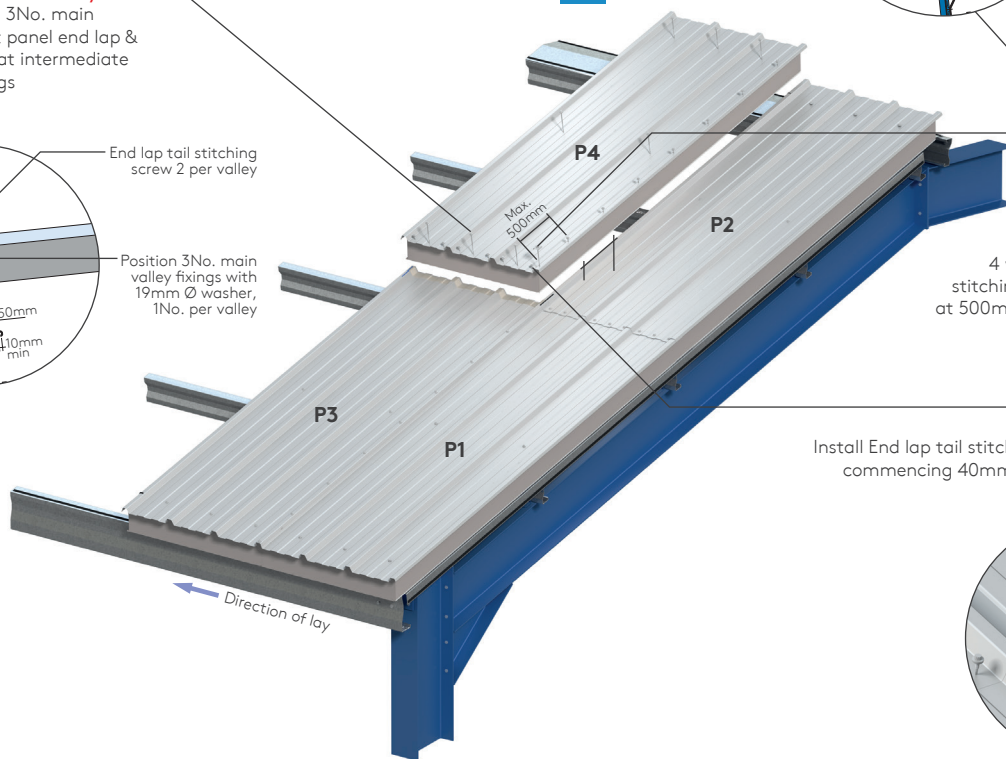
Multiple Panels Eaves to Ridge - 75mm End Lap

○

Position fourth panel (P4). **Ensure side joint on (P4) is pulled tight to (P2) to close any gaps.** Fix fourth panel (P4) with 3No. main fasteners per purlin minimum at panel end lap & ridge position & 2No. minimum at intermediate locations subject to wind loadings

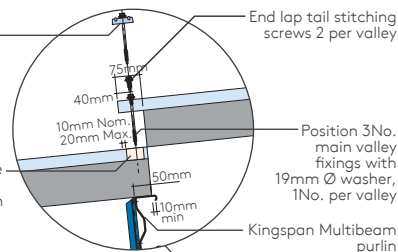


4_b



Position of 1No. main fixing with minimum 16mm Ø washers, including (35-23) storm washer to crown at 3 & 4 way lap only

50 x 6mm co-laminate PE foam face down, continuous & unbroken (do not join)

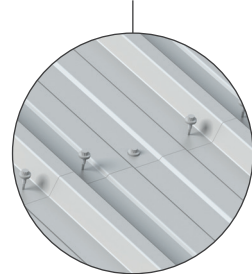


P

Install 1No. main fastener and storm washer (35-23) to crown into purlin at 4 way panel position. Add stitching screws along side lap at 500mm centres commencing above main fastener

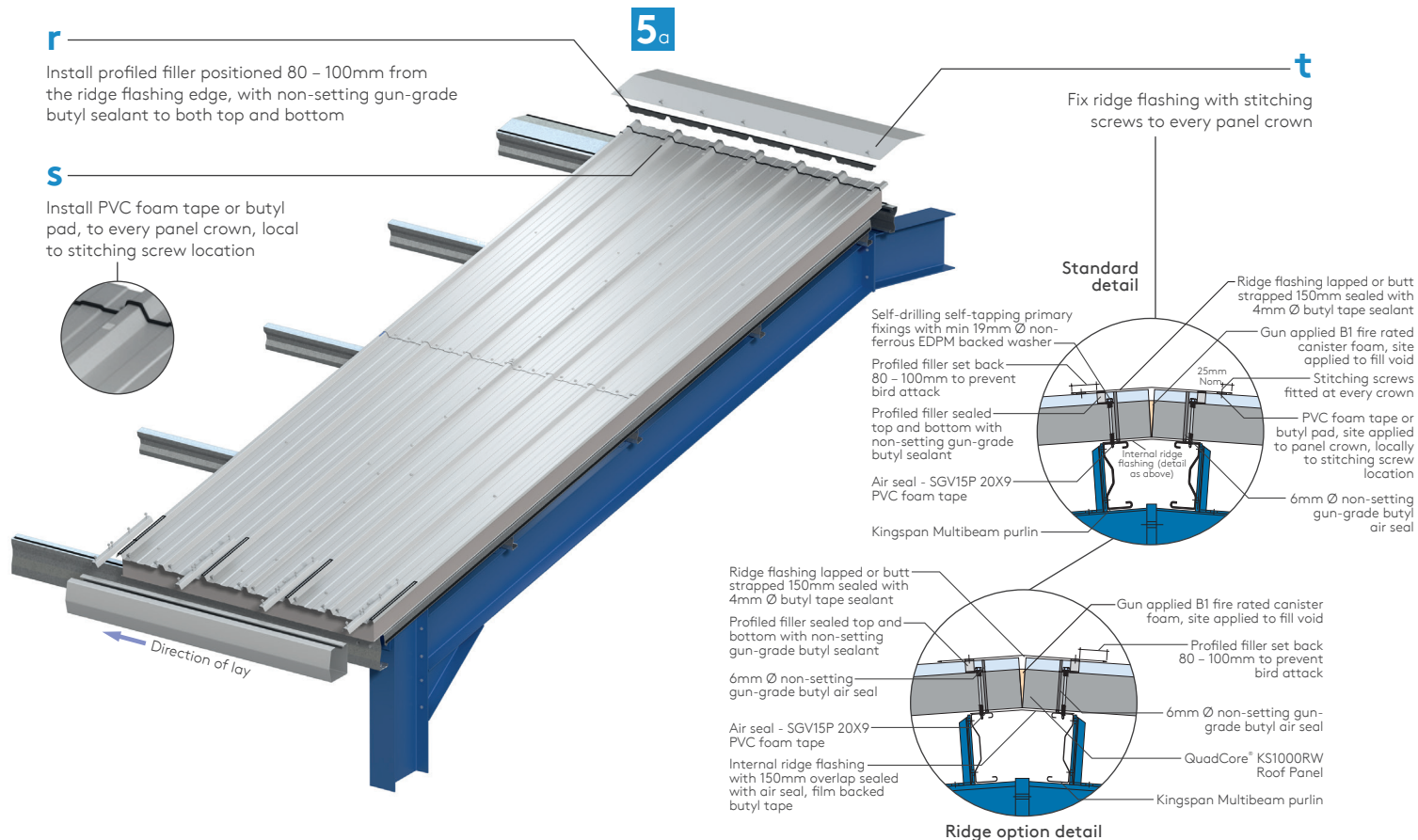
q

Install End lap tail stitching screws 2 per valley, commencing 40mm up from the panel end



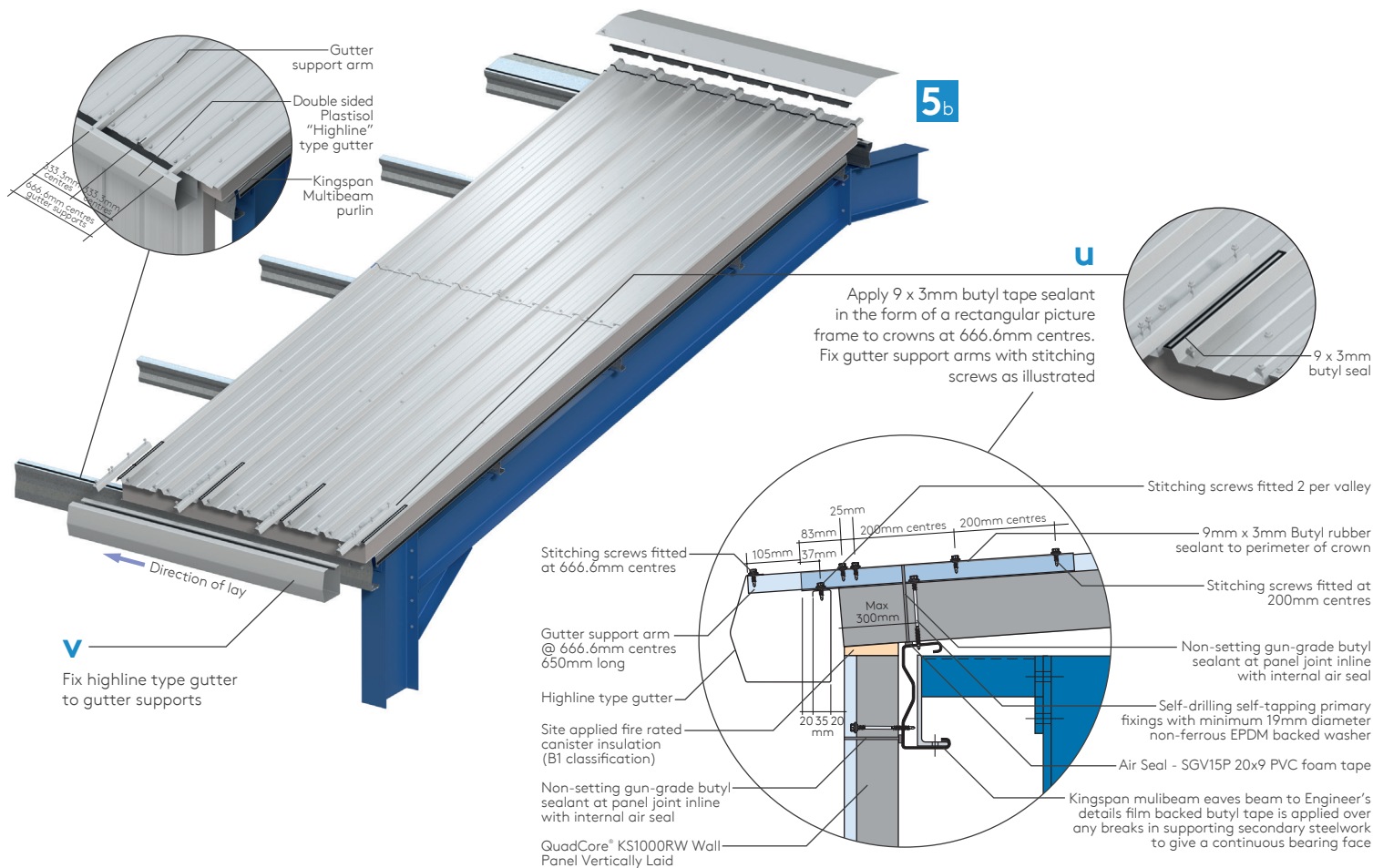
QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 75mm End Lap



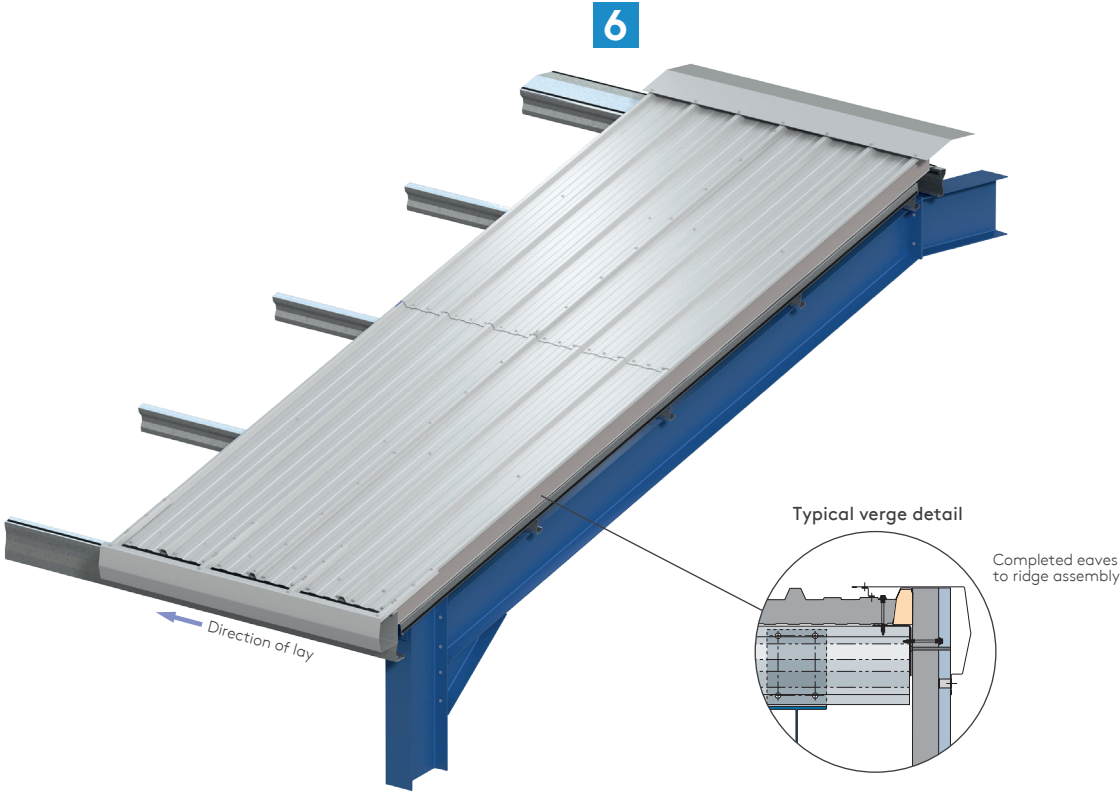
QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 75mm End Lap



QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 75mm End Lap



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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