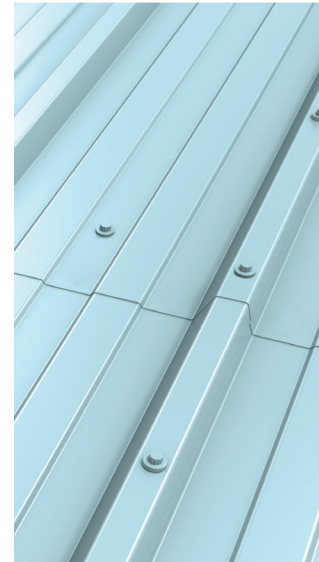
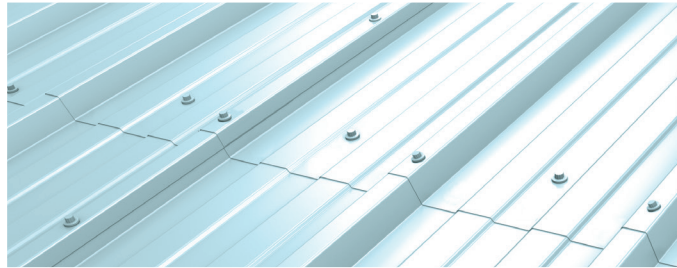


Insulated Roof & Wall Panels
UK & Republic of Ireland



QuadCore® KS1000RW Roof Panel Installation Guide

Multiple Panels Eaves to Ridge
150mm End Lap



QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 150mm End Lap

Components

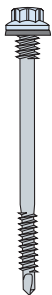
QuadCore® KS1000RW Roof Panel



Profiled ridge filler



Primary / main fastener



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



Butyl tape sealants



Cordless screw driver



PVC foam tape (SGV15P 20X9 PVC)



Film backed butyl tape



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 - 150mm 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 30mm.

Ensure panel joints are pulled tight to adjacent panels to close any gaps as works progress.

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 & side lap 6 x 5mm butyl tape sealant.

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.

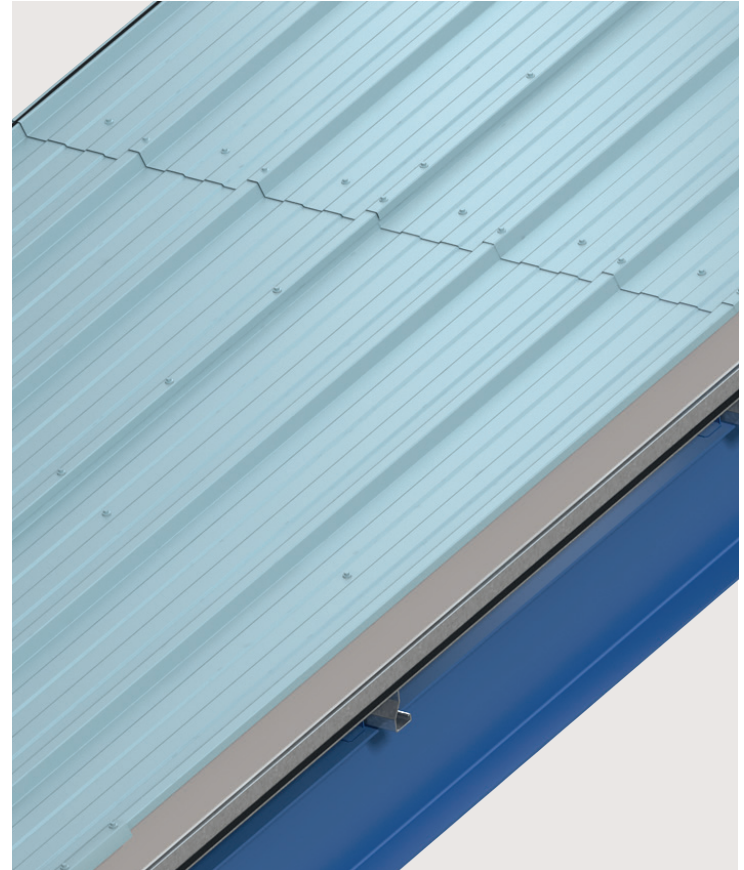
Protective film to be removed from external weather face of panel & internal liner, where applicable, prior to installation.

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.

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



QuadCore® KS1000RW Roof Panel

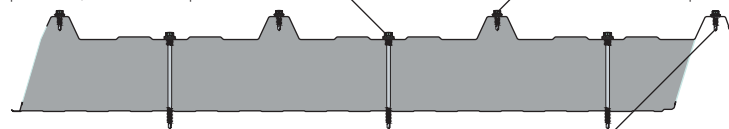
Multiple Panels Eaves to Ridge - 150mm End Lap

Fastener Layouts QuadCore®

End / Side Lap

3No. Self-drilling self-tapping primary fixings with minimum 19mm non-ferrous EPDM backed washer approximately 135mm upslope from panel end, colour to suit panel

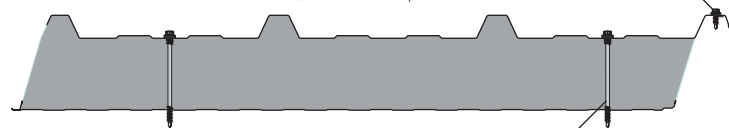
End lap stitching screws with minimum 14mm non-ferrous EPDM backed washer fitted to each crown, 50mm upslope from panel end, colour to suit panel



Stitching screws with minimum 14mm diameter non-ferrous EPDM backed washer fitted at 450mm centres, colour to suit panel

Standard Intermediate & Side Lap

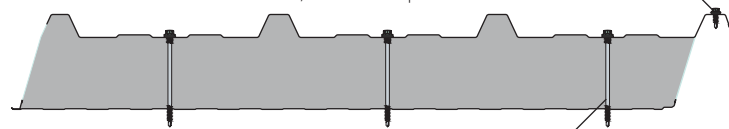
Stitching screws with minimum 14mm diameter non-ferrous EPDM backed washer fitted at 450mm centres, colour to suit panel



Minimum 2No. self-drilling self-tapping primary fixings with minimum 19mm diameter non-ferrous EPDM backed washer, colour to suit panel

Standard Eaves, Ridge & Side Lap

Stitching screws with minimum 14mm diameter non-ferrous EPDM backed washer fitted at 450mm centres, colour to suit panel

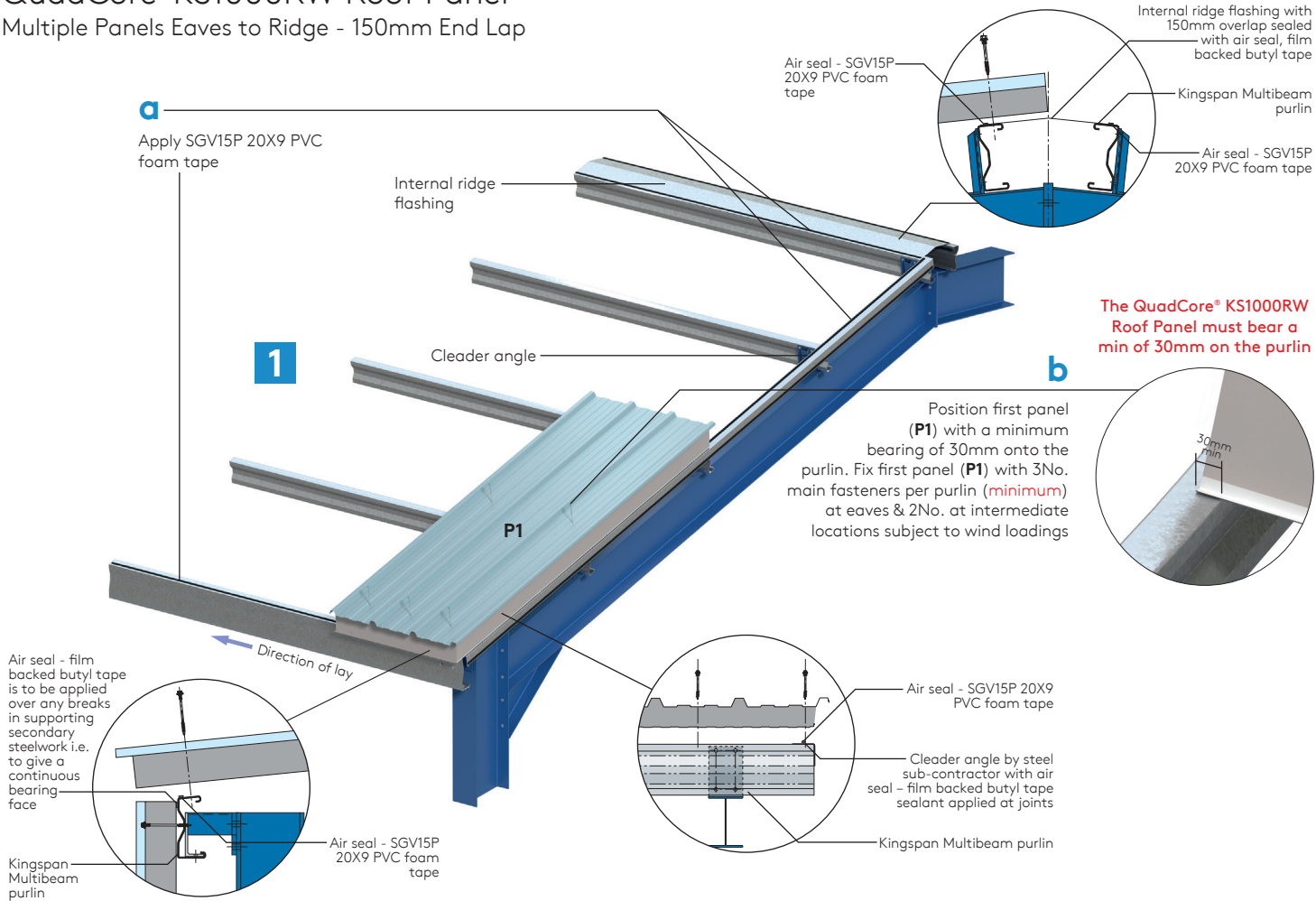


3No Self-drilling self-tapping primary fixings with minimum 19mm diameter non-ferrous EPDM backed washer, colour to suit panel

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

QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 150mm End Lap



QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 150mm End Lap

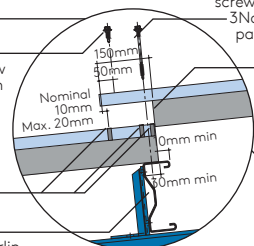
e

Apply 3No. strips of 6 x 5mm butyl tape sealant horizontally across the panel end lap. This can be either tightly butted or turned down min 20mm with the side lap seal. The lower strip sealant should be positioned 10mm nominal up from the end lap edge. The intermediate seal to be positioned 50mm down from the top edge of the panel. The upper seal should be positioned at the top edge of the panel. 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

End lap tail stitching screw to every crown

3 strips of 6 x 5mm butyl tape sealant (site-applied)

Kingspan Multibeam purlin



Main panel fixing screw to every valley
3No. fasteners per panel per support

QuadCore® KS1000RW Roof Panel

2a

P2

P1

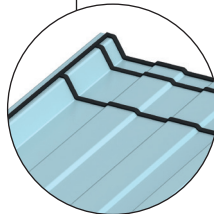
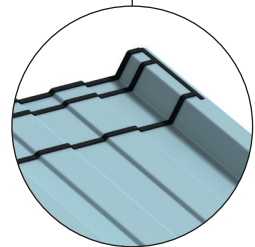
Direction of lay

c

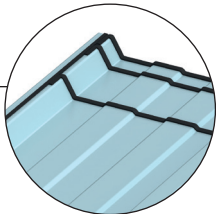
Apply 150mm length 6 x 5mm butyl tape sealant to the weatherside of the side lap, leaving sufficient area on the crown to abut with 3 No. strips 6 x 5mm butyl tape end lap sealant

d

Apply 1 strip of 6 x 5mm butyl tape sealant to the weatherside of the side lap, leaving sufficient area on the crown to abut with 3 No. strips 6 x 5mm butyl tape end lap sealant. This sealant is to be continuous and unbroken down full length of panel as illustrated



Butted



Butted & turned down min 20mm

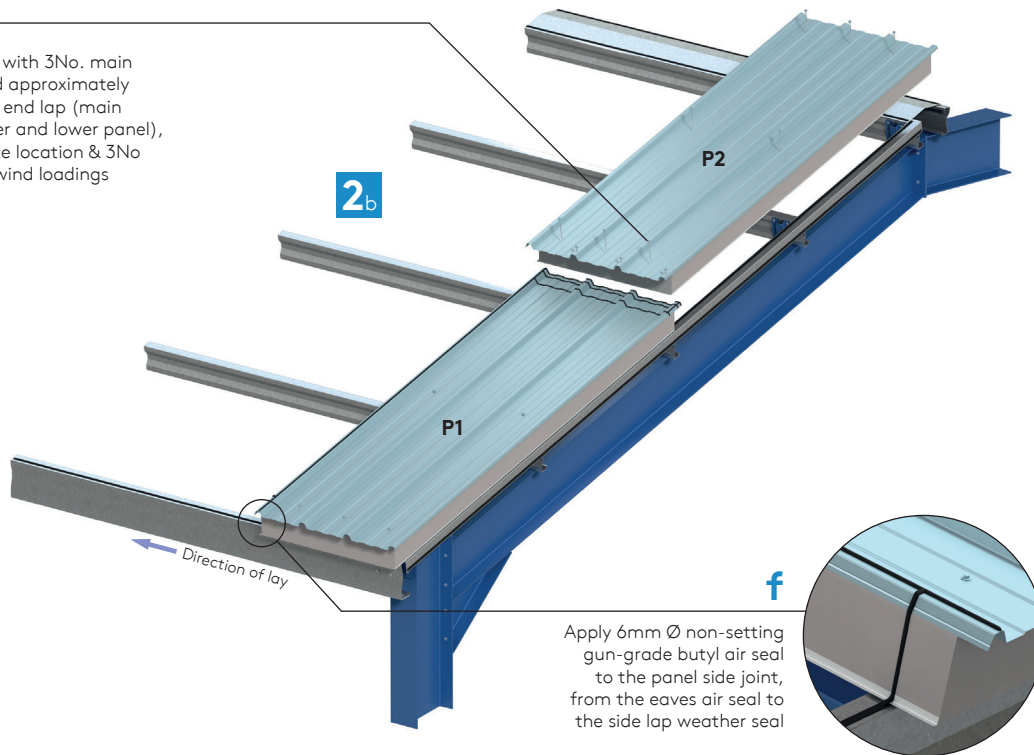
QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 150mm End Lap

g

Position & fix second panel (**P2**) with 3No. main fasteners (**minimum**) positioned approximately 135mm up slope from the panel end lap (main fastener to penetrate both upper and lower panel), 2No. (**minimum**) at intermediate location & 3No. (**minimum**) at ridge subject to wind loadings

2_b

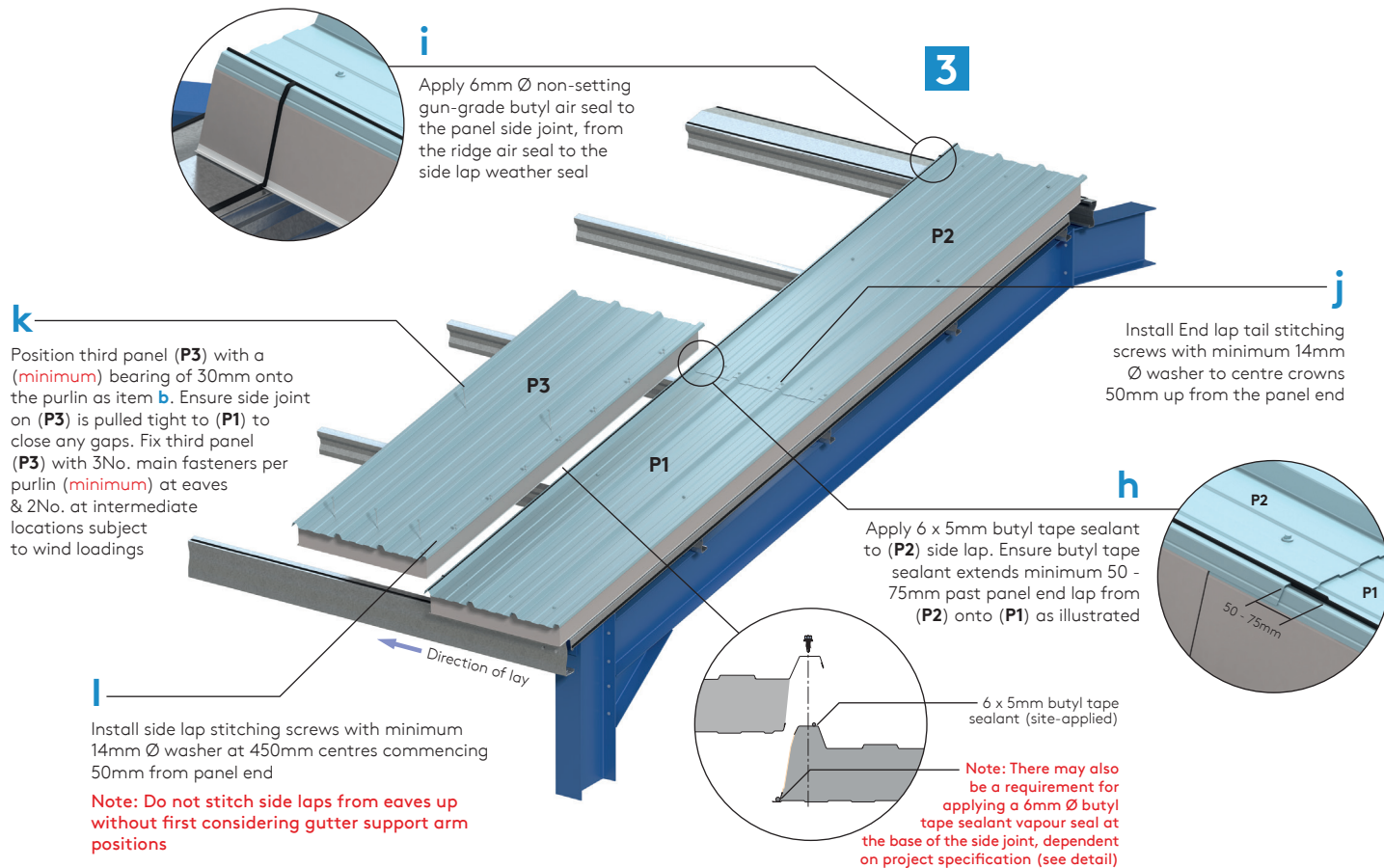


f

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

QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 150mm End Lap



QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 150mm End Lap

p

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 (**minimum**) positioned approximately 135mm up slope from the panel end lap (main fastener to penetrate both upper and lower panel), 2No. (**minimum**) at intermediate location & 3No (**minimum**) at ridge subject to wind loadings

o

Apply 3No. strips of 6 x 5mm butyl tape sealant horizontally across the panel end lap. This can be either tightly butted or turned down min 20mm with the side lap seal. The lower strip sealant should be positioned 10mm nominal up from the end lap edge. The intermediate seal to be positioned 50mm down from the top edge of the panel. The upper seal should be positioned at the top edge of the panel. 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. As per item **e**

n

Apply 1 strip of 6 x 5mm butyl tape sealant to the weatherside of the side lap, leaving sufficient area on the crown to abut with 3 No. strips 6 x 5mm butyl tape end lap sealant. This sealant is to be continuous and unbroken down full length of panel as illustrated. Apply side joint air seal as per item **f**

4

P4

P2

P3

P1

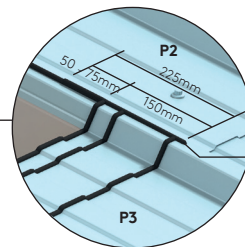
Direction of lay

q

Install End lap tail stitching screws with minimum 14mm Ø washer to centre crowns 50mm from the panel end and side lap stitching screws at 450mm centres commencing 50mm from panel end

m

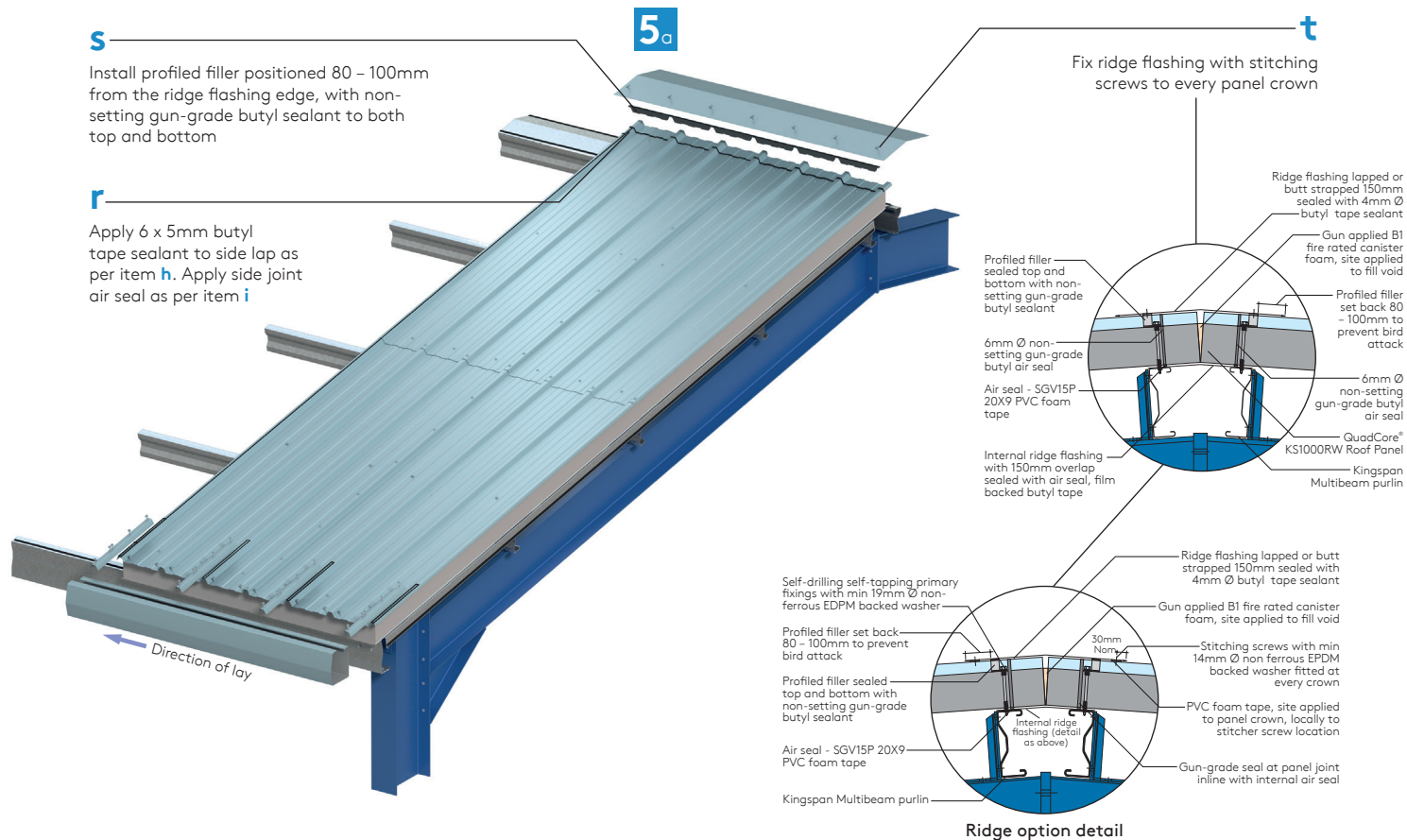
Additional 225mm length of 6 x 5mm butyl tape sealant from (**P3**) onto (**P2**) as illustrated to the weatherside of the side lap leaving sufficient area on the crown to abut with 3 No. strips 6 x 5mm butyl tape end lap sealant



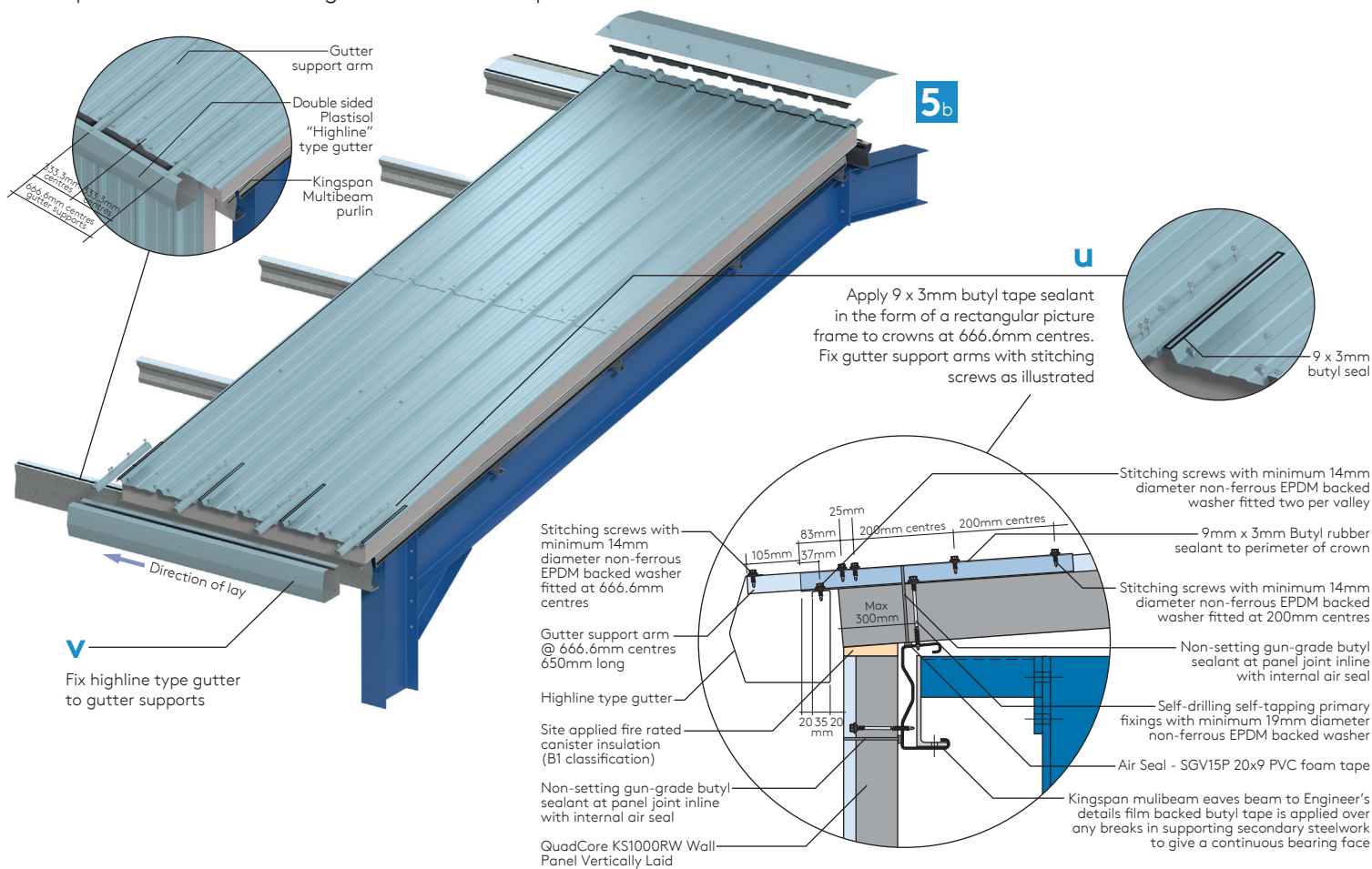
225mm run of 6 x 5mm butyl tape sealant

QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 150mm End Lap

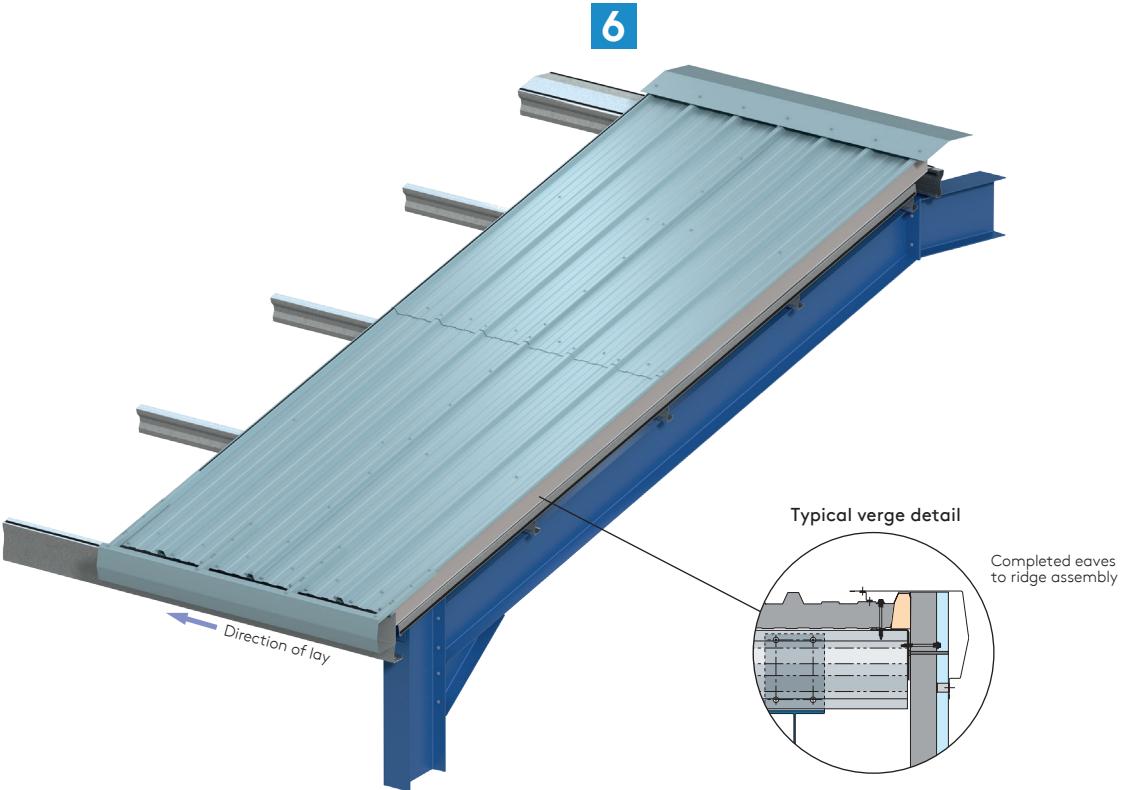


Multiple Panels Eaves to Ridge - 150mm End Lap



QuadCore® KS1000RW Roof Panel

Multiple Panels Eaves to Ridge - 150mm End Lap



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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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