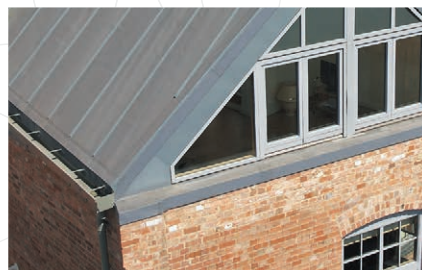


Insulated Roof & Wall Panels
UK & Republic of Ireland

QuadCore™ Topdek KS1000 TD Insulated Single Ply Roofdeck Installation Guide

February 2019

Protected by



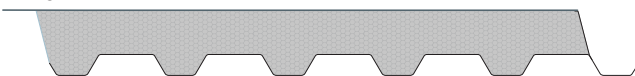

Kingspan®

QuadCore™ Topdek (KS1000 TD)

Insulated Single Ply Roofdeck

Components

Kingspan Topdek (KS1000 TD)



514cw
50mm wide
acrylic tape



Butyl rubber
tape sealants



TRIAC S
hot air tool



SFS
fastener



40mm wide
silicone
pressure roller



40mm nozzle
for lap welding



20mm nozzle for
lap welding and
intricate detailing



SFS drive
bar



Ejot drive
bar



1.5mm PVC
membrane cover
strip. (min: IKO
150mm or SIKA
200mm wide)



Ejot
fastener



Hot air
welder



Penny
pressure
roller



Wire brush



Seam probe



10" scissors



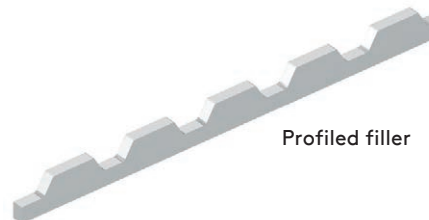
Non-setting
gun-grade
sealant



Fire-rated
canister
insulation



Profiled filler



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 reserves the right to amend the information at any time in the future. Installation guides are available for most of Kingspan insulated roof and wall panels.

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Note: Only fully trained and certified operatives should install Kingspan Topdek and heat weld the relevant membrane.

Ensure steel work is suitable for panels and is within tolerance.

Ensure the lower panel 60mm cutback is bearing on to upper purlin by a minimum of 60mm.

Gun-grade sealant type - non-setting butyl rubber sealant is recommended.

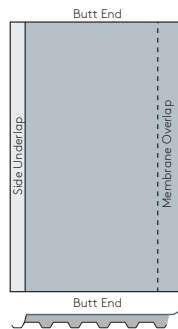
Panel sequence installed in tiers not coursed.

Profiled fillers required at eaves, panel butt joint and ridge.

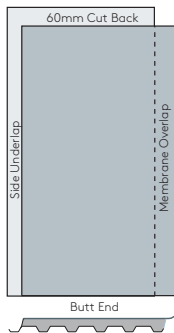
This product cannot be used in high humidity or hygiene internal environments.

PVC membrane options are: IKO Armourplan or Sika Trocal.

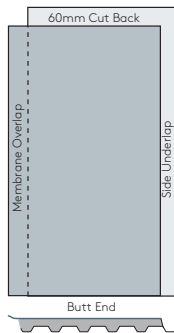
Kingspan Topdek can be used on building applications with a minimum finished roof pitch after deflection of 1:80 (0.72°) to avoid ponding, and on curved and inverted curve roofs with a radii greater than 45 metres



Panel Type TDP
(Left or Right hand)



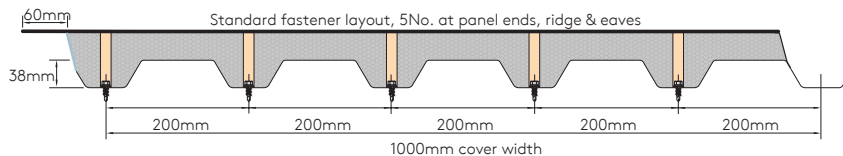
Panel Type TDX
(Laying Right to Left)



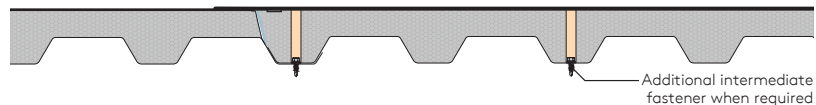
Panel Type TDY
(Laying Left to Right)

Note: 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

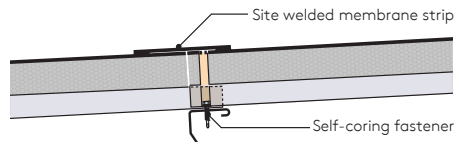
Fastener Layout



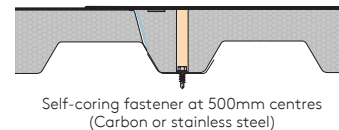
Standard Fastener Layout for Intermediate Panels



End Laps

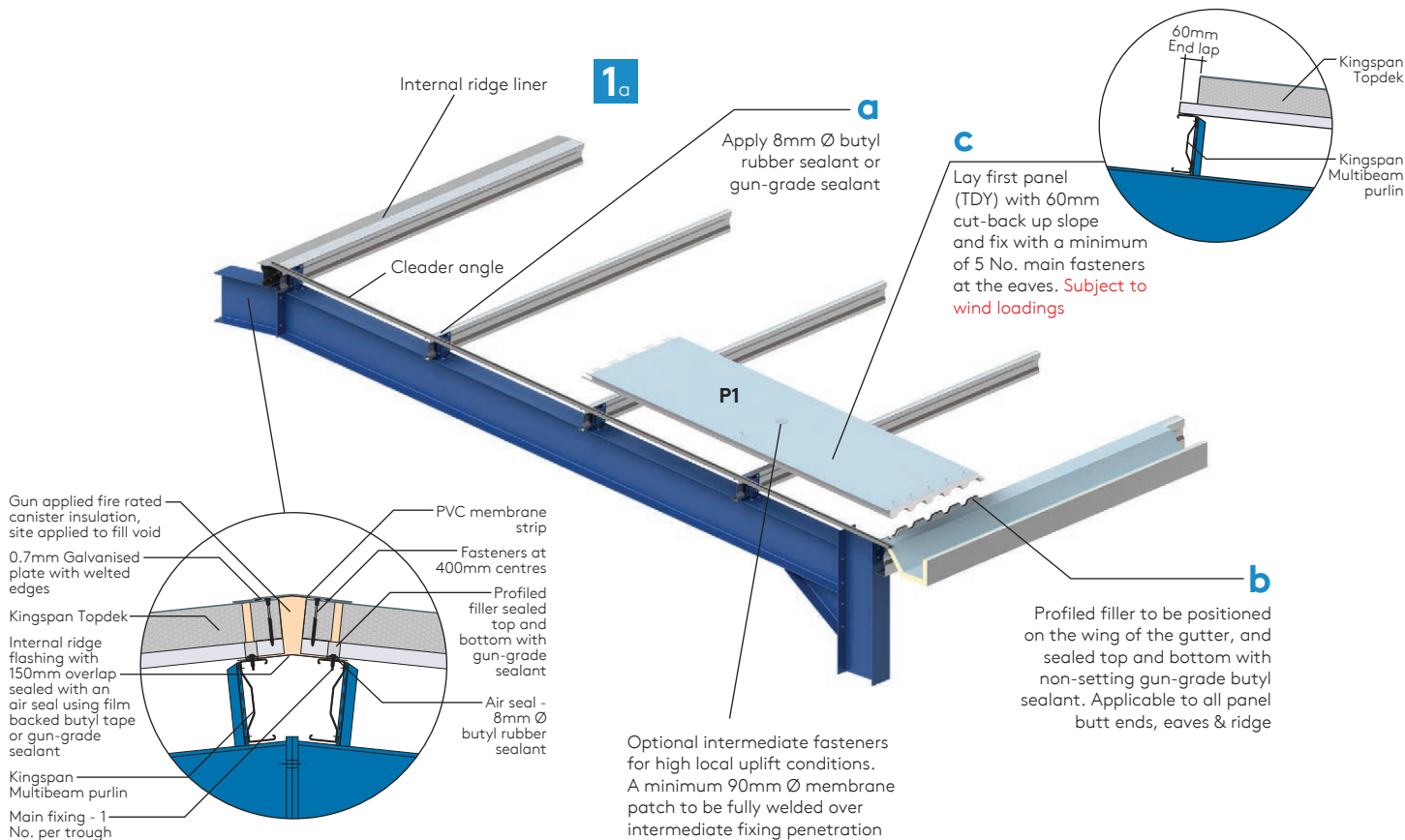


Side Laps



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QuadCore™ Topdek (KS1000 TD)

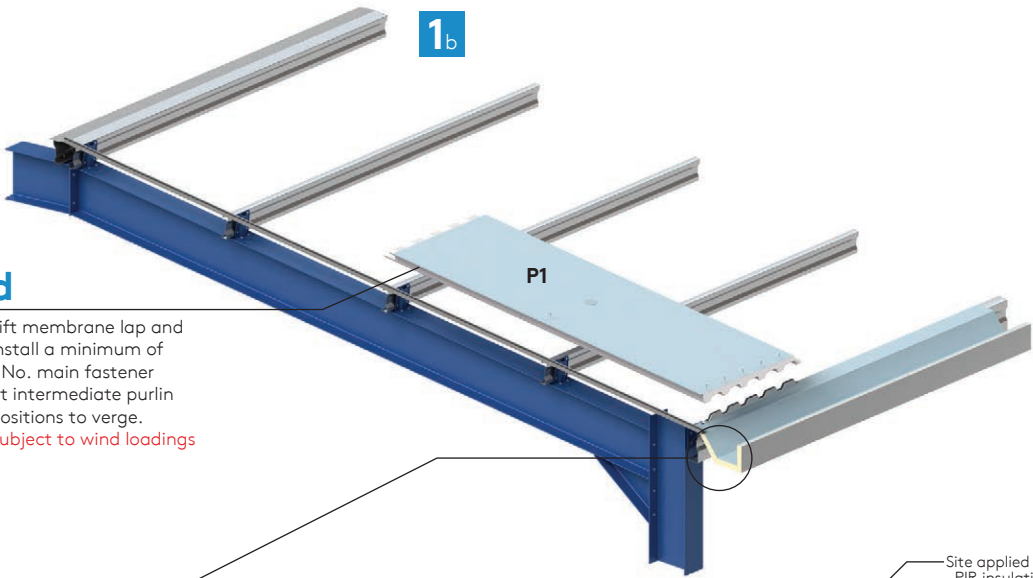
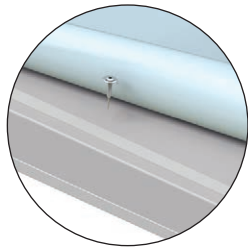
Insulated Single Ply Roofdeck

1_b

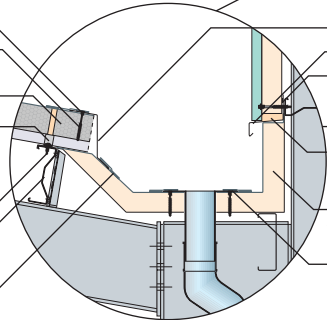
d

Lift membrane lap and install a minimum of 1 No. main fastener at intermediate purlin positions to verge.

Subject to wind loadings

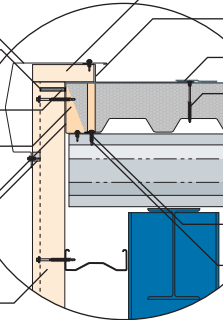


- PVC membrane strip
- Fasteners at 400mm centres
- Kingspan Topdek
- Profiled filler bedded on gun-grade sealant
- Main fixing - 1 No. per trough
- Kingspan Multibeam purlin
- PVC membrane strip



- PVC membrane coated metal upstand flashing
- Drip flashing
- Air seal - 6mm Ø butyl strip
- Site applied fire rated canister insulation
- Membrane coated boundary wall gutter
- PVC membrane disk

- Verge flashing with 150mm butt straps sealed with 6mm Ø butyl strip
- Air seal - Gun-grade sealant to male joint
- Air seal - 6mm Ø butyl strip
- Site applied fire rated canister insulation
- Galvanised steel cleader angle
- AWP filler bedded on gun-grade sealant
- Kingspan Architectural Wall Panel



- Site applied LPCB certified PIR insulation board. Any gaps filled with fire rated canister insulation
- PVC membrane coated metal upstand flashing
- PVC membrane strip
- Fasteners at 400mm centres
- Kingspan Topdek
- Kingspan Multibeam purlin
- Air seal - 6mm Ø butyl strip
- Fasteners at 500mm centres

QuadCore™ Topdek (KS1000 TD)

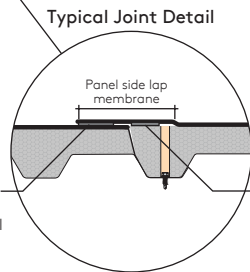
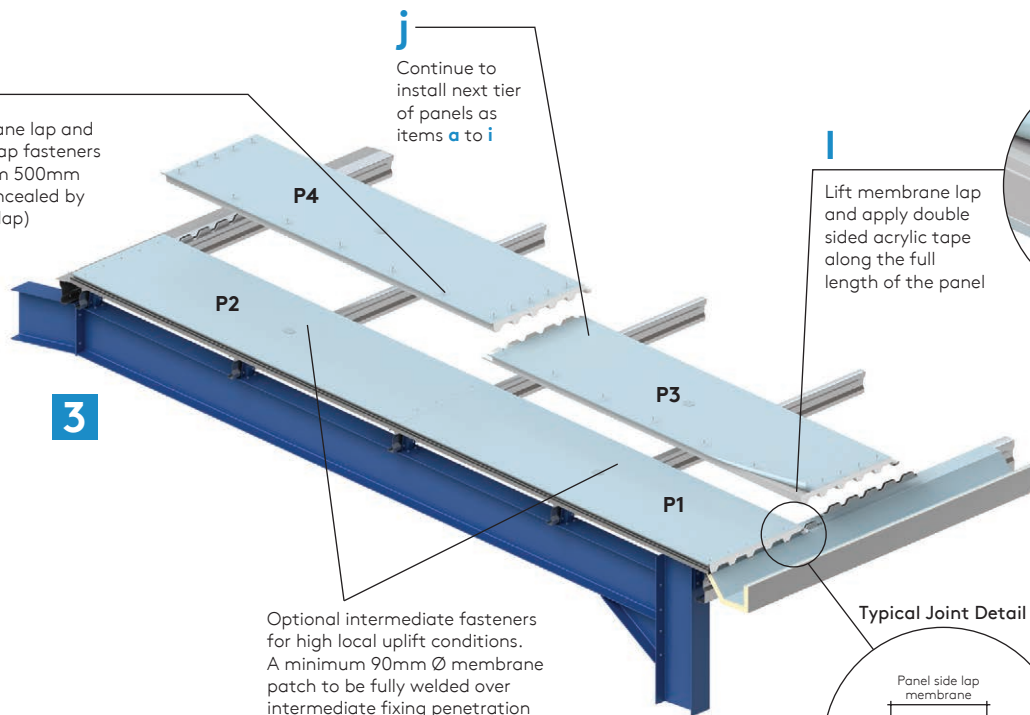
Insulated Single Ply Roofdeck

k
Lift membrane lap and install side lap fasteners at maximum 500mm centres (concealed by membrane lap)

j
Continue to install next tier of panels as items **a** to **i**

l
Lift membrane lap and apply double sided acrylic tape along the full length of the panel

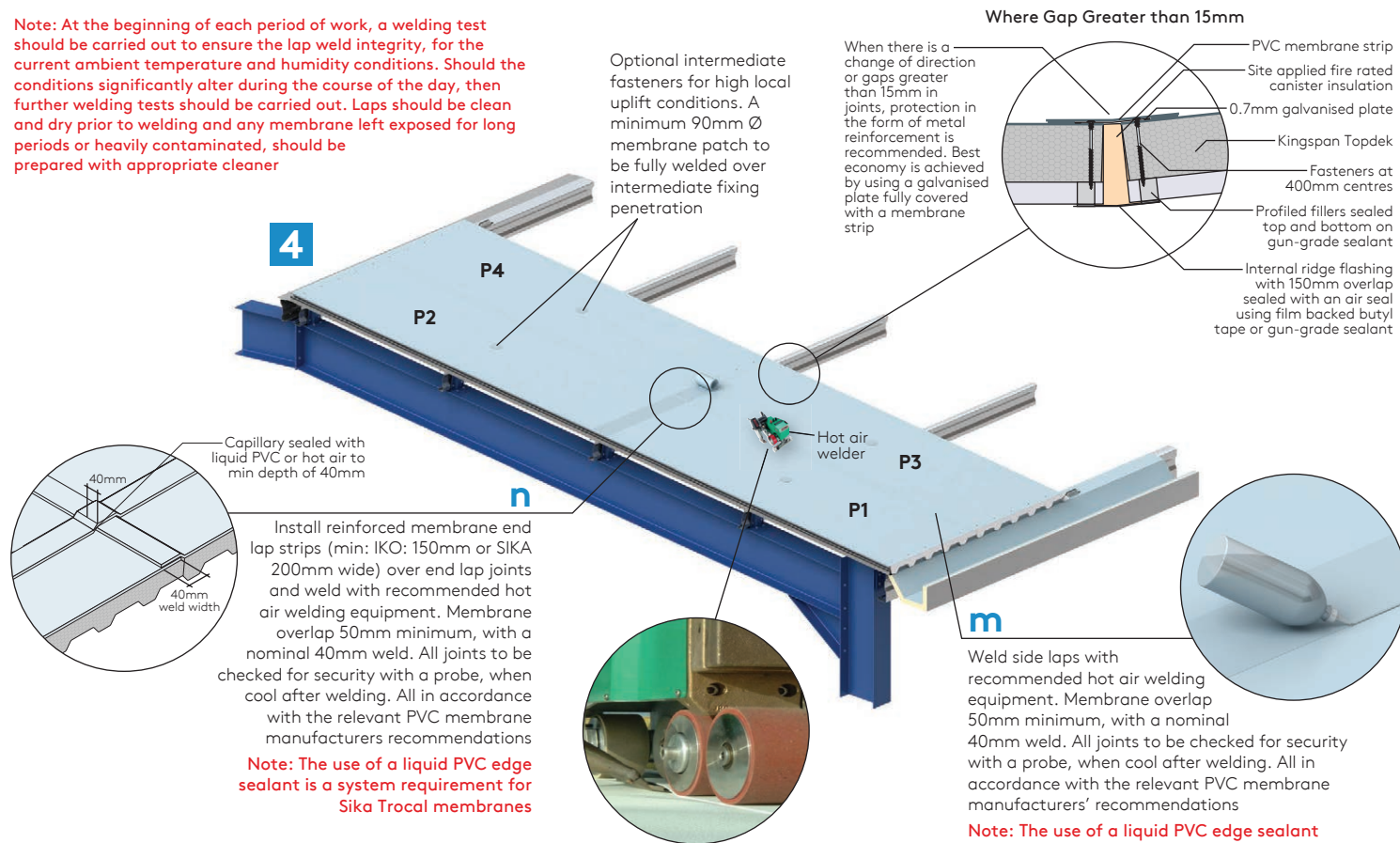
Optional intermediate fasteners for high local uplift conditions. A minimum 90mm Ø membrane patch to be fully welded over intermediate fixing penetration



QuadCore™ Topdek (KS1000 TD)

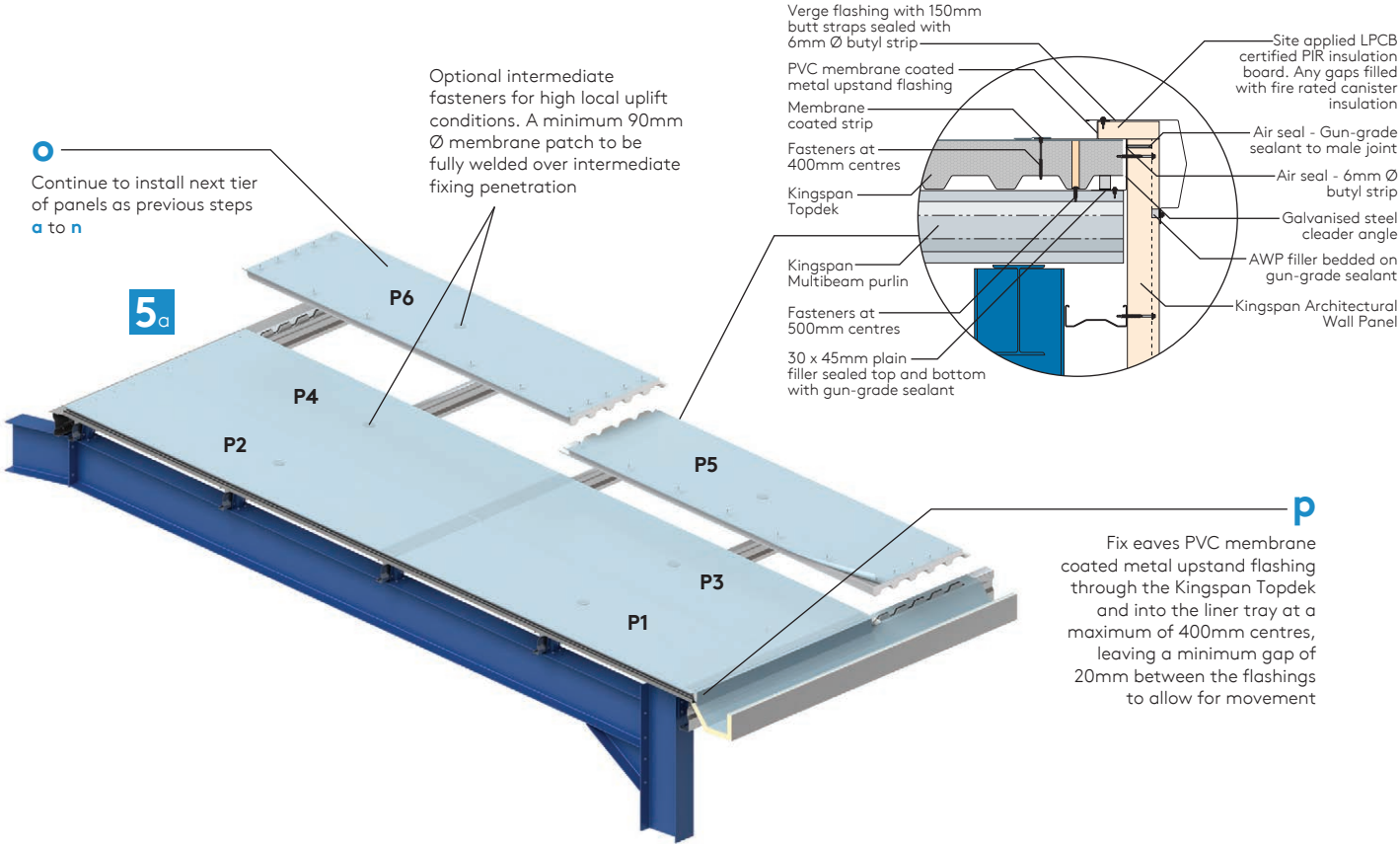
Insulated Single Ply Roofdeck

Note: At the beginning of each period of work, a welding test should be carried out to ensure the lap weld integrity, for the current ambient temperature and humidity conditions. Should the conditions significantly alter during the course of the day, then further welding tests should be carried out. Laps should be clean and dry prior to welding and any membrane left exposed for long periods or heavily contaminated, should be prepared with appropriate cleaner

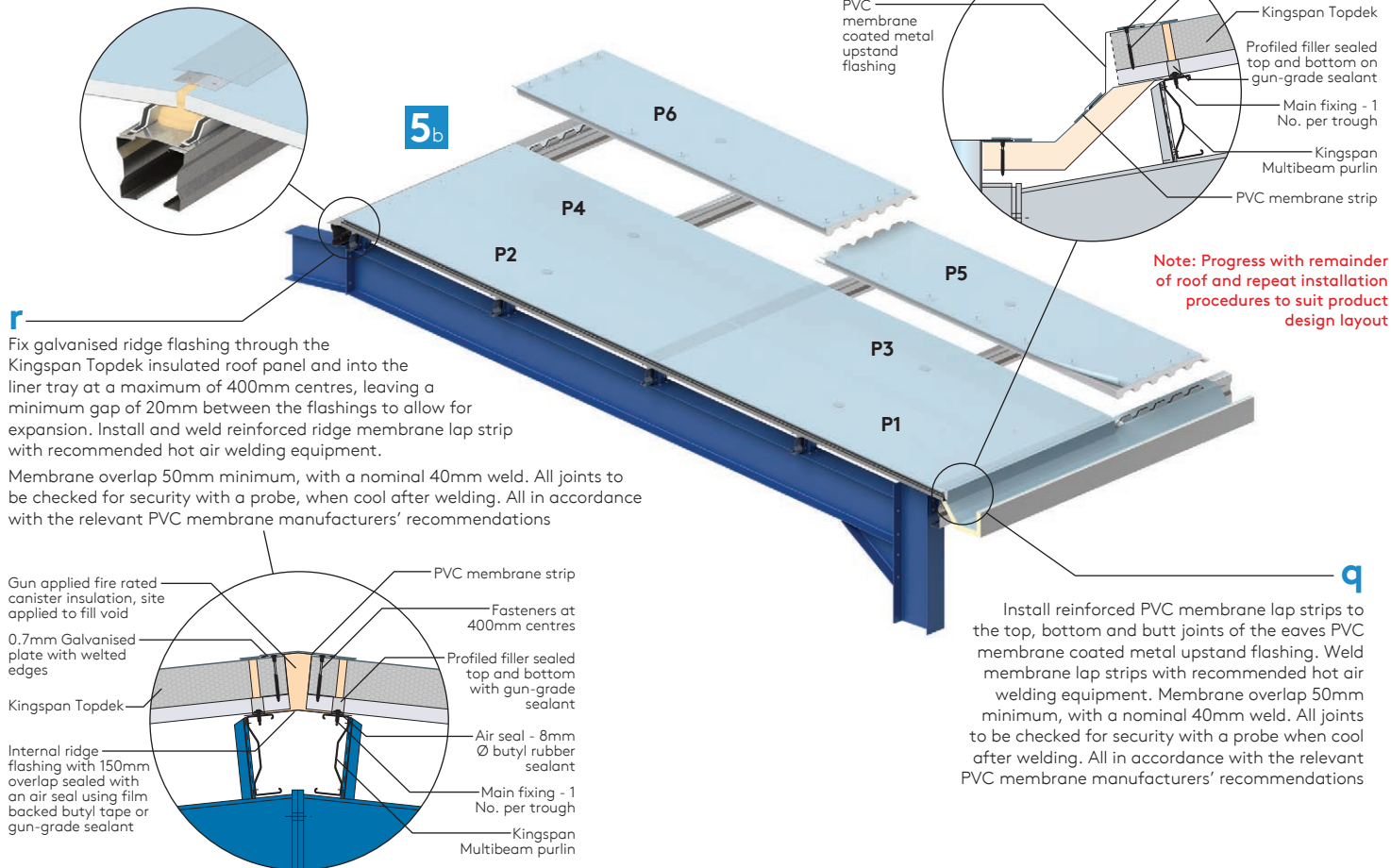


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QuadCore™ Topdek (KS1000 TD) Insulated Single Ply Roofdeck



This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Installation guides are available for most of Kingspan insulated roof and wall panels.

Please call Kingspan Technical Services on:

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www.kingspanpanels.co.uk / www.kingspanpanels.ie

