

Insulated Roof & Wall Panels
UK & Republic of Ireland

Kingspan Topdek KS1000 TD Insulated Single Ply Roofdeck Installation Guide



September 2020



Kingspan 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



PVC foam tape
(SGV15P 20x9
PVC)



Seam probe



10" scissors



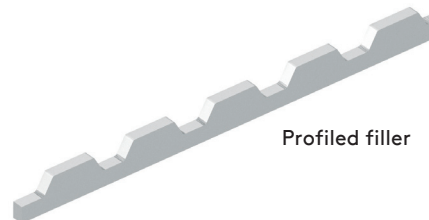
Non-setting
gun-grade
sealant



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.

Kingspan Topdek (KS1000 TD)

Insulated Single Ply Roofdeck

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.

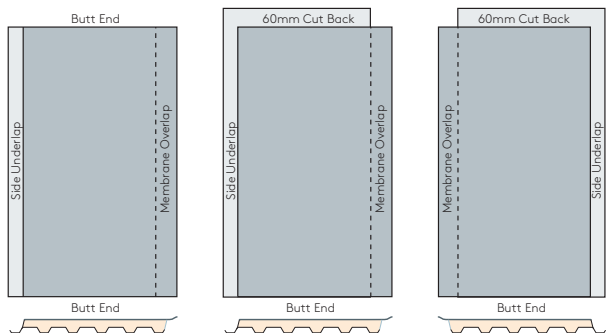
Profiled fillers required at eaves, panel butt joint and ridge.

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. It is also suitable for curved roof applications with a convex curve (45m radius) and concave curve (50m radius).

As an alternative to using butyl air sealants, a PVC foam tape (SGV15P 20x9 PVC) can be used for an air seal.



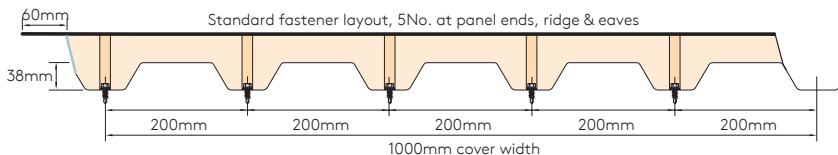
Panel Type TDP
(Left or Right hand)

Panel Type TDX
(Laying Right to Left)

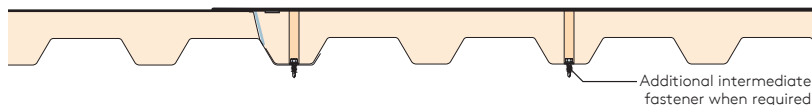
Panel Type TDY
(Laying Left to Right)

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

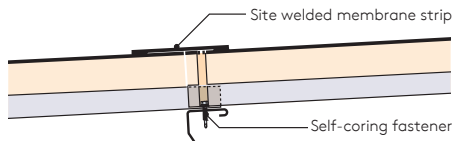
Fastener Layout



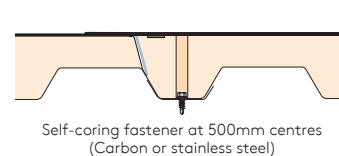
Standard Fastener Layout for Intermediate Panels



End Laps



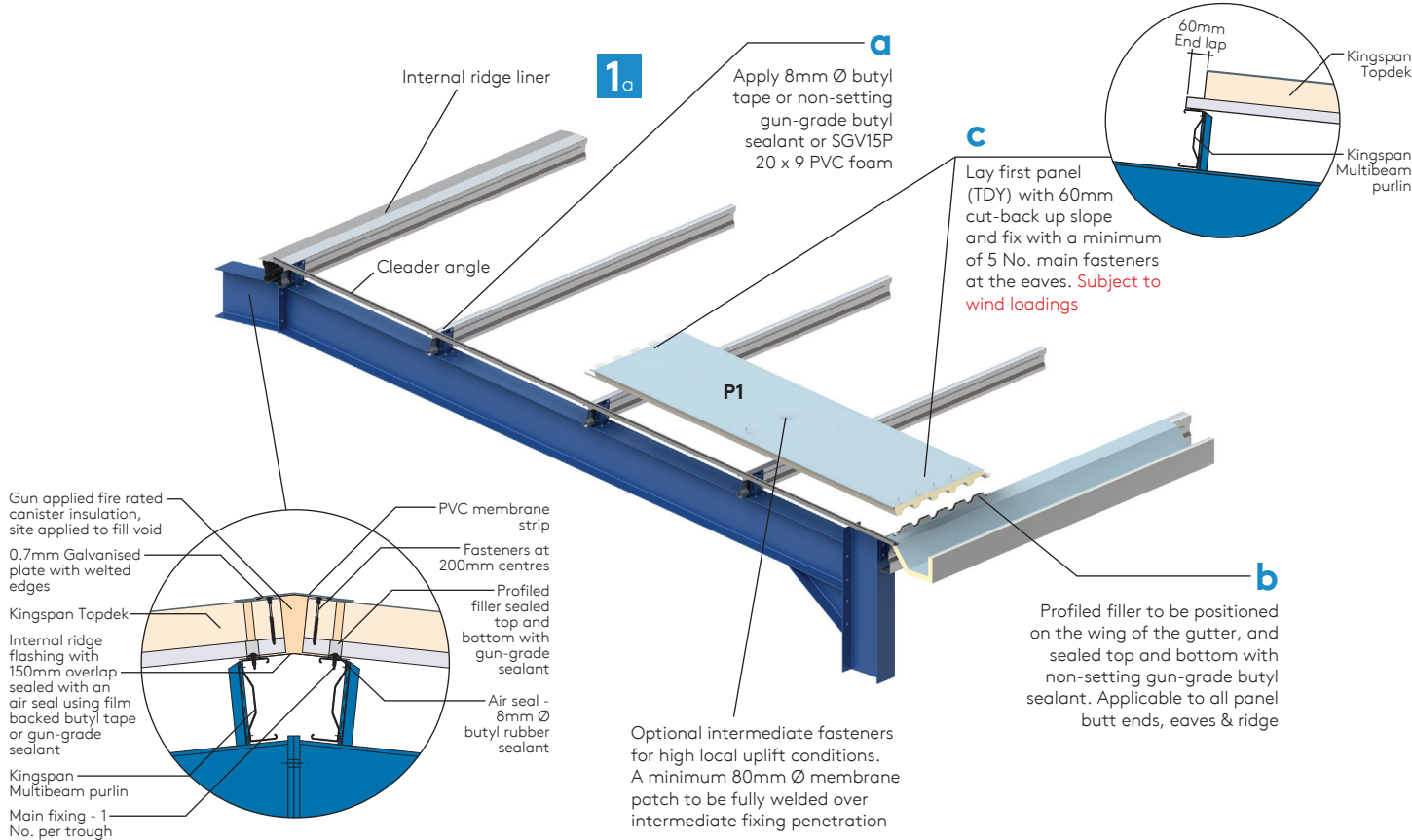
Side Laps



Note: For FM Core panel Specification there is a requirement for 5No main fasteners at intermediate locations subject to wind loads. Contact Kingspan Technical Services for further information.

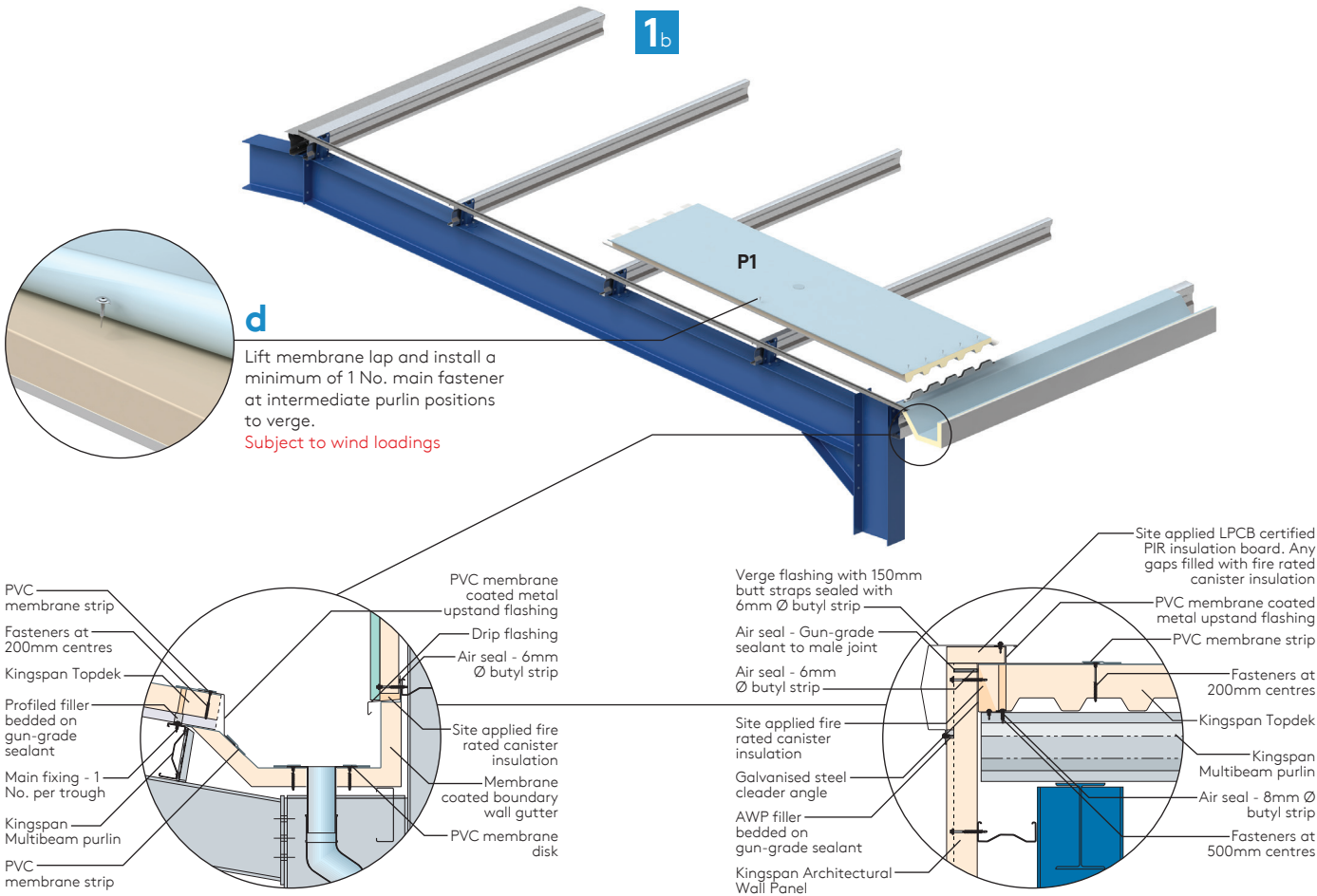
Kingspan Topdek (KS1000 TD)

Insulated Single Ply Roofdeck



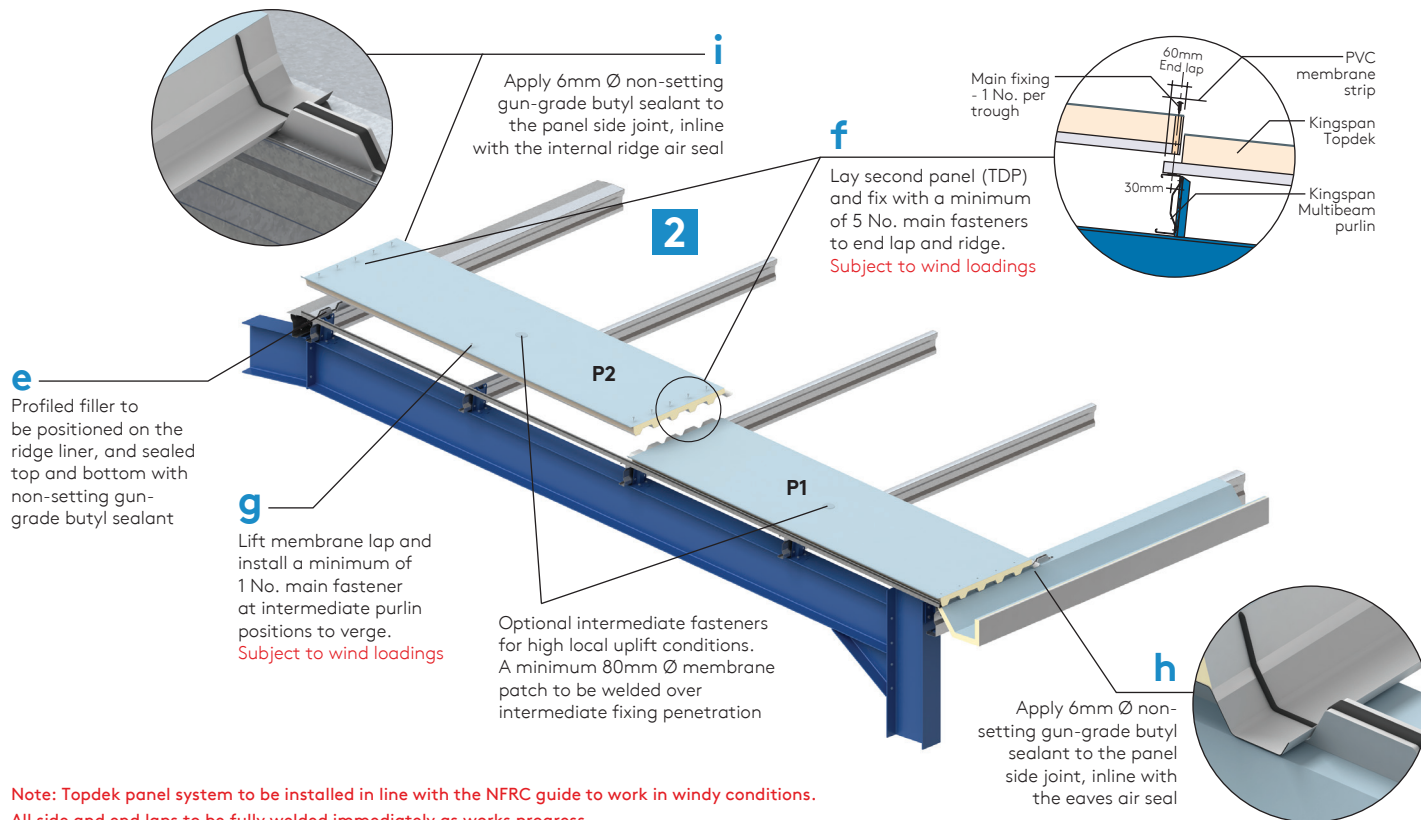
Kingspan Topdek (KS1000 TD)

Insulated Single Ply Roofdeck



Kingspan Topdek (KS1000 TD)

Insulated Single Ply Roofdeck



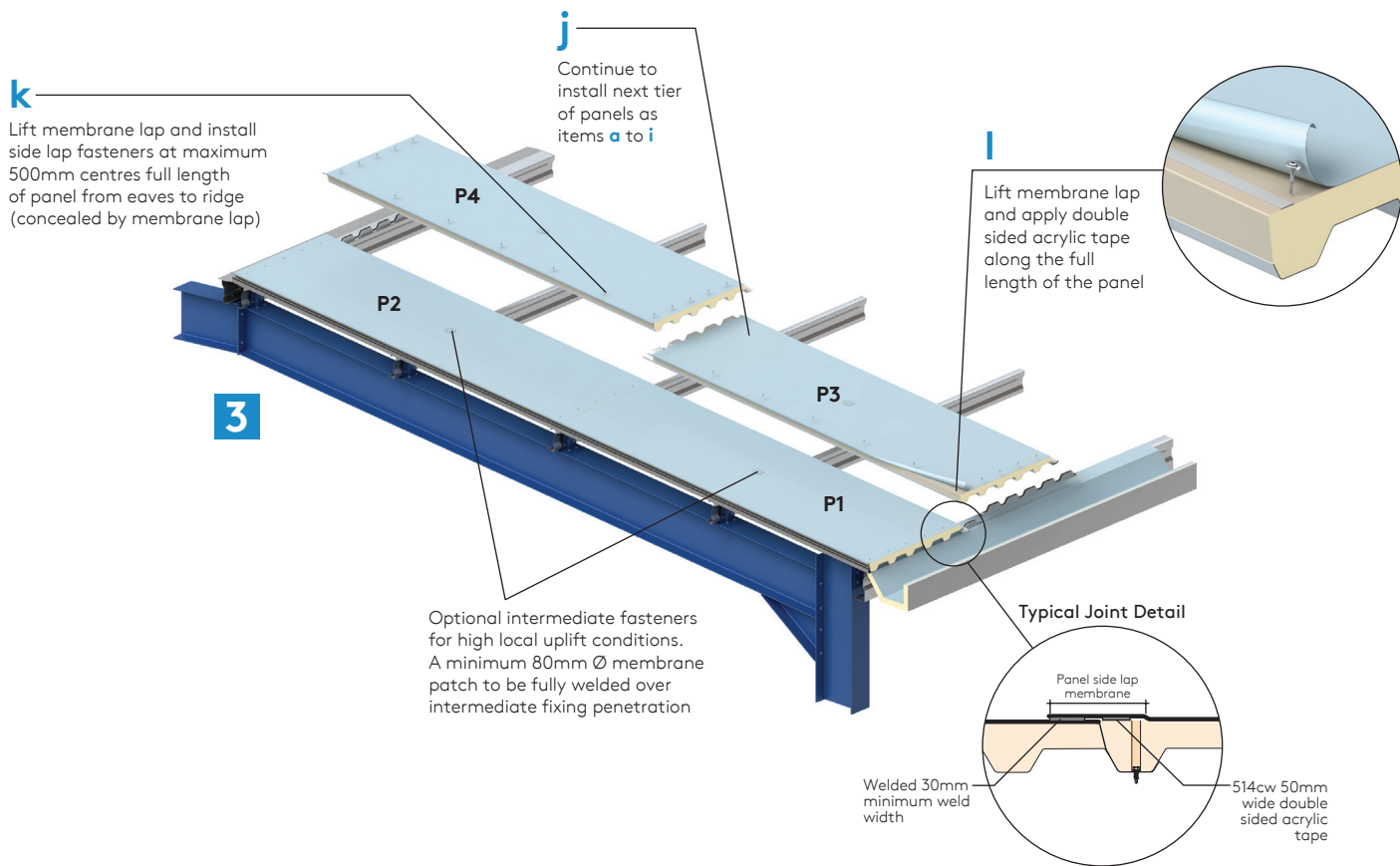
Note: Topdek panel system to be installed in line with the NFRC guide to work in windy conditions.

All side and end laps to be fully welded immediately as works progress.

Kingspan recommend works are planned to ensure that areas of Topdek panels are only installed when they can be fully completed the same day. Topdek roof areas should be inspected during and at the end of the working day to make sure that loose membrane lap materials are not left unsecured to prevent wind damage.

Membrane lap strip to overlap a minimum of 50mm past all fasteners to enable 30mm minimum weld width

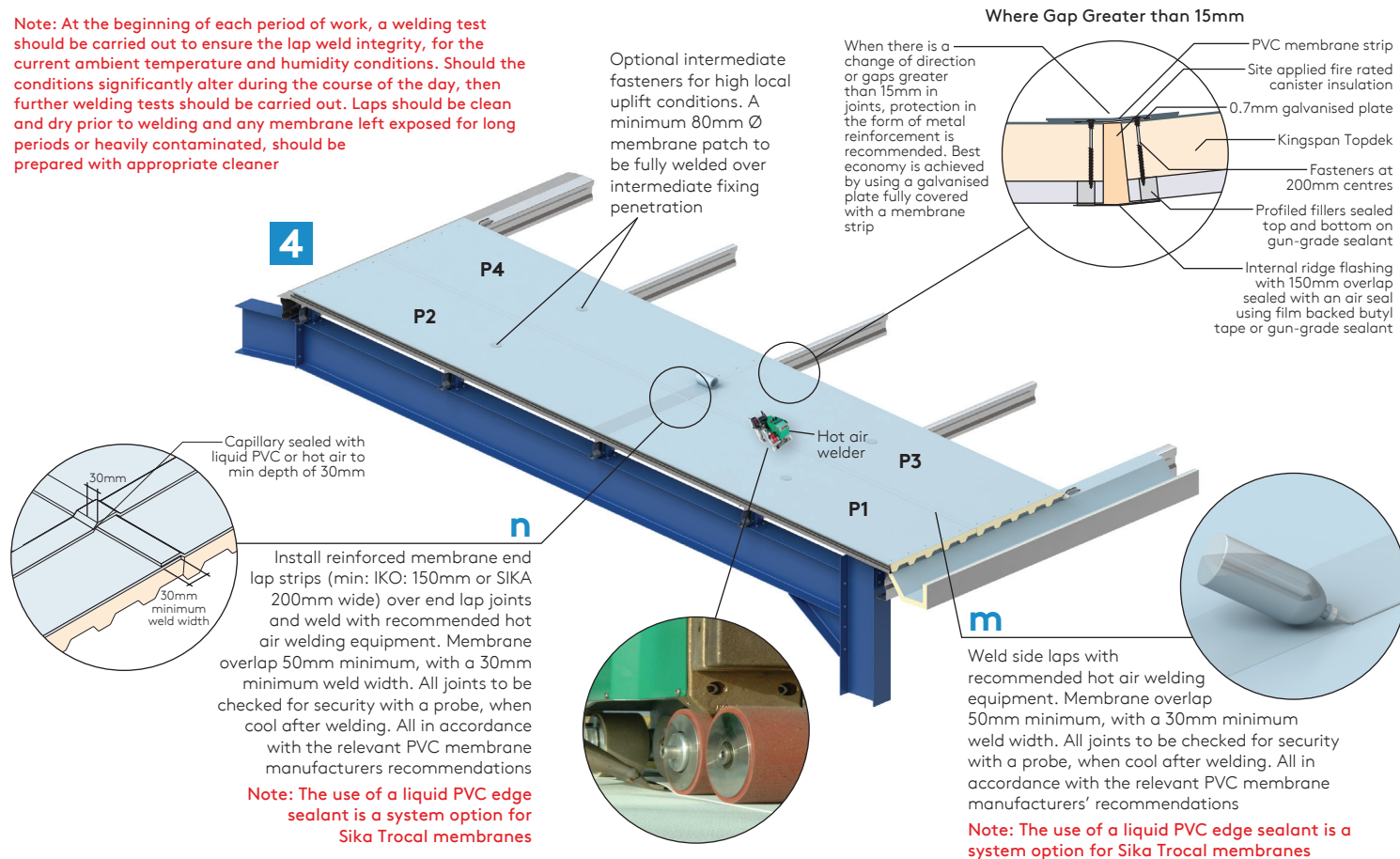
Kingspan Topdek (KS1000 TD) Insulated Single Ply Roofdeck



Kingspan Topdek (KS1000 TD)

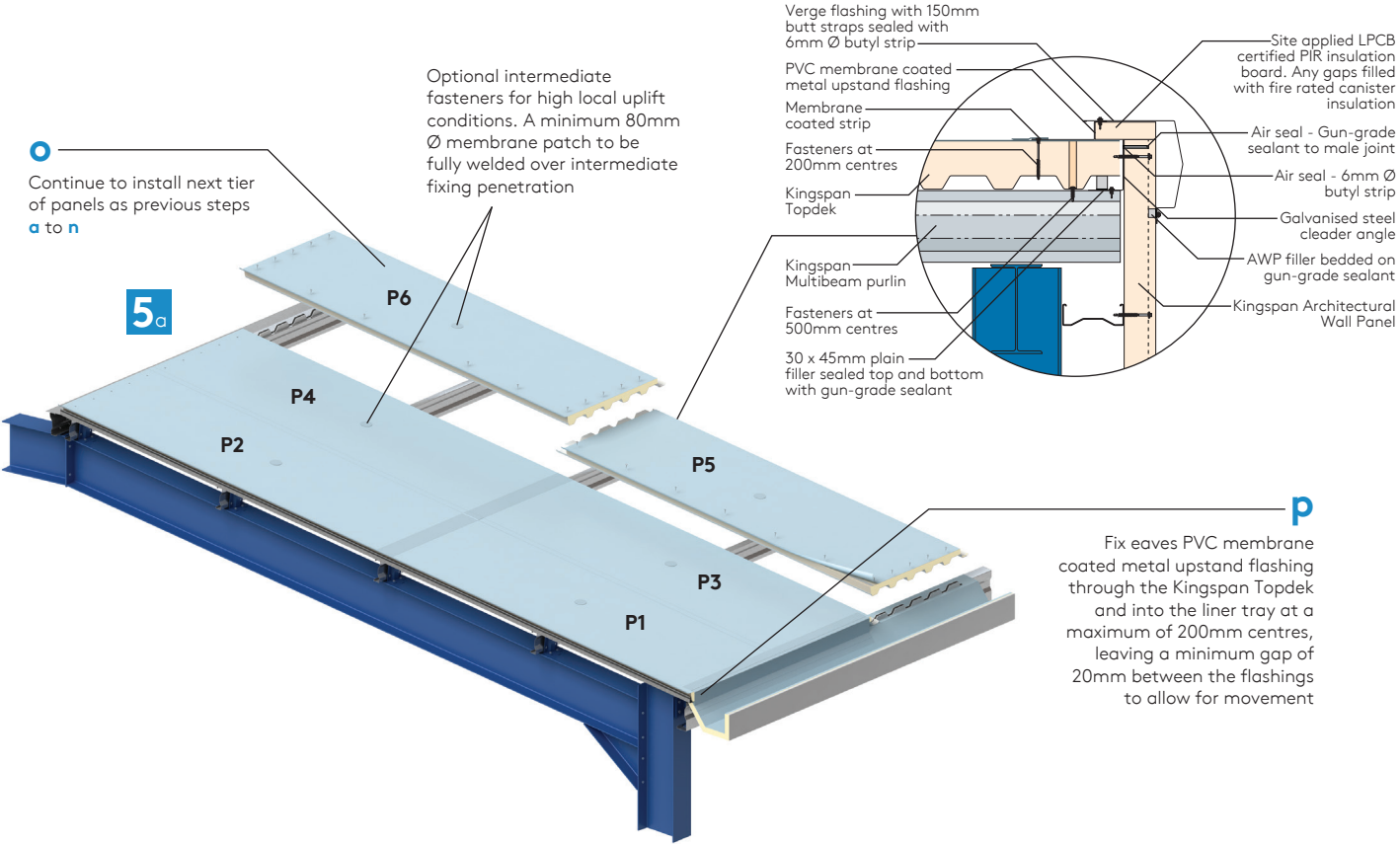
Insulated Single Ply Roofdeck

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



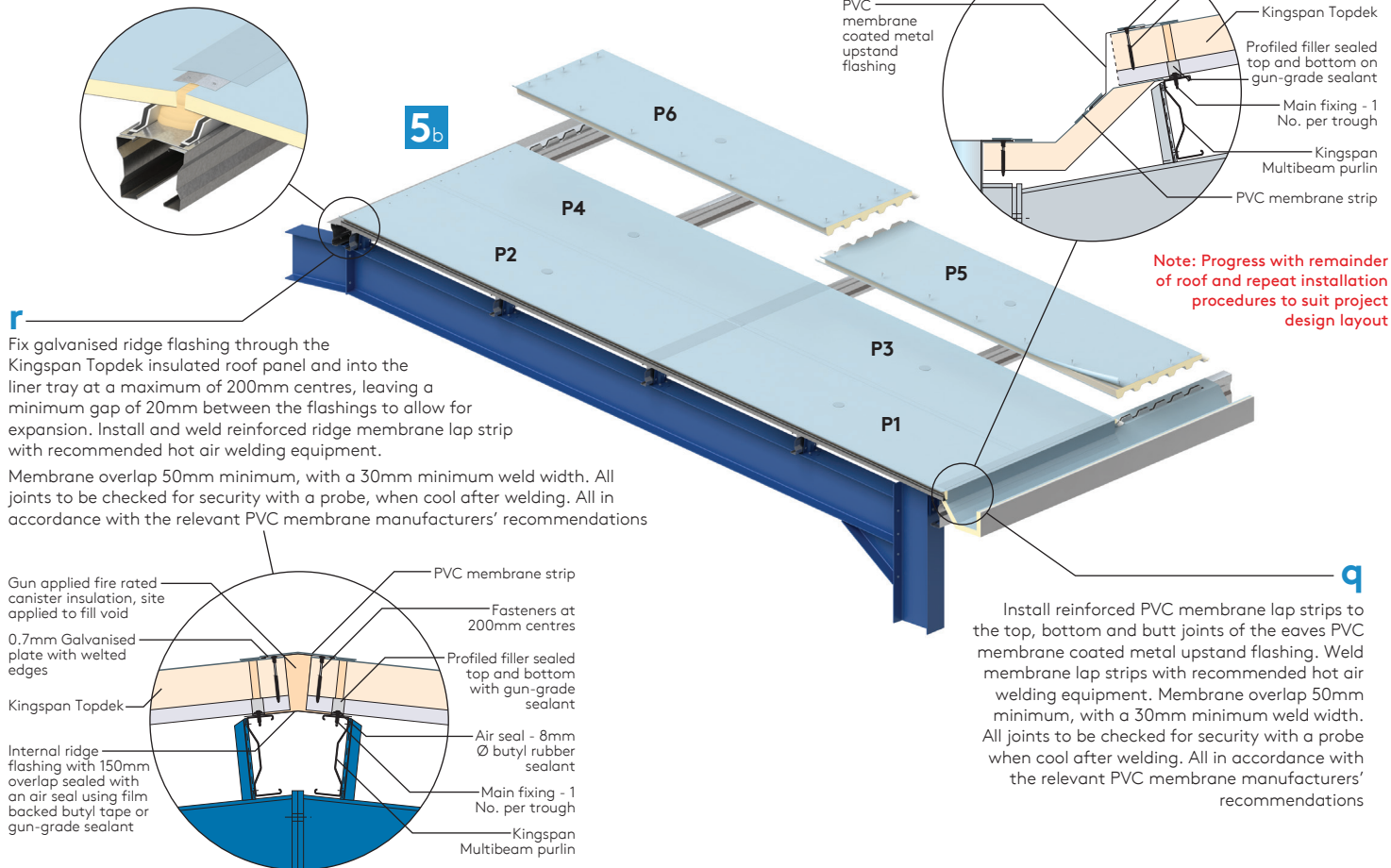
Kingspan Topdek (KS1000 TD)

Insulated Single Ply Roofdeck



Kingspan 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:

UK Tel: +44 (0)1352 716101 or Freephone: 0800 587 0090

IRL Tel: +353 (0) 42 9698529

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

