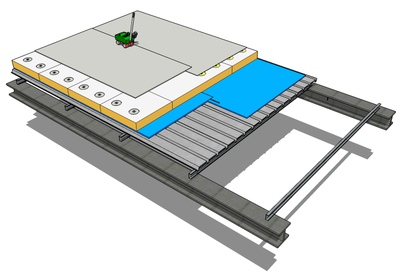
This installation guide should be read and implemented in conjunction with the Fatra site specific specification, architectural drawings and associated documentation.
This installation manual applies to concrete, timber and structural steel deck substrates. Fixing methods may vary depending on substrates. Please refer to site specific Fatra specification for further information.

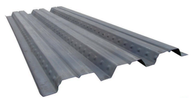
Fatra Installation Guide |



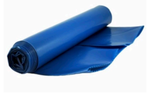
Mechanically Fixed Insulated Systems

1D 10 Childs Road Chipping Norton NSW 2170
www.fatraaustralia.com.au

Components |

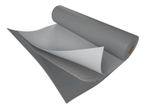


SUBSTRATE |
Metal Deck/Concrete/Timber



FATRAPAR |
Vapour Control Layer

INSULATION |
Insulation Board



FATRAFOL 810v |
Reinforced PVC Membrane

FATRANYL |
Fatranyl PVC Coated Angles

Ancillaries |

FATRABOND |
PVC Pad Adhesive

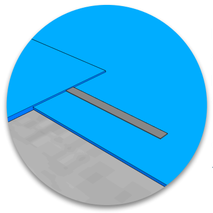
FATRA PADS |
180mm PVC Pads

FATRA BUTYL |
Butyl Tape

TELESCOPIC |
Fixing Tubes

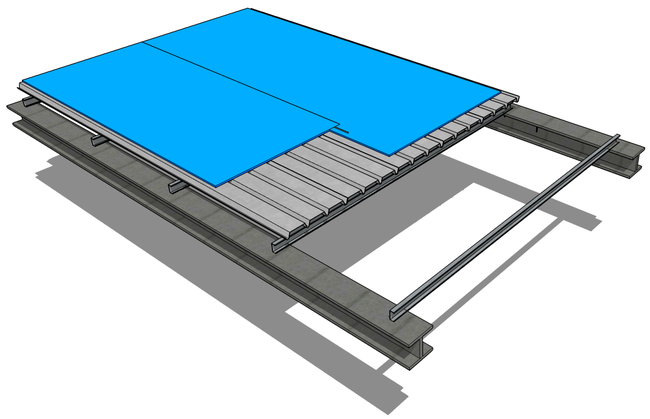
MECHANICAL |
Fixings

Stage 1 | Vapour Control Layer



Roll out Fatrapar vapour control layer over substrate ensuring laps run with the fall of the roof wherever possible. Ensure 100mm overlap is achieved with all conjoining sheets.

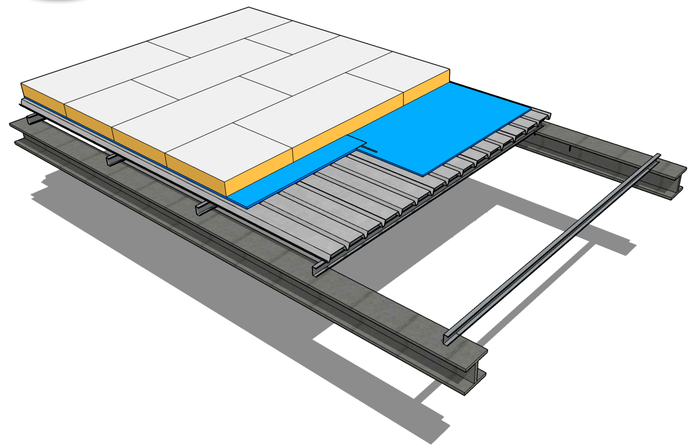
Seal all joints, laps, penetrations using butyl sealing tape 50mm from the outside edge.



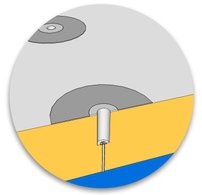
Stage 2 | Insulation Board

Lay insulation boards in a staggered brick bond pattern.

All hobs, plinths and the like are also insulated in accordance with Fatra specifications. Ensure there are no gaps or thermal bridges present between the insulation boards.

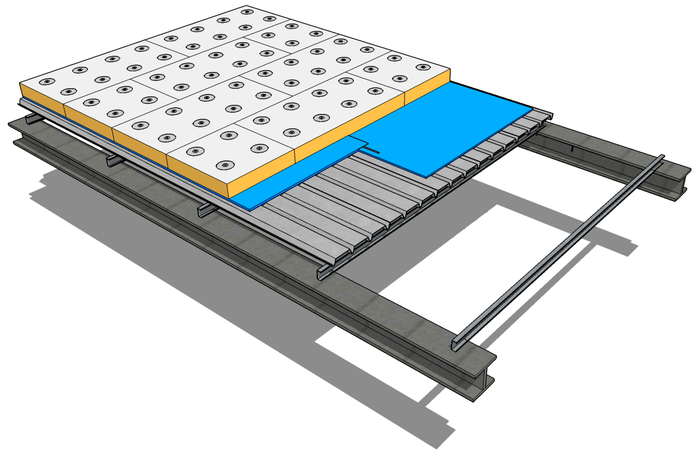


Stage 3 | FatraPad Fixing System



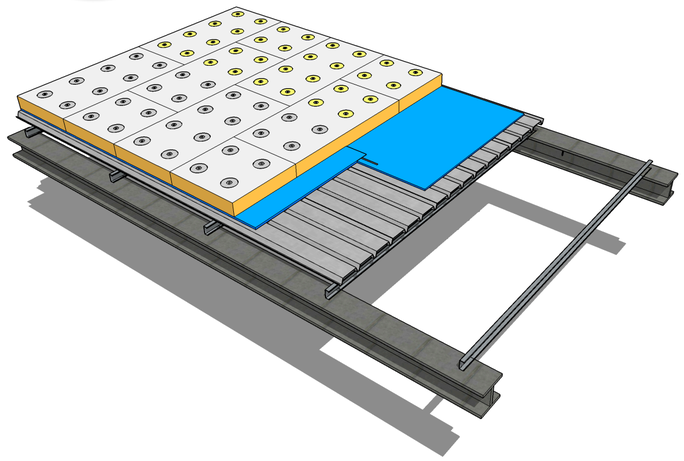
Mark out fixing centres in accordance with the Fatra wind load calculation report.

Install FatraPads, telescopic tubes and fixings into substrate. Ensure all FatraPad fixings are installed as per the wind load calculation report.



Stage 4 | FatraPad Adhesive

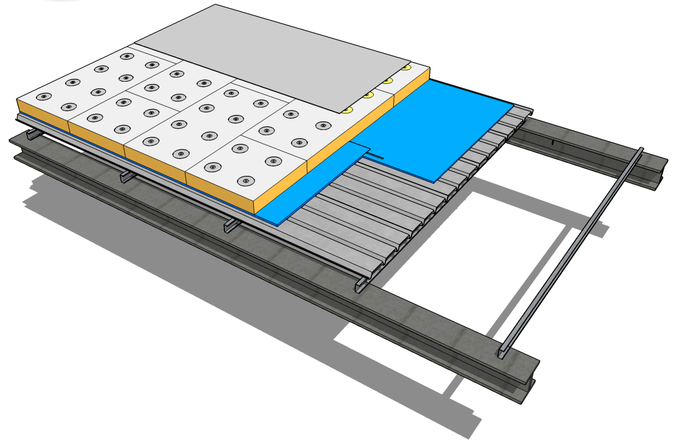
Apply FatraPad adhesive over the PVC pads using a toothed spatula ensuring 100% coverage is achieved over the entire PVC pads.



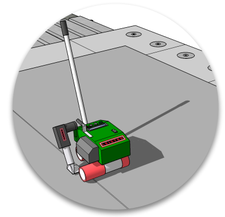
Stage 5 | Fatrafol 810v PVC Field Sheet Membrane

Lay the Fatrafol 810v nylon reinforced PVC membrane over the FatraPad system bonding the membrane to the PVC pads.

Ensure the membrane is laid with the fall of the roof to minimise water running against welded laps.

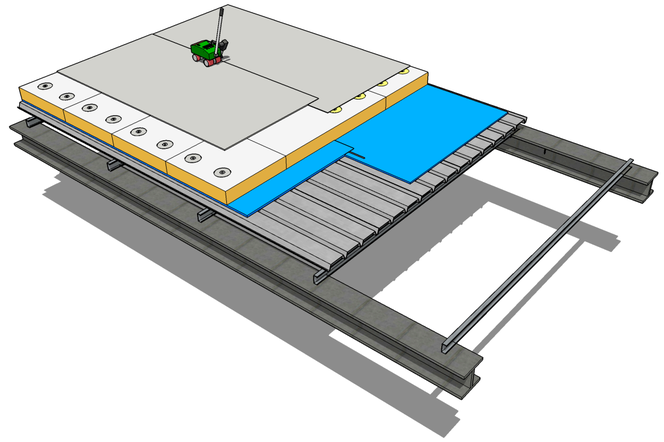


Stage 6 | Fatrafol 810v PVC Field Sheet Membrane



The conjoining sheets are to overlap a minimum of 100mm to allow for an adequate weld width.

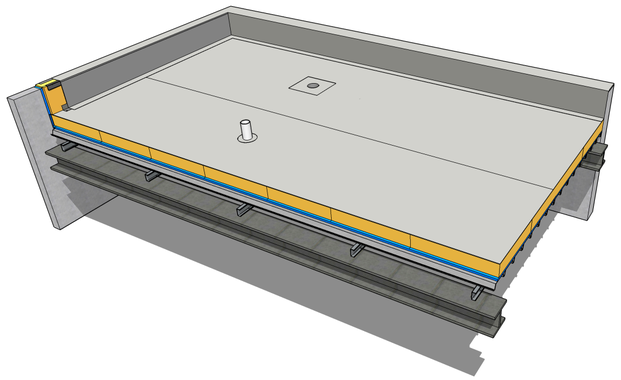
Using a hot air fusion welder, weld the conjoining field sheets together achieving a minimum weld width of 40mm.



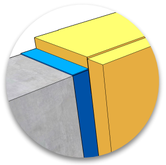
AREAS OF USE | Commercial Roofs | Industrial Roofs | Residential Roofs |

Fatra Mechanically Fixed Insulated Systems | Installation Guide

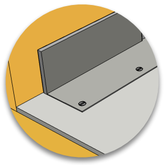
Stage 7 | Fatranyl PVC Coated Angles



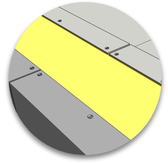
7A. Install insulation board to the inside vertical/ horizontal upturns and all internal penetrations such as plinths, hobs and the like.



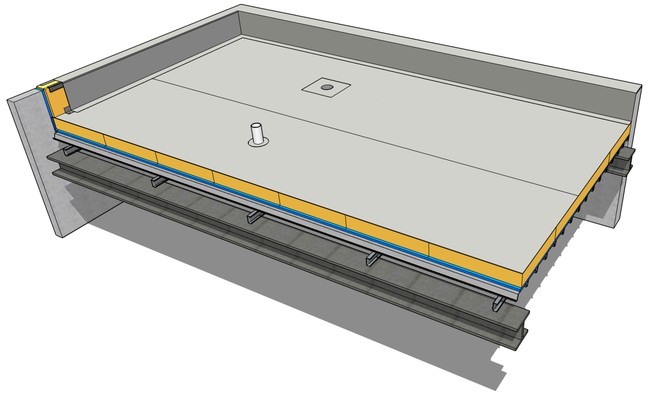
7B. Install a Fatranyl internally coated PVC angle around all vertical and horizontal junctions. Fix over the field sheet membrane and into the substrate. All angles are to be fixed at 150mm centres. Leave 2mm gap between angles to allow for expansion.



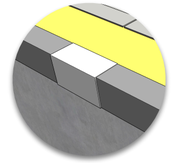
7C. Fix Fatranyl externally coated PVC metal angles at 150mm centres to the outside edge of perimeter hobs, plinths and the like. Leave 2mm gap between angles to allow for expansion.



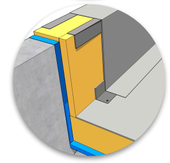
Stage 8 | Fatrafol Membrane Upturn Detailing



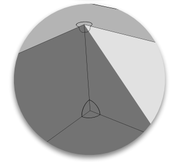
8A. Apply foil tape over expansion gap between angles. Hot air fusion weld a minimum 120mm wide membrane butt strap over expansion gaps. Weld both vertical sides of the butt strap. Ensure there is a minimum 40mm gap which is not welded to the horizontal section of the butt strap to allow for expansion.



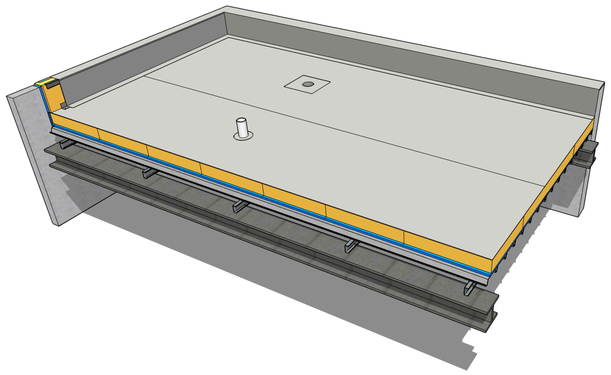
8B. Install a continuous Fatrafol 810v PVC membrane strap to the entire length of the perimeter hobs, plinths and the like. Hot air fusion weld Fatrafol 810v membrane strap to field sheet membrane and termination angles in accordance with Fatra technical specifications and methodologies.



8C. Where changes in direction is present, hot air fusion weld internal/external prefabricated corner patches installed in accordance with Fatra technical specification and methodologies.



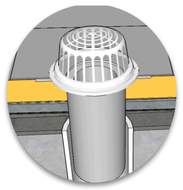
Stage 9 | Pipe & Rainwater Outlet Detailing



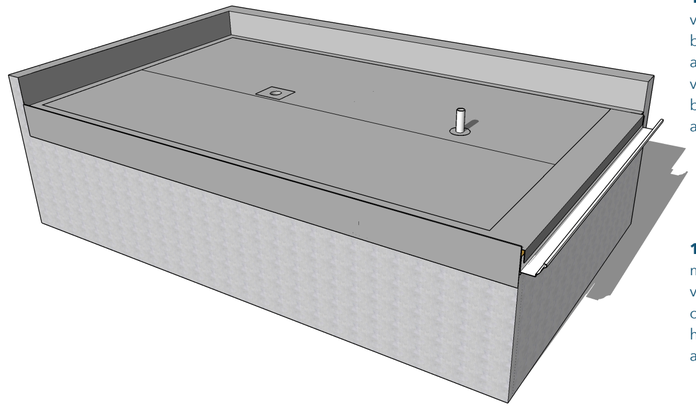
9A. Wrap prefabricated PVC pipe collars around the pipe and weld PVC membrane base flange to the field sheet. Weld the top of the prefabricated pipe collar to the PVC pipe.

Fit pipe cap over the top of the PVC pipe ensuring this overlaps the top of the prefabricated PVC pipe collar.

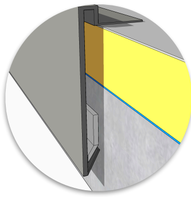
9B. Insert the specific diameter rainwater outlet and fix all four corners into the substrate. Fully weld the entire perimeter of the PVC membrane flange which is attached to the rainwater outlet to the field sheet membrane.



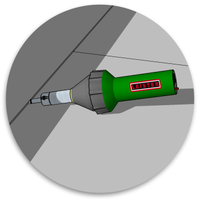
Stage 10 | Verge Detailing



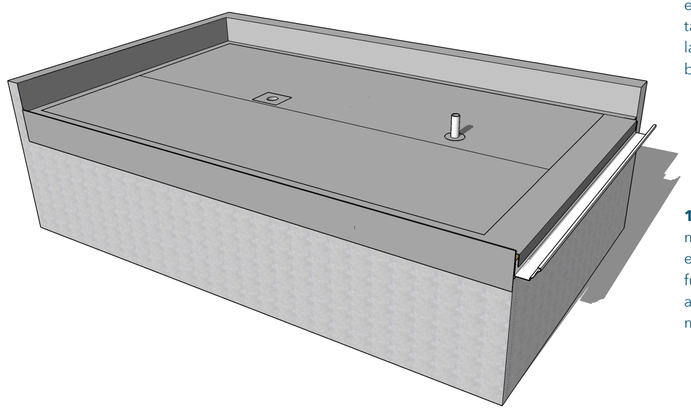
10A. Fix Fatranyl externally coated PVC metal verge angle at 150mm centres to edge of building. Verge angle is to clip onto support angle which is fixed to the structure to support verge flashing. Ensure VCL is lapping down the building and is also sealed using butyl tape against the building.



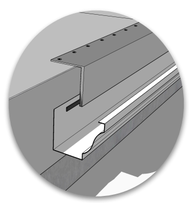
10B. Install 150mm Fatrafol 810v PVC membrane strap to the entire length of the verge edge. The PVC membrane strap is to lap onto the field sheet and install a continuous hot air fusion weld to the PVC coated verge angle and field sheet membrane.



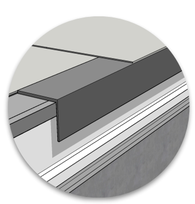
Stage 11 | Verge/Eaves Gutter Detailing



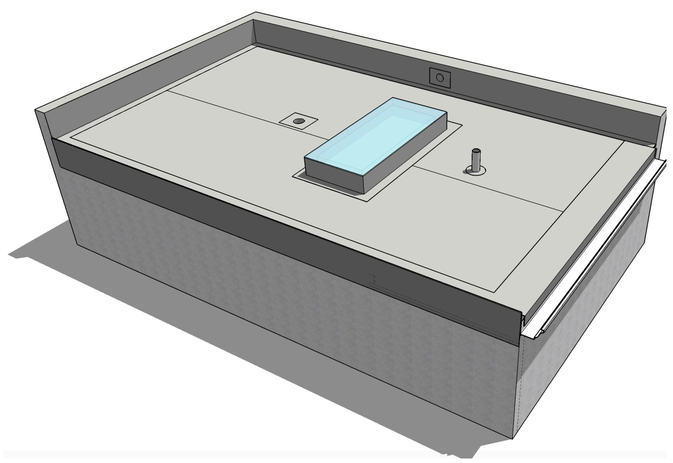
11A. Fix Fatranyl externally coated PVC metal crush and fold gutter angle at 150mm centres into the eaves gutter. Seal Fatranyl gutter angle using butyl tape to the gutter and seal angle. Ensure VCL is lapping down the building and is also sealed using butyl tape against the building.



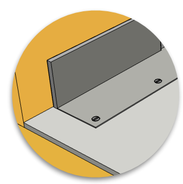
11B. Hot air fusion weld Fatrafol 810v PVC membrane field sheet to the entire length of the eaves gutter. Install a continuous 40mm hot air fusion weld to the PVC coated eaves gutter angle accordance with Fatra technical specification and methodologies.



Stage 12 | Skylight Detailing



12A. Around all vertical and horizontal upturns to skylight hobs, install a Fatranyl internally coated PVC angle fixed over the field sheet membrane. All angles are to be fixed at 150mm centres. Leave 5mm gap between angles to allow for expansion. (Refer to “Stage 7 Fatranyl PVC Coated Angles)



12B. Install a continuous Fatrafol 810v PVC membrane strap to the entire length of the perimeter hobs, plinths and the like. Hot air fusion weld Fatrafol 810v membrane strap to field sheet membrane and termination angles in accordance with Fatra technical specifications and methodologies.