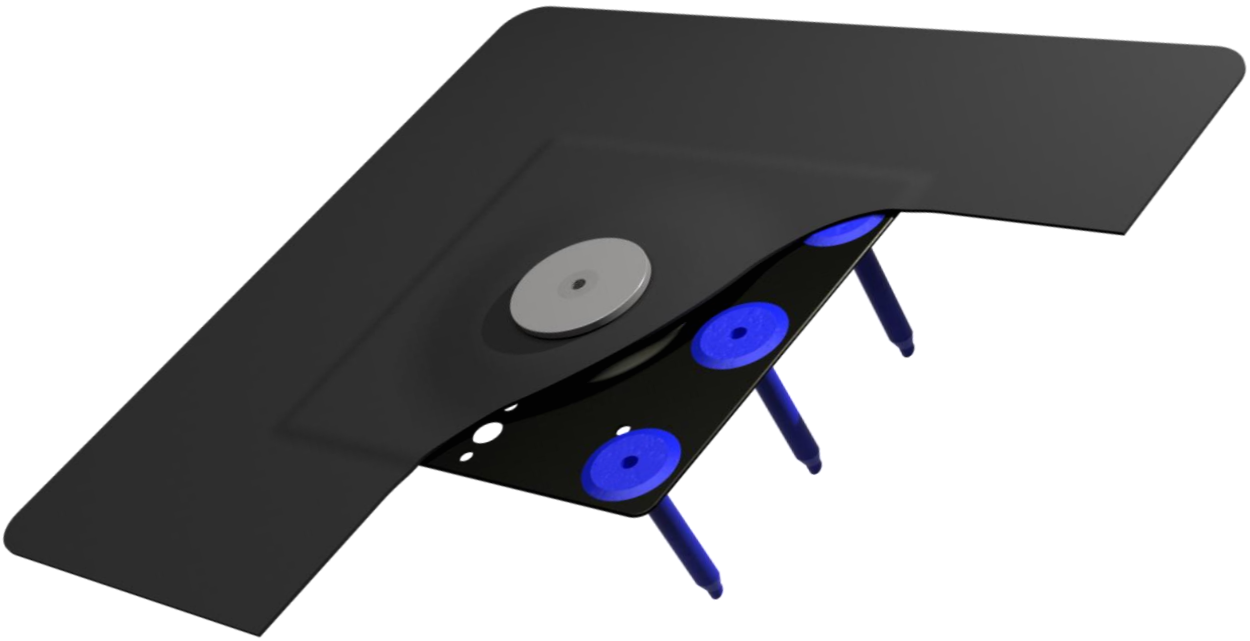
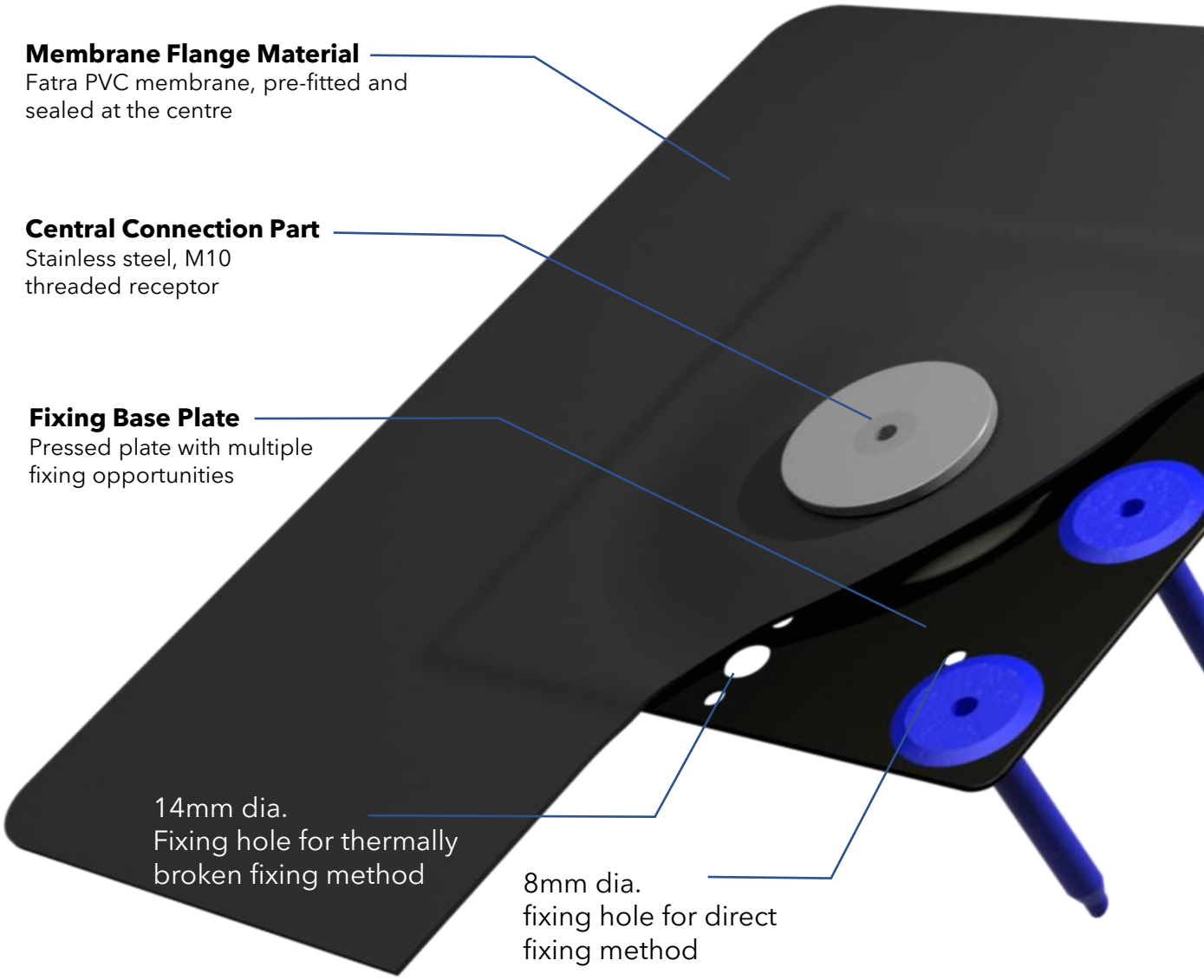
FATRA IFP
integrated fixing point system



FATRA IFP250
INSTALLATION GUIDELINES
Cold Roof / Warm Roof / SIP Roof

fatra

FATRA IFP250 – Installation Guidelines



FATRA IFP250 – The versatile fixing point

The Fatra IFP250 is versatile addition to the Fatra range. Innovation and excellence in engineering have been utilised to make the new Fatra fixing point lighter, smaller and more sustainable, whilst providing the same renowned performance of the existing similar Fatra products.

The IFP250 can be used on both warm and cold roof constructions where a connection to the structure is required, whilst maintaining the total integrity of the waterproofing layer.

The IFP250 now has a single M10 threaded receptor to the top of the fixing point enabling connection to virtually any framework. This also helps to simplify and speed up installation as they can be fitted in any orientation.

FATRA IFP250 Installation Guidelines

General
- Installation guidelines should be read and understood prior to undertaking the installation of Fatra products
- Installation should be undertaken by a competent person with a good understanding of general roofing and weathering principles and trained in the bonding, sealing, welding of the roofing membrane system to which the product is being fitted.
- All roofing should be undertaken in accordance with relevant British standards including but not limited to BS5250, BS6229 & BS5534
- In the absence of any specific project warranty being in place, Fatra products are covered by the Fatra roof system warranty. Please read the terms and conditions of the warranty before installation.
- The purchaser of the Fatra product is deemed to have established that the product is suitable and fit for purpose irrespective of any design proposal put forward by Fatra.

Health & Safety
- Wear suitable PPE whilst handling and installing Fatra products.
- Boxes containing Fatra goods can be heavy and care should be taken when handling and lifting.
- Fixings can be sharp and small splinters can result on handling. Care should be taken and gloves worn to reduce the chances of injury.
- IMPORTANT – installed Fatra products can present a trip hazard. Please ensure the necessary warning signs and guard railing is in place to stop trips and falls.
- Packaging, pallets and any waste materials should be cleared from the area at the time of installation.
- Working at height is dangerous, take all necessary precautionary measures during the installation of Fatra products.
- Fatra products should not be installed during extremes of temperature.

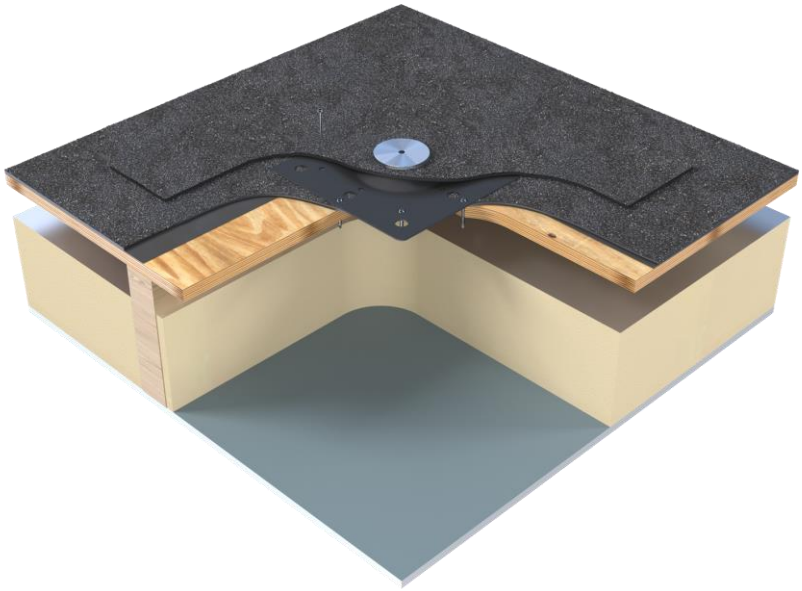
Storage
- Fatra goods should be stored at ground level until they are ready to be fixed into position at roof level.
- Do not store Fatra products on the scaffold or roof.
- Ensure Fatra products or the packaging cannot be blown off the roof by the wind.
- Fatra goods should be kept dry until installation is ready.

Ancillary Products
- The compatibility with ancillary products or framework systems should be checked prior to installation.

Spare Parts & Replacements
- Lost fixings, bolts or Fatra products can be re-ordered from Fatra with the same or similar products should the same items no longer be available.

Returns
- Fatra products fitted with stock generic membrane options can be returned in accordance with the Fatra returns policy.
- Fatra products fitted with client membrane or non-stock membrane are non-returnable.

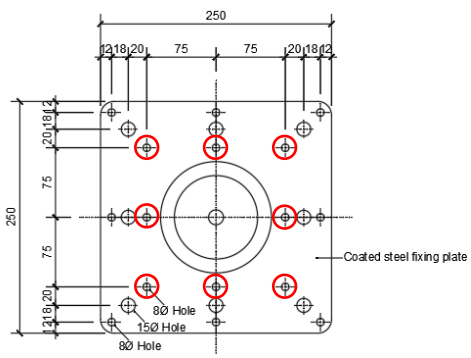
FATRA IFP250 – Installation Guidelines



Installation on a cold roof / fully supported membrane roof construction;

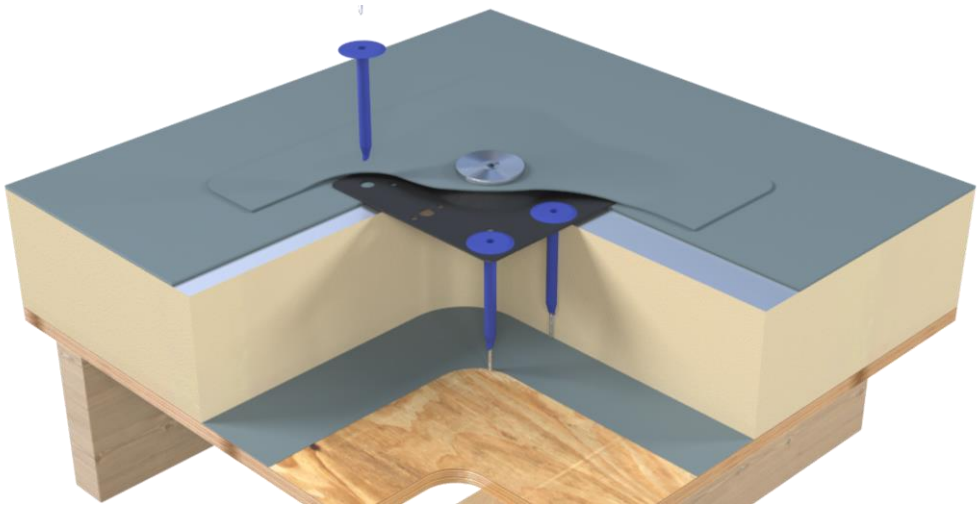
The Fatra IFP250 can be fitted to a cold roof or fully supported membrane roof (SIPS)

1. The IFP250 unit should be positioned on the roof in the desired location.
2. Please note that Fatra IFP250 products should be located in areas of the roof that are free draining, where no ponding will occur. The Fatra warranty will be invalidated if the product becomes submerged to any extent.
3. It is important that where multiple IFP250s are being fitted, to check the alignment between units before fixing.
4. Once in position, fold back the membrane flange material to expose the fixing plate.
5. Use the specified fixings to secure the IFP250 to the roof substrate board. Direct fixing method should be used. Please see load table below for tensile resistance values. 8no. fixings should be utilised, distributed evenly around the plate.
6. Once the IFP250 is installed, the pre-attached Fatra membrane can be hot air welded to the field area membrane, leaving all fixings beneath the waterproofing layer. Please note that to maintain the Fatra guarantee, a Fatra trained installer will be required to seal the membrane. It is the responsibility of the installer to ensure that the membrane seal is waterproof.
7. Care should be taken to ensure the threaded receptor on the IFP250 is kept clean and free from debris until further attachment is made.



When fixing to a cold roof or fully supported membrane roof construction utilise the 8no. Inner fixings

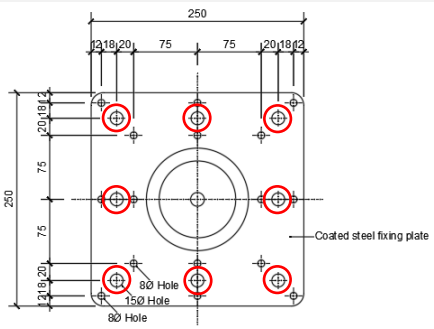
FATRA IFP250 – Installation Guidelines



Installation on a warm membrane roof construction;

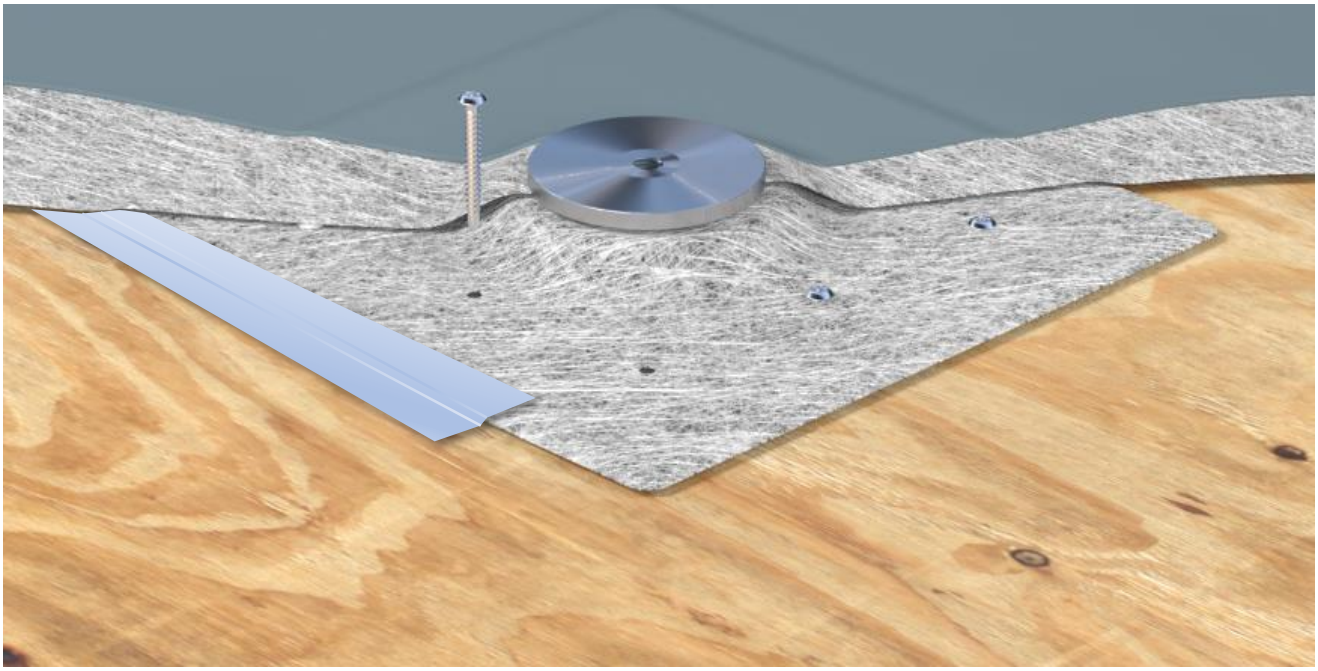
The Fatra IFP250 can be fitted to a warm roof or where membrane is laid over rigid insulation.

1. The IFP250 unit should be positioned on the roof in the desired location.
2. Please note that Fatra IFP250 products should be located in areas of the roof that are free draining, where no ponding will occur. The Fatra warranty will be invalidated if the product become submerged to any extent.
3. It is important where multiple IFP250s are being fitted, to check the alignment between units before fixing.
4. Once in position, fold back the membrane flange material to expose the fixing plate.
5. Use the specified fixings to secure the IFP250 to the roof substrate board. Thermally broken fixing method should normally be used. Please see load table below for tensile resistance values. All 8no. fixing opportunities should be utilised. Care should be taken when using thermally broken fixing that the fixing head does not pull through the bottom of the tube washer. A low torque setting should be used and incrementally increased so that the tube washer pulls tight without damage to the tube. If the fixing does pull through the tube washer, the tube washer should be replaced and a new fixing inserted.
6. Seal the membrane flange to the roof field membrane in accordance with the method as set out by the membrane manufacturer and any other principles of good practice. Please note; For some roof systems a certified membrane installer will be required to seal the membrane. It is the responsibility of the installer to ensure that the membrane seal is waterproof.
7. Care should be taken to ensure the threaded receptor on the IFP250 is kept clean and free from debris until further attachment is made.



When fixing to a warm membrane roof construction with thermally broken fixings utilise the 8no. 14mm Ø holes

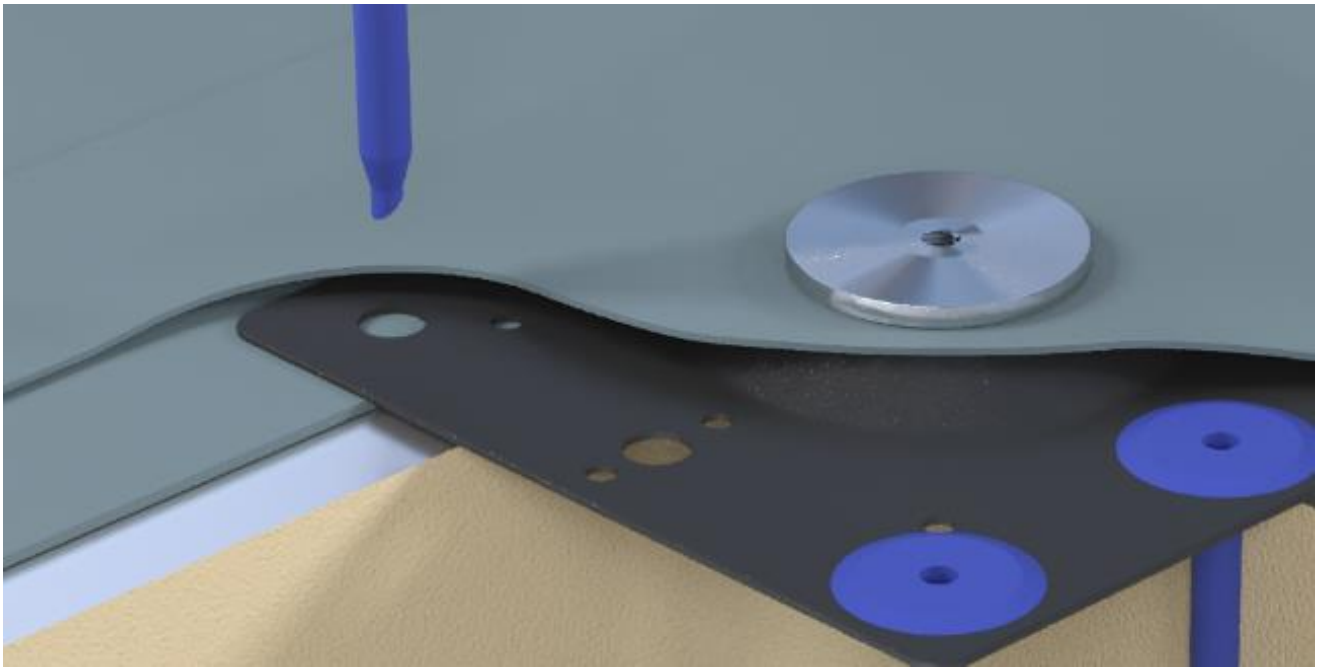
FATRA IFP250 – Installation Guidelines



FATRA IFP250-GRP Installation

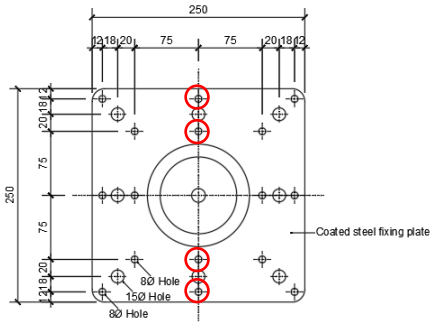
1. The Fatra IFP250 can be used with GRP roof coverings by ordering the Fatra IFP250-GRP. This fixing point does not have a membrane flange material but instead has a GRP base coat pre-applied to the base plate. The top connection part is pre-sealed to this GRP coating.
2. The IFP250-GRP is usually fitted to roofs that have had the base layer of GRP already applied.
3. The IFP250 unit should be positioned on the roof in the desired location.
4. Please note that Fatra IFP250 products should be located in areas of the roof that are free draining, where no ponding will occur. The Fatra warranty will be invalidated if the product becomes submerged to any extent.
5. It is important that where multiple IFP250s are being fitted, to check the alignment between units before fixing.
6. The IFP250 should be fixed to the substrate board with appropriate fixings. Direct or thermally broken fixings can be used according to the roof construction type.
7. New GRP base layer material should be applied to lap onto the roof covering material and also to cover the IFP250 GRP coated plate. The centre stainless steel connection part should not be covered. Application of this material should be installed in accordance with the GRP manufacturers recommendations. Separation tape may be required to ensure no cracking of the GRP take place should any movement occur at the base plate.
8. The top coat of GRP should be applied over the plate and up to, but not covering the top stainless steel connection part

FATRA IFP250 – Installation Guidelines



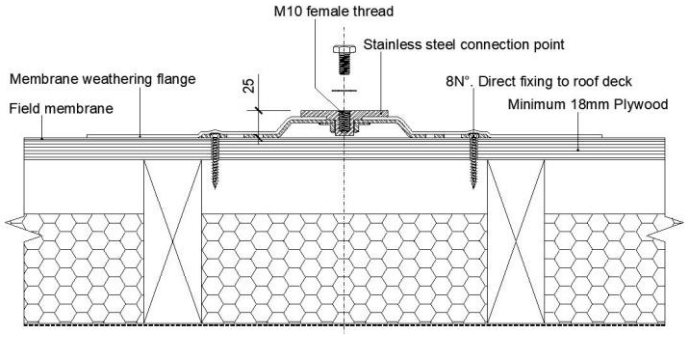
Further installation notes;

- Where mineral wool insulation is used on a warm roof, it is the specifiers/installers responsibility to ensure that compression of the insulation does not occur at installation or and will not occur the long term under load. Alternative IFP products may be available for mineral wool warm roof constructions.
- If fixings other than the specified fixings are used it is the specifiers/installers responsibility to ensure that these fixings equal or exceed the specification of the fixings as set out in the data sheets.
- The IFP250 and the roof to which they are fitted, must be dry at the time of installation
- Units should be checked prior to installation for any defect. Defects should be notified to the manufacturer before installation occurs. Fatra 029 2048 7954
- The Fatra IFP250 should not be dismantled, adjusted or any attempt made to change the membrane flange. Breaking the fixing assembly seal of the IFP250 unit will invalidate the warranty.
- Substrate boards should be a minimum of 18mm plywood or OSB. Where substrate board are less than 18mm thickness, technical advice should be sought from Fatra. In some instances it might be necessary to fix to the structure members , in which case the IFP250 should be positioned centrally over the rafter and 4no. direct fixings used on the central line – see diagram below.

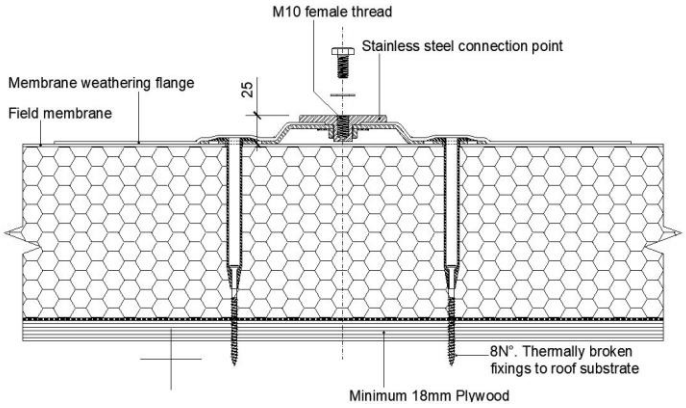


When fixing through to a structural member use 4no. direct inline fixings

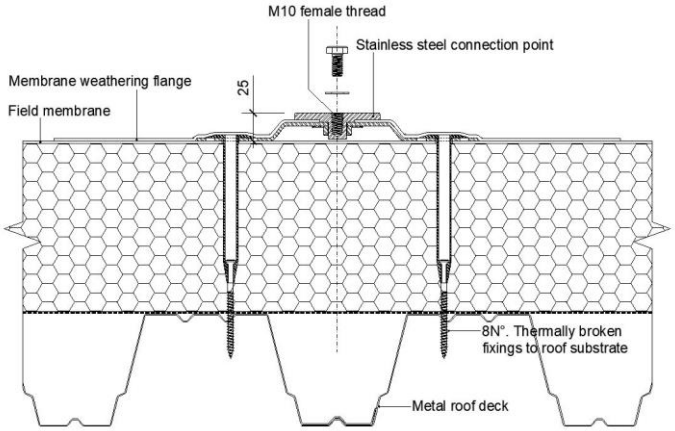
Typical roof section fixing details



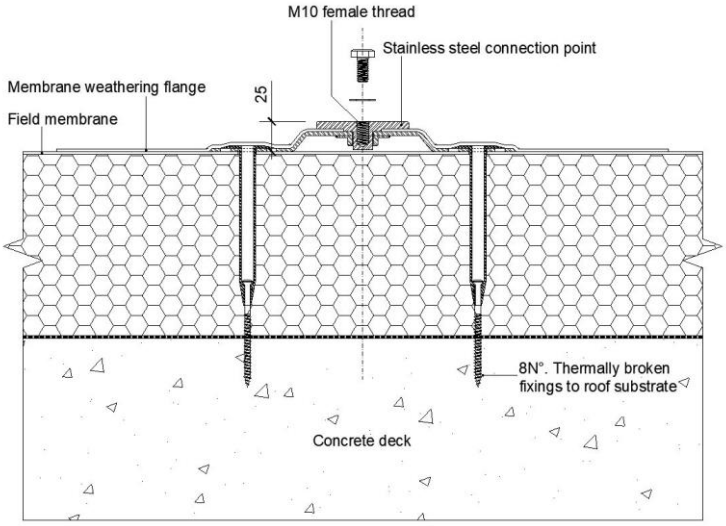
FATRA IFP-250 ON COLD ROOF – SECTION VIEW



FATRA IFP-250 ON WARM ROOF – SECTION VIEW (PLY DECK)



FATRA IFP-250 ON WARM ROOF – SECTION VIEW (STEEL DECK)



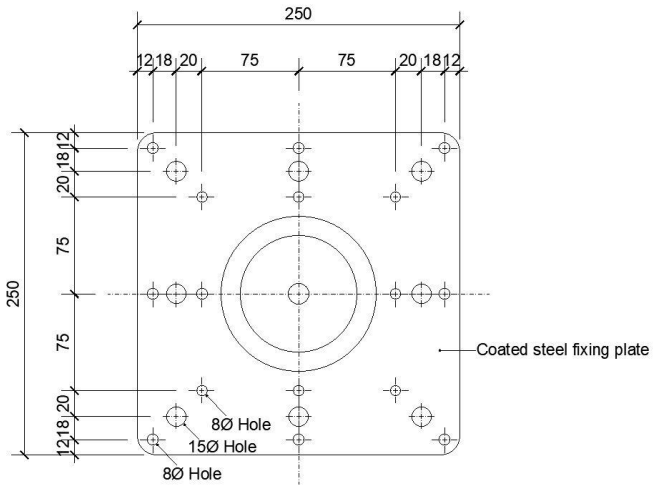
FATRA IFP-250 ON COLD ROOF – SECTION VIEW (CONCRETE DECK)

FATRA IFP250 – Technical information

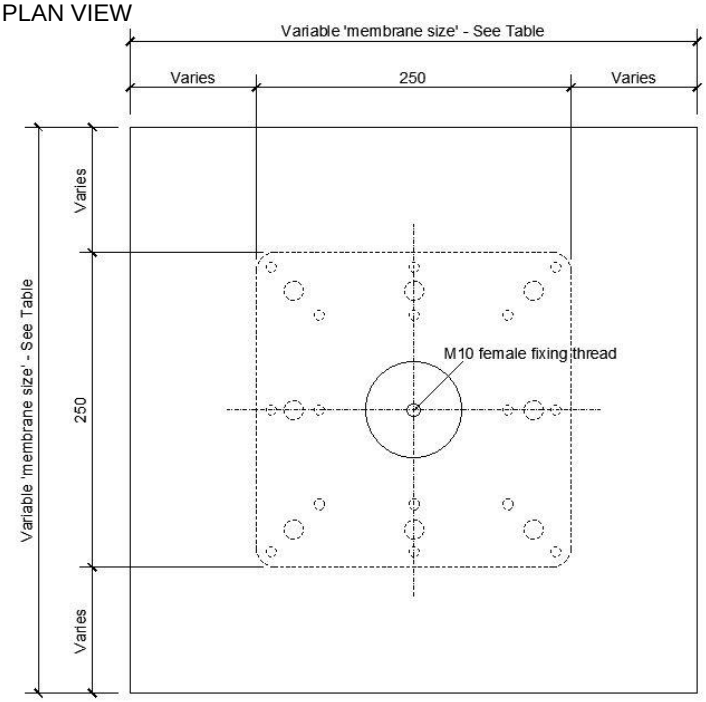
Materials
Base plate – pressed steel / PPC coating
Top connection point assembly – 304 grade stainless steel
Membrane flange – dependent on roof covering

Dimensions;

O/A height from FRL	25mm
Base plate	250mm x 250mm
Fixing holes	16no. 7mm Ø for direct fixings
	8no. 14mm Ø for thermally broken fixings
Membrane Flange dims	PVC / TPO/EPDM 450mm x 450mm
	Bitumen 550mm x 550mm



FATRA IFP-250 FIXING PLATE DIMENSIONS – PLAN VIEW



FATRA IFP-250 – PLAN INCLUDING MEMBRANE

FATRA IFP250 – Technical information

Typical uses
The IFP250 can be used to support and secure axial loads such but not limited to ;

- Architectural rain screen cladding – framework support
- Solar panel framework fixation
- Roof plant supports
- Decking support details
- Roof services support
  Roof walkways fixation detail

Exclusions
The IFP250 is not suitable for inverted, water attenuation, green roof or warm roof constructions with highly compressible insulation. Alternative Fatra products are available for such roof constructions.

The IFP250 should not be used to secure or support non-axial loads such as, but not limited to, handrail balustrade or privacy screens. Alternative Fatra products are available for such roof constructions. Fitness for purpose is the responsibility of the specifier

Installation
The Fatra IFP250 must be fitted in accordance with the manufacturers instructions. The fixing point can be fitted with most membranes however compatibility with the field membrane is the responsibility of the purchaser.

Warranty
The Fatra IFP250 is covered by Fatra Warranty.

Testing
The Fatra IFP250 is not covered by a UK/EU norm directive but has been independently tested by the BRE to confirm data sheet values

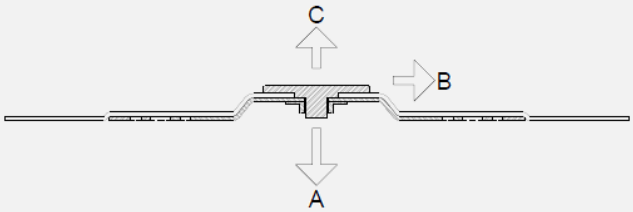
Patent
The Fatra IFP250 is subject to European Patent 2855794 and US Patent 9637917

Specification
Supply and fit Fatra IFP250 fixing point fitted with Fatrafol etc. membrane flange material to suit roof system. Fixed with direct fixings (for cold or SIP roof) / thermally broken fixings (for warm roof) . Fatra products available from Fatra - 029 2048 7954 / sales@fatra.co.uk

FATRA IFP250

FATRA IFP250 – Technical information

Max Compressive Load 'A'	5kN
Max Tensile Load 'C'	5kN
Max Shear Load 'B'	2.5kN



Permissible Installed Load Table

When installed in accordance with manufacturers fitting instructions and when fixed with recommended fasteners Fixfast SF-RS-5.8 / SF-RS-6.1 fastener as per European Technical Approval 15/0406 and allowing a safety factor of three on the combined mean axial pull-out value of 8 fixings**.**

IFP250	Substrate material	Fixing Method	Fixing Specification	Compressive load rating 'A'	Shear loading 'B'	Tensile load rating 'C'
Cold roof or fully supported membrane	18mm Plywood to EN363	8 x Direct	SF-RS-5.8 - min length 40mm	5kN	2.5kN	5.0kN
Cold roof or fully supported membrane	18mm OSB/3 to EN300	8 x Direct	SF-RS-5.8 - min length 40mm	5kN	2.5kN	4.2kN
Cold roof or fully supported membrane	New Concrete substratre C25/30 min 100mm depth	8 x Direct	SF-RS-6.1 - embedment 35mm	5kN	2.5kN	5.0kN
Cold roof or fully supported membrane	Softwood C16 or CLT min depth 50mm	8 x Direct	SF-RS-6.1 - min embedment 35mm	5kN	2.5kN	5.0kN
Warm Roof	Max 200mm Rigid PIR insulation on 18mm plywood to EN363 or 18mm OSB3 to EN300	8 x Thermally broken	SF-T-50 to suit insulation depth + SF-RS-5.8 - min 12mm to underside of substrate board	Assumes min static load rating 30kPa Insulation - 1.8kN	Assumes rigid PIR insulation 2.5kN	4.1kN
Warm Roof	Max 200mm Rigid PIR insulation on new C25/30 concrete substrate min 100mm depth	8 x Thermally broken	SF-T-50 to suit insulation depth + SF-RS-6.1 - 35mm embedment	Assumes min static load rating 30kPa Insulation - 1.8kN	Assumes rigid PIR insulation 2.5kN	4.1kN
Warm Roof	Max 200mm Rigid PIR insulation on min 0.7mm steel trapizoidal substrate	8 x Thermally broken	SF-T-50 to suit insulation depth + SF-RS-5.8 - min 15mm to underside of steel	Assumes min static load rating 30kPa Insulation - 1.8kN	Assumes rigid PIR insulation 2.5kN	4.1kN
Warm Roof	Max 200mm Rigid PIR insulation on min 0.7mm steel trapizoidal substrate	6 x Thermally broken	SF-T-50 to suit insulation depth + SF-RS-5.8 - min 15mm to underside of steel	Assumes min static load rating 30kPa Insulation - 1.8kN	Assumes rigid PIR insulation 1.8kN	3.1kN
Kingspan KS1000TD Topdeck panel	Rigid insulation on 0.5mm steel inner profiled skin	8 x Thermally broken	SF-T-50 to suit insulation depth + SF-RS-5.8 - min 15mm to underside of steel	Assumes min static load rating 30kPa Insulation - 1.8kN - Subject to roof structure. TBC	N/A	1.9kN

Notes	
1	Load values calculated on specified fixings and allow a safety factor of three on combined characteristic pullout values.
2	Axial loads only - not suitable for non-axial applications.
3	It is the purchasers or specifiers responsibility to check that the insulation will bear any compressive load without compression. Seek insulation manufacturers advice if in doubt
4	Shear values for warm roof applications assume 200mm insulation and using 8no. Thermally broken fixings.
5	Compressive load values for mineral wool insulation to be checked on a per project basis.
6	Onsite testing may be required for existing concrete roof structures

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