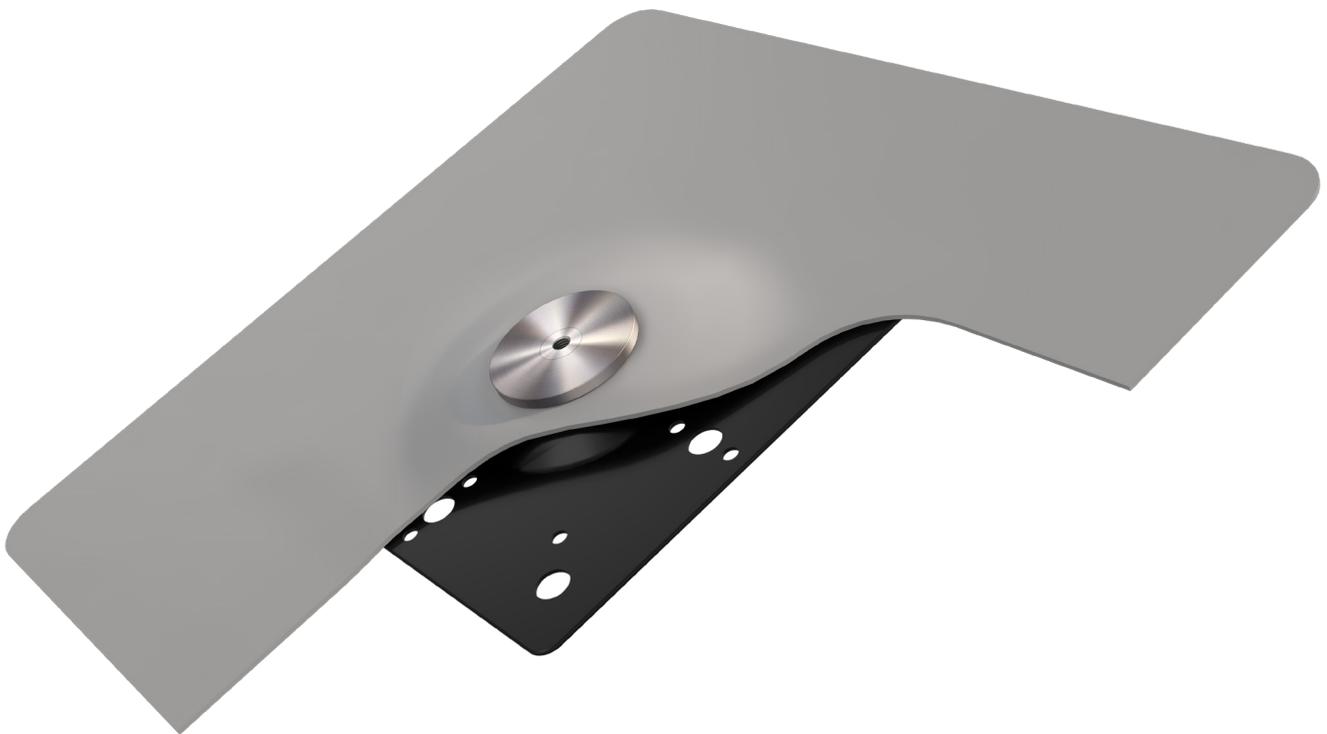
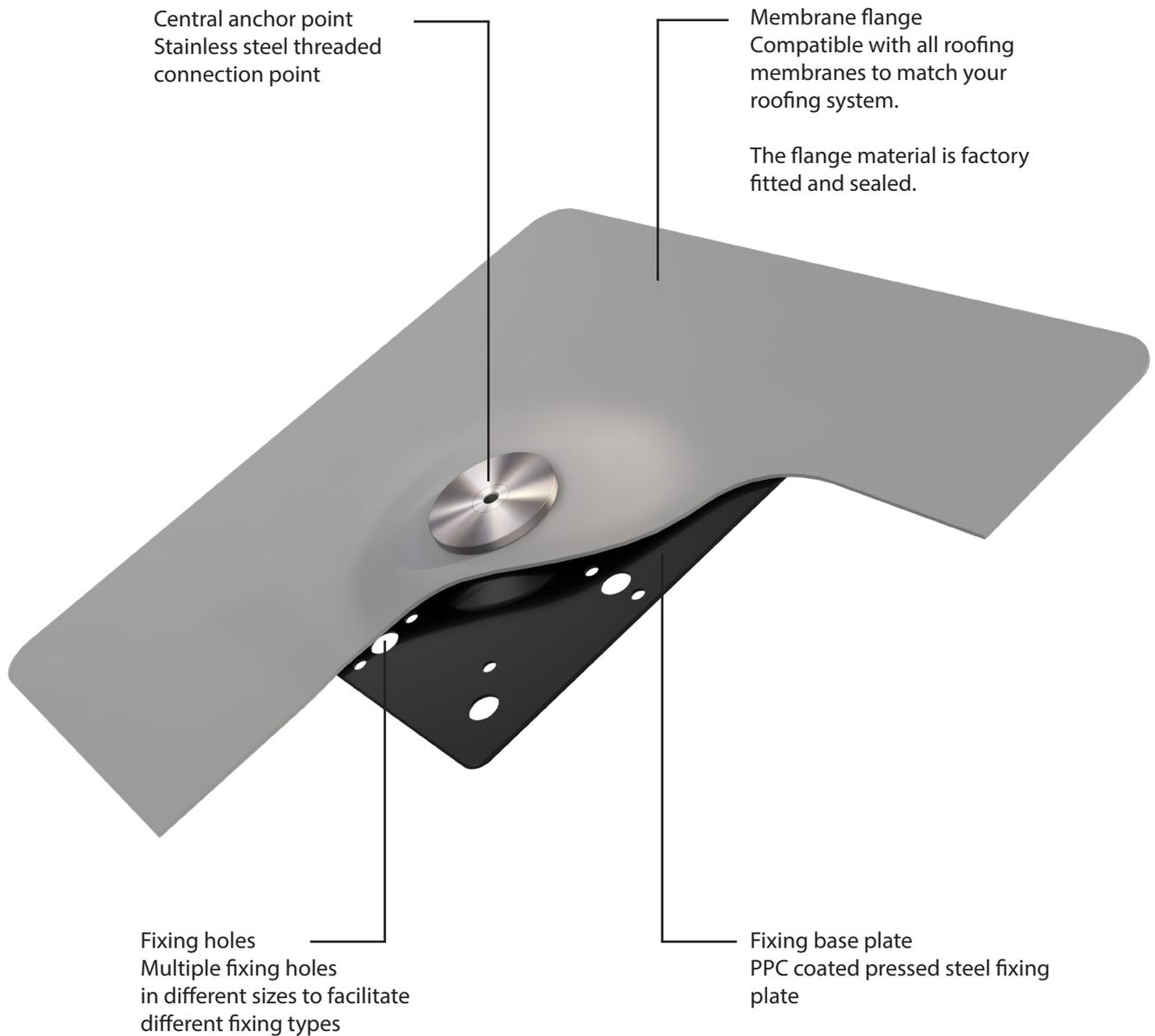


ROOFTRAK[®] IFP
integrated fixing point system



ROOFTRAK[®] IFP250

ROOFTRAK® IFP250

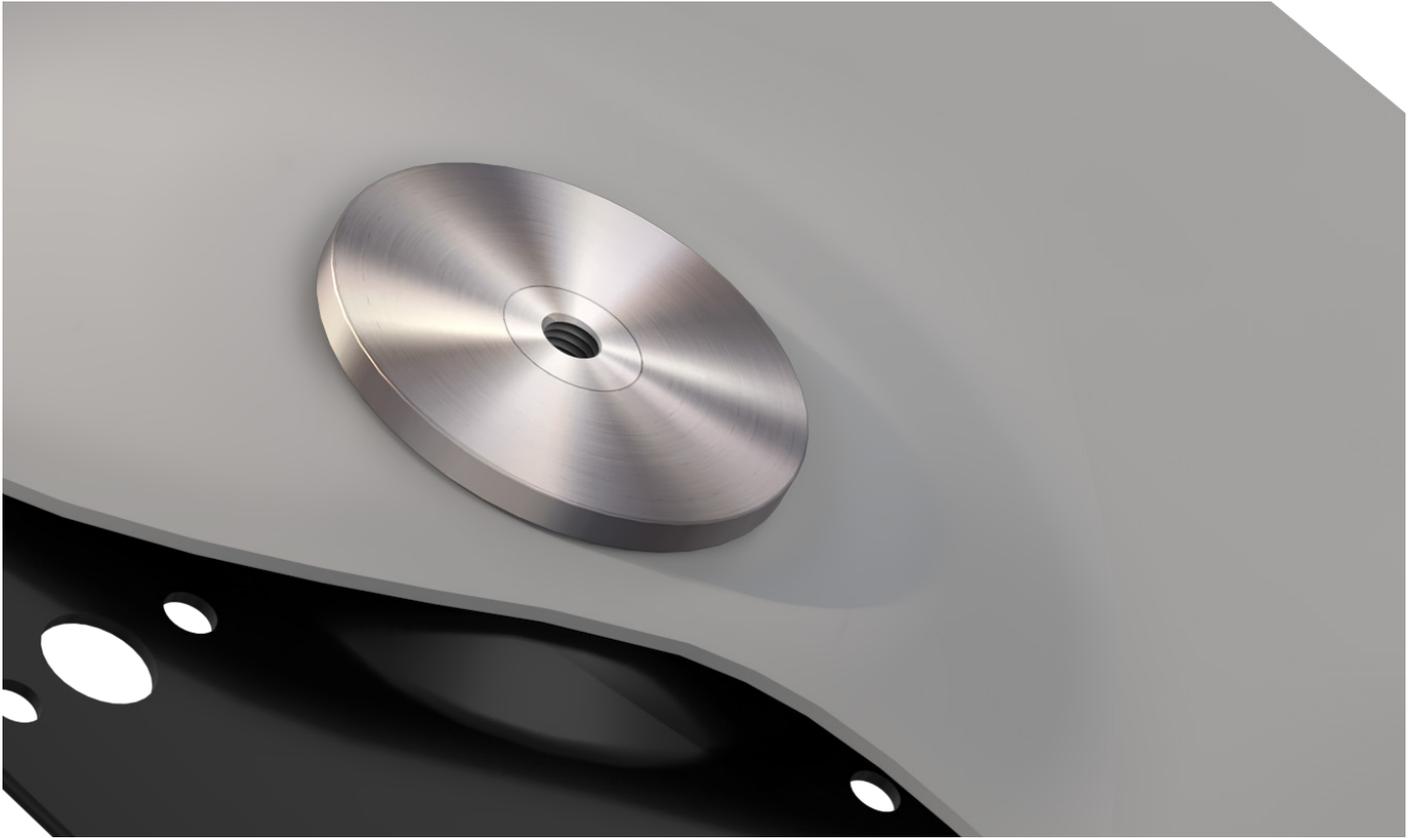


ROOFTRAK® IFP250 – The versatile fixing point

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



ROOFTRAK® IFP250 – Key benefits

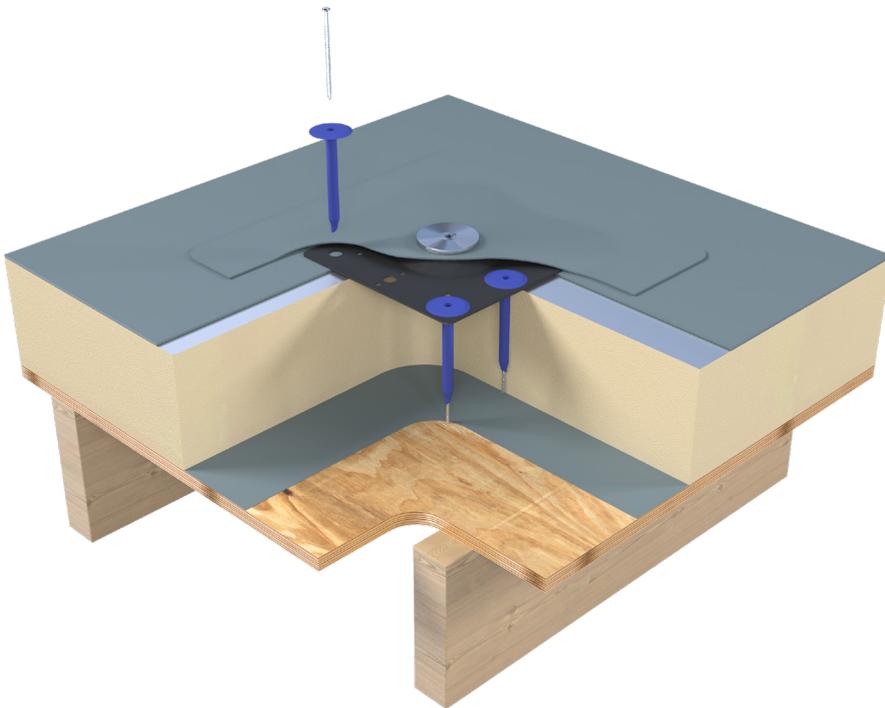
- Low profile. With just 25mm from the finished roof level to the top of the fixing point, the IFP250 gives an ultra low profile connection. Fixing heights can be increased if necessary by supporting items using studding screwed into the threaded connector.
- Unique, patented membrane protection system. The unique design of the IFP250 ensures long term use without damage to the membrane flange material. No extra load is applied to the membrane even when vertical uplift and weight loads are applied to the IFP250.
- Single central threaded connection. The IFP250 has a single central threaded M10 anchor point, meaning that the fixing point can be used in any orientation, helping to simplify and streamline installation processes.
- No open thread components. The IF250 ensures total ingress resistance. There are no open thread components that can lead to slow, long term water ingress.
- Thermally broken or direct fixings. The IFP can be fixed to the structure with thermally broken or direct fixings, giving excellent thermal efficiency.
- A leader in wind uplift resistance. Exceptionally high wind uplift resistance tested by the British Research Establishment (BRE).
- Direct connection to the structure. Direct connection to the structure ensures no long term reduction in tensile resistance.

ROOFTRAK® IFP250

One fixing plate for multiple roof constructions

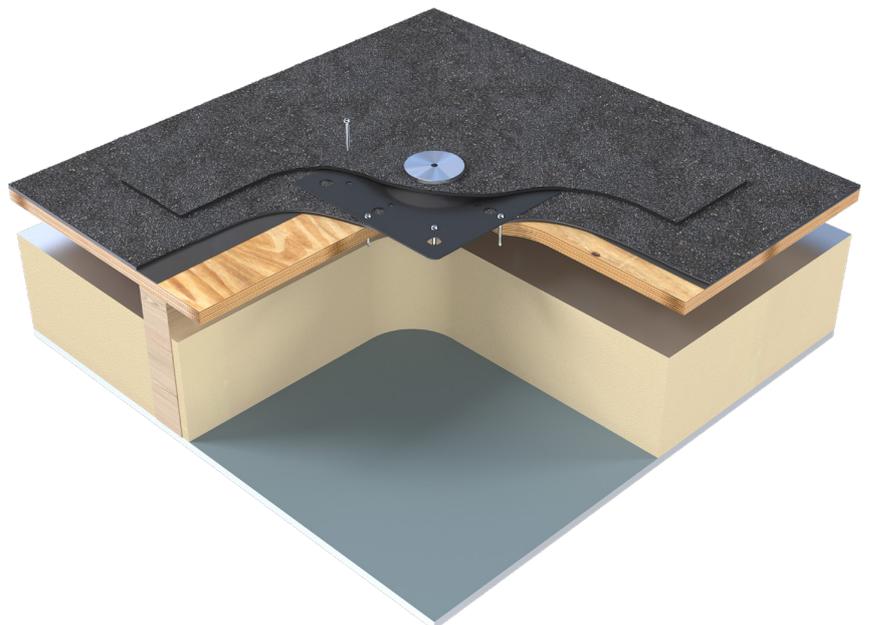
The IFP250 is a versatile unit enabling a single product to be connected to multiple roof constructions. The fixing plate provides opportunity for both thermally broken and direct fixings.

- Cold roof – membrane covered, flat and pitched cold roof constructions
- Warm roof – membrane covered, flat and pitched warm roof construction
- SIP (structural insulated panel) construction – membrane covered, both flat and pitched
- Insulated panel with membrane covering (eg Topdeck KS1000 TD)



Typical warm roof construction with roofing membrane laid in insulation and utilising thermally broken fixings

Typical cold roof construction with roofing membrane laid on roof deck utilising direct fixings



ROOFTRAK® IFP250

ROOFTRAK® IFP250 - membrane flange options

The IFP250 Integrated Fixing Point means that complicated penetration detailing is replaced with a simple lap joint, just the same as all the other lap joints on the roof. This helps to ensure a fast, high-integrity installation. Importantly it ensures complete compatibility with the field membrane

Generic membrane flange options

The ROOFTRAK® IFP250 can be supplied with generic membrane options from stock including;

- Generic PVC single ply membrane
- Generic SBS Bitumen mineral finish
- Generic SBS Bitumen sand finish
- Generic APP Bitumen mineral finish
- Generic EPDM

Specific membrane flange options

The IFP250 Integrated Fixing Point can also be factory fitted with manufacturer's own specific membranes. Roofing membrane can be shipped directly to Nicholson and will be processed in our factory to ensure total compatibility with the particular roofing system. Typical membranes that can be processed are

- PVC membranes
- TPO membranes
- FPO membranes
- SBS bitumen membranes
- APP bitumen membranes
- EPDM membranes
- Rubber membranes

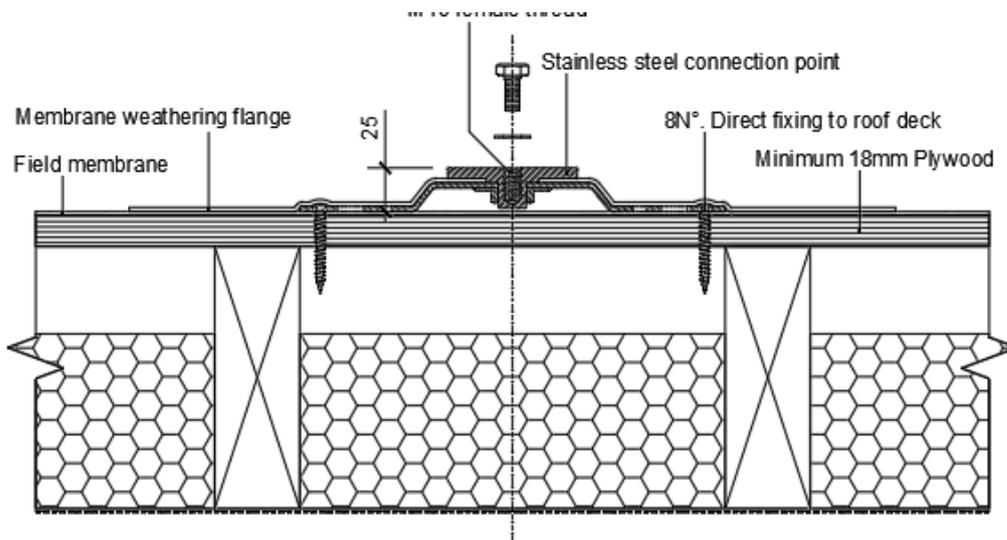
Supply your membrane to us

Nicholson can process and factory fit membrane supplied by contractors to the IFP250 for complete system compatibility and peace of mind. Contact our sales team to arrange collection of membrane from your offices or site.

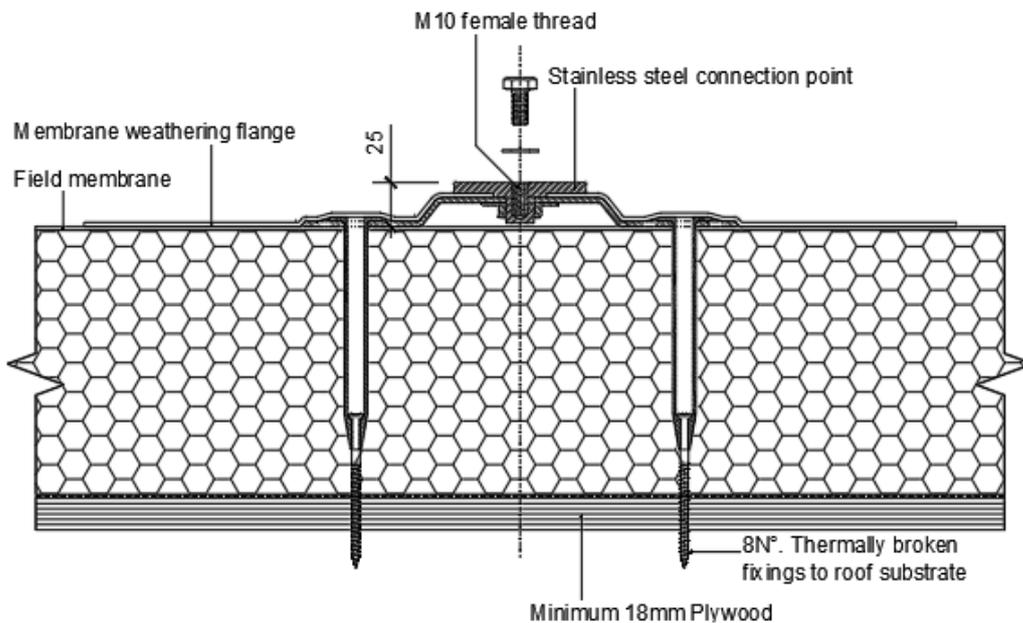


ROOFTRAK® IFP250

ROOFTRAK® IFP250 - Typical roof section fixing details



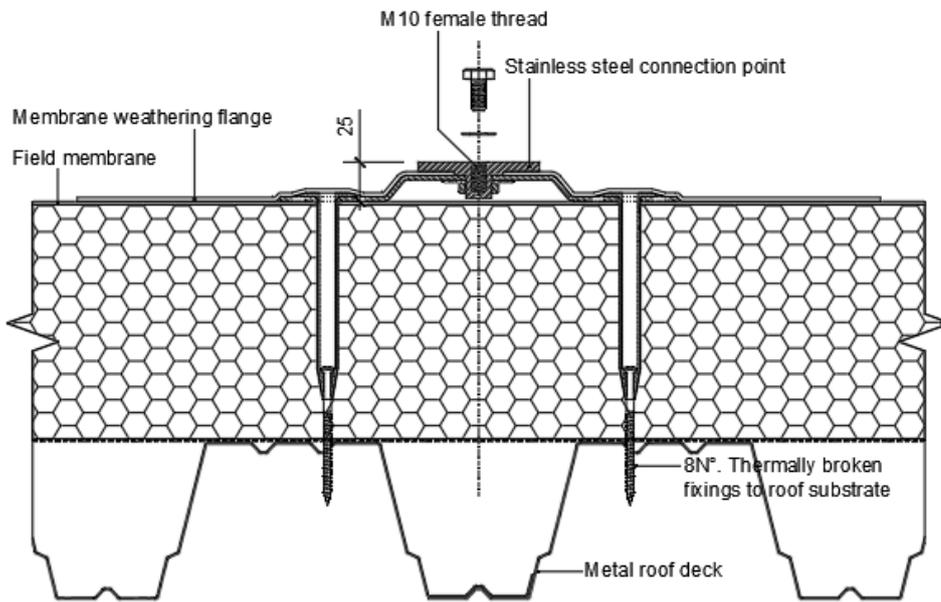
ROOFTRAK IFP-250 ON COLD ROOF - SECTION VIEW



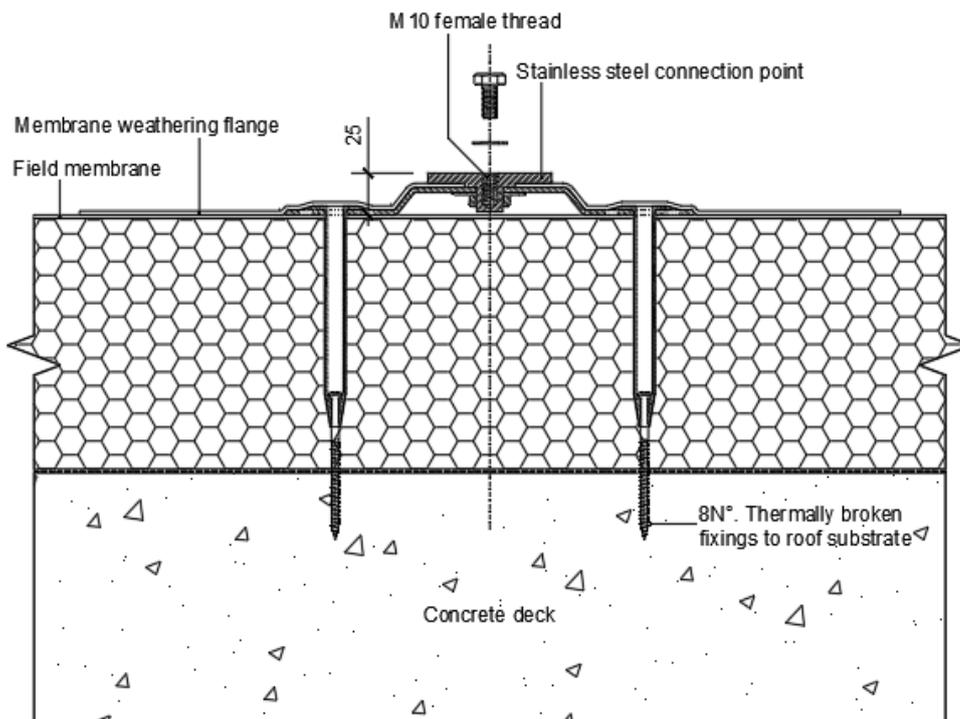
ROOFTRAK IFP-250 ON WARM ROOF - SECTION VIEW
(PLY DECK)

ROOFTRAK® IFP250

ROOFTRAK® IFP250 - Typical roof section fixing details



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



ROOFTRAK IFP-250 ON WARM ROOF - SECTION VIEW
(CONCRETE DECK)

ROOFTRAK® IFP250

ROOFTRAK® 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

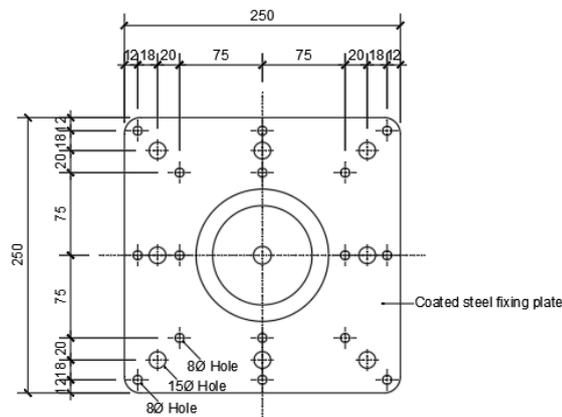
Base plate 250mm x 250mm

Fixing holes 16no. 8mm Ø for direct fixings

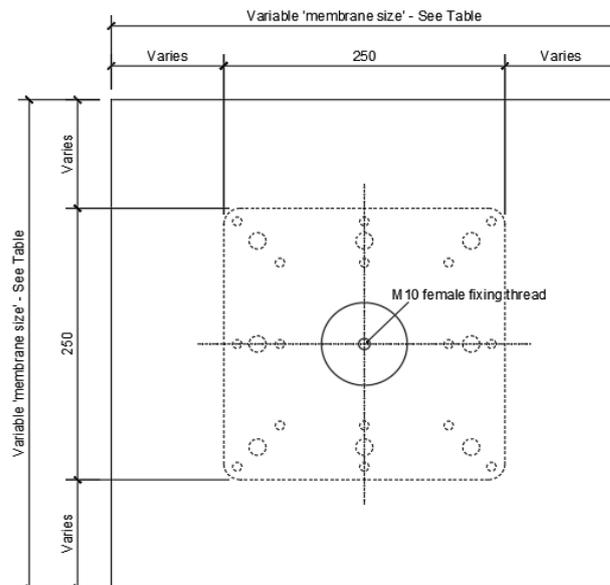
8no. 15mm Ø for thermally broken fixings

Membrane flange PVC / TPO/EPDM 450mm x 450mm

Bitumen 550mm x 550mm



ROOFTRAK IFP-250 FIXING PLATE DIMENSIONS - PLAN VIEW



ROOFTRAK IFP-250 - PLAN VIEW INCLUDING MEMBRANE



ROOFTRAK® 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 ROOFTRAK 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 ROOFTRAK products are available for such roof applications. Fitness for purpose is the responsibility of the specifier

Installation. The ROOFTRAK 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 ROOFTRAK IFP250 is covered by Nicholson Standard ROOFTRAK Product Warranty.

Expected operational service life. The ROOFTRAK IFP250 is manufactured using high quality materials and is designed to have a long operational service life. The unique patented design utilises a membrane flange material in the manufacture process, that is specific to the roof installation. The expected service life of the flange material membrane will govern the expected operational service life of the IFP250.

Where generic membrane flange materials are utilised in the manufacture process, the expected operational service life will be the same as the expected membrane service life - typically 25 years.

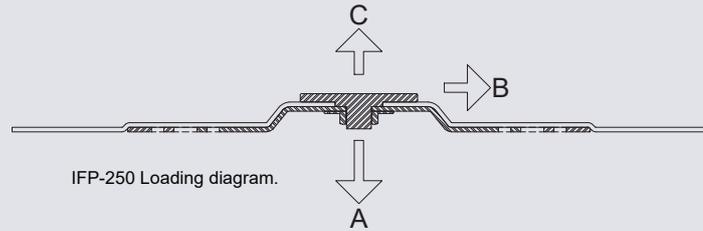
Testing. The ROOFTRAK IFP250 is not covered by a UK/EU norm directive but has been independently tested by the BRE to confirm data sheet values

Patent. The ROOFTRAK IFP250 is subject to European Patent 2855794 and US Patent 9637917

Specification. Supply and fit ROOFTRAK IFP250 fixing point fitted with [membrane type] membrane flange material to suit [roof manufacturer] roof system. Fixed with direct fixings (for cold or SIP roof) / thermally broken fixings (for warm roof) . ROOFTRAK products available from NICHOLSON STS LTD +44 1763 295828 info@nicholsonsts.com

ROOFTRAK® 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 manufacturer's 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 pullout 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 substrate C25/30 min 100mm	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 trapzoidal 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 trapzoidal 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

- Load values calculated on specified fixings and allow a safety factor of three on combined characteristic pullout values.
- Axial loads only - not suitable for non-axial applications.
- 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. 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.
- Shear values for warm roof applications assume 200mm insulation and using 8no. thermally broken fixings
- Compressive load values for mineral wool insulation to be checked on a per project basis.
- Onsite testing may be required for existing concrete roof structures



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