

TECHNICAL DATA SHEET

DESCRIPTION AND APPLICATION FIELDS

The **Nuralite Fixing Plate** is supplied as a factory assembled unit pre-fitted with the correct membrane enabling full integration with the **Nuraply** roof system it is being installed on.

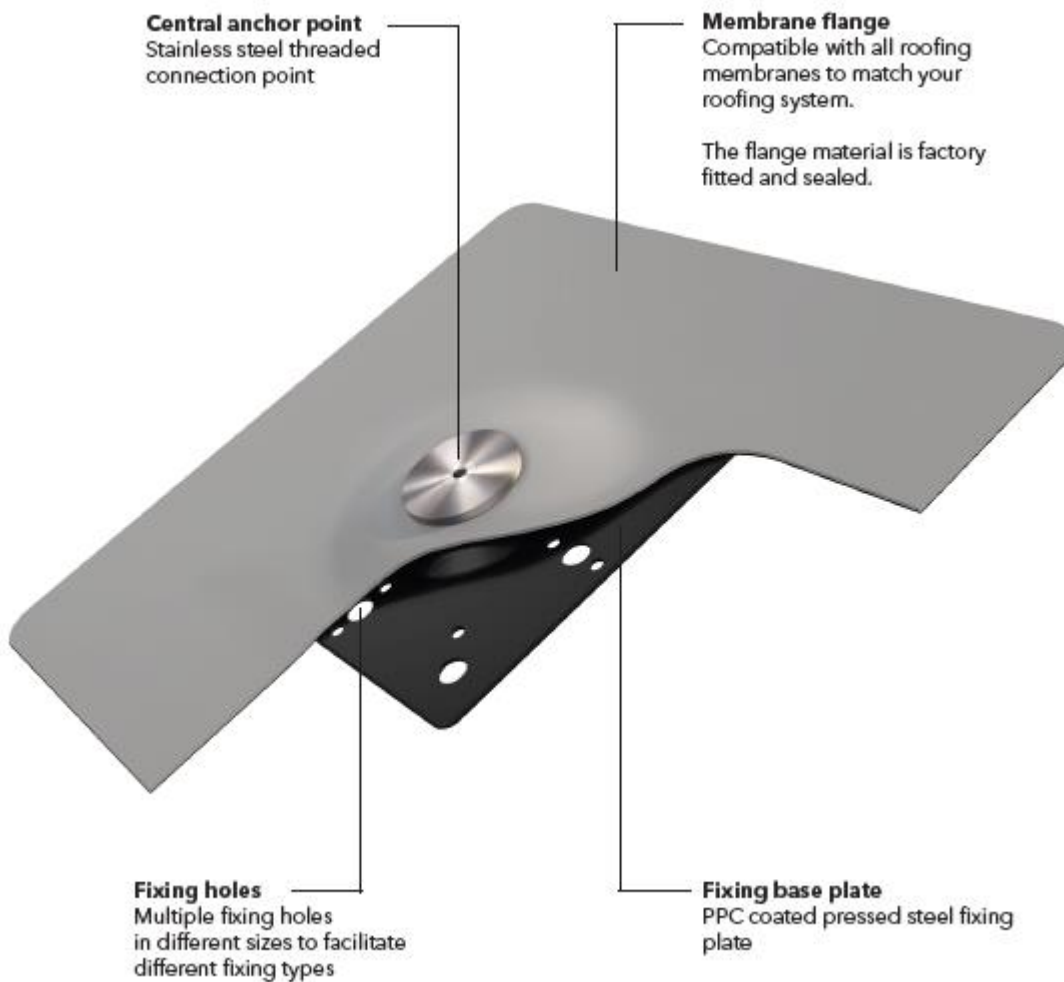
It provides a universal fixing offering one M10 x 20 female threaded anchor point for supporting and securing most types of rails and bars. Multiple fixings can be made directly to the roof structure providing excellent pull-out values into most substrates.

All the fixings are sealed under the flange against water ingress.

The **Nuralite Fixing Plate** can be used on all Nuraply membranes.

The roof area is an ideal area to site many parts and components of the building's mechanical services equipment that are essential to the building use.

These components include air conditioning units, condensers, chillers, general roof plant, pipework, and solar panels. Any effort to fix these items to the roof structure involves a potential threat to the integrity of the roof covering. Solar panels in particular, due to their size and location, are vulnerable to wind forces.



NURALITE FIXING PLATE INSTALLATION

The **Nuralite Fixing Plate** is to be fitted over the completed **Nuraply** membrane system. Where for loading purposes it has been established that the **Nuralite Fixing Plate** should be positioned over structural elements such as rafters or purlins, these should be identified, and the **Nuralite Fixing Plate** set out and located accordingly. The **Nuralite Fixing Plate** should be positioned on the roof considering the

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constraints of any framing system that will be fitted to them. Particular care should be taken to get the orientation of the two points correct as this cannot be adjusted once the **Nuralite Fixing Plate** has been installed.

Fixing on cold roof construction, ensure that the fixings used will penetrate the **Nuraply** membrane and the roof deck below in accordance with the manufacturers tolerances. Use all available fixing holes to achieve the maximum pull-out value.

Fixing on timber and concrete warm roof construction, ensure that the fixings used will penetrate the **Nuraply** membrane and the roof deck below in accordance with the manufacturers tolerances. Use all available fixing holes to achieve the maximum pull-out value.

Fixing on metal tray warm roof construction, the fixings **MUST** only be into the crown of the profile. Care must be taken to identify and locate the positions of the crowns before fixing commences. When required a metal plate can be fixed to the top of the tray so that all fixing points can be utilised.

MEMBRANE INSTALLATION

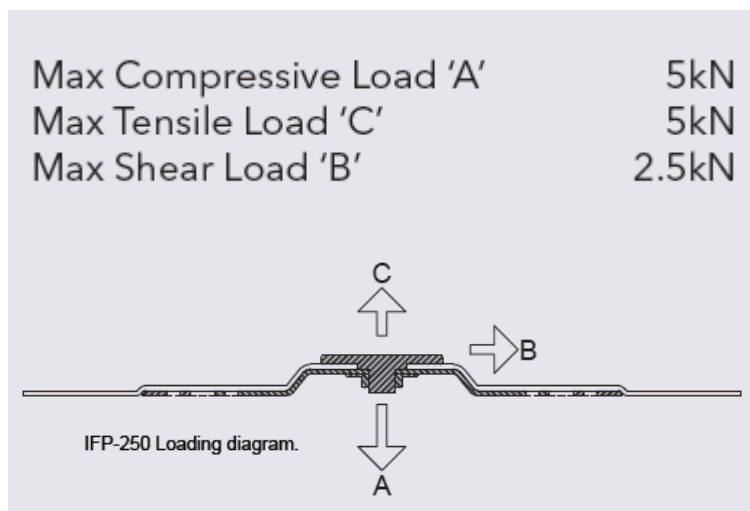
Nuraply 3PM: Once the **Nuralite Fixing Plate** has been correctly installed, the **Nuralite Fixing Plate** is to be primed with Nuraflux primer (refer to the Installation Manual). 70mm² **Nuraply Alu** self-adhesive patches are to be bonded over all fixings, then the **Nuraply 3PM** can be heat welded down (refer to the Installation Manual). A selvedge edge must be created out around the fixing plate 150mm.

Nuraply TPO Smooth Back: Once the **Nuralite Fixing Plate** has been correctly installed, the **Nuralite Fixing Plate** and the underside of the **Nuraply TPO Smooth Back**, out to the edges of the plate is to have **Nuraply TPO Bonding Adhesive 1121** applied. (refer to the Installation Manual). 70mm² **Nuraply TPO Smooth Back** patches are to be bonded over all fixings. Bond the **Nuraply TPO Smooth Back** down to the **Nuralite Fixing Plate**. Weld the **Nuraply TPO Smooth Back** from the plate out (refer to the Installation Manual).

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Static loadings in Kg. Nuralite Enertherm PIR has a static load rating of 40 Kpa.

Insulation manufacturers long term static load ratings*	20Kpa	30Kpa	40Kpa	50Kpa	60Kpa
Nuralite Fixing Plate loading capacity per post in Kg	125Kg	187Kg	250Kg	312Kg	375kg



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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 trapezoidal 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 trapezoidal 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

UNIT WEIGHT (APPROX.)

Nuraply 3PM: 3.65Kg

Nuraply TPO Smooth Back: 3.4Kg

STORAGE

Nuralite Fixing Plate can be stored for 5 years at 5 - 35°C in a dry storage place protected against sunlight.

SAFETY

All regulations applicable to working at height, flammable liquids, flame, and general roof work should be followed. Once the **Nuralite Fixing Plate** is installed it can pose a trip hazard. Use a warning sign and position so that the site operatives are warned before entering that particular area.

TRANSPORT CLASSIFICATION

N/A

The information in this product data sheet is based on our experience and testing. It represents the latest information available at the time of printing, but no guarantee of its accuracy is made or implied, nor responsibility taken for use to which this information may be put. We reserve the right to alter or up-date information parameters and formulations at any time without notice.