



The roofing system that does it all

Tricore is a fully lined, insulated cost effective roof system, it is practical, fully detailed and backed by Dimond and Nuralite. Tricore offers a choice of roofing profiles and skylights easily optimised for appearance, thermal and acoustic performance, providing the flexibility to enhance performance and meet client needs.

Why Tricore?

- > **Weather Secure** – continuous roofing sheets with no end laps or joins which rely on sealant; the slotted roof rail and fastening system negates the use of long fasteners through the roof sheet that would flex due to thermal expansion.
- > **Breathes** – slotted roof rail design allows the required amount of air movement to control moisture resulting in lower moisture levels than other systems year round, removes the need to rely on a vapour barrier and reduces the risk of moisture accumulating sufficiently to cause corrosion of the roof sheet.

- > **Insulates** – consistent R-Value across the roof, reliable for the life of the roof; fastening system reduces energy loss from thermal bridging.
- > **Aesthetic** – your choice of roof profile including Dimondek 630 clip-fastened roof sheets in continuous lengths up to 90m*.
- > **Straightforward** – easy to install to Building Code requirements using the Metal Roofing Code of Practice; building is closed in quickly enabling sequencing of sub-trades to be optimised. Easy to maintain as the roof sheet can easily be replaced if damaged without disturbing the insulation.
- > **For NZ** – designed in New Zealand specifically for the rigors of New Zealand's environment. New Zealand Building Code compliant to clause E2/AS1 and H1.
- > **Warranty** – 15 year system warranty.

The next generation in roofing is available today, specify Tricore on your next commercial roofing project.

* Subject to volume requirements

Pre-finished Lining Sheet

- > NPM 900 profile in Zinalume or ColorCote finish if left exposed as visible lining, available in 0.40, 0.55 or 0.75 mm steel thickness to suit purlin spacing and construction loads.
- > Pan-fixed to purlins to achieve rapid enclosure of the building.
- > Maximum spans to support 1kN foot traffic load and 2.0kPa[†] ultimate limit state (ULS) wind load.

NPM 900	0.40mm	0.55mm	0.75mm
End Span (mm)	1000	1800	2200
Internal Span (mm)	1600	2700	3400

[†]Based on fastening every second pan of all sheets on all purlin lines.

Insulation Board

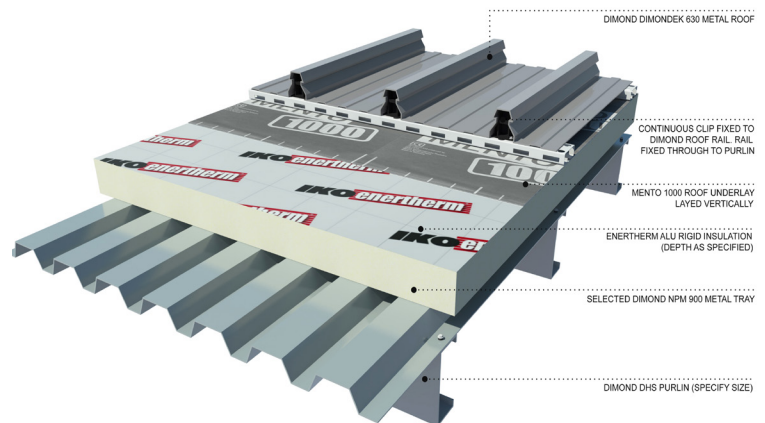
- > High quality Enertherm PIR with tri-laminated aluminium foil facing to both sides, with minimal shrinkage over time
 - Large panel sizes can be used minimising the risk of loss of R value due to gaps at joins
 - Density : 32 kg/m³
 - Compression Strength : at 10% deformation ≥ 175 kPa (EN 13165)
 - Fire Rating: Class E (EN13501 Part 1)
- > Available as square edge
- > Complies with EN13165 for thermal performance

PIR Thickness (mm)	R* (m ² °C/W)
50	2.25
70	3.15
80	3.60
100	4.50
120	5.45
140	6.35

* Based on PIR only without the additional R value from surface effects and additional Tricore components.

Slotted Roof Rail

- > Enables free flow of ventilation air and drainage of any moisture that may be present.
- > Ventilated air space ensures moisture accumulation is removed from the underside of the roof sheet. Given this, Relative Humidity at the roof sheet underside is not expected to exceed 90%. By comparison, an insulated roof build-up that does not have a sufficiently ventilated space below the roof sheet could be expected to have a Relative Humidity at the roof sheet underside exceeding 90% for up to 8 months of the year, creating a significant risk of roof sheet corrosion.
- > Ensures that any leakage at the roof fastener is managed by the roof underlay, preventing fastener leakage entering the PIR.
- > Enables the roof fasteners to be separated from the fasteners that penetrate the warm side of the system.
- > Galvanised steel to provide sufficient screw holding fastened through the PIR board and into the structural purlin at 300mm centres.



Roof Sheet and Underlay

- > Choice of long run profile, with no end laps or reliance on sealant to achieve weather security, including clip fastened Dimondek 630 to remove fastener penetration of the roof sheet.
- > Proven load/span data for each roofing profile based on product testing and history of use.
- > Underlay is supported by the PIR boards and absorbs any moisture present below the roof sheet, releasing it to drying air in the ventilated space below the roof sheet.