



## Viking Warm Roof

### Product Information



### Applications

Warm Roofs can be used on any commercial or residential roofs where thermal efficiency of the building is a priority.

### Physical Description

A Warm Roof combines roofing and insulation solutions in one system. The insulation component comprises of rigid panels installed on top of the roof substrate (versus the traditional Cold Roof system which has soft insulation installed underneath; stuffed in the ceiling cavity.)The waterproofing membrane is then simply adhered on top. A Warm Roof takes the dew point to the outside resulting in a drier, more thermally efficient building.

The Viking Warm Roof system comprises of rigid polyisocyanurate (polyiso) insulation panels made of a combination of closed-cell polyurethane foam and recycled shredded coloured plastic bottles. Polyiso renders the best R-value (thermal efficiency) of any form of building insulation at R-1.1 per inch (25mm). Polyiso panels can be adhered to the roof substrate using either mechanical fasteners and plates, or a 2-part polyurethane foaming adhesive system; the latter of which possesses the same wind uplift resistance as mechanical fasteners, but negates the thermal bridging that can take place with metal fasteners. \*

Wide sheet membrane systems such as Viking Epiclad or Enviroclad (minimum 3.0m wide) are installed on top of the insulation layer. Wide sheet systems are used to minimise the number of seams on the roof.

(\* In the South Island and the North Island's Central Plateau where extreme differences in temperature can be experienced between inside and outside a building, a vapour barrier is required between the substrate and the underside of the polyiso.)

### Dimensions

Thickness	Width	Length	R-Value
25mm	1.22m	2.27m	1.1
50mm	1.22m	2.27m	2.2
75mm	1.22m	2.27m	3.3

### Typical Physical Property Data Chart

Property	Test Method	Value
Compressive Strength	ASTM D 1621 ASTM 1289-06	20 psi* minimum (138kPa, Grade 2)
Dimensional Stability	ASTM D 2126	2% linear change (7 days)
Moisture Vapor Transmission	ASTM E 96 12.10	< 1 perm ((57.5ng/(Pa•s•m²))
Water Absorption	ASTM C 209	< 1% volume
Flame Spread (foam core)	ASTM E 84	< 50
Service Temperature		-100° to 250° F (-73)C to 122°C)

\* Also available in 25 psi minimum, Grade 3

