

PERMASTOP™ BLANKET

Insulation for Metal Deck Roofing & Cladding

PRODUCT DESCRIPTION AND TYPICAL APPLICATIONS

Insulation Solutions™ *PermaStop* Roofing Blanket consists of a lightweight flexible insulation blanket faced on one side with *Sisalation*™ Reflective Foil Laminate. *PermaStop* is available in various R-Values and blanket lengths (see below), and can be produced cut to length, depending on volume. *Insulation Solutions* Roofing Blanket is manufactured from long fine Glass Wool fibres engineered to optimise thermal resistance and acoustic absorption.

The *Sisalation* facing consists of a reinforced double sided aluminium foil adhered to the blanket, with a 150mm. overlap along one long side to ensure a seal is achieved when installed. It is available in various grades, Light, Medium and Heavy Duty, classified according to AS4200.

PermaStop is designed for installation under commercial and residential metal deck roofing as both thermal and acoustic insulation.

STANDARD SIZES AND CHARACTERISTICS

Product Description	Dimensions ¹	Nom.Thickness	Product R-Value	Installed R-Values ²		Area per Roll
				Heat Flow Upwards	Heat Flow Downwards	
<i>PermaStop</i> 436	15m x 1200mm	55mm	R1.5	R2.1	R2.9	18m ²
<i>PermaStop</i> 436	20m x 1200mm	55mm	R1.5	R2.1	R2.9	24m ²
<i>PermaStop</i> 436	15m x 1200mm	75mm	R2.0	R2.6	R3.4	18m ²
<i>PermaStop</i> 436	10m x 1200mm	100mm	R2.5	R3.1	R3.9	12m ²

Note: All of the above sizes are available with *Sisalation* 436 (Light Duty), 430 (Medium Duty) or 450 (Heavy Duty) as facing. (Other facings for example *Sisalation* 437, or perforated products can be made to order).

¹Facing is 1350mm wide on all standard products, ie, with a 150mm overlap.

Non-standard sizes can be produced to order, depending on minimum order quantities.

Please contact your nearest *Insulation Solutions* Sales office for details.

²The installed R-value of *PermaStop* includes both the blanket and foil facing.

SOUND ABSORPTION

PermaStop Roofing Blanket with various facings has the following sound absorption co-efficients when tested in accordance with AS1045 by the Reverberation Room Method.

Tests were carried out with no air space behind the samples and results are based on test reports from RMIT Department of Applied Physics.

Nominal Thickness	Sound absorption coefficients (reverberation) at frequencies (Hz) of:					
	125	250	500	1000	2000	NRC
55mm (<i>Sisalation</i> 436)	0.45	0.85	1.05	0.45	0.20	0.60
55mm (<i>Sisalation</i> 450 Perforated)	0.35	0.60	1.00	1.05	0.85	0.90
75mm (<i>Vapastop</i> 875)	0.40	0.95	1.15	0.75	0.70	0.90

EARLY FIRE HAZARD RATING

When tested in accordance with AS1530 Part 3, *PermaStop* Roofing Blanket has the following Early Fire Hazard Indices.

(Figures may vary slightly for the various grades of facing and blanket thickness)

Ignitability Index	0
Spread of Flame Index	0
Heat Evolved Index	0
Smoke Developed Index	3

PRODUCT FUNCTION

PermaStop Blanket is designed to reduce heat load and noise ingress on metal clad constructions. The *Sisalation* reflective foil facing provides numerous benefits over plain blanket in Metal Deck Roof and Wall Cladding applications. It not only provides an impervious barrier against condensation and dust, but also contributes to the overall thermal performance of the roof system - if, as is usually the case, the product is installed with the foil facing an airspace.

In temperate climates, *PermaStop* is usually installed with the foil facing down. In tropical areas, foil-faced blanket is commonly installed with the foil side facing upwards, ie, on top of the blanket, as the direction of heat flow in tropical climates is predominantly down, through the metal decking.

PermaStop can also be faced with other *Sisalation* products for specific applications. For example a white-coated foil laminate such as *Sisalation 437* is ideal as an exposed surface in animal sheds or in sports and gymnasium areas, where properties like hygiene and light reflectance may be important.

Perforated *Sisalation* facing, such as *Sisalation 450P*, is recommended in workshops, machine shops and similar spaces where it will help absorb internally generated noise.

Please contact your nearest *Insulation Solutions* sales office or ring the Technical Information line if you require further information on products for these applications.

SPECIFICATION NOTES

When specifying, state the following:

- Product name - *Insulation Solutions PermaStop* Blanket
- Facing required - eg: *Sisalation 436*

- Total R or U-value required

Note: The insulation value (R) or thermal performance of reflective foils depends on the installation method used and the direction of heat flow. (see "product R-Values" overleaf)

SERVICE TEMPERATURE

The Glass Wool blanket used on *PermaStop* has a maximum service temperature of 350°C, however due to adhesives used to apply the

facing, and within the facings themselves, the recommended service temperatures of this product should be limited to 70°C.

MOISTURE ABSORPTION

Dry sample of blanket placed in conditions of 95% relative humidity at 50°C for 96 hours.

Moisture Absorption less than 0.2% by Volume.

BIO-SOLUBILITY

The fibre used in this product is FBS-1 Bio-Soluble Glass Wool™ Insulation. This means that it dissolves in bodily fluids and is quickly cleared from the lungs. It complies with the test of short term

biopersistence in Note Q of [NOHSC: 10005 (1999)]. *Glass Wool* is classified as safe to use.



SUSTAINABILITY

Sustainability...measures that satisfy the needs of people today while enhancing the quality of life for future generations. The demands on non-renewable resources for the production of energy are not sustainable without compromising the environment. Insulation, correctly specified and installed, is one of the most critical products in

improving energy efficiency and reducing the levels of greenhouse gas emissions. *Insulation Solutions* is committed to providing environmentally sustainable products and utilises up to 70% recycled waste glass in the production of *Glass Wool* Insulation.