

Permastop® Tropic Building Blanket

Reflective faced thermal and acoustic glasswool insulation blanket for tropical climates

Description

Permastop® Tropic Building Blanket is a glasswool blanket containing up to 80% recycled content faced with a high quality Sisalation® lightweight facing foil on the underside (inward facing when installed) of the Glasswool blanket and Sisalation® Multipurpose 439 Light duty faced on the topside (outward facing when installed). For ease of installation, the reflective foil laminate has a 150mm overlap along one side (lengthwise) for sealing the blanket. The outward foil face also features an anti-glare coating allowing for increased install safety.

Applications

Permastop® Tropic Building Blanket is specifically designed for use in Australia's hot and humid tropical regions to provide increased condensation protection to buildings. In such regions, it is customary to install the vapour barrier on the upper side of the building blanket which faces the roof sheet. This ensures the vapour barrier is installed on the warm side of the building to provide greater protection against the risk of condensation. Permastop® Tropic Building Blanket is suitable for use in metal clad roof applications. It provides excellent thermal and acoustic properties by reducing heat loads entering a building and by minimising the internal reverberation and flow of unwanted nuisance noise generated from adjacent buildings/ rooms and/or the external environment.

Permastop® Tropic Building Blanket is not recommended for use in commercial roofing applications where an insulation spacer is required. In such applications, Fletcher Insulation recommends Permastop® Building Blanket is installed with Roof Razor® insulation spacer. An additional layer of Sisalation® reflective foil laminate should then be laid above the blanket and spacer to achieve the same benefits Permastop® Tropic Building Blanket provides.

Product Limitations of use:

- Not to be used or exposed to weather in any condition including prior, during and after installation. Product must be kept dry at all times.
- This product can not be classified to AS1530.1 as an assembly, and is not suitable where non-combustible material is required, however, where such requirement exist, laying the required blanket and foil separately may comply.
- This product cannot be used in exposed/lining applications where a group number is required in accordance with AS 5637.1 (NCC V1 Amdt 1 C1.10(4) NCC 2022 V1 S7C4)
- Not suitable for under tiled roofs.
- The foil facing is a vapour barrier, not to be used where vapour permeable facing is required.
- Modifications not permissible, as suitability and/or compliance may be compromised.
- Product needs to be allowed to fully recover before installation.
- Not suitable for use in mild-to-cold regions (e.g. NCC Climate Zones 3-8).
- The foil facing product should not come into contact with wet concrete, or alkaline materials.

Features and benefits:

Reduces the risk of condensation forming under metal roofs	→	Prevents damage to ceilings often caused by the development of mould.
Assists in reducing unwanted external noise inside a building often caused by weather condition	→	Provides a more comfortable living and working space.
Delivers overall building energy efficiency keeping buildings cool in summer and warm in winter	→	Reduces future ongoing costs on energy bills and unnecessary stress on HVAC systems.
Environmentally positive made from up to 80% recycled material	→	Minimal impact on the environment.

Product data

Foil Facing Type	Material R-value m ² K/W	Thickness mm	Width mm	Length m	m ² per roll	Old product code	New product code
Sisalation® Light Duty (LD) Facing Foil (436)	1.4	60	1200	15	18	910239	4004329
	1.8	75	1200	15	18	913202	4004225

Physical properties

Property	Test method	Result	Unit
Thermal resistance R-value	AS/NZS 4859.1	Complies	m ² K/W
Moisture absorption	When exposed to environmental conditions of 50°C and 95% relative humidity for four days	< 0.2	% by volume
Maximum service temperature	ASTM C411/C447	Glasswool: 340 Foil: 70	°C
Fungi resistance of insulation materials	ASTM C1338-14	Pass (no growth)	

Fire hazard properties

Permastop® Tropic Building Blanket exhibits the following characteristics when tested in accordance with the following standards:

Property	Test method/standard	Result
Combustibility (unfaced Pink® Building Blanket only)	AS 1530.1	Non-combustible
Flammability (Sisalation® LD Facing Foil)	AS/NZS1530.2	≤ 5
Early Fire Hazard Indices	AS/NZS 1530.3	
Ignitability Index		
Spread of Flame Index		
Heat Evolved Index		
Smoke Developed Index		2
BAL Compliance	AS 3959	Low-40

Compliance

NCC 2019

- Complies with AS/NZS 4859.1 as referenced in NCC 2019, Volume 1 Clause J1.2(a) and NCC 2019, Volume 2 Clause 3.12.1.1
- When tested to AS/NZS 1530.3 this product does not exceed the 'Spread of Flame' or 'Smoke Developed' indices as required by NCC 2019 Volume 1, Specification C1.10 Clause 7 for insulation materials
- Complies with the requirements of AS3959 Bushfire Attack Level Low-40 under metal sheet roofs

NCC 2022

- NCC 2022 Complies with AS/NZS 4859.1 as referenced in NCC 2022, Volume 1 Clause J4D3 (1) and NCC 2022, Volume 2 ABCB Housing provisions Clause 13.2.2
- When tested to AS/NZS 1530.3, this product does not exceed the 'Spread of Flame' or 'Smoke Developed' indices as required by NCC 2022 Volume 1, S7C7 for insulation materials
- Complies with the requirements of AS 3959 Bushfire Attack Level Low-40 under metal sheet roofs.

Health and safety

Permastop® Tropic Building Blanket is manufactured from FBS-1 Glasswool Bio-Soluble Insulation®. Refer to Fletcher Insulation SUIS for more information.

Environmental properties

The glasswool component of Permastop® Tropic Building blanket is manufactured from up to 80% recycled content which would otherwise go into landfill and be unsuitable for alternative manufacturing processes.

The use of Permastop® Tropic Building Blanket guarantees the use of Zero ODP insulation while also ensuring that no harmful levels of Volatile Organic Compounds (VOCs) are released. This allows the incorporation of environmentally preferable insulation whilst also maintaining indoor air quality.

Maintenance and conditions of use

- Product should be kept dry at all times, not to be exposed to weather in any condition including prior, during and after installation.
- Foil facing should not be in contact with any corrosive environments, water or alkaline materials such as wet concrete etc.
- Use of pressure cleaners or mineral based cleaners must not be used on the facing product.
- If product is compressed it will reduce the thermal performance of the product. Allow the product to recover to its nominal thickness to achieve the declared material R-value.
- Where Insulation can be inspected, ensure any tears in the facing are repaired with appropriate tape as highlighted in the product's installation guidelines.
- When storing, ensure product is protected from physical damage. Avoid storing product packaging under UV light (direct sunlight) for extended periods.
- When product is installed as per the product installation guidelines, no further maintenance is required for this product.

Technical specification

When specifying, please state the following:

The insulation material shall be Fletcher Insulation Permastop® Tropic Building Blanket with a Material R-value of R_____m²K/W (specify Material R-value) at a nominal thickness of _____mm (specify nominal thickness).

The following performance attributes must be specified:

Product must be FBS-1 Biosoluble.

Product must recover to the requirements of AS/NZS 4859.1.

Installation instructions

For the correct installation method, follow the Installation Guidelines available from insulation.com.au.

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