

# Anticon™ & Anticon™ HP Roofing Blanket

Refer to product table below for applicable product codes covered by this document

Issue **D, 11/2024**

## Product Type & Application

Anticon™ and Anticon™ High Performance (HP) are Glasswool blankets with a light (LD) duty reinforced paper-based, reflective foil laminate adhered to one side. They are primarily intended for use as metal roof insulation in residential and commercial applications.

## Compliance with the New Zealand Building Code

When correctly specified and installed, this product meets or contributes to compliance with the following performance requirements of the building code:

- **B2 Durability** B2.3.1(a) – Glasswool insulation has a well-established history of use in service.
- **C3 Fire affecting areas beyond the fire source** C3.4(a) - Anticon™ and Anticon™ High Performance (HP) Achieves a Group Number of 1 and  $SMOGR_{RC} \leq 100 \text{ m}^2/\text{s}^2 \times 1000$  for all thicknesses, in accordance with AS ISO 9705 and AS 5637.1. It may be used as an exposed wall or ceiling lining where Group Number is specified by NZBC clause C3.4(a).
- **E2 External Moisture** E2.3.1 – The facing material on Anticon™ and Anticon™ High Performance (HP) resists penetration of water.
- **E3 Internal Moisture** E3.3.1 - Anticon™ and Anticon™ High Performance (HP) products (80 mm thickness or greater) listed in this PTS exceed R1.5 as in Acceptable Solution E3/AS1 and contribute to compliance with E3.3.1.
- **F2 Hazardous building materials** F2.3.1 - Anticon™ and Anticon™ High Performance (HP) do not emit or give rise to harmful concentrations of gas, liquid, radiation or solid particles.
- **H1 Energy Efficiency** H1.3.1(a), H1.3.2E - Anticon™ and Anticon™ High Performance (HP) have been tested to AS/NZS 4859.1 to determine insulation R-values for use in accordance with Acceptable Solutions H1/AS1 and H1/AS2 and Verification Methods H1/VM1 and H1/VM2.

## Conditions of Storage & Maintenance

- Store in the original packaging in a cool, dry area, away from foodstuffs. Ensure packages are adequately labelled, protected from physical damage, and sealed when not in use. Avoid packaging being stored under UV light (direct sunlight) for long periods.
- Do not pressure clean or use mineral based cleaners on the facing product.

Refer to the product SDS at [Bradfordinsulation.com.au](http://Bradfordinsulation.com.au) for more information.

## Specific Design or Installation Instructions

- Isolate power before installation.
- **WARNING:** This product contains aluminium foil which conducts electricity. To avoid electrocution, care should be taken to ensure that this product or conductive fasteners used to secure this product, do not come into contact or close proximity with electrical wiring during installation or use.
- **Caution:** Electrical cables and equipment partially or completely surrounded with bulk thermal insulation may overheat and fail. In new build construction with electrical wiring in accordance with AS/NZS 3000: 2018 or later, wiring may be partially or completely surrounded for up to 400mm. If more than 400mm is surrounded, or for wiring pre AS/NZS 3000:2018, seek advice from a licenced electrician. Refer to legislation and referenced standards for full details or seek advice from an electrician if in doubt.
- To create an air, water, or vapour barrier, the facing material needs to be sealed at overlaps, end laps, discontinuities and penetrations in accordance with AS 4200.2.
- In a roof installation the reflective aluminium side should face inward toward the internal roof cavity.
- Insulation should be installed so that it forms a continuous layer and abuts or overlaps adjoining insulation other than at supporting members such as columns, studs, noggings, joists, furring channels and the like where the insulation must butt against the member.
- To maintain the water barrier properties of the facing material it should not be punctured, creased, crushed, sharply folded or dragged over the building structure during installation.
- Stated thermal performance is based on the insulation blanket or board only - reflective R-values are construction-dependent upon the adjacent airgap and must be determined in accordance with AS/NZS 4859.2.
- **Condensation Risk Consideration:** The facing material is classified as a vapour barrier and is recommended to be positioned on the warm side of the construction to reduce the risk of condensation entrapment within the structure. As there are many factors which can influence condensation risk it is highly recommended that designers undertake a hygrothermal analysis to further reduce condensation risk.
- Suitable for applications where the product is protected from UV light, water and wind pressure during and after installation.

For general installation guidance refer to the product installation guide at [Bradfordinsulation.co.nz](http://Bradfordinsulation.co.nz)

**Supplementary information** - Additional installation guidance for this product can be found in AS 3999.

This Product Technical Statement is published in accordance with the Building Act 2004 Section 14g. It relates to this product when it is produced at a CSR approved facility in accordance with CSR Specifications and approved materials, is unmodified, and installed in accordance with the technical data, plans, specifications, and advice prescribed by the manufacturer. It relates to the provisions of the building code in effect at the date of issue of this Product Technical Statement.

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### Limitations of Use

- **IMPORTANT:** Compliance with the evidence of suitability data referenced in this document is only achieved when this product is produced at a CSR approved facility, in accordance with CSR specifications and approved materials.
- This material is not classified as non-combustible in accordance with AS1530.1 and is not suitable for use where non-combustible material is required.
- Group number and SMOGRA<sub>RC</sub> ratings only apply when the installation requirements listed under 'Specific Design or Installation Instructions' are met.
- Not suitable for use under tiled roofs.
- This product is not designed to withstand exposure to the elements and must be installed dry and remain dry until the roof is completed - accordingly, it is recommended that the exterior cladding and all closure flashings should be installed within the same workday to comply with the product warranty.
- It is recommended to commence installation of this product only if it can be completed prior to rain.
- If this product is left exposed, it must be protected from getting wet.
- Maximum service temperature is 150°C for unfaced Glasswool, 70°C for faced Glasswool.
- The foil facing product should not come into contact with wet concrete, or alkaline materials.
- This product is not suitable for installation in underslab concrete roof applications within a conditioned space where there is a risk of moisture transfer through the unfaced edges.
- This product may not be used for installation or repair in residential buildings with an existing electrical installation (Ban 2016/001 declared by MBIE under section 26 of the Building Act 2004).

### Basis of Compliance

- Testing to AS/NZS 4859.1 across the following reports apply to the unfaced blanket -
  - CSR Lab Report R-20024.
  - CSR Lab Report R-20025.
  - CSR Lab Report R-20027.
- Professional Assessment, AS ISO 9705 and AS 5637.1 -
  - CSIRO Assessment FCO-3029.
  - BRANZ Assessment FC11516.
- Professional Assessment, AS/NZS 1530.3 -
  - Warringtonfire Assessment FAS200045.
- C/AS2 Acceptable Solution for Buildings other than Risk Group SH for New Zealand Building Code Clauses C1-C6 Protection from Fire First edition (Amendment 3), 2 November 2023.

### Basis of Compliance cont.

- Verification Methods E2/VM1 and Acceptable Solutions E2/AS1, E2/AS2 and E2/AS3 for New Zealand Building Code Clause E2 External Moisture Third edition (Amendment 10), 5 November 2020
- Acceptable Solutions and Verification Methods for New Zealand Building Code Clause E3 Internal Moisture Second edition Amendment 7, 5 November 2020
- H1 Energy Efficiency, Acceptable Solution H1/AS1, Energy efficiency for all housing, and buildings up to 300m<sup>2</sup>, Fifth edition Amendment 1, 4 August 2022
- H1 Energy Efficiency, Acceptable Solution H1/AS2, Energy efficiency for buildings greater than 300m<sup>2</sup>, First edition Amendment 1, 4 August 2022
- H1 Energy Efficiency, Verification Method H1/VM1, Energy efficiency for all housing, and buildings up to 300m<sup>2</sup>, Fifth edition Amendment 1, 4 August 2022
- H1 Energy Efficiency, Verification Method H1/VM2, Energy efficiency for all housing, and buildings greater than 300m<sup>2</sup>, First edition Amendment 1, 4 August 2022.
- Bradford SDS CSR-SHE-Glasswool Issued 24<sup>th</sup> September 2024.
- Testing to AS 4200.1 across the following reports apply to the **Light Duty** facing product -
  - AWTA Report 7-598683-MN – *Resistance to Dry Delamination.*
  - AWTA Report 7-598683-MN – *Resistance to Wet Delamination.*
  - AWTA Report 7-598683-MN – *Moisture Shrinkage.*
  - Orora Report 24133 – *Folding Endurance.*
  - AWTA Report 24-004037 – *Tensile Strength.*
  - AWTA Report 24-004037 – *Edge Tearing.*
  - AWTA Report 7-598762-MN – *Emittance Classification.*
  - R&D Services Report RD231199-R1 – *Vapour Control Classification.*
  - AWTA Report 7-543644-NV – *Water Control Classification.*
  - CSR Lab NATA Report NR-17218 – *Flammability Classification.*
  - CSR Lab Report R-20078 – *Thickness*

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### Applicable Product Codes

BASE BLANKET R-VALUE (m <sup>2</sup> K/W)	THICKNESS (mm)	NOMINAL LENGTH (m)	NOMINAL WIDTH (mm)	NOMINAL COVERAGE (m <sup>2</sup> per Roll)	PRODUCT	PRODUCT CODE
<b>LIGHT DUTY FACING</b>						
R1.3	60	20	1200	24	Anticon 60	15574
R1.8	80	15	1200	18	Anticon 80	16072
R2.3	100	10	1200	12	Anticon 100	15625

R-values are determined in accordance with AS/NZS 4859.1 at 23°C. The contribution of the reflective air-gap is construction dependant and excluded from the declared R-value. The duty classification of the facing material does not influence the R-value.

### Additional Product Data

<b>Maximum Service Temperature</b>		150°C for unfaced Glasswool 70°C for faced Glasswool
<b>Fire Hazard Properties</b>	When assessed in accordance with AS/NZS 1530.3	• Ignitability: 0 • Spread of flame: 0 • Heat Evolved: 0 • Smoke Developed: 1

### Acoustic Performance

Sound absorption results were tested under AS/ISO 354-2006 and NRC and SAA rated using ASTM C423-90A-

Product	Thickness (mm)	Practical Sound Absorption Coefficient ( $\alpha_p$ )	Frequency (Hz)						NRC	SAA	$\alpha_w$
			125	250	500	1000	2000	4000			
Anticon 60 with LD Facing	60		0.25	0.75	1	0.55	0.25	0.15	0.65	0.64	0.30 (LM)
Anticon 80 with LD Facing	80		0.45	1	0.95	0.5	0.35	0.15	0.7	0.72	0.35 (LM)

The practical sound absorption coefficient ( $\alpha_p$ ) and weighted sound absorption coefficient ( $\alpha_w$ ) are determined as per AS/ISO 11654-1997.

### Other Accreditation



**FBS-1 Glasswool** - The fibre component of these products is listed by Safe Work Australia as Man-made Vitreous Fibre (Glasswool) of low bio persistence as specified under Note Q in the Australian Hazardous Substances Information System and in the Australian Approved Criteria documentation. In accordance with EU ATP 31 (2009) these fibres are not classified as an irritant, or as carcinogenic. Refer to the product SDS at [Bradfordinsulation.com.au](http://Bradfordinsulation.com.au) for more information.



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