

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

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### **Product Type & Application**

Anticon® and Anticon® High Performance (HP) are Glasswool blankets faced with a light (729 LD), medium (730 MD) or heavy (750 HD) duty reinforced, paper-based, reflective foil laminate on one side. These products are primarily intended for use as metal roof insulation in residential and commercial applications.

### Compliance with the NCC

For use in Australia, when correctly specified and installed, this product provides the following compliance:

#### **NCC 2022**

- Thermal Complies with NCC 2022 Volume 1 J4D3(1) and ABCB Housing Provisions Standard 2022 13.2.2(1). This product meets the requirements of the NCC through compliance with AS/NZS 4859.1.
- Thermal Break Meets the requirements of NCC 2022 Volume 1 J3D5(1) and ABCB Housing Provisions Standard 2022 13.2.3(7). When crushed between metal roof sheet and framing members this product provides an R-value of R0.2.
- Fire Hazard Properties Achieves a Group Number of 1 and SMOGRA<sub>RC</sub> ≤100 m2/s2 x 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 specified by the NCC 2022 Volume 1 S7C4.
- Fire Hazard Properties Meets the requirements of the NCC 2022 Volume 1, S7C7 for insulation materials. When assessed to AS/NZS 1530.3 this product does not exceed the 'Spread of Flame' or 'Smoke Developed' indices of Table S7C7.
- Weatherproofing and Condensation Control Facing material only meets the requirements of the NCC 2022 Volume 1 F3D3 and all State-prescribed variations, through compliance with AS/NZS 4200.1.
- BAL All products meet the requirements for sheet roof construction of buildings in bushfire-prone regions BAL 12.5-40, as per AS 3959, sections 5 to 8.
- BAL Anticon FZ 80 with Light Duty facing meets the requirements for sheet roof construction of buildings in bushfire-prone region BAL-FZ, as per AS 3959, Appendix H3 Clause (c).

### **NCC 2019**

- Thermal Complies with NCC 2019 Volume 1 Amend. 1 Section J1.2(a), NCC 2019 Volume 2 Amend. 1 Section 3.12.1.1(a), and all state-prescribed variations. The product meets the requirements of the NCC through compliance with AS/NZS 4859.1.
- Thermal Break Meets the requirements of NCC 2019 Volume 1 Amend. 1 J0.4 and NCC 2019 Volume 2 Amend. 1 13.12.1.2(c). When crushed between metal roof sheet and framing members this product provides an R-value of R0.2.

### Compliance with the NCC cont. NCC 2019 cont.

- Fire Hazard Properties Achieves a Group Number of 1 and SMOGRA<sub>RC</sub> ≤100 m<sup>2</sup>/s<sup>2</sup> x 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 specified by the NCC 2019 Volume 1 Amend. 1, Specification C1.10
- Fire Hazard Properties Meets the requirements of the NCC 2019 Volume 1 Amend. 1, Specification C1.10 Clause 7 for insulation materials. When assessed to AS/NZS 1530.3 this product does not exceed the 'Spread of Flame' or 'Smoke Developed' indices of Specification C1.10 Clause 7.
- Weatherproofing and Condensation Control Facing material only meets the requirements of the NCC 2019 Volume 1 Amend. 1 F1.6 and all State-prescribed variations, through compliance with AS/NZS 4200.1.
- BAL All products meet the requirements for sheet roof construction of buildings in bushfire-prone regions BAL 12.5-40, as per AS 3959, sections 5 to 8.
- BAL Anticon FZ 80 with Light Duty facing meets the requirements for sheet roof construction of buildings in bushfire-prone region BAL-FZ, as per AS 3959, Appendix H3 Clause (c).







### **Evidence of Suitability**

- Testing to AS/NZS 4859.1 at 23°C across the following reports apply to the unfaced blanket -
  - CSR Lab Report R-20024.
  - CSR Lab Report R-20025.
  - CSR Lab Report R-20026.
  - CSR Lab Report R-20027.
  - CSR Lab Report R-20028.
  - CSR Lab Report R-20029.
  - CSR Lab Report R-20030.
  - CSR Lab Report R-20031.
  - CSR Lab Report R-20032.
  - CSR Lab Report R-22008.
  - CSR NATA Lab Report NR-23104.
- 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.
- Testing to AS/NZS 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 7-598683-MN Tensile Strength.
  - AWTA Report 7-598683-MN Edge Tearing.
  - AWTA Report 7-598762-MN Emittance Classification.
  - R&D Services Report RD18258-R2 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
- Testing to AS/NZS 4200.1 across the following reports apply to the *Medium Duty* facing product -
  - CSIRO Report 14-0240a Resistance to Dry Delamination.
  - CSIRO Report 14-0240a Resistance to Wet Delamination.
  - CSIRO Report 14-0240a Moisture Shrinkage.
  - Orora Report 24133 Folding Endurance.
  - CSIRO Report 14-0240a Tensile Strength.
  - AWTA NATA Report 18-000297 Edge Tearing.
  - R&D Services Report RD16659 Emittance Classification.
  - CSIRO Report 6500.3B Vapour Control Classification.
  - AWTA Report 7-543035-NV Water Control Classification.
  - CSR Lab NATA Report NR-17210 Flammability Classification.
  - CSR Lab Report R-20078 Thickness

### Evidence of Suitability cont.

- Testing to AS/NZS 4200.1 across the following reports apply to the *Heavy Duty* facing product -
  - AWTA Report 16-005482 Resistance to Dry Delamination.
  - AWTA Report 16-005482 Resistance to Wet Delamination.
  - AWTA Report 16-005482 Moisture Shrinkage.
  - Orora Report 24133 Folding Endurance.
  - AWTA NATA Report 16-005482 Tensile Strength.
  - AWTA NATA Report 16-005482 Edge Tearing.
  - R&D Services Report RD16659 Emittance Classification.
  - R&D Services Report RD19028-R3 Vapour Control Classification.
  - AWTA Report 7-542982-NV Water Control Classification.
  - CSR Lab NATA Report NR-17213 Flammability Classification
  - CSR Lab Report R-20078 Thickness

#### **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.
- IMPORTANT: Do Not Modify This Product: Compliance with the evidence of suitability data referenced in this document is only achieved by the product or configuration listed in this PTS.
- 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.
- This product does not meet the non-combustibility or fusion temperature requirements of AS 1668.1, 2.3.2.
- 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. Bradford PIR boards are recommended for these applications.







### **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 install in accordance with the NCC and 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.
- Thermal Break: Where this product is locally crushed between framing members and roof cladding it will provide a R0.2 thermal break as required by the NCC.
- Bulk insulation must be installed so that it maintains its
  position and thickness, other than where it crosses water
  pipes, electrical cabling or the like, or roof battens in Class 1
  and 10 buildings, cladding and supporting members in Class
  2-9 buildings, or where accounted for elsewhere.
- Stated thermal performance is based on bulk insulation only. The effects of thermal bridging and any added reflective R-value contributions are construction dependent and must be determined in the accordance with AS/NZS 4859.2.
- 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.
- 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 interior 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.com.au

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

### **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 SUIS/MSDS at Bradfordinsulation.com.au for more information.

CSR Bradford Locked Bag 1345 North Ryde BC NSW 1670 csrbradford.com.au

For further technical advice call 1300 850 305 or visit csrbradford.com.au





### **Applicable Product Codes**

| BASE<br>BLANKET<br>R-VALUE<br>[m²K/W] | THICKNESS<br>[mm] | NOMINAL<br>LENGTH [m] | NOMINAL<br>WIDTH [mm] | NOMINAL<br>COVERAGE<br>[m² per Roll] | PRODUCT        | PRODUCT<br>CODE |  |
|---------------------------------------|-------------------|-----------------------|-----------------------|--------------------------------------|----------------|-----------------|--|
| LIGHT DUTY F                          | ACING             |                       |                       |                                      |                |                 |  |
| R1.3                                  | 60                | 15                    | 1200                  | 18                                   | Anticon 60     | 15417           |  |
| R1.3                                  | 60                | 15                    | 1400                  | 21                                   | Anticon 60     | 74479           |  |
| R1.3                                  | 60                | 20                    | 1200                  | 24                                   | Anticon 60     | 15574           |  |
| R1.8                                  | 80                | 15                    | 1200                  | 18                                   | Anticon 80     | 16072           |  |
| R1.8                                  | 80                | 15                    | 1200                  | 18                                   | Anticon FZ 80  | 475803          |  |
| R2.0                                  | 90                | 15                    | 1200                  | 18                                   | Anticon 90     | 128181          |  |
| R2.3                                  | 100               | 10                    | 1200                  | 12                                   | Anticon 100    | 15625           |  |
| R2.5                                  | 110               | 10                    | 1200                  | 12                                   | Anticon 110    | 84860           |  |
| R2.5 HP                               | 100               | 10                    | 1200                  | 12                                   | Anticon 100 HP | 85383           |  |
| R3.0                                  | 130               | 10                    | 1200                  | 12                                   | Anticon 130    | 83271           |  |
| R3.3                                  | 140               | 7.5                   | 1200                  | 9                                    | Anticon 140    | 102251          |  |
| R3.6                                  | 145               | 7.5                   | 1200                  | 9                                    | Anticon 145    | 102252          |  |
| R3.6 HP                               | 130               | 5                     | 1200                  | 6                                    | Anticon 130 HP | 194622          |  |
| R4.2                                  | 175               | 6                     | 1200                  | 7.2                                  | Anticon 175    | 179193          |  |
| MEDIUM DUT                            | Y FACING          |                       |                       |                                      |                |                 |  |
| R1.3                                  | 60                | 15                    | 1200                  | 18                                   | Anticon 60     | 15630^          |  |
| R1.8                                  | 80                | 15                    | 1200                  | 18                                   | Anticon 80     | 15696^          |  |
| R2.3                                  | 100               | 10                    | 1200                  | 12                                   | Anticon 100    | 15629           |  |
| R2.5                                  | 110               | 10                    | 1200                  | 12                                   | Anticon 110    | 84859           |  |
| R2.5 HP                               | 100               | 10                    | 1200                  | 12                                   | Anticon 100 HP | 88604^          |  |
| R3.0                                  | 130               | 10                    | 1200                  | 12                                   | Anticon 130    | 81861^          |  |
| R3.3                                  | 140               | 7.5                   | 1200                  | 9                                    | Anticon 140    | 102312          |  |
| R3.6 HP                               | 130               | 7.5                   | 1200                  | 9                                    | Anticon 130 HP | 457378          |  |
| R3.6                                  | 145               | 7.5                   | 1200                  | 9                                    | Anticon 145    | 102311^         |  |
| R4.2                                  | 175               | 6                     | 1200                  | 7.2                                  | Anticon 175    | 132761^         |  |
| <b>HEAVY DUTY</b>                     | FACING            |                       |                       |                                      |                |                 |  |
| R1.3                                  | 60                | 15                    | 1200                  | 18                                   | Anticon 60     | 16013           |  |
| R1.8                                  | 80                | 10                    | 1200                  | 12                                   | Anticon 80     | 16106           |  |
| R2.3                                  | 100               | 10                    | 1200                  | 12                                   | Anticon 100    | 15359           |  |
| R2.5                                  | 110               | 10                    | 1200                  | 12                                   | Anticon 110    | 84858           |  |
| R2.5 HP                               | 100               | 10                    | 1200                  | 12                                   | Anticon 100 HP | 95821           |  |
| R3.0                                  | 130               | 10                    | 1200                  | 12                                   | Anticon 130    | 84891           |  |
| R3.6                                  | 145               | 5.5                   | 1200                  | 6.6                                  | Anticon 145    | 136684          |  |
| R3.6                                  | 145               | 7.5                   | 1200                  | 9                                    | Anticon 145    | 121280          |  |

<sup>^</sup> AS/NZS 1530.3 Test Report available.

Material 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.

CSR Bradford Locked Bag 1345 North Ryde BC NSW 1670

For further technical advice

call 1300 850 305 or visit csrbradford.com.au





### **Additional Product Data**

| Maximum Service Temperature |   | 150°C for unfaced Glasswool<br>70°C for faced Glasswool                       |  |  |  |
|-----------------------------|---|---|--|--|--|
| Fire Hazard Properties      | When assessed in accordance with AS/NZS 1530 Part 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-

|                                  |                |                                     | Frequency [Hz] |      |      |      |      |      |      |      |              |
|----------------------------------|----------------|-------------------------------------|----------------|------|------|------|------|------|------|------|--------------|
| Product                          | Thickness [mm] |                                     | 125            | 250  | 500  | 1000 | 2000 | 4000 | NRC  | SAA  | $\alpha_W$   |
| Anticon 60<br>with LD<br>Facing  | 60             | Practical<br>Sound                  | 0.25           | 0.75 | 1    | 0.55 | 0.25 | 0.15 | 0.65 | 0.64 | 0.30<br>(LM) |
| Anticon 80<br>with LD<br>Facing  | 80             | Absorption Coefficient $(\alpha_p)$ | 0.45           | 1    | 0.95 | 0.5  | 0.35 | 0.15 | 0.7  | 0.72 | 0.35<br>(LM) |
| Anticon 130<br>with LD<br>Facing | 130            |                                     | 0.6            | 1.0  | 1.0  | 0.7  | 0.4  | 0.25 | 0.85 | 0.84 | 0.4<br>(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 SUIS/MSDS at Bradfordinsulation.com.au for more information.** 



**National Asthma Council Sensitive Choice** 

