Bradford™

Product **Technical** Statement

Supertel HVAC Blankets

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

Issue **D**

Product Type & Application

Supertel HVAC Blankets are high-density Glasswool insulation. They are available plain (unfaced) or faced with materials of various properties bonded to one side. Supertel HVAC Blankets provide thermal resistance and acoustic properties, and are primarily intended for use as insulation for HVAC rigid ducts in commercial applications. For the properties of Supertel HVAC or Soffit Boards, refer to their separate Product Technical Statements.

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.
- **Fire Hazard Properties** - Meets the requirements of the NCC 2022 Volume 1 S7C5 for Air Handling Ductwork and 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 S7C5 or Table S7C7.

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.
- **Fire Hazard Properties** - Meets the requirements of the NCC 2019 Volume 1 Amend. 1 Specification C1.10 Clause 5 for Air Handling Ductwork and 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 5 or 7.

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.

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 – The use of ventilation and air conditioning in buildings, 2.3.2.
- This product is not suitable for use as an exposed internal wall or ceiling lining in applications which require a Group Number in accordance with AS ISO 9705 and AS 5637.1 (NCC 2019 Volume 1 Amend. 1, Specification C1.10 Clause 4, NCC 2022 Volume 1 S7C4).
- Unfaced Glasswool is not a water or vapour barrier and is not suitable for water or vapour control.
- 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.

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.
- Suitable for applications where the product is protected from direct UV light, water and wind pressure during and after 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/NZS4859.2.
- Refer to AS 4254.1 or AS 4254.2 for installation requirements for air handling ductwork.

For general installation guidance refer to the product information on Bradfordinsulation.com.au

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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-20071.
  - CSR Lab Report R-20072.
  - CSR Lab Report R-20073.
- Professional Assessment, AS/NZS 1530.3 -
  - Warringtonfire Assessment FAS200045.
- Professional Assessment, UL 181.11 -
  - Warringtonfire Assessment FAS200051.

Applicable Product Codes

BASE BLANKET R-VALUE [m²K/W]	THICKNESS [mm]	NOMINAL LENGTH [m]	NOMINAL WIDTH [mm]	m² PER ROLL	PRODUCT CODE
PLAIN					
R0.7	25	15	1200	18	15759
R0.7	25	15	1500	22.5	15805
R1.5	50	10	1200	12	16028
R1.5	50	10	1500	15	15488
R2.2	75	7.5	1200	9	15976
BLACK MATT FACING (BMF)					
R0.7	25	15	1200	18	26513
R0.7	25	15	1500	22.5	17458
R1.5	50	10	1200	12	18926
R1.5	50	10	1500	15	17460
ACOUSTITUFF® FACING					
R0.7	25	15	1500	22.5	17579
R1.5	50	10	1200	12	15550
R1.5	50	10	1500	15	15395
R2.2	75	7.5	1200	9	84451
HEAVY DUTY FACING (HD)					
R0.7	25	15	1200	18	43881
R1.5	50	10	1200	12	17965
R2.2	75	7.5	1500	11.2	116249
HEAVY DUTY PERFORATED FACING (HDP)					
R0.7	25	15	1200	18	15830
R0.7	25	15	1500	22.5	15706
R1.5	50	10	1200	12	15948^
R1.5	50	10	1500	15	16099^
ULTRAPHON FACING					
R0.7	25	15	1500	22.5	40646
R1.5	50	10	1500	15	40649
R2.2	75	7.5	1500	11.2	157508

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.
^ AS/NZS 1530.3 Test Report available.

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Additional Product Data

Maximum Service Temperature		• 150°C for Unfaced Glasswool • 70°C for Faced Glasswool
Volatile Organic Compound (VOC) and Formaldehyde Emissions	When tested in accordance with ASTM D5116	• VOC 0.15 mg/m²/hr • Formaldehyde 0.03 mg/m²/h
Fire Hazard Properties	When assessed in accordance with AS/NZS 1530.3	**Plain (Unfaced) Blanket:** • Ignitability: 0 • Spread of flame: 0 • Heat Evolved: 0 • Smoke Developed: 1 **BMF Faced Blanket:** • Ignitability: 18 • Spread of flame: 0 • Heat Evolved: 0 • Smoke Developed: 3 **Acoustituff® Faced Blanket:** • Ignitability: 0 • Spread of flame: 0 • Heat Evolved: 0 • Smoke Developed: 1 **Heavy Duty Faced Blanket:** • Ignitability: 0 • Spread of flame: 0 • Heat Evolved: 0 • Smoke Developed: 0-1 **Heavy Duty Perforated Faced Blanket:** • Ignitability: 0 • Spread of flame: 0 • Heat Evolved: 0 • Smoke Developed: 3 **Ultraphon® Faced Blanket:** • Ignitability: 0 • Spread of flame: 0 • Heat Evolved: 0 • Smoke Developed: 3
UL-181 Burning Test	Insulation 25-75mm thick was assessed in a representative duct section to UL-181's Burning Test, as an indication of how it will perform when the assembled duct undergoes the test. AS 4254.1 and AS 4254.2 require the full duct assembly to be tested to UL 181. (NCC 2019 Volume 1 Amend. 1, Specification C1.10 Clause 5, NCC 2022 Volume 1 S7C5). Insulation satisfies criteria as an indicative test only – specific testing of the final assembly is necessary for the duct to meet Australian Standard requirements.	

Acoustic Performance

Sound absorption results tested in accordance with AS/ISO 354-2006 and NRC rated using ASTM C423-90A.

			Frequency [Hz]								
Product	**Thickness [mm]**	**Practical Sound Absorption Coefficient (α_p)**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**NRC**	**Flow Resistivity [Rayl/m]**	**α_w**
Supertel with HDP Facing	100mm		0.7	1.0	1.0	1.0	1.0	1.0	1.15		1.0

The practical sound absorption coefficient is determined as per AS/ISO 11654-1997.
The weighted sound absorption coefficient is 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.