

# Supertel HVAC Boards

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

Issue **A**

## Product Type & Application

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

- **Thermal** - Complies with NCC 2019 Volume 1 Section J1.2, NCC 2019 Volume 2 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** – Plain Supertel, and Supertel with all facings except HDP/PET meet the requirements of the NCC 2019 Volume 1, Specification C1.10 Clause 7 for insulation materials. When tested to AS/NZS 1530.3 this product does not exceed the 'Spread of Flame' or 'Smoke Developed' indices of Specification C1.10 Clause 7.

## Evidence of Suitability

- Testing to AS/NZS 4859.1 across the following reports apply to the unfaced board -
  - CSR Lab Report R-20012.
  - CSR Lab Report R-20013.
  - CSR Lab Report R-20056.
  - CSR Lab Report R-20057.
  - CSR Lab Report R-20059.
- Testing and Professional Assessment, AS/NZS 1530.3, applies to Plain Supertel, and Supertel with all facings except HDP/PET -
  - CSIRO Assessment FCO-2805.

## Limitations of Use

- This material is not classified as non-combustible in accordance with AS1530.1.
- Maximum service temperature is 300°C for unfaced Glasswool, 70°C for faced Glasswool.

## Specific Design or Installation Instructions

- Isolate power before installation.
- **WARNING:** Acoustituff® and Heavy Duty Perforated Facing contain 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 version 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 version, seek advice from a licenced electrician. Refer to legislation and referenced standards for full details.
- Insulation should form a continuous layer, except where it butts against structural members, or for mandatory gaps around services and fittings. It should be installed at nominal thickness, except where it crosses structures, services and fittings.
- Do not allow insulation to get wet after installation.
- Refer to AS 4254.1 or AS 4254.2 for installation requirements.

For general installation guidance refer to the product information on [Bradfordinsulation.com.au](http://Bradfordinsulation.com.au)

**Supplementary information** - Additional installation guidance for this product can be found in AS3999.

## Conditions of Storage, Use & 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. Store in the original packaging in a cool, dry area, removed from UV light (direct sunlight).
- The facing product should not come into contact with wet concrete, or alkaline materials.
- Do not pressure clean or use mineral based cleaners on the facing product.

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

## Supertel HVAC Boards

### Applicable Product Codes

R-VALUE (m <sup>2</sup> K/W)	THICKNESS (mm)	NOMINAL LENGTH (m)	NOMINAL WIDTH (mm)	PIECES PER PACK	m <sup>2</sup> PER PACK	PRODUCT CODE
<b>PLAIN</b>						
R0.3	13	2.4	1200	16	46.1	16026
R0.7	25	2.4	1200	10	28.8	15311
R0.7	25	3.0	1500	6	27	77921
R0.7	25	2.4	1500	10	36	15714
R1.2	40	2.4	1200	6	17.3	111256
R1.2	40	2.4	1500	6	21.6	111397
R1.5	50	2.4	1200	5	14.4	15332
R1.5	50	2.4	1500	5	18	15709
R1.5	50	3.0	1500	3	13.5	77931
R2.2	75	2.4	1200	3	8.6	15282
R2.2	75	2.4	1500	2	7.2	30493
R3.0	100	2.4	1200	2	5.8	15371
R3.0	100	2.4	1500	2	7.2	17454
<b>BLACK MATT FACING (BMF)</b>						
R0.3	13	2.4	1200	16	46.1	17468
R0.7	25	2.4	1200	10	28.8	15326
R0.7	25	2.4	1500	10	36	74995
R1.5	50	2.4	1200	5	14.4	15292
R1.5	50	2.4	1500	5	18	74996
R2.2	75	2.4	1200	3	8.6	15285
<b>ACOUSTITUFF® FACING</b>						
R0.7	25	2.4	1200	10	28.8	15676
R0.7	25	2.4	1500	6	21.6	85421
R0.7	25	3.0	1500	6	27	94106
R1.2	40	2.4	1200	10	28.8	112259
R1.2	40	2.4	1500	6	21.6	112282
R1.5	50	2.4	1200	5	14.4	16214
R1.5	50	2.4	1500	3	10.8	30501
R1.5	50	3.0	1500	3	13.5	94108
R2.2	75	2.4	1200	3	8.6	97338
R2.2	75	2.4	1500	2	7.2	111108
R2.2	75	3.0	1500	2	9	123553
R3.0	100	2.4	1500	2	7.2	113211
<b>HEAVY DUTY PERFORATED FACING WITH PET OVERLAY (HDP/PET)</b>						
R0.7	25	2.4	1200	10	28.8	84686
R1.5	50	2.4	1500	3	10.8	83992
R1.5	50	2.4	1200	5	14.4	17564
R2.2	75	2.4	1200	3	8.6	87247

R-values apply to the unfaced board.

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### Applicable Product Codes cont.

R-VALUE (m <sup>2</sup> K/W)	THICKNESS (mm)	NOMINAL LENGTH (m)	NOMINAL WIDTH (mm)	PIECES PER PACK	m <sup>2</sup> PER PACK	PRODUCT CODE
<b>HEAVY DUTY PERFORATED FACING (HDP)</b>						
R0.7	25	2.4	1200	10	28.8	15281
R0.7	25	2.4	1500	6	21.6	15276
R0.7	25	3.0	1500	6	27	77922
R1.2	40	2.4	1200	6	28.8	112281
R1.2	40	2.4	1500	4	14.4	111607
R1.2	40	3.0	1500	4	18	112023
R1.5	50	2.4	1200	5	14.4	15302
R1.5	50	2.4	1500	3	10.8	15362
R1.5	50	3.0	1500	3	13.5	77932
R2.0	67	2.4	1500	3	10.8	115203
R2.0	67	3.0	1500	2	9	170225
R2.2	75	2.4	1200	3	8.6	15268
R2.2	75	2.4	1500	2	7.2	88665
R2.2	75	3.0	1500	2	9	104210
R3.0	100	2.4	1500	2	7.2	17684

R-values apply to the unfaced board.

### Additional Product Data

<b>Maximum Service Temperature</b>		<ul style="list-style-type: none"> <li>• 300°C for Unfaced Glasswool</li> <li>• 70°C for Faced Glasswool</li> </ul>
<b>Volatile Organic Compound (VOC) and Formaldehyde Emissions</b>	When tested in accordance with ASTM D5116	<ul style="list-style-type: none"> <li>• VOC 0.15 mg/m<sup>2</sup>/hr</li> <li>• Formaldehyde 0.03 mg/m<sup>2</sup>/h</li> </ul>
<b>Fire Hazard Properties</b>	When tested in accordance with AS/NZS 1530.3	<p><b>Plain (Unfaced) Board:</b></p> <ul style="list-style-type: none"> <li>• Ignitability: 0 • Spread of flame: 0</li> <li>• Heat Evolved: 0 • Smoke Developed: 1</li> </ul> <p><b>BMF Faced Board:</b></p> <ul style="list-style-type: none"> <li>• Ignitability: 18 • Spread of flame: 0</li> <li>• Heat Evolved: 0 • Smoke Developed: 3</li> </ul> <p><b>Acoustituff® Faced Board:</b></p> <ul style="list-style-type: none"> <li>• Ignitability: 0 • Spread of flame: 0</li> <li>• Heat Evolved: 0 • Smoke Developed: 1</li> </ul> <p><b>Heavy Duty Perforated Faced Board:</b></p> <ul style="list-style-type: none"> <li>• Ignitability: 0 • Spread of flame: 0</li> <li>• Heat Evolved: 0 • Smoke Developed: 3</li> </ul>
<b>UL-181 Burning Test</b>	Insulation was tested 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, Specification C1.10 Clause 5, NCC Volume 2, 3.7.1.2(b)).	25-100mm thick products were assessed and satisfy the criteria.

## Supertel HVAC Boards

### Acoustic Performance

Sound absorption results tested in accordance with AS/ISO 354-2006 and NRC rated using ASTM C423-90A. Flow Resistivity tested in accordance with ASTM C522-87.

Product	Thickness (mm)	Practical Sound Absorption Coefficient ( $\alpha_p$ )	Frequency (Hz)					NRC	Flow Resistivity (Rayl/m)	$\alpha_w$	
			125	250	500	1000	2000				4000
Plain Supertel (Unfaced)	50mm	Practical Sound Absorption Coefficient ( $\alpha_p$ )	0.2	0.6	1.0	1.0	1.0	1.0	0.95	17300	0.9
	75mm		0.35	1.0	1.0	1.0	1.0	1.0	1.05	19900	1.0
	100mm		0.5	1.0	1.0	1.0	1.0	1.0	1.15	20100	1.0
Supertel with BMF Facing	50mm		0.15	0.55	1.0	1.0	1.0	1.0	0.95		0.85(H)
	75mm		0.35	1.0	1.0	1.0	1.0	1.0	1.05	21700	1.0
Supertel with Acoustituff® Facing	40mm		0.2	0.75	1.0	0.8	0.45	0.25	0.8		0.45(LM)
	50mm		0.25	0.85	1.0	0.9	0.55	0.3	0.85		0.4(LM)
	75mm		0.5	1.0	1.0	0.85	0.55	0.3	0.95		0.5(LM)
	100mm		0.75	1.0	1.0	0.85	0.55	0.3	0.9		0.5(LM)
Supertel with HDP Facing	25mm		0.1	0.3	0.7	0.9	1.0	0.85	0.75		0.6(MH)
	40mm		0.1	0.5	1.0	1.0	1.0	0.9	0.9		0.8
	50mm		0.2	0.75	1.0	1.0	1.0	0.95	1.0		1.0
	75mm	0.4	1.0	1.0	1.0	1.0	0.9	1.10	44600	1.0	
Supertel with HDP/PET Facing	75mm	0.55	1.0	0.75	0.4	0.2	0.25	0.6		0.3(LM)	

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 SUI/MSDS at [Bradfordinsulation.com.au](http://Bradfordinsulation.com.au) for more information.**