Bradford™ SAINT-GOBAIN

Product Technical Statement

Polytel HVAC Boards

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

Issue **A**

Product Type & Application

Polytel HVAC Boards are 32 kg/m³ thermally bonded polyester fibre insulation boards (Martini MAB), faced on one side with a Heavy Duty Perforated (HDP) foil facing. Polytel HVAC Boards provide thermal resistance and acoustic properties and are primarily intended for use as internal insulation for HVAC rigid ducts in commercial applications.

Compliance with the NCC

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

NCC 2025

- **Thermal** - Complies with NCC 2025 Volume 1 J4D3(1) and ABCB Housing Provisions Standard 2025 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 2025 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 2022

- **Thermal** - Complies with NCC 2022 Volume 1 Amend. 2 J4D3(1) and ABCB Housing Provisions Standard 2022 Amend. 2 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 Amend. 2 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.

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 Amend. 2 S7C4, NCC 2025 Volume 1 S7C4).
- This product is not a water or vapour barrier and is not suitable for water or vapour control.
- Maximum service temperature is 150°C for unfaced polyester insulation and 70°C for the faced Polytel HVAC Board.
- The foil facing product should not come into contact with wet concrete, or alkaline materials.
- This product is not suitable for use within 500m of a saltwater body in an unenclosed, ventilated space.

Specific Design or Installation Instructions

- Isolate power before installation.
- **WARNING:** Products faced with aluminium foil conduct 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.
- 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 csrbradford.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 board -
  - AWTA Report 26-002529.
  - AWTA Report 26-002530.
  - CSR NATA Lab Report NR-26003.
  - CSR NATA Lab Report NR-26004.
- Testing, AS/NZS 1530.3 -
  - CSIRO Test Report FNE13583.
- Professional Assessment, AS/NZS 1530.3 -
  - CSIRO Assessment FCO-3601 Revision C.
- Professional Assessment, UL 181.11 -
  - Warringtonfire Assessment FAS210406.

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.
- 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 SDS at csrbradford.com.au for more information.

Applicable Product Codes

R-VALUE [m²K/W]	THICKNESS [mm]	NOMINAL LENGTH [m]	NOMINAL WIDTH [mm]	PIECES PER PACK	m² PER PACK	PRODUCT CODE
HEAVY DUTY PERFORATED FACING (HDP)						
R0.6	25	2.4	1500	6	21.6	496293
R1.3	50	2.4	1500	3	10.8	160970
R2.0	75	2.4	1500	2	7.2	496294
R2.7	100	2.4	1500	2	7.2	496295

Material R-values are determined in accordance with AS/NZS 4859.1 at 23°C. The contribution of the reflective airgap 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

Maximum Service Temperature		• 150°C for unfaced polyester insulation • 70°C for faced Polytel HVAC Board
Nominal Density		32 kg/m^3
Fire Hazard Properties	When assessed in accordance with AS/NZS 1530.3	When assessed in accordance with AS/NZS 1530.3 – Spread of Flame Index: 0 Smoke Developed Index: 3
UL-181 Burning Test	Polyester Insulation 25-100mm 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 Amend. 2 S7C5, NCC 2025 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.	

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