

Bradford® PIR Boards

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

Issue **A**

Product Type & Application

Bradford® PIR Boards are thermal insulation in a slimline, rigid board profile. Bradford PIR Board's inner core is an advanced thermoset polyisocyanurate (PIR) foam which is sandwiched between two layers of embossed aluminium foil facings. Bradford PIR Boards are primarily intended for use as a wall and/or ceiling lining in commercial applications.

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** - Meets 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.
- **Fire Hazard Properties** Has a Group Number of 2 and $SMOGR_{RC} < 100 \text{ m}^2/\text{s}^2 \times 1000$ for all thicknesses tested, 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, Specification C1.10 Clause 4.

Evidence of Suitability

- Testing to AS/NZS 4859.1 across the following reports apply to the unfaced board -
 - CSIRO Report XC3715/R4a
 - AWTA Report 19-002613 – *Emission Classification*.
- Testing to AS/NZS 1530.3 -
 - AWTA NATA Report 20-003292 – 40mm Product.
 - Professional Assessment for all thicknesses pending.
- Testing to AS ISO 9705 and AS 5637.1 –
 - BRANZ Report FI11441-001 – 40mm Product.
 - IGNIS Report IGNL-3182-06-01R I01 R00 – 60mm Product.
 - Ignis Assessment IGNS-8332 I01 R00_Draft - Professional Assessment for all thicknesses.

Specific Design or Installation Instructions

- Isolate power before installation.
- **WARNING:** Embossed Aluminium Facing 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.
- The foil facing material should not be creased, crushed, sharply folded or dragged over the building structure during installation.
- **Condensation Risk Consideration:** When positioned on the cold side of the construction the foil facing may increase 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.
- **Caution:** Electrical cables and equipment partially or completely surrounded with bulk thermal insulation may overheat and fail – this applies to both new and retro-fit applications. Refer to legislation and referenced standards.
- 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.
- Stated thermal performance is based on the insulation board only - reflective R-values are construction-dependent upon the adjacent airgap and must be determined in accordance with AS/NZS4859.2.
- Do not allow insulation to get wet after installation.
- For installations requiring Group Number and $SMOGR_{RC}$ ratings, install as per instructions with plastic insulation fasteners (Powers C5, Hilti or AA). Tape to seal edges and joints.

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

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

Limitations of Use

- This material is not classified as non-combustible in accordance with AS1530.1.
- Group number and $SMOGR_{RC}$ ratings only apply when installation requirements under 'Specific Design or Installation Instructions' are met.
- Maximum service temperature is 200°C.

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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 SUIIS/MSDS at Bradfordinsulation.com.au for more information.

Applicable Product Codes

R-VALUE (m ² K/W)	THICKNESS (mm)	NOMINAL LENGTH (m)	NOMINAL WIDTH (mm)	PIECES PER PACK	m ² PER PACK	PRODUCT CODE
R1.05	25	2.4	1200	12	34.56	467850
R1.30	30	2.4	1200	10	28.80	467851
R1.90	40	2.4	1200	7	20.16	467852
R2.35	50	2.4	1200	6	17.28	467853
R2.85	60	2.4	1200	5	14.40	467854

R-values apply to the unfaced board.

Additional Product Data

Maximum Service Temperature		• 200°C
Volatile Organic Compound (VOC) and Formaldehyde Emissions	When tested in accordance with California Specification CA 01350	• VOC <0.01 mg/m ³ • Formaldehyde 6 µg/m ³
Fire Hazard Properties	When tested in accordance with AS/NZS 1530.3	• Ignitability: 0 • Spread of flame: 0 • Heat Evolved: 0 • Smoke Developed: 0-1
Emissivity	When tested in accordance with ASTM E 408.	≤0.05 (Foil Facing)

Other Accreditation

Red List

Products do not exceed the maximum allowable ingredient limits as defined in the CDPH Standard Methos v1.2-2017, and levels provided in SCAQMD Rule 1113 June 3, 2011.

Products meet the requirements of the WELL Specification AE-ES-SPS-003 relating to WELL X11 Long Term Emission Control and WELL X12 Short Term Emission Control.