

Bradford PolymaxTM

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

Issue |

Product Type & Application

Bradford PolymaxTM insulation products are unfaced polyester thermal insulation wall and ceiling batts, and underfloor rolls. These products are designed for residential and commercial applications which do not require non-combustible certification.

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 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.

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 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.

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 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.

Limitations of Use

- **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.
- **IMPORTANT:** Polymax R2.0 Wall Batt's are high-density products that will not compress during installation and must be installed in a cavity of the correct size, with no obstructions. If installed in a cavity smaller than the product's nominal thickness, there is a risk of deformation or detachment of rigid wall lining materials.
- 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 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).
- Check the plasterboard, ceiling tile or ceiling grid manufacturer's weight limitations prior to increasing the recommended R-Values or densities to ensure the structure can support the additional weight of the insulation batts.
- Unfaced polyester is not a water or vapour barrier and is not suitable for water or vapour control.

Evidence of Suitability

- Testing to AS/NZS 4859.1 at 23°C across the following reports-
 - CSR Lab Report R-20082.
 - CSR Lab Report R-20083.
 - CSR Lab Report R-20084.
 - CSR Lab Report R-20085.
 - CSR Lab Report R-20086.
 - CSR Lab Report R-20087.
 - CSR Lab Report R-20088.
 - CSR Lab Report R-20089.
 - CSR NATA Lab Report NR-22007.
 - CSR NATA Lab Report NR-23113.
- Professional Assessment, AS/NZS 1530.3 –
 - CSIRO Assessment FCO-3601.

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Specific Design or Installation Instructions

- Isolate power before installation.
- **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.
- **IMPORTANT:** Polymax R2.0 Wall Batts are high-density products that will not compress during installation and must be installed in a cavity of the correct size, with no obstructions. If installed in a cavity smaller than the product's nominal thickness, there is a risk of deformation or detachment of rigid wall lining materials.
- 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.
- 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 accordance with AS/NZS 4859.2.
- Compensate for gaps as specified by the NCC 2019 Volume 2 Amend. 1, 3.12.1.2(e) and Table 3.12.1.1h, ABCB Housing Provisions Standard 2022 Amend. 2 13.2.3(5) and Table 13.2.3w, ABCB Housing Provisions Standard 2025 13.2.3(5) and Table 13.2.3w. Insulation should be installed at nominal thickness, except where it crosses structures, services and fittings.
- Ceiling perimeter batts may be required to achieve compliance depending upon roof and exterior wall design.
- Suitable for applications where the product is protected from direct UV light, water and wind pressure during and after installation.

For general installation guidance refer to the product installation guide at csrbradford.com.au

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

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.

Refer to the product SDS at csrbradford.com.au for more information.

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Applicable Product Codes – Polymax™ Wall Products

R-VALUE [m ² K/W]	THICKNESS [mm]	STANDARD SIZE [mm]	PIECES PER PACK	m ² PER PACK	COVERAGE PER PACK [m ²]-~	PRODUCT CODE
R1.5	75	1160 x 430	16	8.0	8.9	126817
R1.5	75	1160 x 580	16	10.8	11.8	126818
R1.5	90	1160 x 430	16	8.0	8.9	65297
R1.5	90	1160 x 580	16	10.8	11.8	65298
R2.0	75	1160 x 430	8	4.0	4.5	126819
R2.0	75	1160 x 580	8	5.4	5.9	126820
R2.0	90	1160 x 430	12	6.0	6.7	126871
R2.0	90	1160 x 580	12	8.1	8.9	126873

~Based on a single batt between 35mm framing, with one nogging per cavity. The framing ratio for wall heights 2400-2550mm high is used to determine coverage per pack. This does not include other intermediate or double/extra framing members around openings etc.

Where required by Standards and Codes, removal of insulation around recessed luminaires, electrical equipment or flues etc must be considered separately, and compensated for adequately.

Material R-values are determined in accordance with AS/NZS 4859.1 at 23°C and apply to the product installed at nominal thickness.

Applicable Product Codes – Polymax™ Ceiling Products

R-VALUE [m ² K/W]	THICKNESS [mm]	STANDARD SIZE [mm]	PIECES PER PACK	m ² PER PACK	COVERAGE PER PACK [m ²]-~	PRODUCT CODE
R2.0	120	1160 x 430	12	6.0	6.5	83145
R2.0	120	1160 x 580	12	8.1	8.6	83146
R2.5	140	1160 x 430	8	4.0	4.3	126350
R2.5	140	1160 x 580	8	5.4	5.7	117709
R3.0	180	1160 x 430	8	4.0	4.3	126361
R3.0	180	1160 x 580	8	5.4	5.7	126362
R3.5	180	1160 x 430	8	4.0	4.3	126363
R3.5	180	1160 x 580	8	5.4	5.7	126364
R4.0	200	1160 x 430	6	3.0	3.2	126876
R4.0	200	1160 x 580	6	4.0	4.3	126877

~ Based on a single batt between 35mm joist framing, without accounting for any intermediate framing members. Batts side by side between widely spaced truss bottom chords would achieve less coverage.

Where required by Standards and Codes, removal of insulation around recessed luminaires, electrical equipment or flues etc must be considered separately, and compensated for adequately.

Material R-values are determined in accordance with AS/NZS 4859.1 at 23°C and apply to the product installed at nominal thickness.

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Applicable Product Codes – Polymax™ Underfloor Products

R-VALUE [m ² K/W]	THICKNESS [mm]	STANDARD SIZE [mm]	PIECES PER PACK	m ² PER PACK	PRODUCT CODE
R1.5	90	15000 x 430	2	12.9	127822
R2.0	120	12000 x 430	2	10.3	127823
R2.0	120	11600 x 450	3	15.6	457352
R2.5	140	10000 x 430	2	8.6	127824
R2.5	140	10000 x 450	3	13.5	458506

Material R-values are determined in accordance with AS/NZS 4859.1 at 23°C and apply to the product installed at nominal thickness.

Additional Product Data

Fire Hazard Properties	When assessed in accordance with AS/NZS 1530 Part 3 - 1999	<ul style="list-style-type: none"> • Spread of Flame: 0 • Smoke Developed: 1
Sample Specification – Wall Products	The insulation material shall be Bradford Polymax™ Wall Batts having a material R-Value R ___ m ² K/W (specify R-Value) @ ___ mm (specify thickness) as manufactured by Bradford Insulation.	
Sample Specification – Ceiling Products	The insulation material shall be Bradford Polymax™ Ceiling Batts R ___ m ² K/W (specify R-Value) as manufactured by Bradford Insulation.	
Sample Specification – Underfloor Products	The insulation material shall be Bradford Polymax™ Underfloor Rolls R ___ m ² K/W (specify R-Value) as manufactured by Bradford Insulation.	

Acoustic Performance

Sound absorption results tested in accordance with AS/ISO 354-2006 [R2016] and NRC and SAA rated using ASTM C423-22. The practical sound absorption coefficient is determined as per AS/ISO 11654-2002 [R2016]. The weighted sound absorption coefficient is determined as per AS/ISO 11654-2002 [R2016].

Flow Resistivity tested in accordance with ASTM C522-03 [R2016].

Product		Frequency [Hz]						NRC	SAA	α_w
		125	250	500	1000	2000	4000			
Polymax Wall Batts	R1.5 75mm	0.35	0.70	0.80	0.85	0.85	1.00	0.80	0.80	0.85(H)
	R1.5 90mm	0.35	0.70	0.75	0.80	0.75	0.90	0.75	0.75	0.80
	R2.0 75mm	0.40	0.85	0.95	0.95	0.95	1.00	0.95	0.93	0.95
	R2.0 90mm	0.50	0.90	1.00	0.95	1.00	1.00	0.95	0.96	1.00
Polymax Ceiling Batts	R2.0 120mm	0.55	0.80	0.85	0.85	0.90	1.00	0.85	0.86	0.90
	R2.5 140mm	0.55	0.95	0.95	0.90	0.95	1.00	0.90	0.93	0.95
	R3.0 180mm	0.75	1.00	0.95	0.95	1.00	1.00	0.95	0.97	1.00
	R3.5 180mm	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.00
Polymax Underfloor Rolls	R4.0 200mm	0.95	1.00	1.00	1.00	1.00	1.00	1.05	1.09	1.00
	R1.5 90mm	0.35	0.70	0.75	0.80	0.75	0.90	0.75	0.75	0.80
	R2.0 120mm	0.55	0.85	0.85	0.85	0.95	1.00	0.85	0.87	0.90
	R2.5 140mm	0.60	0.95	0.90	0.90	1.00	1.00	0.90	0.93	0.95

Bradford Polymax[™]

Other Accreditation



National Asthma Council Sensitive Choice