

Thermoseal® 750 HD

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

Issue I

Product Type & Application

Thermoseal® 750 HD is a Heavy Duty classified product suitable for use as facing with bulk insulation products or as a sarking-type material. It is a reinforced paper based, double-sided reflective aluminium foil laminate; bonded using a fire-retardant adhesive. This product is a Water Barrier and Class 1 Vapour Barrier.

Compliance with the NCC

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

NCC 2022

- **Material Performance Properties** - Meets the requirements of the NCC 2022 Volume 1 F3D3 for sarking-type material through compliance with AS 4200.1.
- **Non- Combustible Sarking-Type Material Exemption** - This product may be used in accordance with the non-combustible sarking-type material exemption stated in NCC 2022 Volume 1 C2D10(6)(f) and NCC 2022 Volume 2 H3D2(1)(f) – it does not exceed 1mm in thickness and has a Flammability Index ≤5.
- **BAL and Fire Hazard Properties** - Where sarking is required by AS 3959 for construction of buildings in bushfire-prone regions BAL 12.5-FZ, this product meets the requirements of section 3.10. It also meets the fire hazard property requirements for sarking-type materials in all locations except exposed installations in fire control rooms or fire-isolated exits, in NCC 2022 Volume 1 S7C7. The product meets these requirements by having a flammability index ≤5.

NCC 2019

- **Material Performance Properties** - Meets the requirements of the NCC 2019 Volume 1 Amend. 1 F1.6 for sarking-type material through compliance with AS 4200.1.
- **Non- Combustible Sarking-Type Material Exemption** - This product may be used in accordance with the non-combustible sarking-type material exemption stated in NCC 2019 Volume 1 Amend. 1 C1.9(e)(vi) and Volume 2 Amend. 1 3.7.1.1(f) – it does not exceed 1mm in thickness and has a Flammability Index ≤5.
- **BAL and Fire Hazard Properties** - Where sarking is required by AS 3959 for construction of buildings in bushfire-prone regions BAL 12.5-FZ, this product meets the requirements of section 3.10. It also meets the fire hazard property requirements for sarking-type materials in all locations except exposed installations in fire control rooms or fire-isolated exits, in NCC 2019 Volume 1 Amend. 1 Specification C1.10. The product meets these requirements by having a flammability index ≤5.

Compliance with the NCC cont.

Compliance details apply to the facing product only. For details of CSR-manufactured faced Glasswool or Rockwool completed products, refer to their individual Product Technical Statements.

Evidence of Suitability

- Testing of the facing material only to AS 4200.1 across the following reports-
 - AWTa Report 16-005482 – *Resistance to Dry Delamination.*
 - AWTa Report 16-005482 – *Resistance to Wet Delamination.*
 - AWTa Report 16-005482 – *Moisture Shrinkage.*
 - Orora Report 24133 – *Folding Endurance.*
 - AWTa NATA Report 24-003454 – *Tensile Strength.*
 - AWTa NATA Report 24-003454 – *Edge Tearing.*
 - R&D Services Report RD16659 – *Emittance Classification.*
 - R&D Services Report RD19028-R3 – *Vapour Control Classification.*
 - AWTa Report 7-542982-NV – *Water Control Classification.*
 - Opal Research & Technology 28401 – *Air Barrier Classification.*
 - CSR Lab NATA Report NR-17213 – *Flammability Classification.*
 - CSR Lab Report R-20078 – *Thickness.*

Testing details apply to the facing product only. For details of CSR-manufactured faced Glasswool or Rockwool completed products, refer to their individual Product Technical Statements.

Conditions of Storage & Maintenance

- Store in the original packaging in a cool, dry area, away from UV light (direct sunlight).
- Do not pressure clean or use mineral-based cleaners on this product.

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

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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.
- Suitable for use as a facing material for bulk insulation.
- When installed for vapour and/or air control, this product should be sealed at overlaps (minimum 50mm), end laps, discontinuities and penetrations by suitable means such as heat and moisture resistant adhesive tape.
- When installed for water control, this product must have overlaps of minimum 150mm, or 50mm and be taped on the exterior face.
- Improved water control at vertical joints can be achieved by sealing overlaps, end laps, discontinuities and penetrations by suitable means such as heat and moisture resistant adhesive tape with a minimum 50mm overlap.
- **Application Suitability:** Suitable for installation on the exterior side of the building frame in NCC 2019 Climate Zones 1 to 5, and NCC 2022 Climate Zones 1 to 3 where a vapour barrier is specified. Always check cladding manufacturer's guidance to confirm compatibility and refer to the Condensation Risk Consideration section on this document for further guidance.
- Always follow the installation instructions in AS 4200.2, and those available on the Bradford website. For inclusion in BAL (Bushfire Attack Level) classified buildings, additionally adhere to the installation requirements of AS 3959.
- For products used in HVAC ductwork, design and installation should be in accordance with AS 4254.
- To maintain the water barrier properties of the material it should not be punctured, creased, crushed, sharply folded or dragged over the building structure during installation.
- **Condensation Risk Consideration:** This product is classified as a vapour barrier and is recommended to be positioned on the warm side of the construction to reduce 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. If in doubt, consider using a Class 4 Bradford Enviroseal vapour permeable product on the cold side of the construction.
- Reflective R-values achieved by the product rely upon adjacent air spaces and will vary depending upon the design and installation. Refer to AS/NZS 4859.2.

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

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.
- **WARNING:** This product is not structural - Do not walk on this product or place/store building materials or equipment on this product.
- When combined with bulk insulation, the fire performance properties of the final system should be re-assessed by a certifying authority or contact Bradford for more information.
- When used independently this product is not suitable for use as an exposed internal wall or ceiling lining and does not achieve 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). For access to CSR-manufactured product combinations that achieve Group Numbers, refer to faced-Glasswool Product Technical Statements.
- When used as a wall wrap this product is not suitable where a vapour permeable, pliable building membrane is specified for use in climate zones 6 to 8 in NCC 2019 Volume 1 Amend. 1 F6.2(a), and NCC 2019 Volume 2 Amend. 1 3.8.7.2(a), in climate zones 4-8 in NCC 2022 F8D3, ABCB Housing Provisions Standard 2022 10.8.1; or where the cladding manufacturer specifies a vapour permeable membrane.
- This product is not designed to withstand prolonged exposure to the elements - accordingly, the exterior cladding should be installed within 6 weeks in a wall application, or 2 weeks in a roof application. Products exposed during this period should be inspected for damage and repaired or replaced prior to installation of the exterior cladding to comply with the Product Warranty.
- Additional mechanical fasteners should be considered for products exposed to harsh weather conditions prior to cladding.
- Products exposed to harsh weather conditions prior to cladding should be inspected for damage and replaced or repaired to ensure compliance with the Product Warranty.
- Prior to cladding, it is good practice to protect this product from UV exposure and harsh weather conditions which may cause damage.
- This product does not have an antiglare surface to reduce glare and is not recommended for use independently as a roof sarking. Please refer to the Product Technical Statements of CSR-manufactured construction fabrics for products suitable for use independently as a sarking.
- This product is not suitable for submersion in water or continuous contact with soil.
- This product should not come into contact with wet concrete, or alkaline materials.

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Applicable Product Codes

WIDTH (mm)	LENGTH (m)	m ² PER ROLL	WEIGHT (kg)	PRODUCT CODE
750	300	225	94.76	15070
1000	60	60	25.46	15072
1000	300	300	126.26	15073
1000	500	500	210.26	15074
1000	1000	1000	405	169681
1200	60	72	30.5	15086
1200	300	360	151.46	15087
1200	500	600	252.26	15088
1200	1000	1200	504.26	15089
1350	300	405	170.36	15082
1350	500	675	283.76	15083
1350	1000	1350	567.26	15084
1500	500	750	315.26	15077
1500	1000	1500	630.26	15078

Additional Product Data – AS 4200.1

Duty Classification (AS 4200.1)	Heavy Duty	
Tensile Strength (AS 1301.448s and AS 4200.1)	≥ 12.5 kN/m	Machine Direction
	≥ 7.5 kN/m	Lateral Direction
Edge Tear Resistance (TAPPI T470 and AS 4200.1)	≥ 80 N	Machine Direction
	≥ 80 N	Lateral Direction
Folding Endurance (AS 1301.423 and AS 4200.1)	Pass	
Water Control Classification (AS/NZS 4201.4 and AS 4200.1)	Water Barrier	
Vapour Control Classification (ASTM E96 and AS 4200.1)	Class 1 Vapour Barrier	
Air Control Classification (ISO 5636-5 and AS 4200.1)	Air Barrier	
Emittance Classification (AS/NZS 4201.5 and AS 4200.1)	Reflective, ≤0.05	Inward Facing
	Reflective, ≤0.05	Outward Facing
Flammability Index (AS 1530.2 and AS 4200.1)	≤ 5 (Low)	
Electrical Conductivity (AS/NZS 3100 Mod. and AS 4200.1)	Conductive	
Resistance to Dry Delamination (AS/NZS 4201.1)	Pass	
Resistance to Wet Delamination (AS/NZS 4201.2)	Pass	
Moisture Shrinkage (AS/NZS 4201.3 and AS 4200.1)	≤ 0.5 %	
Thickness	< 1.0 mm	