

Thermoplast 990F White Perforated (Facing Material)

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

Issue **C**

Product Type & Application

Thermoplast 990F White Perforated is a facing product suitable for use in applications requiring aesthetic or acoustic properties. It is a reinforced, paper based, perforated laminate of white decorative lacquer and foil; bonded using a fire-retardant adhesive. Perforations provide a 9% openness factor. This product is not a Water Barrier or Vapour Barrier.

It can be installed as a facing material for Bradford Glasswool Building Blanket; either adhered or laid separately. See page 4 of this document for more details.

Compliance with the NCC

The perforations in this product make it unsuitable for applications for air, water, vapour or thermal control. As such it is outside the scope of AS 4200.1, and is not a sarking-type material or pliable building membrane as defined by the NCC.

For details on compliance when this facing material is used in conjunction with a Bradford bulk insulation board or blanket, refer to the individual Product Technical Statement. For details on use with CSR Bradford Glasswool Building Blanket refer to page 4 of this document.

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.
- The product should not be dragged over the building structure during installation.
- **Condensation Risk Consideration:** This product is **not** an air, vapour or water barrier and when installed alone may not be suitable for condensation control. As there are many factors which can influence condensation risk it is highly recommended that designers undertake a hygrothermal analysis of the building design.

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.
- This product is perforated and is not suitable for applications that require the control of air, vapour or water.
- When combined with bulk insulation, the fire performance properties of the final system should be re-assessed by a certifying authority if the application is not defined on page 4 of this document, or in other Bradford PTSs.
- This product is not suitable for use in HVAC applications. Thermoseal® 750 Perforated is recommended for HVAC use.
- When used independently this product does not have a Group Number and is not suitable for use as an exposed wall or ceiling lining. Refer to page 4 of this document for details on use in such applications with CSR Bradford Glasswool Building Blanket.
- 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. Products exposed for longer than the recommended periods will not be covered by the Product Warranty.
- 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 should not come into contact with wet concrete, or alkaline materials.
- This product is not suitable for submersion in water or continuous contact with soil.
- This product should not be disturbed after installation and is not suitable for applications exposed to contact or impact from activity.

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

Thermoplast 990F White Perforated (Facing Material)

Evidence of Suitability

- Testing of the facing material only to AS 4200.1 (as the most appropriate Australian Standard to follow) across the following reports is for information purposes only, not Code compliance-
 - CSIRO Report 5978-2A – *Tensile Strength before perforation.*
 - CSIRO Report 5978-2A – *Edge Tearing before perforation.*
 - CSR Lab NATA Report NR-20203 – *Flammability Classification.*
 - CSR Lab Report R-20078 – *Thickness.*

Testing details apply to the facing product only. For details of CSR Bradford-manufactured faced Glasswool or Rockwool completed products, refer to their individual Product Technical Statements, or to page 4 below for faced Glasswool Building Blanket.

Applicable Product Codes

WIDTH (mm)	LENGTH (m)	m ² PER ROLL	WEIGHT (kg)	PRODUCT CODE
1350	60	81	28.58	180831

Thermoplast 990F White Perforated (Facing Material)

Additional Product Data – AS 4200.1

As this perforated product is not suitable for air, water, vapour or thermal control it is not a sarking-type material or pliable building membrane as defined by the NCC; either alone or as a facing product on Glasswool or Rockwool. It is outside the scope of AS 4200.1. Test data given below are for information only, and not for compliance purposes.

Duty Classification (AS 4200.1) – Before Perforation	Medium Duty before Perforation	
Tensile Strength (AS 4200.1 and AS 1301.448s) – Before Perforation	≥ 9.5 kN/m before perforation	Machine Direction
	≥ 6.0 kN/m before perforation	Lateral Direction
Edge Tear Resistance (AS 4200.1 and TAPPI T470) – Before Perforation	≥ 65 N before perforation	Machine Direction
	≥ 65 N before perforation	Lateral Direction
Water Control Classification (AS/NZS 4201.4)	Non-Water Barrier	
Vapour Control Classification (ASTM E96)	Non-Vapour Barrier	
Air Control Classification (ISO 5636-5)	Non-Air Barrier	
Flammability Index (AS 1530.2)	> 5 (High)	Not indicative of non-compliance as perforated products are not sarking-type materials and are outside the scope of AS 4200.1. See 'Compliance with the NCC' above.
Electrical Conductivity	Conductive	
Thickness	< 1.0 mm	
Taping	Overlaps and joins in the facing material should be taped using the recommended tape for a consistent colour finish.	

Thermoplast 990F White Perforated (Facing on Building Blanket)

Product Type & Application

Thermoplast 990F White Perforated is a facing product suitable for use in applications requiring aesthetic or acoustic properties. It is a reinforced, paper based, perforated laminate of white decorative lacquer and foil; bonded using a fire-retardant adhesive. Perforations provide a 9% openness factor. This product is not a Water Barrier or Vapour Barrier.

It can be installed as a facing material for Bradford Glasswool Building Blanket as an exposed wall or ceiling lining; either adhered to the Glasswool Blanket in a CSR approved facility or laid separately with Bradford Building Blanket on site. This section details these applications.

Compliance with the NCC

For use in Australia, when correctly specified and installed, this product faced to a CSR Bradford Glasswool Building Blanket provides the following compliance:

NCC 2022

- **Thermal** - Refer to the CSR Bradford Glasswool Building Blanket PTS for details on thermal compliance of the insulation.
- **Fire Hazard Properties** - When used in specified CSR Bradford Glasswool systems detailed on this PTS only: This product achieves a Group Number and SMOGRA_{RC} in accordance with AS ISO 9705 and AS 5637.1. It may be used as an exposed internal wall or ceiling lining where specified by the NCC 2022 Volume 1 S7C4.
- **Fire Hazard Properties** - When used in specified CSR Bradford Glasswool systems detailed on this PTS only: This product meets the requirements of the NCC 2022 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 2019

- **Thermal** - Refer to the CSR Bradford Glasswool Building Blanket PTS for details on thermal compliance of the insulation.
- **Fire Hazard Properties** - When used in specified CSR Bradford Glasswool systems detailed on this PTS only: This product achieves a Group Number and SMOGRA_{RC} in accordance with AS ISO 9705 and AS 5637.1. It may be used as an exposed internal wall or ceiling lining where specified by the NCC 2019 Volume 1 Amend. 1 Specification C1.10 Clause 4.
- **Fire Hazard Properties** - When used in specified CSR Bradford Glasswool systems detailed on this PTS only: This product 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.

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.
- **Caution:** Electrical cables and equipment partially or completely surrounded with bulk thermal insulation may overheat and fail.
- **Condensation Risk Consideration:** This product is **not** an air, vapour or water barrier and when installed alone may not be suitable for condensation control. As there are many factors which can influence condensation risk it is highly recommended that designers undertake a hygrothermal analysis of the building design.
- Facings may be either adhered to the Glasswool in a CSR approved facility with an approved adhesive, or laid separately prior to the installation of the bulk insulation.
- The facing may be supported by safety mesh in the installation, as long as the mesh can support it under ambient conditions.
- The facing may be supported by screw or pin fasteners spaced not larger than a 350mm x 350mm square grid.
- Lap joints in the facing may be taped or left un-taped depending upon the application requirements.
- 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.
- Suitable for applications where the product is protected from direct UV light, water and wind pressure during and after installation.
- Suitable for underslab concrete roof/soffit applications in unconditioned spaces.
- The product should not be dragged over the building structure during installation.

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

Supplementary information - Additional installation guidance for this product can be found in AS 3999.

Thermoplast 990F White Perforated (Facing on Building Blanket)

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.
- This product is perforated and is not suitable for applications that require the control of air, vapour or water.
- Group number and SMOGRA_{RC} ratings only apply when the installation requirements listed under 'Specific Design or Installation Instructions' are met.
- This product is not suitable for use in HVAC applications.
- 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. Products exposed for longer than the recommended periods will not be covered by the Product Warranty.
- 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 should not be disturbed after installation and is not suitable for applications exposed to contact or impact from activity.
- The foil facing product should not come into contact with wet concrete, or alkaline materials.
- This product is not suitable for submersion in water or continuous contact with soil.

Evidence of Suitability

- Testing and Professional Assessment, AS ISO 9705 and AS 5637.1 for Thermoplast 990F White Perforated on Bradford Glasswool Building Blankets listed in 'Additional Product Data' on this PTS –
 - BRANZ Assessment FC11516.
- Professional Assessment, AS/NZS 1530.3 for Thermoplast 990F White Perforated on Bradford Glasswool Building Blankets listed in 'Additional Product Data' on this PTS –
 - Warringtonfire Assessment FAS200045.

Testing details apply to the facing material with CSR Bradford Glasswool Building Blanket only.

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

Additional Product Data

When manufactured and installed in accordance with CSR Bradford guidance, Bradford Thermoplast 990F White Perforated may be used with CSR Bradford Glasswool Building Blankets listed below, and achieve the following fire hazard properties-

FACING MATERIAL	GLASSWOOL – CSR BRADFORD BUILDING BLANKET	GROUP NUMBER (AS 5637.1)	SMOGRA _{RC} [m ² /s ² x 1000] (AS 5637.1)	FIRE HAZARD PROPERTIES (AS/NZS 1530.3)
Thermoplast 990F White Perforated	R1.0 50mm R1.3 60mm R1.5 75mm R1.8 80mm R2.0 90mm R2.3 100mm	1	> 100	<ul style="list-style-type: none"> • Ignitability: 0 • Spread of flame: 0 • Heat Evolved: 0 • Smoke Developed: 2
	R2.5 (HP) 100mm R2.5 110mm R3.0 130mm R3.3 140mm R3.6 145mm R4.2 175mm	2	> 100	

For more details on Bradford Building Blanket, refer to PTS029. Note that once a non-combustible Building Blanket has a facing adhered it is no longer deemed a non-combustible material.