

# TF200 THERMO LOW EMISSIVITY INSULATING BREATHER MEMBRANE

**P**rotect TF200 Thermo is a robust, highly reflective, insulating breather membrane which has been developed to enhance the thermal performance of timber frame walls, Structural Insulated Panels (SIPs), Cross Laminated Timber (CLT) panels and steel frame construction, and offers Class 1 surface spread of flame to BS 476-7. It provides a significant thermal benefit along with strength and performance enhancements over other reflective breather membranes.

Produced in the UK of triple ply construction, Protect TF200 Thermo's innovative design provides a highly reflective yet vapour permeable, low emissivity outer layer. When installed into an unventilated

airspace it effectively blocks infra red radiation, enhancing the thermal performance of the airspace and hence the overall U-value of the wall.

It has been proven in use for many years within timber frame

constructions, providing reliable weather protection and thermal performance enhancement.



**Aged Thermal Resistance**  
**0.77m²K/W**



## BENEFITS

- Aligned with STA Advice Note 18, with aged thermal resistance of 0.77m²K/W, incorporating printing and using typical 600mm stud centres.
- Resists the passage of water, wind blown snow and dust into the interior of the building.
- Low emissivity reflective surface enhances the thermal performance of the wall.
- Helps to meet the requirements of Approved Document Part L and Scotland Part J.
- Corrosion and damage resistant reflective surface.
- UV and heat stabilised.
- Good nail tear resistance compared with alternative membranes.
- High burst strength, tough and durable.
- Unaffected by conditions found in timber frame walls.
- Meets the permeability requirements recommended by TRADA and NHBC.
- BM TRADA independently certified for all applications.



### Top tip

Use the membrane solution of Protect TF200 Thermo, TF InterFoil and VC Foil Ultra within a timber frame panel to achieve thermal efficiency and potential insulation cost savings.



### Dimensions

Roll sizes: 0.3m, 0.6m, 2.7m and 3.0m x 100m. 1.5m x 50m.

Roll weights: 4.6kg, 9.2kg, 42kg, 46kg, 12kg.

### Appearance

High purity aluminium micro perforated upper surface and embossed lower surface.

### Compatibility

As with all nonwoven spunbond materials do not lay in direct contact with undried timber preservatives (whether water or solvent based).

For more information visit

[www.protectmembranes.com/tf200thermo](http://www.protectmembranes.com/tf200thermo)

### Specification clause:

Timber frame breather membrane to be Protect TF200 Thermo supplied by Protect Membranes, 2 Brooklands Road, Sale, Cheshire M33 3SS. Tel: 0161 905 5700 Fax: 0161 905 2085. Email: [info@protectmembranes.com](mailto:info@protectmembranes.com) Breather membrane to be non-woven PP core, with a permeable high purity aluminium foil layer with a thermal resistance of 0.77m<sup>2</sup>K/W to BS EN ISO 8990 & BS EN 15976 (aged – incorporates printing) and a vapour resistance of 0.36 MNs/g / 0.071 S<sub>d</sub> to BS EN ISO 12572. Breather membrane to be fitted into wall on the cold side of the insulation in accordance with TRADA recommendations and manufacturer's instructions.

### Improvement in thermal resistance values using Protect TF200 Thermo with reflective technology

Wall heat flow	Airspace (mm)	Unventilated airspace:		Improvement with Protect TF200 Thermo
		With no special treatment (m <sup>2</sup> K/W)	With Protect TF200 Thermo facing into airspace (m <sup>2</sup> K/W)	
Horizontal	>20	0.18	0.77* (aged)	328%

### PERFORMANCE

	MD (along roll)	CD (across roll)
Nail tear strength (N) to EN 12310-1 with mods	239	243
Tensile strength (N/50mm) to EN 12311-1 with mods	210	205
Water vapour resistance to BS EN ISO 12572	0.36 MNs/g / 0.071 S <sub>d</sub>	
Thermal resistance (m <sup>2</sup> K/W) to BS EN ISO 8990 & BS EN 15976 (incorporates printing)	0.77* (aged)	
Emissivity of the surface (ε) unaged to BS EN 15976	0.02**	
Emissivity of the surface (ε) aged to BS EN 15976	0.03**	
Weight (g/m <sup>2</sup> )	150	
Resistance to water penetration to BS EN 13111	Pass	Class W2 No leakage (aged)

\* Independently tested by National Physical Laboratories (NPL) in a typical UK house timber frame wall cavity and verified by BM TRADA.

\*\* Independently tested by a European notified laboratory.

### Related products

Protect VC Foil Ultra AVCL membrane: [www.protectmembranes.com/vcfoilultra](http://www.protectmembranes.com/vcfoilultra)

Protect TF InterFoil breather membrane: [www.protectmembranes.com/tfinterfoil](http://www.protectmembranes.com/tfinterfoil)

Stockist's stamp



### PROTECT MEMBRANES

2 Brooklands Road, Sale, Cheshire M33 3SS

Tel: 0161 905 5700 Fax: 0161 905 2085

Email: [info@protectmembranes.com](mailto:info@protectmembranes.com) Web: [www.protectmembranes.com](http://www.protectmembranes.com)

Protect Membranes maintains a policy of continuous development and reserves the right to amend product specifications without notice.



A division of Building Product Design Ltd. Company Registration No: 3944123

