



FRAMEFOIL FR

A2 FIRE RATED, LOW EMISSIVITY AIR AND VAPOUR CONTROL LAYER

NEW

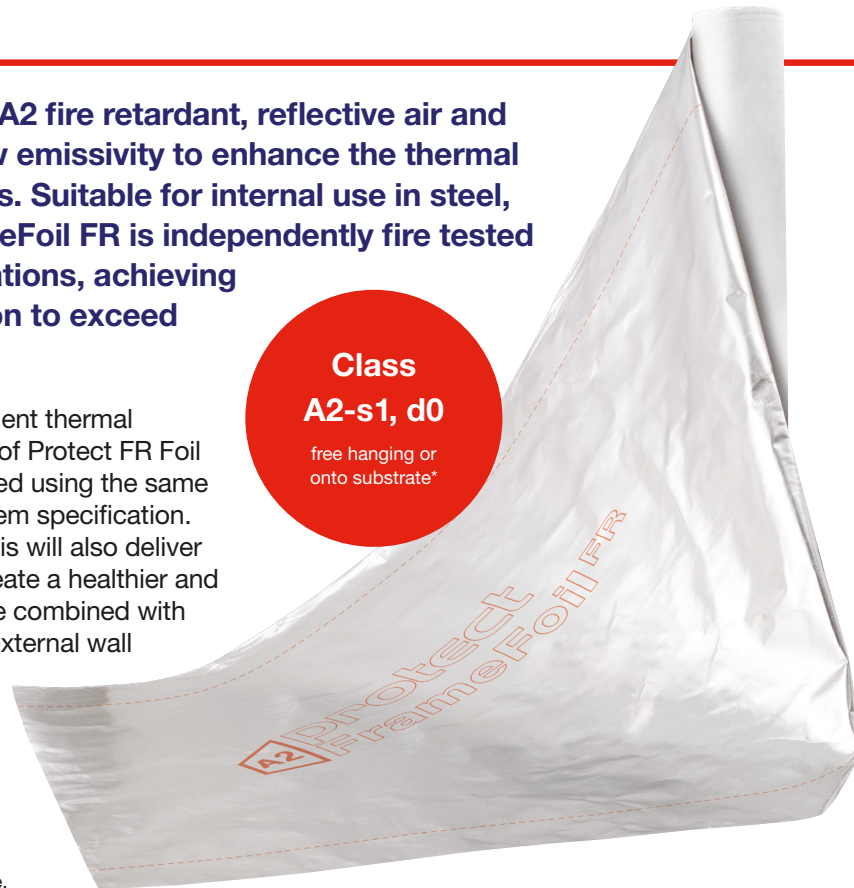
Protect FrameFoil FR is a robust, Class A2 fire retardant, reflective air and vapour control layer (AVCL), offering low emissivity to enhance the thermal performance of walls, ceilings and floors. Suitable for internal use in steel, masonry and timber construction, FrameFoil FR is independently fire tested in both free hanging and system applications, achieving an A2-s1, d0 reaction to fire classification to exceed current fire regulations.

Offering Class A2 fire rated performance and excellent thermal resistance, this AVCL is complemented by the use of Protect FR Foil tape, which is available separately and manufactured using the same A2 material, giving reassurance on a fire rated system specification. By ensuring membrane overlaps are well sealed, this will also deliver effective airtightness and vapour control to help create a healthier and more energy efficient building. FrameFoil FR can be combined with the Protect FrameSafe FR or FrameSafe 5000 FR external wall breather membrane to provide a wall solution inside and out, giving optimum defence against the elements during construction and added protection for the life of the building.

* Tested by an external laboratory both free hanging and as part of a system in an end use application with Protect FrameFoil FR fixed over A1 and A2 substrates with a minimum density of 37.5kg/m³ and all laps sealed using Protect FR Foil tape with a maximum 10% coverage.

**Class
A2-s1, d0**

free hanging or
onto substrate*



BENEFITS

- Fully compliant with EN 13501-1 and exceeds requirements in UK Building Regulations Approved Document B & Building Regulations Technical Guidance Document B in Ireland.
- Membrane and tape independently fire tested as a system, providing reassurance in product specification across all building heights.
- Reflective membrane featuring an advanced glass fibre fabric composition with added tensile strength and durability.
- Protect FR Foil tape available separately to seal laps for complete system solution.
- UKCA & CE marked.
- Ideal for modular, offsite and traditional build on both residential and commercial projects.
- Strong air and vapour resistance, helping to avoid condensation risk, in accordance with BS 5250.
- Low emissivity reflective surface achieving an aged thermal resistance R-value of 0.64m²K/W, enhancing the energy efficiency of the wall when facing into a still air cavity of ≥20mm.



protect
FrameFoil^{FR}

bimstore

NBS Source
PARTNER

FRAMEFOIL FR

A2 FIRE RATED, LOW EMISSIVITY AIR AND VAPOUR CONTROL LAYER

Dimensions

Roll size: 1.2 m x 50 m (60 m²)

Roll weight: 10.4 kg

Appearance

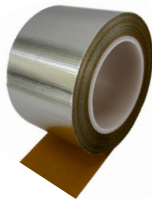
Lacquered aluminium foil upper surface and a laminated woven glass fibre mesh lower layer.

Compatibility

Do not lay in direct contact with undried timber preservatives (whether water or solvent based).

Accessories and fixing

Separate Protect FR Foil tape is available in 75 mm wide x 25 m long format to seal Protect FrameFoil FR membrane laps. This is third party fire tested as part of a system application.



Installation

Protect FrameFoil FR is installed on the warm side of the structure immediately adjacent to the insulation and can be used on walls, ceilings and floors to improve thermal performance and reduce air leakage, when Protect FR Foil tape is used. This ensures Building Regulations and airtightness standards are met.

For recommended mechanical fixings along with installation and detailing guidance, please contact Glidevale Protect's Technical team at technical@glidevaleprotect.com

Fire testing

Full independent fire test reports for Protect FrameFoil FR and Protect FR Foil tape used as part of a system are also available on request.

Specification clause:

Class A2 fire rated air and vapour control layer (AVCL) to be Protect FrameFoil FR high performance, reflective, glass fibre fabric supplied by Glidevale Protect, Studio 9, Jackson House, Sibson Road, Sale, Greater Manchester, M33 7RR.
T: +44 (0)161 905 5700
F: +44 (0)161 905 2085
E: info@glidevaleprotect.com

Fire rated membrane to have a lacquered aluminium foil upper surface and woven glass fibre mesh lower layer. The product should have a weight of 165 g/m² and be suitable for installation into low, medium and high rise structures. The product should achieve the following technical characteristics: Reaction to fire - Class A2-s1, d0 (free hanging or fitted over either an A1 or A2 substrate*) to BS EN 13501-1, exceeding Building Regulations Approved Document B and Building Regulations Technical Guidance Document B requirements. Membrane should achieve a water resistance of Class W1, a vapour resistance of $\geq 7500 \text{ MNs/g}$ and an equivalent air layer thickness of $\geq 1500 \text{ S}_d$ (m) to BS EN ISO 1931. Membrane to achieve an aged thermal resistance R-value (m²K/W) of 0.64 when used on the wall, with the reflective surface facing into a still airspace of $\geq 20 \text{ mm}$ to BS EN 15976. AVCL to be fitted onto the warm side of frame in accordance with manufacturer's instructions and membrane laps should be sealed with Protect FR Foil tape, independently fire tested as part of a system.

*Class A2-s1, d0 when tested by an independent laboratory both free hanging and as part of a system, fixed over A1 & A2 substrates with all laps perimeter sealed with Protect FR Foil tape.

For more information visit: glidevaleprotect.com/framefoil

PERFORMANCE TO BS EN 13984		
	MD	CD
Nail tear strength (N) to BS EN 12310-1 modified to BS EN 13859-2	≥ 150	≥ 130
Tensile strength (N/50mm) to BS EN 12311-1 modified to BS EN 13859-2	≥ 700	≥ 700
Thermal resistance (m ² K/W) heat flow horizontal to BS EN 15976	R-value 0.64 (aged)	
Emissivity of the surface (ε) aged to BS EN 15976	0.06	
Weight (g/m ²) to BS EN 1849-2	165	
Reaction to fire to BS EN 13501-1 (BS EN ISO 1716 and BS EN 13823)	Class A2-s1, d0 *	
Water vapour resistance to EN ISO 1931	$\geq 7500 \text{ MNs/g}$	
Equivalent air layer thickness to EN ISO 1931	$\geq 1500 \text{ S}_d$	
Resistance to water penetration to BS EN 1928 modified to BS EN 13984	Pass - Class W1	

MD = Machine Direction (along roll). CD = Cross Direction (across roll).
* Tested by an external laboratory both free hanging and as part of a system in an end use application with Protect FrameFoil FR fixed over A1 and A2 substrates with a minimum density of 37.5 kg/m³ and all laps sealed using Protect FR Foil tape with a maximum 10% coverage.

Thermal resistance

Facing the reflective surface of FrameFoil FR into a still airspace delivers a thermal improvement on the wall or ceiling build up when compared to no reflective membrane being used. For horizontal heat flow within the wall using a $\geq 20 \text{ mm}$ airspace, this provides a thermal resistance R-value of 0.64 m²K/W and an emissivity of 0.06 (aged). For upwards heat flow in the ceiling, within a $\geq 13 \text{ mm}$ airspace, a thermal resistance R-value of 0.44 m²K/W and an emissivity of 0.06 (aged) can be delivered.

To obtain U-value calculations using this product in the build up and find out how thermal enhancements can be made, contact Glidevale Protect's Technical team.

Related products

Protect FrameSafe FR external wall breather membrane: glidevaleprotect.com/framesafe

Protect FrameSafe 5000 FR external wall breather membrane for open joint facades: glidevaleprotect.com/framesafe5000



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Glidevale Protect maintains a policy of continuous development and reserves the right to amend product specifications without notice. The company is a division of Building Product Design Ltd. Company registration 3944123. Printed on sustainably sourced paper.

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