

Proctorwrap Reflect®

REFLECTIVE BREATHER MEMBRANE

Proctorwrap Reflect® is a vapour permeable low emissivity membrane specifically designed to enhance the thermal performance of timber and steel frame structures. Proctorwrap Reflect is a non-woven polypropylene foil laminate, providing excellent breathability, as well as secondary protection to the building during construction. The product is installed on the external face of the timber frame, foil side face out, similar to that of a traditional breather membrane but with added thermal benefits.

Proctorwrap Reflect complies with the vapour resistance requirements set out by TRADA and the NHBC. The existing legislation requires a breather membrane to have a vapour resistance not greater than $S_d 0.12\text{m} / 0.6 \text{ MNs/g}$. Proctorwrap Reflect has a vapour resistance of $S_d 0.08\text{m} / 0.4 \text{ MNs/g}$.

The A. Proctor Group can provide a range of solutions, with U-values, down to as low as $0.18\text{W/m}^2\text{K}$ in standard timber frame walling applications.

Once Proctorwrap Reflect is applied to the walls, the primary wall covering should be installed within 3 months.

Proctorwrap Reflect must be covered as soon as practically possible on completion of installation. Any damaged areas should be repaired or replaced before completion.

KEY BENEFITS

- R value 0.71.
- Competitively priced.
- Enhanced foil surface.
- Low vapour resistance - complies with TRADA and NHBC requirement.
- Water resistant.
- High strength to weight ratio.
- Improved thermal resistance.
- 1.5, 2.7 & 3 metre wide rolls.



PHYSICAL PROPERTIES

Property	Test Method	Mean Results
Roll Size	n/a	1.5m x 50m 2.7m x 100m 3m x 100m
Mass per unit area	ISO 536	140g/m ²
Emissivity	EN 15976	<0.05
Equivalent R value		0.71 m ² K/W
S _d value	EN 12572, Condition C	0.08m
Resistance to water penetration	EN 13111:2010	Class W2
Reaction to fire	EN 13501-1	Class E
Tensile force	EN 12311-1, mod with EN 13859-2:2014 Annex A	MD 200 N/50mm CD 140 N/50mm
Elongation		MD 30% CD 40%
Tearing resistance	EN 12310-1, mod with EN 13859-2:2014	MD 140N CD 180N
Resistance to air penetration	EN 12114:2000	20m ³ /(h*m ² *50Pa)

Reflectatherm Plus

REFLECTIVE VAPOUR CONTROL LAYER

Reflectatherm Plus is a reflective, high resistance air and vapour control layer for internal walls, ceilings and floors, specifically designed to enhance the thermal performance when placed on the warm side of the insulation.

The membrane should be installed with the foil side facing the cavity. In ceilings the product is placed between the underside of the rafters and the ceiling lining. Adjacent sheets should be lapped by at least 150mm and sealed with a suitable tape. Minimise penetrations caused by services and seal all joints.

PHYSICAL PROPERTIES

Property	Test Method	Mean Results	
Roll Size - Standard	n/a	1.5x50m, 2.7x100m & 3x100m	
Base Membrane			
Mass per unit area	ISO 536	140g/m ²	
Emissivity	EN 15976	<0.05	
Sd value	EN 1931	>150m	
Resistance to water penetration	EN 13111:2010	WI	
Reaction to Fire	EN 13501-1	Class E	
Tensile force	EN 12311-1, mod with EN 13859-2:2014 Annex A	MD 200N/50mm	CD 140N/50mm
Elongation		MD 30%	CD 40%
Tearing resistance	EN 12310-1, mod with EN 13859-2:2014	MD 140N	CD 180N



KEY BENEFITS

- R value of 0.72 m²K/W when used with a minimum 19mm service cavity.
- High vapour resistance.
- Improved airtightness.
- Creates service void.
- Creates an unbroken vapour control layer.
- Sd Value of >150m.
- Help meets the requirements of the Part L in England and Wales, Section 6 in Scotland, and Technical Guidance Document L in Ireland.



U Value - Performance Ready Reckoner

Stud	89mm					95mm					115mm					140mm					145mm				
Insulation k Value	0.04	0.037	0.035	0.032	0.022*	0.04	0.037	0.035	0.032	0.022*	0.04	0.037	0.035	0.032	0.022*	0.04	0.037	0.035	0.032	0.022*	0.04	0.037	0.035	0.032	0.022*
Proctorwrap Reflect	0.32	0.31	0.30	0.29	0.25	0.31	0.30	0.29	0.28	0.24	0.28	0.27	0.26	0.25	0.22	0.24	0.23	0.23	0.22	0.19	0.24	0.23	0.22	0.21	0.18
Reflectatherm Plus	0.34	0.33	0.32	0.31	0.26	0.32	0.31	0.31	0.29	0.25	0.29	0.29	0.27	0.26	0.22	0.25	0.24	0.24	0.23	0.19	0.25	0.24	0.23	0.22	0.19
Proctorwrap Reflect & Reflectatherm Plus	0.28	0.27	0.27	0.26	0.22	0.27	0.26	0.26	0.25	0.21	0.25	0.24	0.23	0.22	0.19	0.22	0.21	0.21	0.20	0.17	0.21	0.21	0.20	0.19	0.17

0.30 or above 0.23 - 0.29 0.22 or less

*When utilising rigid insulation boards between studs, accommodation for services should be considered. The above calculations are based on fully filling the stud with insulation and the provision of a service cavity.

