

Description

FR Window & Door Sealing Membrane (ME010) is a vapour permeable polyester, airtight and fully watertight membrane used as a perimeter membrane seal to the external side of glazed units such as windows, doors, and curtain walling.

When correctly installed with illbruck FR Membrane Adhesive (SP025), it provides an air and fully watertight seal over the construction joint which remains breathable to enable any trapped incidental moisture or condensation to escape out through to the external side of the wall construction.

It can also be used to seal and protect horizontal and vertical linear joints between sheathing boards and the main structure.

It is available in a range of pre-cut slit widths from 60 mm to 400 mm wide.

When bonded to compatible substrates with a minimum Class A2-s1, d0 fire performance with illbruck FR Membrane Adhesive (SP025), the combined system has been tested and achieves a Class B-s1, d0 fire performance in accordance with EN 13501-1.

When tested for water resistance in accordance with EN 1928 with a 2 kPa head of water, FR Window & Door Sealing Membrane (ME010) remains watertight for 24 hours and meets both the criteria for a Class W1 membrane in accordance with EN 13859-2 and the more onerous requirements stated for a Type A water resistant membrane as given in EN 13984.

Illbruck's FR Window & Door Sealing Membrane (ME010) should be used in conjunction with FR Breather Membrane Black (ME014) as a full facade breather membrane. When used together they form a continuous weather and airtight barrier around the full building envelope including structural openings.

It is important that FR Window & Door Sealing Membrane (ME010) is installed in the correct orientation with the smooth/coated side always facing outwards towards the external environment.

Colour

Black

Packaging

Item No.	Roll Width* (mm)	Roll Length (mm)	Rolls/Box
500932	60	50 m	1
500931	100	50 m	1
500930	150	50 m	1
500929	200	50 m	1
500928	250	50 m	1
346531	300	50 m	1



ME010

FR Window & Door Sealing Membrane

Usage / Purpose

Illbruck FR Window & Door Sealing Membrane (ME010) is a permanently UV stable, specially coated polyester based, airtight and watertight membrane that is compliant with the regulatory requirements for use on 'Relevant and Higher Risk Buildings' as described in Approved Document B.

FR Window & Door Sealing Membrane (ME010) is available in a range of slit widths to seal the external perimeters of glazed units and curtain walling.

Key Benefits

- Permanently UV-resistant
- Reaction to Fire Class B-s1, d0 when bonded with FR Membrane Adhesive (SP025)
- Easy to apply, fold and manipulate.
- Water resistant to EN 1928 at 24 hours and resistant to wind driven rain.
- Airtight and can achieve Passiv Haus standards.
- Breathable (vapour-open)
- High range of in-service temperature resistance
- Non branded, plain black finish – suitable for visible applications
- Environmentally friendly- EC1+

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500927	350	50 m	1
346532	400	50 m	1

*Other widths are available upon request – please consult Tremco CPG UK Customer Services with your requirements and for confirmation of lead times.

Technical Information

Property	Standards	Result
Grammage	EN 1849-2	Approx. 180 g/m ²
Thickness	EN 1849-2	Approx. 0.4 mm
Reaction to Fire	EN 13501-1	Class B-s1, d0
Resistance to Water Penetration	EN 1928 (EN 13859-2)	Class W1- watertight after 2 hours
	EN 1928 (EN 13984)	Type A - watertight after 24 hours
	EN 1027	Weathertight at 1,200 Pa
Resistance to Water Penetration After Ageing	EN 1297/1296	Class W1
Maximum Tensile Strength- Lengthwise/ Crosswise	DIN 12311-1	Approx. 450/180 N ± 15%
After Ageing	EN 1297/1296	>75 % of value as new
Elongation of Break- Lengthwise/Crosswise	EN 12311-1	Approx. 30/35% ± 15%
After Ageing	EN 1297/1296	>75 % of value as new
Tear Growth Resistance / Nail Shank	EN 12310-1	Approx. 45 / 105 N ± 20%
Vapour Diffusion- Equivalent Air Layer Thickness	EN ISO 12572	Sd-value: Approx. < 0.12 m
Air Permeability	EN 12114	≤ 0.1 m ³ /m ² .h.50 Pa
Service Temperature	EN 13859-1	-40°C to +150°C
Flexural Behaviour in Cold Conditions	EN 1109	<-30°C
UV Resistance	Exposed- 12 months	
	Covered- Permanent (including open joints to max. 50 mm).	
Storage	Store in shaded, dry conditions and avoid stacking pallets	
Shelf Life	1 year when stored as recommended in original unopened packaging	

Intended Scope of Application

- FR Window & Door Sealing Membrane (ME010) can be applied around the perimeter of windows and doors which project forward from the backing wall in a built-up wall construction such as SFS and timber frame constructions or sheathed walls.
- When using FR Window & Door Sealing Membrane (ME010), apply to the window perimeter first, followed by the installation of FR Breather Membrane Black (ME014) full façade membrane in order to provide a robust, fully bonded seal around the window interfaces and the façade.
- The principal purpose of FR Window & Door Sealing

Membrane (ME010) is to:

- Prevent air and water penetration through the window/ door perimeter joint.
- Manage and control moisture migration to the cold side of the wall build up.
- Remain vapour open to prevent localised instances of interstitial condensation from occurring.
- Prevent unplanned air loss around windows and doors.
- FR Window & Door Sealing Membrane (ME010) adhesively fixed with SP025, when tested as a system is classified as Class B-s1, d0 in accordance with EN 13501-1 and conforms with Approved Document B, Requirement B4 and Regulation 7.

Application

To provide maximum UV resistance and to maintain the fire performance of the product, FR Window & Door Sealing Membrane (ME010) must be applied with the smooth/coated face exposed to the external environment. The textured side of the membrane is always bonded back to the substrate to maximise the adhesive bond when using FR Membrane Adhesive (SP025).

Window Membrane (as a perimeter or linear seal):

FR Window & Door Sealing Membrane (ME010) is suitable for sealing window, door, curtain wall assemblies and other linear joints. When installed around windows or doors, FR Window & Door Sealing Membrane (ME010) is applied to all four sides of the glazed frame with the application starting at the sill, followed by the jambs, and finishing with the head. All membrane overlaps must be a minimum 100 mm and formed in a downwards direction to provide a robust seal.

FR Window & Door Sealing Membrane (ME010) should be applied in accordance with illbruck best practice, specification guidance and method statements. For a detailed step by step guidance on applying FR Window & Door Sealing Membrane (ME010) as a perimeter membrane seal, please refer to “Application of illbruck membranes using paste adhesive”, available on CPG UK website.

FR Window & Door Sealing Membrane (ME010) is bonded initially on the leading edge of the sill, jambs and head of the glazed frame using FR Membrane Adhesive (SP025). The trailing edge is then lapped a nominal 100 mm (minimum 50 mm) onto the backing structure and bonded with FR Membrane Adhesive (SP025). To bond the membrane, a 10 mm diameter bead of adhesive should be applied 15 mm inside of the membrane edge and consolidated with a seam roller to achieve a 20 – 30 mm wide x 2- 3 mm thick continuous band around the membrane perimeter. When correctly installed, the adhesive will ooze out and be visible around the edge of the membrane. This excess sealant should not be scraped away or flattened as this can damage the membrane. The use of additional sealant around the perimeter of the membrane is not required. Once installed,

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the membrane should be inspected and any noticeable voids, gaps or pin holes sealed with SP025. The minimum bond width for any application is an unobstructed 20 mm bonding zone around the entire perimeter frame. Where this is not possible, please consult Tremco CPG UK's technical department. An optional termination bar may be considered to provide mechanical retention of the membrane.

If the membrane interfaces with a third-party material such as sealants, hot melt, torch-down or cold applied liquid waterproofing membrane, the compatibility of the FR Membrane Adhesive (SP025) should be confirmed by consulting with Tremco CPG UK technical department. When bonding FR Membrane Adhesive (SP025) to silicone-based sealants (e.g. on sheathing board joints), the area should be primed using illbruck AT140 Primer applied directly over the cured sealant areas.

At any door sills or low thresholds (such as balconies) where it has been assessed that there is a risk of standing water or long-term submersion of the membrane, please consult with Tremco CPG UK technical department.

When applying FR Window & Door Sealing Membrane (ME010) with FR Breather Membrane Black (ME014) full facade membrane, the window application should be completed first, followed by the façade application. The FR Breather Membrane Black (ME014) should form an overlap which is sealed to the FR Window & Door Sealing Membrane (ME010) using ME316 Endurance Tape. The connection to the FR Window & Door Sealing Membrane (ME010) of the trailing edge of the membrane to the structure should be completed as soon as possible to avoid leaving the trailing edge open to the effects of wind displacement or damage.

For linear joint seals, with a suitable width roll of FR Window & Door Sealing Membrane (ME010) is used, and bonded either side of the joint with FR Membrane Adhesive (SP025). The minimum overlap on either side of the joint should be a minimum of 30 mm.

Applicators are advised to obtain full on-site training and consult the relevant method statements in addition to reading this Technical Data Sheet.

For further information regarding FR Membrane Adhesive (SP025) adhesive please consult technical data sheet,

available from website (www.tremcocpg.eu).

Health & Safety Precautions

Safety data sheet must be read and understood before use.

Technical Service

Tremco CPG UK Ltd has a team of experienced Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Services on 01942 251400.

Guarantee / Warranty

Tremco CPG UK Ltd products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco

CPG UK Ltd written instructions and (b) in any application recommended by Tremco CPG UK Ltd, but which is proved to be defective, will be replaced free of charge.

No liability can be accepted for the information provided in this leaflet although it is published in good faith and believed to be correct.

Tremco CPG UK Ltd Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.



Tremco CPG UK Limited
Coupland Road
Hindley Green, Wigan WN2 4HT
United Kingdom
T: +44 1942 251400
F: +44 1942 251410

info.uk@tremcocpg.com
www.tremcocpg.eu