

# **Description**

ME010 is a water and air tight but vapour permeable polyester based breather membrane in two basic formats highly suited for use as a monolithic breather membrane. It can be used for sealing around window, door, and curtain wall perimeter tolerance joints (slit into a range of widths), or for sealing sheathing board to board or sheathing board to structure joints (supplied on 1,500 mm x 50 m rolls or in a smaller range of widths).

ME010 complies with the reaction to fire classification Class B-s3, d0 according to EN13501-1. When used as a monolithic breather membrane, linear gap or window perimeter membrane seal, in conjunction with SP025 Fire Membrane Adhesive, the system achieves Class B-s1, d0 (better than the requirement).

# Colour

Black

## **Packaging**

Item No.	Roll Width* (mm)	Roll Length (mm)	Rolls/Box	
398872	1,500	50 m	1	
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	
500927	350	50 m	1	
346532	400	50 m	1	

<sup>\*</sup>Other widths are available upon request – please consult tremco illbruck Customer Services with your requirements and for confirmation of lead times.

# **Technical Information**

Property	Standards	Result
Grammage	EN 1849-2	Approx. 160 g/m <sup>2</sup>
Thickness	EN 1849-2	Approx. 0.5 mm
Reaction to Fire	DIN 4102	B1
Reaction to Fire	EN 13501-1	Class B-s1, d0, fixed to mineral wool or sheathing board, (min. A2-s1, d0), including SP025 Adhesive
Resistance to Water Penetration	EN1928 EN1027	W1 600 Pa
After Ageing	EN 1297/1296	W1
Maximum Tensile Strength - Lengthwise/ Crosswise	DIN 12311-1	Approx. 400/230 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. 100 / 120 N ± 15%



# **ME010**

# Façade UV & Fire Membrane

# Usage / Purpose

This high performance breather membrane can be directly laid on sheathing board or thermal insulation behind partially or fully open rain screen façades or curtain walling. ME010 is a highly vapour open, watertight, polyester-based breather membrane, with Class B-s1, d0 to EN13501-1 –including adhesive, tested by MPA Hannover. Suitable for full façade or window perimeter sealing applications.

# Key Benefits

- Permanently UV-resistant
- Class B-s1, d0 to EN13501-1 fixed to Class A2-s1, d0 mineral wool insulation or sheathing board. Tested with SP025 adhesive as a system
- High range of in-service temperature resistance
- Highly vapour-open
- Non-branded, plain black finishsuitable for visible applications
- Airtight and weather-tight
- Available with self-adhesive strip



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Vapour Diffusion- Equivalent Air Layer Thickness	EN ISO 12572	Sd-value: Approx. 0.04 m	
Air Permeability	EN 12114	Approx. 0.1 m <sup>3</sup> / m <sup>2</sup> .h.50 Pa	
Service Temperature	EN 13859-1	-40°C to +150°C	
Flexural Behaviour in Cold Conditions	EN 1109	<-20°C	
UV Resistance		Permanent	
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**

- ME010 can be applied to the full façade or around the perimeter of windows and doors which project forward from the backing wall in a built-up wall construction such as SFS or timber framed and sheathed walls.
- When using ME010 for both applications, apply to the window perimeter first, followed by the full façade in order to provide a robust, fully bonded seal around the window interfaces.
- The principal purpose of ME010 is to:
  - Prevent water penetration through the window/door perimeter gap or full façade from outside to inside.
  - Manage and control moisture migration on 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.
- ME010 is classified under DIN 4102-1 as B1 ("not easily flammable"), and Class B-s1, d0 ("very limited contribution to fire") under EN13501-1 and conforms with Approved Document B, Requirement B4, Regulation 7. The MPA assessment (report no. 201173) includes SP025 Façade Fire Adhesive. ME010 is not intended to act as a fire barrier in its' own right.
- ME010 may add an additional level of protection specifically to the window perimeter joint when applied adjacent to other proprietary fire-resistant materials such as Cavity Closures and Fire Socks that conform to BS476: Part 20.

# Application – for Window Perimeter Sealing

#### **PREPARATION**

- Ensure surfaces are clean, dry, free from dust, debris and any other contaminants that may affect adhesion.
- Beware that the excessive use of pre-applied silicones and or intumescent mastics in the adjacent area may affect the adhesion of SP025. We recommend that silicones and mastics used to seal joints between sheathing boards and concrete interfaces are used sparingly to prevent over-spill into an area where the SP025 is likely to be used.
- The use of illbruck primers may be required if in doubt please consult CPG UK technical department before commencing works.

- When bonding SP025 to silicone based sealants, use AT140
   Primer direct to the cured sealant substrate.
- ME010 can be applied to the entire perimeter of windows and doors that project from the backing wall in a builtup wall construction such as SFS or timber framed and sheathed walls. Suitable for single windows and curtain walling or multiple coupled windows.
- To ensure stability of the seal in the early stages of a fire, ME010 should be bonded to the window/door frame and the structure (sheathing board) with SP025 Façade Fire Adhesive.
- ME010 is applied in the same way as other window sealing membranes such as ME501 Duo Window Membrane HD and ME220 EPDM Membrane.
- For a detailed step by step guide please refer to Method Statement: "Installation of illbruck Membranes to Windows and Doors – Windows Projecting Externally from Backing Wall".

## Fixing to the Frame

- ME010 Membrane at the appropriate width should be positioned with the glossy face outwards and the dull face inwards.
- Starting at the sill- apply a consistent minimum 10 mm diameter bead of SP025 adhesive in the usual way to the edge of the frame.
- Locate the pre-cut length of ME010 with finger pressure onto the frame.
- When satisfied with positioning, consolidate the bond by applying pressure and rolling over the top of the membrane with a seam roller until a small amount of "ooze" is visible at the edge of the membrane. The compressed bead should be approximately 20-30 x 2-3 mm. If it is not possible to apply a consolidated bead of minimum 20 mm, please consult CPG UK technical department.
- Cut, fold and seal the corners as per method statement.
- Complete application to the jambs and then the head.

### **Completing the Lap to the Structure**

- Mark out with a straight edge around the entire perimeter the position where the trailing edge of the membrane will terminate on the sheathing or other structural element.
- Mark out another dotted line 15 mm inside the first line around the entire perimeter. This is the position where the SP025 adhesive will be applied.
- Starting at the sill-Apply a consistent 10 mm diameter bead of SP025 adhesive in the usual way onto the dotted line.
- Locate the trailing edge of ME010 with finger pressure onto the adhesive ribbon.
- When satisfied with positioning, consolidate the bond by applying pressure and rolling over the top of the membrane with a seam roller until a small amount of "ooze" is visible at the edge of the membrane. The compressed bead should be 20-30 x 2-3 mm.

# Façade UV & Fire Membrane



• Cut, fold and seal the corners as per method statement.

Application – For Full Façade Protection

- For connecting to previously applied ME010 applied as window perimeter seal, bond with SP025 or ME315Total ProtectionTape then continue on the façade as below.
- Apply the membrane horizontally, starting from the bottom to ensure natural water run-off, fixing each sheet with staples or SP025 adhesive\* to the sheathing board or other substrate.
- When applying the membrane from the roll, to achieve maximum UV stability, and to ensure a good bond (if applicable) the outer (fleece) face of the membrane must be orientated towards the structure, and the inner (smooth) face must be left exposed to the UV light.
- For fixing (mechanical or bonding), a supporting area of minimum 30 mm is required.
- For correct joint formation, a minimum overlap of 100 mm is required. Seal the overlap with SP025, ME315 or ME316 tape for a wind tight connection.\*
- Mechanical damage, penetrations or connections should be sealed with SP025, ME315 or ME316 depending on the application.\*
- When likely to be exposed to weather for an extended time during the construction period, it is recommended that the membrane is adhered around the full perimeter. This prevents damage due to ingress of wind behind the membrane. It is also beneficial to apply dabs of SP025 adhesive at approximately 500 mm centres across the surface area to aid membrane stability.
- Available with self-adhesive strip (subject to MOQ and 4 weeks' delivery time).
- \* For applications needing to comply with Approved Document B, Requirement B4, Regulation 7, SP025 must be used in order to comply with Classification B-s3, d0 to EN13501-1. If unsure, please contact CPG UK for advice. For membrane to membrane overlaps, ME315 or ME316 at 60 mm width will comply with the above Regulation 7 due to being considered as a 'seal' and therefore exempt from

being non-combustible.

#### Please Note

- When sealing at low thresholds subject to regular or permanent wetting, ME220 EPDM Membrane should be used at the sill in conjunction with ME010 to the head and jambs. Consult CPG UK for further information.
- The connection of the trailing edge of the membrane to the structure should be completed as soon as possible.
   Avoid leaving the trailing edge open to the effects of wind to reduce the possibility of damage to the partially installed membrane.
- ME010 on the façade should be adhered (using SP025 adhesive) to the ME010 Membrane at the window interface to ensure continuity of the temporary weather tight line.
- For further information regarding SP025 adhesive please consult technical data sheet, available from website (www. cpg-europe.co.uk).
- An optional termination bar may be considered to provide mechanical retention of the membrane.

### **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.

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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.



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