

CI/SfB
(31)   Ln6
CAW P10 Uniclass L6631:P91

## Material

ME500-E is a polyethylene copolymer film with non-woven fleece fabric and acrylic self-adhesive and butyl adhesive strips for location to frame and wall.

## Description

ME500-E Duo Flexible Window Membrane comprises a tear-proof non-woven fleece fabric with a polyethylene copolymer film including an integrated movement pleat for variable joint sizes and absorption of movement.

The product is BBA accredited and complies with the planning and installation recommendations of DIN 4108-7 and with the RAL Quality Assurance Association for windows and doors. For frame sealing, it is attached to the wall with butyl adhesive, and to the window /door with a self-adhesive strip. The adhesive strips are located on the same face of the membrane and this version is intended for application to windows and doors after installation. The product has a specially designed reactive membrane whereby the water vapour permeability (sd value) changes depending on the humidity inside the joint. This allows the product to perform as an intelligent seal for airtight and vapour tight internal joints.

## Colour

Black

## Dimensions

Width (mm)	Thickness (mm)	Rolls per Carton	Metres per Carton
80- 110	0.5 mm	5	250
110- 140	0.5 mm	3	150
140- 170	0.5 mm	2	100

All rolls are 50 m in length.

## Technical Data

Property	Test Method	Result
Class of Building Material	DIN 4102	B2 (normal flammability), P-NDS04-292
Water Vapour Permeability	DIN 4108-3	sd value between 0.3 and 20 m, depending on average atmospheric humidity, and acts as an intelligent vapour barrier
Water Vapour Resistance Factor ( $\mu$ )	DIN 52615	600 - 40,000
Adhesive Strength of Butyl		12 N/25 mm
Adhesive Strength of Self-Adhesive		12 N/25 mm
Compatibility with Conventional Building Materials	DIN 52 452	passed
UV Resistance - Fleece Face Exposed		approximately 3 months
UV Resistance – Shiny Face Exposed		approximately 2 weeks
Airtightness	DIN 18542 EN 1026	< 0.1 m <sup>3</sup> /[h m (daPa)n]
Weathertight Against Driving Rain	EN 1027	> 600 Pa
Temperature Resistance		- 40°C to +100°C
Application Temperature		+ 5°C to + 45°C
Storage Period		1 year

Length tolerances in accordance with DIN 7715 P3, width measurements in accordance with tolerance  $\pm$  2.5 mm. The self-adhesive strip is 1 to 6 mm in from the edge.



## ME500-E

### Duo Flexible Window Membrane E



#### Usage / Purpose

ME500-E is an intelligent membrane providing an internal airtight perimeter seal to windows and doors.

#### Key Benefits

- The variable sd value ensures that the joint dries out quickly, thus protecting against mould and moisture damage
- Intelligent membrane providing an internal airtight and vapour tight perimeter seal
- Easy fixing to frame and wall

#### "i3" Window Sealing System

Part of the state of the art, ift-approved sealing system, with a 10 year guarantee.\* This system fulfils the EnEV requirements with regards to airtightness.

\*Under the conditions specified by the manufacturers. Only valid on receipt of the correct registration documents in accordance with terms and conditions, available on request.

### Priming

Priming with ME901 (brushable) or ME902 (spray) Butyl & Bitumen Primer may be required on dusty or damp substrates, or where the ambient temperature is below 5°C

### Application as Internal Airtight Seal

- The membrane should be bonded to the internal face of the frame, applying in individual strips to each side and allowing an extra 50 mm in length to allow for lap jointing at the corners (fig 1). Alternatively, it is possible to fix continuously around the frame by carefully folding the membrane at the frame corners and finally making a lap joint to close the beginning and end sections.
- Use the self-adhesive strip to locate onto the face of frame. Ensure there is 10 mm minimum of adhesive contact and that the finishing system will cover the exposed membrane.
- Ensure that the membrane is located as in fig 2 after applying FM230 Pro Foam Window (if required). If necessary, prime the reveal area where the butyl adhesive will be located with ME901 (brushable) or ME902 (spray) Butyl & Bitumen Primer.
- Bond membrane to reveal using the butyl strip
- Consolidate the bond using a seam roller as fig 3.
- Normally, the exposed printed face of the membrane is subsequently dry-lined, however where a wet plaster finish is required, use illbruck ME508 Duo Membrane EW/F which includes a full self-adhesive backing to ensure complete contact with the reveal and good adhesion of the plaster.
- All lap joints and areas of potential air leakage paths (eg. around fixing brackets) must be sealed with SP525.

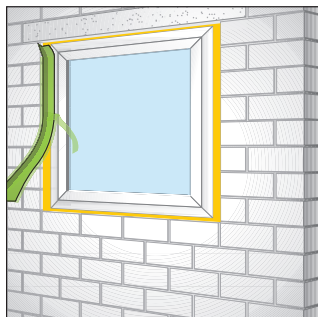


Fig 1: Bond membrane to face of frame

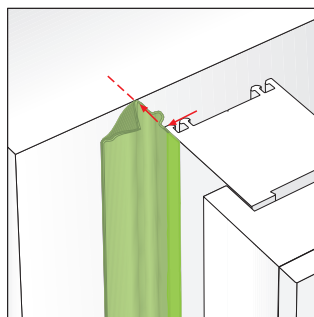


Fig 2: Positioning of the butyl strip

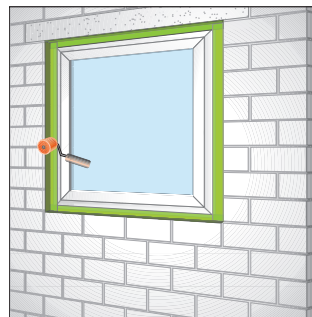


Fig 3: Consolidate the butyl bond using a roller

### Application as External Weathertight Seal

- Although suitable for external applications as a weathertight perimeter seal, we recommend ME501 Duo Window Membrane HD due to the higher strength and up to 12 months UV exposure capability

### Please Note

- ME500 should be applied with the fleece (printed) face towards the inside. The shiny face must not be exposed to UV for longer than two weeks, therefore if this is likely, the exposed face must be protected temporarily until covered by other elements of the built-up wall.
- Bonding surfaces must be dry and free from oil, grease, dust and other anti-adhesive components. ME901 or ME902 Butyl & Bitumen Primer may be required on some wall surfaces.
- The use of butyl tapes in conjunction with sealing materials may result in interactions. Compatibility must be tested in individual cases.
- The membrane must always be fitted such that the printed face is visible before rendering / finishing.
- We provide a service for testing compatibility of our adhesives with 3rd party materials and would advise that our representative is made aware of this requirement in order to organise appropriate samples and to instigate the required testing (comprehensive testing takes up to 4 weeks).

### Health & Safety Precautions

Safety data sheet must be read and understood before use.

### Technical Service

tremco illbruck 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 service on 01942 251400.

### Guarantee / Warranty

tremco illbruck products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with tremco illbruck written instructions and (b) in any application recommended by tremco illbruck, but

which is proved to be defective, will be replaced free of charge.

No liability can be accepted for information provided in this leaflet although it is published in good faith and believed to be concerned. tremco illbruck Limited reserves the right to alter product specification without prior notice, in line with Company policy of continuous development and improvement.



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