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ME500 Duo Flexible Window Membrane E

Intelligent Seal for Airtight Internal & Weathertight External Joints

Description

illbruck ME500 Duo Flexible Window Membrane E comprises a tear-proof woven fleece fabric with a polyethylene copolymer film including an integrated movement pleat. 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 internal joints, and weathertight, breathable external joints. The intelligent reactive system ensures that the joint always dries at the maximum rate. In non-fenestration applications, the membrane can be used to seal across adjacent insulated panels as an airtight or weathertight seal.

Material

Polyethylene copolymer film with woven fleece fabric and acrylic self-adhesive and butyl adhesive strips for location 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.



Colour

- Grey

Product Advantages

- The variable sd value ensures that the joint dries out quickly, thus protecting against mould and moisture damage.
- Single intelligent product acts as internal airtight seal and external weathertight but breathable seal.
- Easy fixing to frame and wall.
- Large expansion pleat for variable joint sizes and absorption of movement.

Dimensions

Width (mm)	Rolls per carton	m/carton
80 - 110	5	250
110 - 140	3	150
140 - 170	2	100

All rolls are 50 m in length.

Priming

Priming with illbruck 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.

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Technical Data

Category	Standard	Result
Class of Building Material	DIN 4102	B2 (normal inflammability), P-NDS04-292
Water Vapour Permeability	DIN 4108-3	sd value between 0.21 and 15 m, depending on average atmospheric humidity, and acts as an intelligent vapour barrier
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
Temperature Resistance		- 40°C to +100°C
Application Temperature		+ 5°C to + 45°C
Storage Period		1 year
UV Resistance		approximately 2 months
Airtightness	DIN 18542 EN 1026	< 0.1 m ³ /[h m (daPa)n]
Weathertight Against Driving Rain	EN 1027	> 600 Pa

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

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 illbruck FM230 Window Seal Foam (if required). If necessary, prime the reveal area where the butyl adhesive will be located with illbruck 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.

- The exposed side of the membrane can be dry-lined, or plastered over. If using plaster, it is recommended to use illbruck ME500 Duo Membrane with Plaster Mesh (consult sales office for details) and the membrane must be bonded tightly to the reveal with Tremco SP525 as air pockets behind the membrane may cause cracking of the plaster.
- All lap joints and areas of potential air leakage paths (eg. around fixing brackets) must be sealed with Tremco SP525.

Application as External Weathertight Seal

- The membrane should be bonded to the external face of the frame, applying in individual strips to each side and allowing an extra 50mm 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.

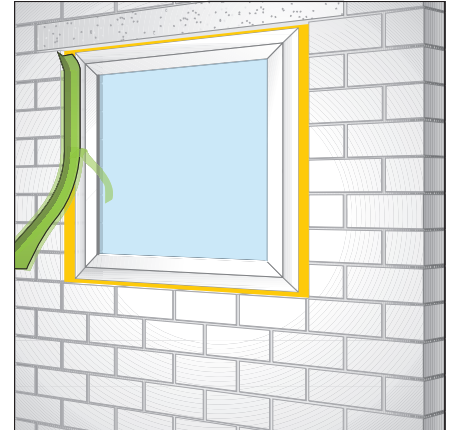


Fig 1: Bond membrane to face of frame

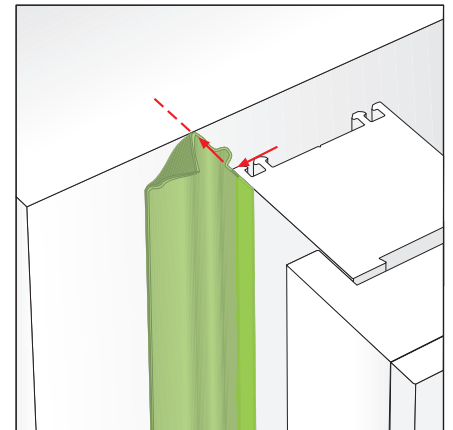


Fig 2: Positioning of the butyl strip

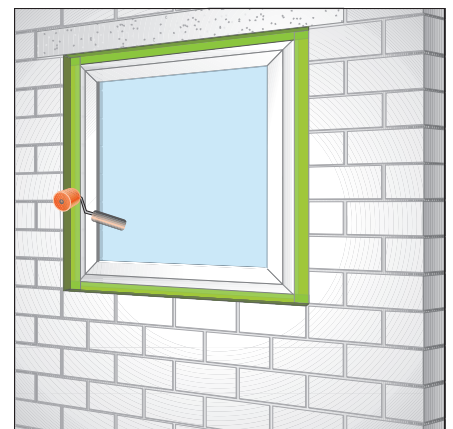


Fig 3: Consolidate the butyl bond using a roller

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Tremco illbruck Limited
3A Walton Road, Pattinson North
Washington, Tyne & Wear NE38 8QA
Tel: 0191 419 0505 Fax: 0191 419 2200
Email: uk.sales@tremco-illbruck.com
Website: www.tremco-illbruck.co.uk

- 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. If necessary, prime the reveal area where the butyl adhesive will be located.
- Bond membrane to reveal using the butyl strip.
- Consolidate the bond using a seam roller as fig 3.
- All lap joints and potential areas of weather ingress must be sealed with Tremco SP525.

Limitations

- When used externally, the membrane must be covered within 2 months to protect from UV, normally by an insulated cladding/render system. If a 'wet' finishing system is to be applied, use illbruck ME500 Duo Membrane with plaster mesh and ensure that the membrane is bonded tightly to the reveal with Tremco SP525 as air pockets behind the membrane may cause cracking of the finish.

- Bonding surfaces must be dry and free from oil, grease, dust and other anti-adhesive components. illbruck 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.

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 Services on 0191 419 0505.

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.

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