Description
ME220 VV is an EPDM-based membrane used for sealing interfaces to provide airtight or weather tight seals. It is suitable for wide ranging application details. The material does not contain any solvents which could later migrate into adjacent surfaces.

Certifications
MPA Hannover – air and weather tightness (EN12114/EN1027)
Emicode – EC1 Plus

Colour
Black

Design
Membrane with embossed finish, wound on rolls and available in various widths. The membrane is fixed to the frame and construction substrates using the full face self-adhesive.

*Available in 100 - 300 mm widths in 50 mm increments.

Dimensions
Roll length 25 m
Thickness 0.75 mm
Width 50 - 1,500 mm
Cut rolls or full log (1,500 mm)

Technical Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Classification</td>
<td>EN 13501-1</td>
<td>Class E</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>DIN 53504</td>
<td>&gt; 6.5 N/mm²</td>
</tr>
<tr>
<td>Elongation at Break</td>
<td></td>
<td>&gt; 300%</td>
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<tr>
<td>UV Resistance</td>
<td>DIN 53504</td>
<td>&gt; 24 months</td>
</tr>
<tr>
<td>Water Vapour Resistance Factor (µ value)</td>
<td>DIN 52615</td>
<td>60,000</td>
</tr>
<tr>
<td>Moisture Vapour Permeability (sd value)</td>
<td>DIN 4108-3</td>
<td>45 m</td>
</tr>
<tr>
<td>Airtightness</td>
<td>EN 12207</td>
<td>&gt; Class 4</td>
</tr>
<tr>
<td>Watertightness</td>
<td>EN 12208</td>
<td>&gt; Class 9A</td>
</tr>
<tr>
<td>Resistance to Wind Loading</td>
<td>EN 12210</td>
<td>&gt; Class 3</td>
</tr>
<tr>
<td>Dynamic Puncture Resistance</td>
<td>EN 12691</td>
<td>tight (10 mm punch)</td>
</tr>
<tr>
<td>Peel Adhesion (180°) to Steel, Concrete, Brick &amp; Wood</td>
<td>EN 1939-1</td>
<td>$F_{\text{max}}$ Minimum 25.40 N/25 mm</td>
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<tr>
<td>Static Puncture Resistance</td>
<td>EN 12730</td>
<td>&gt; 250 N</td>
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<tr>
<td>Static Puncture Resistance</td>
<td>EN 12310-1</td>
<td>120 N</td>
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<tr>
<td>Flammability Class</td>
<td>DIN 4102-1</td>
<td>B2 P-ND504-531</td>
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<tr>
<td>Temperature Resistance</td>
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<td>-40°C to +100°C</td>
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<tr>
<td>Application Temperature</td>
<td>+5°C to +35°C</td>
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</tbody>
</table>

Storage
Store in dry shaded conditions between +5°C and +25°C.

Shelf Life
Unlimited when stored as recommended in original unopened packaging; 24 months with self-adhesives.

Necessary Installation Tools
Installation requires the following: tape measure, scissors or illbruck shears, sharp knife and seam roller.

Usage / Purpose
ME220 VV EPDM membrane is used for sealing the connecting joint between a window/curtain walling and an adjacent structure (e.g. a wall, concrete panel, steel frame, etc.), providing air and weather tightness.

The membrane is fixed to frame and construction using the full face self-adhesive.

If an internal and external membrane is required, in order to meet the principle of ‘inside tighter than outside’, ME220 VV should be located as the inner membrane and ME501 Duo Window Membrane HD or ME501 VV as the outer membrane. This will ensure that the inner seal is more vapour tight than the outer which will facilitate drying out of any entrapped moisture between the two layers.

Key Benefits
- High resistance to mechanical damage
- High performance full face self-adhesive backing for quick and easy fixing
- Excellent movement capability in both transverse and longitudinal direction with excellent material recovery after elongation
- Excellent weathering, ageing and UV radiation resistance
- Excellent moisture vapour barrier
**Surface Preparation**
- The substrate surface must be dry, degreased, and free of dust and loose particles, which could negatively affect adhesion.
- It may be required to prime the substrate if porous, damp, dusty or when ambient temperatures are < 5°C. In such cases use ME901 or ME902 Butyl & Bitumen Primer (brush or spray grade respectively) or ME904 Adhesive Tape Primer.

**Application**
- The width of the membrane must be determined with full consideration of the façade or window detail including the interior and exterior sides of the connection joint.
- The final solution must always take into account project requirements, dilatation of structures, operating load and application difficulty of individual products.
- The recommended overlap width between membranes and porous materials (concrete, brick, etc.) is a minimum 100 mm.
- Bonding onto particularly porous materials is best achieved with plain ME220 using CT113 Adhesive which is applied by brush or roller in an even layer to BOTH bonded surfaces (see Fig. 2).
- After applying the adhesive, allow to flash off (approximately 10–15 min, using finger touch test). This is very important to ensure good adhesion. After flashing off, both bonded surfaces must be connected and the upper membrane layer pressed down firmly using a seam roller. Depending on porosity of the substrate, a primer coat of diluted CT113 with AW421 (1:3 ratio by volume) may be necessary prior to application of neat CT113 as above.
- Recommended overlap width between membranes and non-porous materials is approximately 20 - 30 mm.
- For ensuring robust air and weather tight seals at the membrane corner joints, illbruck ME241 EPDM Corners should be used (see Fig. 1). For full application details, please consult ME241 TDS.
- For head details, it is recommended to use a metal clamping strip together with min. 100 mm overlap of the membrane to prevent attack of running water (most commonly a window or façade head detail on ventilated cladding structures before a connecting joint is covered).
- Seal the upper edge of the strip at an angle of 45° using OT015 adhesive. (see Fig. 2).
- A metal clamping strip may also be necessary on other applications to enhance the fixing of the membrane to the window frame.
- Irrespective of bonding method, ensure that the membrane is located in a tension-free state and all adhesive bond lines/areas are consolidated with a seam roller.

**Please Note**
This data sheet should be read in conjunction with those for associated products (e.g. ME220, OT015, CT113 and ME241 EPDM Corners).

**Health & Safety Precautions**
Safety data sheet must be read and understood before use.