Description
ME508 is a non-woven fleece laminate with self-adhesive for optimum adhesion and vapour control. The combination of self-adhesives provide options for installing to the window frame edge (W) or face (E), providing air and weather tightness. Part of the intelligent membrane range, ME508 also benefits from humidity variable vapour permeability.

Colour
Black

Packaging

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Roll Length</th>
<th>Roll Width</th>
<th>Rolls/Box</th>
</tr>
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<tbody>
<tr>
<td>501392</td>
<td>75 m</td>
<td>EW-70</td>
<td>1</td>
</tr>
<tr>
<td>501393</td>
<td>75 m</td>
<td>EW-100</td>
<td>1</td>
</tr>
<tr>
<td>500252</td>
<td>25 m</td>
<td>EW-140</td>
<td>2</td>
</tr>
<tr>
<td>500290</td>
<td>25 m</td>
<td>EW-200</td>
<td>1</td>
</tr>
<tr>
<td>500540</td>
<td>25 m</td>
<td>EW-250</td>
<td>1</td>
</tr>
</tbody>
</table>

Membrane thickness: 0.5 mm

Technical Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Classification</td>
<td>DIN 4102</td>
<td>B2 (normal combustible)</td>
</tr>
<tr>
<td>Water Vapour Transmission</td>
<td>DIN EN ISO12572</td>
<td>sd value 0.4 - 20 m</td>
</tr>
<tr>
<td>Resistance to Water Penetration</td>
<td>EN 1928</td>
<td>W1</td>
</tr>
<tr>
<td>Resistance to Driving Rain</td>
<td>EN 1027</td>
<td>1050 Pa</td>
</tr>
<tr>
<td>Watertightness</td>
<td>Test method: EN 13859</td>
<td>W1 corresponds to 2000 Pa</td>
</tr>
<tr>
<td>Air Permeability</td>
<td>EN 1026</td>
<td>&lt;0.1 m³/h.m(da Pa)n</td>
</tr>
<tr>
<td>Compatibility with Construction Materials</td>
<td>DIN 52452</td>
<td>Fulfills requirements</td>
</tr>
<tr>
<td>UV Stability</td>
<td></td>
<td>9 months prior to covering</td>
</tr>
<tr>
<td>Service Temperature</td>
<td></td>
<td>-40°C to +80°C</td>
</tr>
<tr>
<td>Application Temperature</td>
<td></td>
<td>-5°C to +40°C</td>
</tr>
<tr>
<td>Storage</td>
<td></td>
<td>Store in shaded, dry conditions, not exposed to direct weathering and UV-radiation</td>
</tr>
<tr>
<td>Shelf Life</td>
<td></td>
<td>24 months when stored as recommended in original unopened packaging</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The laminated self-adhesive is at a distance from the edge from 1 to 6 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Depending on the application temperature or on highly absorbent surfaces, ME902 or ME904 primer can be used to improve adhesion and optimise usage</td>
</tr>
</tbody>
</table>

Preparation
- The bonding surfaces must be dry, free of oil, grease, dust and other anti-adhesive components. For guaranteed adhesion it is advisable to use illbruck ME902 primer (note the flash-off time). Similarly, in slightly damp conditions, use ME904 primer.
- Bonding in ‘E’ format (Fig. 1):- peel off the protective split liner of the self-adhesive on the side of the membrane facing the frame, allowing some slack in the membrane retained within the joint.
- Bonding in ‘W’ format (Fig. 2):- peel off the liner from the

ME508
Duo Membrane EW/F

Usage / Purpose
- Used for sealing window connection joints, internally or externally.
- Strong and reliable self-adhesive, allowing bonding to virtually any substrate (e.g. masonry, concrete, PVC, metal, wood, and all usual insulation materials (EPS, XPS, PUR rigid foam)), making application fast and simple.
- Can be used as an internal airtight seal in conjunction with ME501 Duo Window Membrane HD or VV externally, and/or as an external weather-tight seal with 1050 Pa driving rain resistance.
- Complies with the “inside tighter than outside” principle in order to facilitate moisture and vapour control.

Key Benefits
- Quick and easy application with split release liner
- Highly flexible fleece
- Weather tight
- Suitable for retrofit
- Initial repositioning possible, bond strength increases over time
- Airtight and vapour tight
- Allows over-plastering without cracking.
Duo Membrane EW/F

Application

For external applications, ME508 should be bonded to the weather sheathing board or similar weather line of the wall build-up behind the external skin. If a breather membrane has previously been applied to the backing wall, cut back the line of where the perimeter membrane will locate against the backing wall to enable bonding directly to the sheathing board (or similar). Ensure all bond zones are free of debris and other material which may affect adhesion such as excess silicone or fire rated compound between sheathing board joints.

• Silicone based sealants and fire rated compounds used to seal gaps against the sheathing board or other substrate. Please Note
• For internal applications where ME508 is being used as an air tight perimeter seal, the ‘E’ or ‘W’ option can be used.

Attachment to the Window – Internal

• Clean the frame as in ‘Preparation’. For certain walling applications, it may be necessary to apply ME508 with an amount of ‘play’ across the membrane width, i.e. do not bond tightly across the joint but allow excess material so that in the event of movement, the membrane will not be stripped tightly. For applications where significant movement, prolonged soaking or foot traffic to horizontal surfaces is expected, illbruck ME220 EPDM Membrane should be used.

• Using ‘E’ format, the window should be installed first. Remove the narrow part of the split liner from the self-adhesive backing. On the reverse (non-printed) face of the membrane to be applied in a single run, or if they may be visible cut a small patch from the membrane roll and covering onto the patches (min. 50mm). The plastic mesh version of ME508 is available subject to application details. It is necessary to use illbruck OT015 to bond ME241 to other components and ME508 to ME241.

• Using ‘W’ format (for punched-hole windows), prior to the window being installed, remove the release liner from the narrow self-adhesive on the printed face of the membrane and locate onto the outside edge of the frame in a suitable location (to flat profile rather than across profile ‘legs’) (see Fig. 2). Apply a continuous length around all four sides of the frame. At each corner, allow an extra 20 mm forming a ‘loop’ and folding the membrane and bonding to itself. When the end section meets the start, allow a 50mm overlap. Once the membrane is applied, connect any fixing brackets as necessary over the membrane.

ME508

• 500 mm wide ME508 should be used for all window sizes.

• 300 mm wide ME508 to be used for large format windows (where cut-up may be necessary). For thermal and/or acoustic insulation to the window/trunking. If necessary use ME310 Primer on such surfaces to fully bed down the self-adhesive and remove / flatten any wrinkles on either the window frame profile or construction substrate.

Attach the Window – External

For punched hole windows, the application method is essentially as for internally above.

• Measure and pre-cut individual lengths of ME508 appropriate to sill, jambs and head to match the window dimensions and the additional overlap at each end equal to the width of the membrane in use.

• Starting at the sill, dry fit the membrane with the release liners still attached and mark the front edge of the membrane at the window extent.

• Fold the membrane upwards to form a 90° angle tucking it up under the sill and the remaining membrane placed against the sheathing board or concrete, also at a 90° angle.

• Make a mark where the lower/outer edge of the membrane will terminate on the sheathing board or other substrate.

• Using an appropriate long straight edge or other device against the sheathing board or concrete, also at a 90° angle.

• Make a mark where the lower/outer edge of the membrane will terminate on the sheathing board or other substrate.

• Using an appropriate long straight edge or other device such as a laser level, draw a line to indicate where the membrane will terminate to use as a guide to levelling on the substrate.

• Remove the angle, narrower release liner on the non-printed face of the membrane and position the self-adhesive strip on a suitable flat surface of the sill profile (the printed face should be facing the exterior). Bond the membrane to be applied with an ideal minimum 20mm of self-adhesive contact.

Attachment to the Wall

• Now remove the wide dual release liners (one at a time)** and bond the membrane to the sheathing board or other substrate using your marked out line as guide to ensure a neat and level finish. The membrane should now be at a 90° “L” shape with the un-bonded extensions at either end resembling a tube.

• Now remove the wide dual release liners (one at a time)** and bond the membrane to the sheathing board or other substrate using your marked out line as guide to ensure a neat and level finish. The membrane should now be at a 90° “L” shape with the un-bonded extensions at either end resembling a tube.

•MEM508

• Forming the First Layer of the Corner Seal
• Starting at one end, and using the printed lines and grid lines, carefully roll out the membrane to be applied as a guide, silt the loose end of the membrane extension along horizontally until it is level with the bottom of the window frame. Take care not to silt too far or too short.

• Slitting will form a flap which will be folded upwards and bonded to the side of the frame at the jamb. The lower remaining section is bonded flat to the substrate.

• Once bonded repeat the same actions on the opposite end. Note: with firm pressure with an illbruck AB004 VV seam roller to all membrane surfaces to fully bed down the self-adhesive and remove / flatten any wrinkles on either the window frame profile or construction substrate.

Alternative Application Strategy

• Sometimes it may be more expedient to form the corners separately to the main run of membrane. In this case, cut a suitable length of ME508 (circa 150mm) and twist the membrane on the narrow self-adhesive strip to form a corner shape. Apply one to each corner of the window, removing each release liner as you apply it to the frame. The ME508 can then be run from corner to corner in single runs, allowing a 50mm overlap onto the pre-applied corners.

• If a window fixing straps interfere with enabling the membrane to be applied in a single run, or if they may prevent the achieving of a satisfactory seal, consider cutting out suitable size patches of membrane and covering the membrane to be applied with a 50mm overlap onto the patches (min. 50mm).

Optional Use of Pre-Moulded 3D Corners

• ME241 EPDM Corners may be used for forming the corner seals.

• See ME241 TDS and method statement for further application details. It is necessary to use illbruck OT015 to bond ME241 to other components and ME508 to ME241.

Jams and Head

• Now remove the wide dual release liners (one at a time)** and bond the membrane to the sheathing board or other substrate using your marked out line as guide to ensure a neat and level finish. The membrane should now be at a 90° “L” shape with the un-bonded extensions at either end resembling a tube.

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Inspecting the Completed Application

The completed application should resemble a picture frame border to the installed window.

• Check the cuts and folds at all of the corners and ensure that there are no gaps. If any imperfections or small holes are visible a cut small patch from the membrane roll and use it to cover the imperfection.

• Please note that the self-adhesive used with this membrane is very strong and will grab to almost any surface more or less instantly, particularly your gloved hand! For optimum performance, try to minimise hand contact with the exposed self-adhesive layer to prevent it from picking up dust and debris which can reduce the effectiveness of the adhesive bond.

Existing or Pre-applied Breather Membranes

• Re-instate the breather membrane if applicable by sealing the edge joint between the newly applied window membrane and the existing breather membrane using illbruck ME315 Total Protection Tape.

• ME241 Primer should always be installed with the branded non-shiny (fleece) face facing outwards. This is to ensure UV resistance for up to 6 months (and to facilitate over-plastering if required for internal applications). If the shiny face is accidentally installed facing outwards, the air and weather tightness properties will not be affected but the membrane must be covered within 2 weeks to avoid UV degradation. If there are small gaps in the external cladding e.g. between rainscreen panels, this is closed as exposed (alternative illbruck membrane may be required).

• Don’t leave ME508 bonded to the window frame without also being bonded to the structure for more than 72 hours in order to avoid damage to the unsecured membrane by being exposed to UV (to the shiny face) and/or mechanical abrasion due to contact with other components during periods of wind pressure.

• If ME508 has been exposed to UV light over the stipulated tolerances, simply cover over with a further application of ME508.

• For internal and/or acoustic insulation to the window/ construction interface, we recommend illbruck FM330 Pro Foam Air Seal Kit to be applied into the perimeter gap subject to construction details.

• Please consult with your illbruck TDS for further application details. Please Note
• For certain walling applications, it may be necessary to apply ME508 with an amount of ‘play’ across the membrane width, i.e. do not bond tightly across the joint but allow excess material so that in the event of movement, the membrane will not be stripped tightly. For applications where significant movement, prolonged soaking or foot traffic to horizontal surfaces is expected, illbruck ME220 EPDM Membrane should be used.

• If intending to apply ‘wet’ finishes over the membrane, ensure application to the branded non-shiny (fleece) face. For large areas and improved adhesion of the finish, a plaster mesh version of ME508 is available subject to minimum order quantity and 3 – 4 weeks delivery. Do not employ the ‘dot and dash’ method of fixing drying lining as the increased thickness and resultant weight of the adhesive will prevent bonding.

• Ensure all self-adhesive is fully bonded to the window and structure, and consolidated using a seam roller.
• Take care not to create longitudinal stress during application (avoid stretching along the length). When creating vertical overlaps, bond the upper membrane length onto the lower.

i3 Warranty
Part of the state of the art, ift-approved sealing system, with a 15 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.

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