**Usage / Purpose**

TP610 Duo is an impregnated foam tape which can be used for weather tight sealing of perimeter joints around windows and doors. In order to provide thermal insulation within the perimeter joint and maintain the energy rating of the window, it is recommended to also use FM330 Pro Foam Airseal. The use of this system will maintain the energy rating of the window. An ‘A’ rated (WER) window can therefore be classed as having an ‘A’ rated installation.* TP610 is available in a range of widths and thicknesses.

**Key Benefits**

- Maintains the energy rating of the window (when used in conjunction with FM330)
- Driving rain tightness to 600 Pa
- Meets CWCT test for site water tightness (TN41)
- Breathable
- All weather installation
- UV-resistant

* Installation rating not included in BFRC ‘WER’ scheme

**Technical Information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Standard</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Material Class</td>
<td>DIN 4102</td>
<td>B1 (flame retardant), P-NDS04-218</td>
</tr>
<tr>
<td>Water Vapour Diffusion, sd Value</td>
<td>EN 1026</td>
<td>$a \leq 0.1 \text{ m}^2\text{h}^{-1}\text{m}^{-1}\text{Pa}^{-n}$</td>
</tr>
<tr>
<td>Air Permeability</td>
<td>DIN 18 542</td>
<td>meets the requirements</td>
</tr>
<tr>
<td>Classification</td>
<td>DIN 18 542</td>
<td>BG1</td>
</tr>
<tr>
<td>Resistance to Water Penetration</td>
<td>EN 1027</td>
<td>Requirements are fulfilled up to 600 Pa</td>
</tr>
<tr>
<td>Compatibility with Conventional Building Materials</td>
<td>DIN 18 542</td>
<td>Meets the requirements</td>
</tr>
<tr>
<td>Service Temperature</td>
<td></td>
<td>–30°C to +90°C</td>
</tr>
<tr>
<td>Storage</td>
<td></td>
<td>• Store in dry, shaded conditions between +1°C and +20°C.</td>
</tr>
<tr>
<td>Shelf Life</td>
<td></td>
<td>• 9 months when stored in cool, dry conditions in original unopened containers.</td>
</tr>
</tbody>
</table>

**Tools**

- Tape measure, cutting shears or knife and a flat bladed tool are required for installation.

**Application**

- Remove any contamination or mortar residue from the reveal. Any areas where significant undulations or damage is present should be repaired locally using an appropriate mortar. Check presence and condition of DPM and ensure cavities are filled/closed prior to fitting the new window.
- Install the window into the opening.
- Assuming internal plaster finish is to be undisturbed, apply FM330 Pro Foam Airseal to provide thermal insulation using the illbruck gun into the perimeter gap from the external side to a depth of approximately 50% of the frame thickness (e.g. 35 mm deep for a 70 mm frame) and allow to cure. Do not apply too much foam (allowing
for post-expansion) so that there is insufficient space for application of the TP610 tape. (If access to the inside of the joint is possible due to removal of internal finishes, apply the FM330 foam from the inside after application of the TP610 and following full expansion).

- Select tape size from the table above. The joint width must be within the variation of the tape size (thickness) selected. It is advisable to select the tape size based on the nominal joint width being in the middle of the range (e.g. for a nominal 5 mm joint width, select size 15/3 – 6).
- Cut off the wedge shaped start of the roll and apply the tape to the outer edge of the window frame in the perimeter joint, recessed back from the external frame face by 1 – 2 mm, applying a separate length for each side to be sealed, bonding with the aid of the self-adhesive. Allow an extra 10mm/m when cutting the tape length to allow for potential shrinkage - the dimension should be based on the opening size, not frame dimension. Make tight butt joints at the corners and at connections between separate lengths. Pay particular attention to the corner joints (See Fig. 1). Normally the TP610 is applied to the head and two sides to allow for insertion of packers under the cill.
- Any unintended small gaps at joints should be sealed with FS500 low modulus neutral cure silicone or SP525 hybrid sealant (black).
- FM330 Pro Foam Airseal should then be applied under the cill. Once this is cured, the ends of the window cill and the gap between the underside of the cill and structural opening should be sealed with a suitable sealant (e.g. FS500 or SP525) against the external reveal. Ensure that window cill end caps protrude for the full frame depth rather than just the projecting part of the cill.
- If the window is installed into a ‘check reveal’, apply the TP610 to the external face of the window frame, positioned to achieve a 2 - 3 mm set-back behind the external opening. The TP610 is normally applied immediately prior to installing the window.

Note
- High temperatures accelerate tape expansion, while low temperatures delay this. At ambient temperatures above 20°C, the tape should be stored in a cool place on the construction site away from direct sunlight. A small fridge is ideal for this.
- Remaining rolls in opened boxes should be maintained in a horizontal state and weighted down to prevent lateral expansion (telescoping) of the rolls. Whilst it is unnecessary to seal over the external face of the tape, the exposed edge can be plastered or painted over. The compatibility of sealants must be tested. In some cases, white sealants can be incompatible. The tape must not come into contact with chemicals containing solvents or aggressive chemicals.

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