**Description**

FS500 is a one-part, neutral curing, low modulus, low odour silicone sealant suitable for perimeter joint sealing applications with high movement capability. It has excellent primerless adhesion to multiple surfaces including masonry, brick, aluminium, lead, PVC-U, polycarbonate, polyacrylate, wood, painted wood, glass and glazed surfaces.

**Colours**

White, brilliant white, black, anthracite and pine.

**packaging**

310 ml cartridge (20 per carton)

**Technical Information**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Standard</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition</td>
<td>EN 15651</td>
<td>neutral silicone</td>
</tr>
<tr>
<td>Classification</td>
<td>ISO 11600</td>
<td>EN 15651-1 class 25 LM CC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EN 15651-2 class 25 LM CC</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>BS EN 13501-1,</td>
<td>DIN EN ISO 11600-F-25LM</td>
</tr>
<tr>
<td></td>
<td>section 11.3</td>
<td>DIN EN ISO 11600-G-25LM</td>
</tr>
<tr>
<td>Consistency</td>
<td>BS EN ISO 7390</td>
<td>0 mm, non-sagging</td>
</tr>
<tr>
<td></td>
<td>(20 mm)</td>
<td></td>
</tr>
<tr>
<td>Shore A Hardness</td>
<td>BS EN ISO 868</td>
<td>Approximately 24</td>
</tr>
<tr>
<td>Skin Forming Time</td>
<td>at 23°C, 50% RH</td>
<td>Approximately 20-35 minutes</td>
</tr>
<tr>
<td>Cure Rate</td>
<td>at 23°C, 50% RH</td>
<td>Approximately 1-2 mm/1st day</td>
</tr>
<tr>
<td>Volume Shrinkage</td>
<td>BS EN ISO 10563</td>
<td>Approximately 6%</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>BS EN ISO 8339</td>
<td>Approximately 0.5 N/mm²</td>
</tr>
<tr>
<td></td>
<td>23°C</td>
<td>Approximately 1.6 N/mm²</td>
</tr>
<tr>
<td></td>
<td>DIN 53504 S2</td>
<td></td>
</tr>
<tr>
<td>Modulus at 100% Elongation</td>
<td>BS EN ISO 8339</td>
<td>Approximately 0.38 N/mm²</td>
</tr>
<tr>
<td></td>
<td>23°C</td>
<td></td>
</tr>
<tr>
<td>Elongation at Break</td>
<td>BS EN ISO 8339</td>
<td>Approximately 275%</td>
</tr>
<tr>
<td></td>
<td>23°C</td>
<td></td>
</tr>
<tr>
<td>Movement Capability</td>
<td>BS EN ISO 11600</td>
<td>25%</td>
</tr>
<tr>
<td>Elastic Recovery</td>
<td>BS EN ISO 7389</td>
<td>Approximately 95%</td>
</tr>
<tr>
<td>Application Temperature</td>
<td>+5°C to +40°C</td>
<td></td>
</tr>
<tr>
<td>Service Temperature Range</td>
<td>-40°C to +150°C</td>
<td></td>
</tr>
<tr>
<td>(Short Term)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>Store in shaded dry conditions between +5°C and +25°C</td>
<td></td>
</tr>
<tr>
<td>Shelf Life</td>
<td>12 months when stored as recommended in original unopened containers</td>
<td></td>
</tr>
</tbody>
</table>

**Necessary Tools**

- Cartridge gun and sharp knife.

**Protective Equipment**

Use in well ventilated conditions and ensure all recommended protective equipment is worn during handling & use of this product. For full recommendation, refer to safety data sheet.

**Priming**

- FS500 has excellent primerless adhesion to many typical construction materials. For special situations, or if in doubt, please contact Tremco CPG Technical Services Department to discuss your requirements.

**Usage / Purpose**

FS500 is ideal for use in expansion & curtain wall joints, perimeter joints around windows or doors, panel joints between most common substrates, heel and toe beads, polycarbonate glazing and other general joint sealing applications.

**Key Benefits**

- Meets the requirements of EN ISO 11600 G&F 25LM
- High movement capability
- Long-term resistance to weathering, ageing and extra UV protection
- Low modulus formulation ensures minimum stress at joint faces
- Neutral cure: low odour and non-corrosive
- Modern colour range in low sheen finish
- Easy to tool into place and smooth off
### Adhesion Table

#### Bricks, Concrete & Stone
- **Brick** +, AT101
- **Concrete** +, AT101
- **Natural Stone**
- **Plaster**

#### Metals
- **Aluminium** +
- **Aluminium Anodised** +, AT120
- **Aluminium Powder Coated** +, Test
- **Brass**
- **Copper**
- **Galvanised Steel** +, AT105, AT120
- **Iron** +, AT105, AT120
- **Stainless Steel** +, AT105, AT120

#### Glass
- **Glass** +

#### Plastics
- **ABS** +, AT120
- **Acrylic Glass PMMA** +, AT120
- **Polyamide** +, AT120
- **Polycarbonate** +, AT120
- **Polyester GRP** +
- **PVC Rigid** +, AT105, AT120
- **PVC Soft Sheet/Film**

#### Sanitary Acrylic

#### Wood
- **Wood** +, Test
- **Wood Primed** +, AT120
- **Wood Painted (acrylic)** +, AT120
- **Wood Stained** +, Test

#### Tiles
- **Glazed Tiles** +
- **Tiles Reverse Side** +, AT101
- **Unglazed Tiles** +, AT101

#### Others
- **Enamel** +
- *Substrates can vary in their surface properties, therefore adhesion tests prior to using are recommended + = good adhesion can normally be expected without primer. Reference numbers (e.g. AT111) show the type of illbruck primer required to improve adhesion. Where there is no result listed according to substrate please contact technical department.

### Joint Design Considerations
- Joint design to be in accordance with BS 6093.
- Minimum joint width should normally not be less than 5 mm.
- Typical maximum joint width of 30 mm, however for all large joints (greater than 30 mm), please contact Tremco CPG to discuss project specifics.
- Width to depth ratio should typically be 2:1.
- Minimum width to depth ratio should typically be 1:1. Please note MAF is reduced at smaller width to depth ratios.
- The minimum contact area with any substrate (including for fillet joints) should be determined by the quality of the bond. If in doubt please contact Tremco CPG.
- PE backing rod (e.g. illbruck PR102) should be used in all movement joint applications.

### Preparation
- Always carry out a test to confirm compatibility prior to use.
- Surfaces must be clean, free from grease and must be stable and dry.
- For non-porous substrates use cleaner AT200, do preliminary test.
- Use a brush to remove loose particles from joints.
- For plastics and powder coatings, clean with AT115 and conduct preliminary tests to confirm compatibility.

### Joint Backing
- PE Backing rod (e.g. illbruck PR012) is recommended beneath the joint to ensure the sealant is only bonded to two surfaces.

### Application
- Use a good quality sealant gun to expel the sealant consistently. Cut cartridge nozzle to desired aperture.
- Apply sealant slightly proud of desired level, spray on illbruck smoothing agent AA301.
- Tool off immediately using a jointing tool such as AA311. Wipe/wash away excess smoothing agent with clean water to avoid streaking.

### Coverage

<table>
<thead>
<tr>
<th>Width x Depth (mm)</th>
<th>Linear metres per 310 ml Cartridge</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 x 3</td>
<td>20.7</td>
</tr>
<tr>
<td>5 x 5</td>
<td>12.4</td>
</tr>
<tr>
<td>8 x 6</td>
<td>6.5</td>
</tr>
<tr>
<td>10 x 8</td>
<td>3.9</td>
</tr>
<tr>
<td>15 x 10</td>
<td>2.1</td>
</tr>
<tr>
<td>20 x 12</td>
<td>1.3</td>
</tr>
<tr>
<td>25 x 15</td>
<td>0.8</td>
</tr>
</tbody>
</table>

### Cleaning
Clean tools or sealant spillage immediately with illbruck AT200 Cleaner. Ensure surface is solvent resistant before cleaning. Cured sealant can only be removed mechanically.
FS500
Frame & Façade Silicone

Please Note
Not suitable for some substrates such as neoprene, butyl rubber, EPDM, bituminous or tar containing surfaces. Contact with bituminous or tar containing surfaces can lead to discolouration and failing adhesion. Not suitable for trafficable joints or areas subject to abrasion. Not suitable for over painting. For safe sealing on natural stone use FA870/FA880. On other sensitive substrates test first.

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