EXEL DOOR PROFILES

EXELENCE FOR THE WIN

EXELENT VALUE

We are an uncompromising supplier and expert of top quality composite solutions for the most demanding door and window manufacturers all over the world.

Composites are always a sum of multiple properties. Good thermal and mechanical properties make glassfiber profiles an ideal choice for door sills and leaf profiles.

- Low thermal conductivity improves the door U-value
- No condensation water on door sill
- Excellent abrasion resistance equals longer lifetime
- No need for thermal breaks means simple structure and easy assembly
- Very good chemical resistance and weatherability for the most demanding atmospheres
- Low thermal coefficient of heat expansion means stable doors in changing temperatures
- Custom-made design and colors

SUPERIOR PRODUCT FEATURES

- High energy efficiency
- Non corrosive
- Class 1 paintable surface
- Low weight
- Composites enable slim profiles and thus enable maximum solar light and solar heating
- No cold air falls, so installation to floor level possible with no radiators needed

Composite is a sustainable long term solution.

SOME APPLICATIONS

Door sills for exterior doors and sliding door, door leaf profiles, stiffeners, thermal breaks

EXEL OFFERING

- Pultrusion profiles with traditional construction
- High performance optimized pultrusion profiles
- All different materials
  - Resins
    - Polyester
    - Polyurethane
    - Epoxy
  - Reinforcements
    - Glassfiber
    - Carbonfiber
    - Natural fiber
- Machining options
  - Cutting
  - Drilling
  - Milling
- Colour/coating options
  - Through coloured resin systems
  - Wet painting
  - Powder coating
## TECHNICAL DATA SHEET

### General information

<table>
<thead>
<tr>
<th>Structure</th>
<th>UNIT</th>
<th>DOOR SILLS</th>
<th>DOOR FRAMES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MONOLITHIC</td>
<td>HOLLOW</td>
</tr>
<tr>
<td>Resin type</td>
<td></td>
<td>UP</td>
<td>UP</td>
</tr>
<tr>
<td>Reinforcement</td>
<td></td>
<td>GF</td>
<td>GF</td>
</tr>
<tr>
<td>Color</td>
<td></td>
<td>Available</td>
<td>Available</td>
</tr>
<tr>
<td>Surface finish</td>
<td></td>
<td>Plain</td>
<td>Plain</td>
</tr>
</tbody>
</table>

### Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Unit</th>
<th>DOOR SILLS</th>
<th>DOOR FRAMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity</td>
<td>g/cm³</td>
<td>1.85</td>
<td>1.85</td>
</tr>
<tr>
<td>Fiber Weight Content</td>
<td>Weight-%</td>
<td>75</td>
<td>65</td>
</tr>
<tr>
<td>Fiber Volume Content</td>
<td>Volume-%</td>
<td>55</td>
<td>44</td>
</tr>
<tr>
<td>Bending strength</td>
<td>MPa</td>
<td>300</td>
<td>250</td>
</tr>
<tr>
<td>E-modulus</td>
<td>GPa</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>Bending strength</td>
<td>MPa</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>E-modulus</td>
<td>GPa</td>
<td>5</td>
<td>7</td>
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</tbody>
</table>

### Mechanical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>DOOR SILLS</th>
<th>DOOR FRAMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal elongation</td>
<td>10⁻⁶ K⁻¹</td>
<td>6</td>
</tr>
<tr>
<td>Thermal conductivity</td>
<td>W/m²K</td>
<td>0.3</td>
</tr>
</tbody>
</table>

**STRUCTURES:**
- U = unidirectional fibres
- V = veil
- M = mat

Data included in tables are for guiding and material choice. Final specifications can be finetuned for particular applications. Data is believed to be correct to the best of our knowledge at the date of printing. Basic laminates in accordance with ISO13706 E17 and E23 are available.