SIMONA® PE FOAM/SIMONA® PP FOAM
Foamed Plastic Sheets
Light Weight and High Rigidity – SIMONA® PE FOAM/SIMONA® PP FOAM

Featuring a closed-cell foamed core and coextruded outer layers, the new sheets SIMONA® PE FOAM and SIMONA® PP FOAM provide an outstanding combination of light weight and high rigidity.

Excellent properties
- Very easy to process
- Excellent surface quality
- High flexural strength
- Corrosion-free
- Easy to clean
- UV-resistant (PE FOAM)
- Printable after pretreatment

SIMONA® PE FOAM
SIMONA® PE FOAM combines excellent processing properties with the benefits of high surface quality and low water absorption. With SIMONA® PE FOAM it is possible to replace many applications that use plywood and MDF (medium density fibreboard). Compared to the latter wood-based materials, PE FOAM is much more durable, especially in applications exposed to moist/wet conditions.

SIMONA® PE FOAM features UV stabilisation as standard and has a scratch-resistant embossed surface.

SIMONA® PP FOAM
SIMONA® PP FOAM sheets have smooth, compact surfaces and offer maximum rigidity. Owing to these properties, together with good chemical resistance, excellent fabrication capability and low water absorption, SIMONA® PP FOAM is ideal for linings, encasements and, in apparatus construction, for applications with non-critical chemical and mechanical stresses.
Fields of Application and Properties
SIMONA® PE FOAM/SIMONA® PP FOAM

Fields of application
SIMONA® PE FOAM
- Boatbuilding (partitions, bulkheads, control desks, etc.)
- Banner material
- Toilet containers, toilet walls and toilet doors
- Partitions in agriculture and livestock farming

Fields of application
SIMONA® PP FOAM
- Apparatus components
- Encasements
- Tank covers
- Transport containers
- Small sewage treatment plants
- Packaging systems
- Insulation components
- Reusable containers
- Linings

Excellent fabrication capability
Owing to their low inherent stresses and strains, SIMONA® PE FOAM/SIMONA® PP FOAM sheets are ideal for processing in many different ways and are easy to clean.

Fabrication processes
- Welding
- Thermoforming
- Hot bending
- Cutting
- Drilling
- Milling
- Sawing
- Water-jet cutting
- Die cutting
- Printing after pretreatment
- Cut edges can be sealed with edge strips

Light weight, low density and high rigidity
Density comparison in g/cm³

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (g/cm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 100</td>
<td>0.955</td>
</tr>
<tr>
<td>PE FOAM</td>
<td>0.700</td>
</tr>
<tr>
<td>PP DWU</td>
<td>0.915</td>
</tr>
<tr>
<td>PP FOAM</td>
<td>0.650</td>
</tr>
</tbody>
</table>

The chart illustrates the difference in densities of compact PE and PP compared to SIMONA® PE FOAM and SIMONA® PP FOAM.

UV stability
SIMONA® PE FOAM is UV-stabilised and suitable for outdoor use.
Range of Products and Material Specifications

**SIMONA® PE FOAM/SIMONA® PP FOAM**

### Range of products

<table>
<thead>
<tr>
<th>Extruded sheets (formats/thicknesses)</th>
<th>SIMONA® PE FOAM</th>
<th>SIMONA® PP FOAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 x 1000 mm</td>
<td>6, 8, 10</td>
<td>5, 6, 8, 10, 15, 20</td>
</tr>
<tr>
<td>2000 x 1250 mm</td>
<td>10</td>
<td>–</td>
</tr>
<tr>
<td>3000 x 1500 mm</td>
<td>–</td>
<td>5, 6, 8, 10, 15, 20</td>
</tr>
<tr>
<td>Colours</td>
<td>white</td>
<td>grey</td>
</tr>
</tbody>
</table>

All dimensions in mm. Other formats, colours and intermediate thicknesses are available on request. Stock availability of products: **Bold face** = available immediately; light face = available on request.

### Material specifications

<table>
<thead>
<tr>
<th></th>
<th>SIMONA® PE FOAM</th>
<th>SIMONA® PP FOAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density, g/cm³, DIN EN ISO 1183</td>
<td>0.700</td>
<td>0.650</td>
</tr>
<tr>
<td>Tensile modulus of elasticity, MPa, DIN EN ISO 527</td>
<td>700</td>
<td>1100</td>
</tr>
<tr>
<td>Shore hardness, D, DIN EN ISO 868</td>
<td>61</td>
<td>71</td>
</tr>
<tr>
<td>Fire behaviour, DIN 4102</td>
<td>normal flammability</td>
<td>normal flammability</td>
</tr>
<tr>
<td>Temperature range, °C</td>
<td>–50 to +80</td>
<td>0 to +100</td>
</tr>
</tbody>
</table>