PRODUCT DESCRIPTION

Sarnafil® G 410-15 EL SA is a PVC, multi-layer, self-adhesive, lacquered matt finish, weldable sheet membrane with a glass fibre reinforcing inlay. Contains ultraviolet light stabilizers and flame retardants to provide a colour stable, fast installation, low maintenance and durable membrane. Thickness 1,5 mm.

USES

- Roof waterproofing membrane for exposed flat roofs on smooth substrates

CHARACTERISTICS / ADVANTAGES

- Proven performance over decades
- Factory applied VOC free self adhesive system
- No primer required
- Lacquer coated surface
- Resistant to permanent UV radiation
- Glass fleece inlay provides high dimensional stability
- High water vapour permeability
- Resistant to all common environmental influences
- Suitable for use in most global conditions
- Hot air welded no naked flames
- Fast installation
- Instant wind uplift resistance through the self-adhesive backing

APPROVALS / STANDARDS

- CE Marking and Declaration of Performance to EN 13956 - Polymeric sheets for roof waterproofing.
- External fire performance tested according to EN 1187 and classified according to EN 13501-5: Broor(t4).
- Official Quality Approvals and Agreement Certificates and approvals.
- Monitoring and assessment by approved laboratories.
- Quality Management system in accordance with EN ISO 9001/14001.

PRODUCT INFORMATION

<table>
<thead>
<tr>
<th>Chemical Base</th>
<th>PVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging</td>
<td>Standard rolls are wrapped individually in a blue PE-foil.</td>
</tr>
<tr>
<td></td>
<td>Roll size</td>
</tr>
<tr>
<td></td>
<td>Length</td>
</tr>
<tr>
<td></td>
<td>Width</td>
</tr>
<tr>
<td></td>
<td>Weight</td>
</tr>
</tbody>
</table>
### Appearance / Colour

<table>
<thead>
<tr>
<th>Surface</th>
<th>matt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colours</td>
<td></td>
</tr>
<tr>
<td>Top surface</td>
<td>light grey (Sika colour no. 9525)</td>
</tr>
<tr>
<td>Bottom surface</td>
<td>dark grey</td>
</tr>
<tr>
<td>Backing</td>
<td>self-adhesive film and PP release liner</td>
</tr>
</tbody>
</table>

### Shelf Life
12 months from production date.

### Storage Conditions

Product must be stored in original unopened and undamaged sealed packaging in dry conditions and temperatures between + 5 °C and + 35 °C. Protect from direct sunlight, rain, snow and ice, etc. Store in a horizontal position. Do not stack pallets of the rolls on top of each other, or under pallets of any other materials during transport or storage. Always refer to packaging.

### Product Declaration
EN 13956 - Polymeric sheets for roof waterproofing.

### Visible Defects

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Pass</th>
<th>(EN 1850-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>15 m (-0 % / +5 %)</td>
<td>(EN 1848-2)</td>
</tr>
<tr>
<td>Width</td>
<td>2 m (-0.5 % / +1 %)</td>
<td>(EN 1848-2)</td>
</tr>
<tr>
<td>Effective Thickness</td>
<td>1,5 mm (-5 % / +10 %)</td>
<td>(EN 1849-2)</td>
</tr>
<tr>
<td>Straightness</td>
<td>≤30 mm</td>
<td>(EN 1848-2)</td>
</tr>
<tr>
<td>Flatness</td>
<td>≤10 mm</td>
<td>(EN 1848-2)</td>
</tr>
<tr>
<td>Mass per unit area</td>
<td>2,00 kg/m² (-5 % / +10 %)</td>
<td>(EN 1849-2)</td>
</tr>
</tbody>
</table>

### TECHNICAL INFORMATION

**Resistance to Impact**

<table>
<thead>
<tr>
<th>Substrate</th>
<th>≥600 mm (EN 12691)</th>
<th>≥1000 mm (EN 12691)</th>
</tr>
</thead>
<tbody>
<tr>
<td>hard substrate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>soft substrate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Hail Resistance**

<table>
<thead>
<tr>
<th>Substrate</th>
<th>≥22 m/s (EN 13583)</th>
<th>≥30 m/s (EN 13583)</th>
</tr>
</thead>
<tbody>
<tr>
<td>rigid substrate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>flexible substrate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Resistance to Static Load**

<table>
<thead>
<tr>
<th>Substrate</th>
<th>≥20 kg (EN 12730)</th>
<th>≥20 kg (EN 12730)</th>
</tr>
</thead>
<tbody>
<tr>
<td>soft substrate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rigid substrate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tensile Strength**

<table>
<thead>
<tr>
<th>Direction</th>
<th>≥600 N/50 mm (EN 12311-2)</th>
<th>≥600 N/50 mm (EN 12311-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>longitudinal (md)¹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>transversal (cmd)²</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ md = machine direction
² cmd = cross machine direction

**Elongation**

<table>
<thead>
<tr>
<th>Direction</th>
<th>≤300 % (EN 12311-2)</th>
<th>≤300 % (EN 12311-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>longitudinal (md)¹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>transversal (cmd)²</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ md = machine direction
² cmd = cross machine direction

**Dimensional Stability**

<table>
<thead>
<tr>
<th>Direction</th>
<th>≤0.2 % (EN 1107-2)</th>
<th>≤0.1 % (EN 1107-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>longitudinal (md)¹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>transversal (cmd)²</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ md = machine direction
² cmd = cross machine direction

**Joint Peel Resistance**

| ≥300 N/50 mm (EN 12316-2) |

**Joint Shear Resistance**

| ≥600 N/50 mm (EN 12317-2) |

**Foldability at Low Temperature**

| ≤ -20 °C (EN 495-5) |

**External Fire Performance**

B-ROOF(t4) (EN 1187)

(EN 13501-5)

**Reaction to Fire**

Class E (EN ISO 11925-2, classification to EN 13501-1)
Effect of Liquid Chemicals, Including Water

- On request (EN 1847)

UV Exposure
- Pass (> 5000 h / grade 0) (EN 1297)

Water Vapour Transmission
- μ = 20,000 (EN 1931)

Water Tightness
- Pass (EN 1928)

Service Temperature
- -50 °C minimum / +50 °C maximum

SYSTEM INFORMATION

System Structure
- System products for installation:
  - Sarnafil® G 410-15EL sheet for detailing
  - Sarnafil® G 410-15EL strips
  - Sarnafil® Metal Sheet
  - Peelstop
  - Sarna Seam Cleaner
  - Sarna Cleaner
- Ancillary Products:
  - Prefabricated parts, roof drains, scuppers, walkway pads, decor profiles and protection sheets.

Compatibility
- Waterproofing membrane not compatible with direct contact to other plastics, e.g. EPS, XPS & PF. Not resistant to tar, bitumen, oil and solvent containing materials.

APPLICATION INFORMATION

Ambient Air Temperature
- +5 °C min. / +60 °C max.

Substrate Temperature
- +5 °C min. / +60 °C max.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

The substrate surface/supporting layer must be uniform, smooth and free of any sharp protrusion or burrs, clean, dry and free of grease, bitumen, oil and dust. All layers of the roof build-up and substrate must be secured against wind uplift.

The substrate must be one of the following materials:
- Sarnatherm G
- OSB 3
- Plywood

APPLICATION METHOD / TOOLS

Installation procedure
- Refer to the relevant installation instructions and method statement.

Welding overlap seams
- All membrane seam overlaps must be welded by using hand welding guns and pressure rollers or automatic heat welding machines, with individually adjustable and electronically controlled welding temperatures.

Recommended welding equipment
- Welding parameters, such as speed and temperature must be established with trials on site, prior to any welding works. The effective width of welded overlaps by hot air must be minimum 20 mm. The seams must be mechanically tested with screw drivers to ensure the integrity / completion of the weld. Any imperfections must be rectified by hot air welding.

Bonding to flashings:
- Sarnafil® G 410-15EL is bonded to flashing surfaces using Sarnacol® 2170 adhesive.
FURTHER DOCUMENTS

- Installation instructions for Sarnafil® G 410-EL type systems fully bonded for exposed roofs

LIMITATIONS

Installation work must only be carried out by Sika-Sarnafil® Registered Roofing Contractors.
- Do not apply to wet, damp or unclean surfaces.
- Do not apply to slopes over 20°.
- Installation of some ancillary products, e.g. contact adhesives / cleaners are limited to temperatures above +5 °C. (Refer to appropriate Product Data Sheet).
- Be aware special measures may be compulsory for certain installations below +5 °C ambient temperature due to safety and national regulations.

VALUE BASE

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

ECOLOGY, HEALTH AND SAFETY

REGULATION (EC) NO 1907/2006 - REACH

This product is an article as defined in article 3 of regulation (EC) No 1907/2006 (REACH). It contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet following article 31 of the same regulation is not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in this product data sheet. Based on our current knowledge, this product does not contain SVHC (substances of very high concern) as listed in Annex XIV of the REACH regulation or on the candidate list published by the European Chemicals Agency in concentrations above 0.1 % (w/w)

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika’s current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika’s recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product’s suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.