PRODUCT DATA SHEET

Sarnafil® G 410-48 Feltback EnergySmart

Sarnafil G 410 Roof Membrane is a PVC thermoplastic membrane

PRODUCT DESCRIPTION

Sarnafil® G 410-48 Feltback EnergySmart Roof Membrane is a PVC thermoplastic membrane produced with an integral fiberglass mat reinforcement for excellent dimensional stability, is highly reflective, with heat-weldable seams, and a unique lacquer coating applied to the top of the membrane to reduce dirt pick up.

USES

Sarnafil G 410 is used in adhered applications with various adhesives over various substrates.

AREAS OF APPLICATION

- New Roofs
- Reroofs
- Recovers

CHARACTERISTICS / ADVANTAGES

- Highly reflective
- Excellent dimensional stability
- Factory applied lacquer coated to reduce dirt pick up
- Hot-air welded seams for long-term performance
- Proven membrane performance
- Superior fire resistance

APPROVALS / STANDARDS

- FM Global
- Underwriters Laboratories
- Underwriters Laboratories of Canada
- ICC Code Compliance – ESR 1157
- Miami-Dade County
- Florida Building Code
- NSF/ANSI 347: Platinum Certified
- ENERGY STAR®
- California Title 24
- LEED / Green Globes
PRODUCT INFORMATION

Chemical Base
High-quality, PVC membrane containing ultraviolet light stabilizers, flame retardant, and fiberglass reinforcement with a unique lacquer coating on the top surface.

Recycled Content
9% Pre-consumer, 1% Post-consumer

Reinforcing Material
Fiberglass

Packaging
48 mil (1.2 mm) Membrane*
10 ft x 100 ft (3 m x 30 m) roll, 363 lbs (165 kg) per roll,
9 rolls per pallet

* Made to order, minimum volume required, extended production lead times. Consult with Sika – Roofing representative for further information.

Appearance / Color
• Top: White, Reflective Gray, Tan, and Patina Green
• Bottom: Gray

Storage Conditions
Store rolls on pallets and fully protected from the weather with clean canvas tarpaulins. Unvented polyethylene tarpaulins are not accepted due to the accumulation of moisture beneath the tarpaulin in certain weather conditions that may affect the ease of membrane weldability.

TECHNICAL INFORMATION

Resistance to Static Puncture
Pass
33 lbf (15 kg)

Resistance to Dynamic Puncture
Pass
7.3 ft-lbf (10 J)

Tensile Strength
60 lbf (267 N)
55 lbf (245 N)

Elongation
250 & 220% MD & CMD
250 & 220% MD & CMD

Linear Dimensional Change
-0.02%
0.1%

Tear Strength
15 lbf (67 N)
10 lbf (45 N)

Seam Strength
Pass
75% of original

Low Temperature Bend
Pass
Pass -40°F (-40°C)
Retention of Properties after Heat Ageing

<table>
<thead>
<tr>
<th>Property</th>
<th>% of original</th>
<th>(ASTM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength</td>
<td>Pass</td>
<td>(D-3045) Pass</td>
</tr>
<tr>
<td>Elongation</td>
<td>Pass</td>
<td>(D-715) Pass</td>
</tr>
<tr>
<td>Tensile Strength, % of</td>
<td>90</td>
<td>(Type II D-4434 Spec. Requirement)</td>
</tr>
<tr>
<td>original</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elongation, % of original</td>
<td>90</td>
<td></td>
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</table>

UV Exposure

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Time</th>
<th>(ASTM)</th>
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</thead>
<tbody>
<tr>
<td>Cracking</td>
<td>None</td>
<td>(Type II D-4434 Spec. Requirement)</td>
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<tr>
<td>Discoloration</td>
<td>Negligible</td>
<td></td>
</tr>
<tr>
<td>Crazing</td>
<td>None</td>
<td></td>
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Weight Change after Immersion in Water

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<thead>
<tr>
<th>Change</th>
<th>%</th>
<th>(ASTM)</th>
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<tbody>
<tr>
<td>Weight Change</td>
<td>1.9%</td>
<td>(D-570) 3.0%</td>
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</table>

Solar Reflectance

<table>
<thead>
<tr>
<th>EnergySmart Colors</th>
<th>Initial Solar Reflectance</th>
<th>3-Year Solar Reflectance</th>
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</thead>
<tbody>
<tr>
<td>EnergySmart White</td>
<td>0.85</td>
<td>0.74</td>
</tr>
<tr>
<td>EnergySmart Tan</td>
<td>0.73</td>
<td>0.65</td>
</tr>
<tr>
<td>EnergySmart Reflective Gray</td>
<td>0.73</td>
<td>0.66</td>
</tr>
<tr>
<td>EnergySmart Patina Green</td>
<td>0.55</td>
<td>0.46</td>
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</table>

Thermal Emittance

<table>
<thead>
<tr>
<th>EnergySmart Colors</th>
<th>Initial Thermal Emittance</th>
<th>3-Year Thermal Emittance</th>
</tr>
</thead>
<tbody>
<tr>
<td>EnergySmart White</td>
<td>0.86</td>
<td>0.84</td>
</tr>
<tr>
<td>EnergySmart Tan</td>
<td>0.85</td>
<td>0.86</td>
</tr>
<tr>
<td>EnergySmart Reflective Gray</td>
<td>0.89</td>
<td>0.88</td>
</tr>
<tr>
<td>EnergySmart Patina Green</td>
<td>0.86</td>
<td>0.85</td>
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</tbody>
</table>

Solar Reflectance Index

<table>
<thead>
<tr>
<th>EnergySmart Colors</th>
<th>Initial Solar Reflectance Index</th>
<th>3-Year Solar Reflectance Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>EnergySmart White</td>
<td>107</td>
<td>90</td>
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<tr>
<td>EnergySmart Tan</td>
<td>89</td>
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<tr>
<td>EnergySmart Reflective Gray</td>
<td>90</td>
<td>80</td>
</tr>
<tr>
<td>EnergySmart Patina Green</td>
<td>64</td>
<td>51</td>
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</tbody>
</table>

1 Solar Reflectance Index calculated according to ASTM E1980.
2 Meets ENERGY STAR®, LEED, Green Globes, and California’s Title 24 criteria for Low and Steep Slope applications
APPLICATION INSTRUCTIONS

APPLICATION

Sarnafil G 410 is installed after proper preparation of the approved substrate. The membrane is unrolled into Sarnacol® adhesive in accordance with Sika’s technical requirements and then pressed into place with a minimum 100 lb (45 kg) steel roller. Sarnafil G 410 seams are heat-welded together by trained operators using hot-air welding equipment. Different Sarnacol adhesives require different application methods. Please consult Sika’s Specifications or Applicator Handbook for detailed installation procedures.

MAINTENANCE

Standard maintenance of Sarnafil systems should include regular inspections of flashings, drains, and termination sealants at least twice a year and after each storm.

AVAILABILITY/WARRANTY

AVAILABILITY

From Sika Corporation – Roofing Authorized Applicators for use within Sarnafil or Sikaplan systems.

WARRANTY

Upon successful completion of the installed roof by the Sika Authorized Applicator, Sika Corporation will provide a warranty to the Building Owner via the Sika Authorized Applicator

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.
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