



# PRODUCT DATA SHEET

## SARNATHERM<sup>®</sup> LIGHTGUARD

Sarnatherm Lightguard is a composite latex modified concrete bonded to extruded polystyrene insulation. Sarnatherm Lightguard is installed directly on the separator sheet over the completed Sarnafil<sup>®</sup> roof assembly.

### PRODUCT INFORMATION

#### USES

Wherever insulation is required on top of a conventional roof assembly.

#### AREAS OF APPLICATION

- New Roofs
- Recover Roofs
- Mechanically Attached Systems
- Adhered Systems

#### FEATURES / BENEFITS

- Interlocking boards
- Available with a white reflective Coolguard<sup>®</sup> coating that is EnergyStar listed.

#### TESTS

#### STANDARDS / APPROVALS

- UL 1256, 790, 263
- FM 4450, 4470
- Miami-Dade County
- State of Florida

### PRODUCT DATA

#### FORM

#### COMPOSITION

Composite latex modified concrete bonded to extruded polystyrene insulation

#### PACKAGING

- 2 ft x 4 ft (0.6 m x 1.2 m) panels
- 2 in (51 mm) thick polystyrene foam with 3/8 in (9.5 mm) thick latex modified concrete face
- 3 in (76 mm) thick polystyrene foam with 3/8 in (9.5 mm) thick latex modified concrete face

**STORAGE****STORAGE CONDITIONS**

Factory applied packaging is intended only for protection during transit. When stored outdoors or on the job site, the insulation should be stacked on pallets at least four inches above the surface level and completely covered with a weatherproof covering such as a tarpaulin. The insulation shall be protected from sunlight. Sarnatherm Lightguard that becomes wet or damaged must be removed and replaced with dry product.

**TECHNICAL DATA****TYPICAL PHYSICAL PROPERTIES\***

| Properties   | ASTM Test Method | Results                                  |
|--|------------------|--|
| Extruded Polystyrene                                   | C 578            | Type VI                                  |
| Weight, lbs/ft <sup>2</sup> (kg/m <sup>2</sup> )       | --               | 4.5 (22)                                 |
| R-Value, per 1 in (25 mm) foam                         | C 518            | 5  |
| Thermal Conductivity, K-Value                          | --               | 0.2                                      |
| Compressive Strength (foam), lbs/in <sup>2</sup> (kPa) | 1621             | 40 (275.6)                               |
| Point Loading (1 in x 1 in), lbs/in <sup>2</sup> (kPa) | --               | 450 (3101)                               |
| Water Absorption, %                                    | D 2842           | < 0.1                                    |
| Impact Test, 2 (51 mm) Steel Ball Drop                 | FM 4470          | <0.05 in (1.3 mm)<br>Slight Indentations |
| Freeze/Thaw, cycles                                    | C 666 – B        | 750                                      |
| Water Vapor Transmission, perm                         | E 96             | 0.8                                      |
| Thermal Emittance**                                    | E 408            | 94                                       |
| Reflectivity**   | --               | Initial 84 / Aged 65                     |

\*Physical properties listed above are presented as typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation.

\*\*Test values with Coolguard® coating applied to weathering surface.

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## SYSTEM INFORMATION

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|---------------------|--|
| <b>INSTALLATION</b> | Sarnatherm Lightguard is installed by a Sika Authorized Applicator. Sarnatherm Lightguard is installed over a separator sheet that is protecting the Sarnafil membrane. Rows of Sarnatherm Lightguard shall have a 2 ft (0.6 m) stagger. All sides of the boards must be tightly butted to adjacent boards with gaps no greater than 1/4 in (6.3 mm).  |
| <b>AVAILABILITY</b> | From Sika Corporation – Roofing Authorized Applications for use within Sarnafil or Sikaplan systems.   |
| <b>MAINTENANCE</b>  | Standard maintenance of Sarnafil or Sikaplan systems should include regular inspection of flashings, drains, and termination sealants at least twice a year and after each storm.  |
| <b>WARRANTY</b>     | As a Sika supplied product, Sarnatherm Lightguard is covered under Sika Corporation warranties.  |
| <b>LEGAL NOTES</b>  | <p>All information provided by Sika Corporation (“Sika”) concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika’s current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika’s instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika’s control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s). Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at <a href="http://usa.sarnafil.sika.com">usa.sarnafil.sika.com</a> or by calling 800-451-2504.</p> <p><b>Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product’s most current Product Data Sheet, product label and Safety Data Sheet which are available online at <a href="http://usa.sarnafil.sika.com">usa.sarnafil.sika.com</a> or by calling Sika’s Technical Service Department at 800-451-2504. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.</b></p> <p>Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer’s sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.</p> <p><b>NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.</b></p> |

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