

## PRODUCT DATA SHEET

# Sarnatherm® XPS tapered

SARNATHERM XPS IS A RIGID EXTRUDED POLYSTYRENE INSULATION BOARD THAT CAN BE USED IN EITHER A SIKA ROOFING OR WATERPROOFING APPLICATION

### PRODUCT DESCRIPTION

Sarnatherm® XPS tapered is a rigid extruded polystyrene insulation board that can be used in either a Sika roofing or waterproofing application.

### USES

Wherever insulation is required within a conventional roof assembly and waterproofing systems.

Areas of Application

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

### CHARACTERISTICS / ADVANTAGES

- Low water absorption
- Compatible with Sarnafil® and Sikaplan® membranes

### APPROVALS / STANDARDS

- ASTM C 578, Type VI, VII, V
- CAN/ULC S701, Type 4

### PRODUCT INFORMATION

<b>Chemical Base</b>	Polystyrene foam core with a smooth skin surface on the face and back surfaces
<b>Packaging</b>	<ul style="list-style-type: none"> <li>▪ Various Thicknesses</li> <li>▪ Sarnatherm per bundle depends on thickness</li> </ul>
<b>Shelf Life</b>	n/a
<b>Storage Conditions</b>	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 4 in (102 mm) above ground level and completely covered with a weatherproof covering such as a tarpaulin. The temporary factory-applied packaging should be slit or removed to prevent accumulation of condensation. Refer to PIMA Technical Bulletin 109: Storage and Handling Recommendations for Polyiso Roof Insulation.

## Thickness

### Thermal Data\*

Thickness	R-Value	C-Value
1.0 in (25 mm)	5.0	0.200
1.5 in (38 mm)	7.5	0.133
2.0 in (51 mm)	10.0	0.100
2.5 in (64 mm)	12.5	0.080
3.0 in (76 mm)	15.0	0.067
4.0 in (102 mm)	20.0	0.050

\*Not all available thicknesses are listed.

## TECHNICAL INFORMATION

<b>Compressive Strength</b>	40 (275)	(ASTM D-1621), psi (kPa), min <sup>(1)</sup>
<b>Flexural Strength</b>	60 (480)	(ASTM C-203), psi (kPa), min
<b>Dimensional Stability</b>	<b>Coefficient of Linear Thermal Expansion</b> 3.5 x 10 <sup>-5</sup> (6.3 x 10 <sup>-2</sup> )	(-) in/in.°F (mm/m.°C)
<b>Reaction to Fire</b>	<b>Flame Spread<sup>1</sup>: 5</b> <b>Smoke Developed: 165</b>	(ASTM E-84)
	<sup>1</sup> This numerical flame spread rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.	
<b>Diffusion Resistance to Water Vapour</b>	0.8 (35)	(ASTM E-96), perms (ng/(Pa•s•m <sup>2</sup> ))(1)
	<sup>1</sup> Water vapor permeance varies with product type and thickness. Values are based on the desiccant method and they apply to insulation 1 in (25 mm) or greater in thickness.	
<b>Water Absorption</b>	0.1	(ASTM C-272), % by volume, max
<b>Service Temperature</b>	165 °F (74 °C)	

## SYSTEM INFORMATION

### System Structure

Sarnatherm® XPS tapered is installed either under or over the Sika roofing/waterproofing membrane depending on the system design. Overburden is utilized to hold the insulation in place in a waterproofing application. Polystyrene should not come in contact with PVC. Always place a separation layer such as Sarnafelt NWP between the Sarnatherm® XPS tapered and the membrane in both roofing and waterproofing applications. During installation in hot, sunny weather, protect the insulation with a white covering to prevent excessive heat build-up and potential warping of the insulation boards.

### Maintenance

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.

## FURTHER DOCUMENTS

### Maintenance

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

### Availability

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

### Warranty

As a Sika supplied accessory, Sarnatherm® XPS tapered is eligible for coverage under Sika Corporation System

Warranties.

## 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

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling.

Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

## 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.

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Product Data Sheet  
Sarnatherm® XPS tapered  
June 2019, Version 01.01  
020935052000005011

SarnathermXPSastered-en-IE-(06-2019)-1-1.pdf