



## PRODUCT DATA SHEET

# Sarnatherm® MPS

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SARNATHERM MPS IS A RIGID, CLOSED CELL, MOLDED POLYSTYRENE INSULATION BOARD

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### PRODUCT DESCRIPTION

Sarnatherm® MPS is a rigid, closed cell, molded polystyrene insulation board that is used in Sika waterproofing applications.

### USES

Wherever insulation is required within a waterproofing protected membrane assembly (PMA).

#### Areas of Application

- Green Roofs
- Plaza Decks

### CHARACTERISTICS / ADVANTAGES

- High compressive strength: 40 psi and 60 psi
- Stable long-term R-value
- Moisture resistant

### APPROVALS / STANDARDS

- ASTM C 578, Type XIV (40 psi)
- ASTM C 578, Type XV (60 psi)
- UL Classified

# PRODUCT INFORMATION

<b>Chemical Base</b>	Polystyrene Foam Core
<b>Packaging</b>	<ul style="list-style-type: none"> <li>▪ 4 ft x 8 ft (1.2 m x 2.4 m)</li> <li>▪ Various Thicknesses</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" (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.

<b>Density</b>	<b>40 psi</b>	<b>60 psi</b>	(ASTM C-303)
	2.4 lb/ft <sup>3</sup> (40 kg/m <sup>3</sup> )	3.0 lb/ft <sup>3</sup> (48 kg/m <sup>3</sup> )	

Thickness	40 psi		
	Thickness	R-Value <sup>1</sup>	RSI <sup>1</sup>
1" (25 mm)	4.4	0.77	
1-1/8" (29 mm)	5	0.88	
1-1/2" (38 mm)	6.6	1.16	
1-11/16" (43 mm)	7.5	1.32	
2" (51 mm)	8.8	1.55	
2-1/4" (57 mm)	10	1.76	
2-1/2" (63 mm)	11	1.94	
3" (76 mm)	13.2	2.32	
3-3/8" (86 mm)	15	2.64	
4" (102 mm)	17.6	3.10	
4-1/2" (114 mm)	20	3.52	
6" (152 mm)	26.4	4.65	
6-3/4" (171 mm)	30	5.28	
8" (203 mm)	35.2	6.20	
	60 psi		
	Thickness	R-Value <sup>1</sup>	RSI <sup>1</sup>
1" (25 mm)	4.5	0.79	
1-1/8" (29 mm)	5	0.88	
1-1/2" (38 mm)	6.8	1.19	
1-11/16" (43 mm)	7.5	1.32	
2" (51 mm)	9	1.59	
2-1/4" (57 mm)	10	1.76	
2-1/2" (63 mm)	11.3	1.98	
3" (76 mm)	13.5	2.38	
3-3/8" (86 mm)	15	2.64	
4" (102 mm)	18	3.17	
4-1/2" (114 mm)	20	3.52	
6" (152 mm)	27	4.76	
6-3/4" (171 mm)	30	5.28	
8" (203 mm)	36	6.34	

<sup>1</sup> R-value at 75°F (24°C)



## TECHNICAL INFORMATION

<b>Compressive Strength</b>	40 psi (276 kPa) 60 psi (414 kPa)	(ASTM D-1621)		
<b>Flexural Strength</b>	<b>40 psi</b> 60 psi (414 kPa)	<b>60 psi</b> 75 psi (517 kPa)	(ASTM C-203)	
<b>Reaction to Fire</b>	Flame Spread: <25 Smoke Development: <450	(ASTM E-84)		
<b>Thermal Conductivity</b>	<b>K-value per inch, Btu-in/°F·ft<sup>2</sup>·h (W/°K·m)</b>			
	<b>40 psi</b> <b>at 25°F (-4°C)</b>	<b>at 40°F (5°C)</b>	<b>at 75°F (24°C)</b>	(ASTM C-518)
	0.20 (0.029)	0.21 (0.030)	0.23 (0.033)	
	<b>60 psi</b> <b>at 25°F (-4°C)</b>	<b>at 40°F (5°C)</b>	<b>at 75°F (24°C)</b>	(ASTM C-518)
	0.20 (0.028)	0.21 (0.030)	0.22 (0.032)	
<b>Thermal Resistance</b>	<b>R-value per inch, °F·ft<sup>2</sup>·h/Btu (°K·m<sup>2</sup>/W)</b>			
	<b>40 psi</b> <b>at 25°F (-4°C)</b>	<b>at 40°F (5°C)</b>	<b>at 75°F (24°C)</b>	(ASTM C-518)
	5.0 (0.88)	4.8 (0.85)	4.4 (0.77)	
	<b>60 psi</b> <b>at 25°F (-4°C)</b>	<b>at 40°F (5°C)</b>	<b>at 75°F (24°C)</b>	(ASTM C-518)
	5.1 (0.90)	4.9 (0.86)	4.5 (0.79)	
<b>Permeability to Water Vapor</b>	2.5 perm at 1" thickness	(ASTM E-96)		
<b>Water Absorption</b>	0.3 % after 24 hrs ambient storage	(ASTM C-272)		
<b>Service Temperature</b>	165°F (74°C)			

## APPLICATION INSTRUCTIONS

Sarnatherm MPS is installed by a Sarnafil Authorized Applicator. It is installed over the membrane in PMA waterproofing systems; the overburden is utilized to hold the insulation in place. Polystyrene must not come in contact with PVC. Always place a separation layer between the Sarnatherm MPS and the membrane.

## 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.

## 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.

## LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at [usa.sika.com](http://usa.sika.com) or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

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### Product Data Sheet

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