

PRODUCT DATA SHEET

SARNATHERM[®] XPS

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

PRODUCT INFORMATION

USES

Wherever insulation is required within a conventional roof assembly.

AREAS OF APPLICATION

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

FEATURES / BENEFITS

- Low water absorption
- Compatible with Sarnafil[®] and Sikaplan[®] membranes
- Available in various sizes

TESTS

STANDARDS / APPROVALS

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

PRODUCT DATA

FORM

COMPOSITION

Polystyrene foam core with a smooth skin surface on the face and back surfaces

PACKAGING

- Various Thicknesses
- Sarnatherm per bundle depends on thickness

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 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*.

TECHNICAL DATA
TYPICAL PHYSICAL PROPERTIES⁽¹⁾

Properties	ASTM Test Method	400	600	1000
Thermal Resistance per in. (25 mm) @75°F (24°C), ft ² .h.°F/Btu (m ² .°C/W), min	C 518, C 117	5.0 (0.88)	5.0 (0.88)	5.0 (0.88)
Compressive Strength, psi (kPa), min ⁽²⁾	D 1621	40 (275)	60 (415)	100 (690)
Flexural Strength, psi (kPa), min	C 203	60 (480)	75 (585)	100 (690)
Water Absorption, % by volume, max	C 272	0.1	0.1	0.1
Permeability, perms (ng/(Pa•s•m ²)) ⁽³⁾	E 96	0.8 (35)	0.8 (35)	0.8 (35)
Maximum Use Temperature, °F (°C)	--	165 (74)	165 (74)	165 (74)
Coefficient of Linear Thermal Expansion, in/in.°F (mm/m.°C)	D696	3.5 x 10 ⁻⁵ (6.3 x 10 ⁻²)	3.5 x 10 ⁻⁵ (6.3 x 10 ⁻²)	3.5 x 10 ⁻⁵ (6.3 x 10 ⁻²)
Flame Spread ⁽⁴⁾	E 84	5	5	5
Smoke Developed	E 84	165	165	165

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

(2)Value at yield or 5% whichever occurs first.

(3)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.

(4)This numerical flame spread rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

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

*Not all available thicknesses are listed.

SYSTEM INFORMATION

INSTALLATION

Sarnatherm XPS 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 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.

AVAILABILITY

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

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.

WARRANTY

As a Sika supplied product, Sarnatherm XPS is covered under Sika Corporation warranties.

LEGAL NOTES

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