

PARATHERM POLYISOCYANURATE INSULATION



Commercial Product Data Sheet

Product Description

Paratherm is a rigid roof insulation board composed of a closed cell polyisocyanurate foam core bonded on each side to fiberglass-reinforced facers. The product provides high thermal R-value, code compliance, and superior physical properties at a low installed cost.

Product Uses

Paratherm is used in combination with coverboards approved in advance by Siplast for all constructions requiring a single-source guarantee. Each panel of Paratherm must be secured to the roof deck with Factory Mutual Approved fasteners (appropriate to the deck type) and plates installed in accordance with current FM requirements. Alternately, maximum 4 ft x 4 ft (1.22 m x 1.22 m) panels of Paratherm may be adhered to a prepared concrete deck with a full mopping of hot asphalt or with Para-Stik Insulation Adhesive. Contact Siplast for approvals on other product uses.

Product Approvals

Paratherm meets or exceeds the requirements of ASTM C 1289 Type II, Class 1, Grade 2. Paratherm meeting ASTM C 1289 Type II Class 1 Grade 3 or Type II Class 2 requirements is also available. Paratherm is Factory Mutual Approved for Class 1, 1-60 and 1-90 fire and wind-resistant systems when constructed according to FM requirements. Paratherm has been classified by Underwriters Laboratories, Inc. as an approved roof insulation in all Siplast Class A roof constructions and Roof/Ceiling hourly fire-rated assemblies, and is classified by Underwriters Laboratories Canada.

Mechanical and physical properties are on the back side of this data sheet.

Current copies of all Siplast Commercial Product Data Sheets are posted on the Siplast Web site at www.Siplast.com.

COMMERCIAL PRODUCT INFORMATION

Panel Size - Flat Panels: Available in 4' x 8' (1.22 m x 2.43 m) and 4' x 4' (1.22 m x 1.22 m) panels.

Thickness - Flat Panels: 1 inch (2.54 cm) to 4 inches (10.16 cm)

Panel Size - Tapered Panels: Available in 4' x 4' (1.22 m x 1.22 m) panels.

Thickness - Tapered Panels: Panel thickness varies with taper/slope of the panel. Tapered panels are available to provide 1/16, 1/8, or 1/4 inch per foot slope (0.5%, 1%, or 2%).

Packaging: Panels are provided in palletized bundles shrouded with 1.5 mil polyethylene bags, shrink-wrapped, or stretch-wrapped in clear, unmarked film.

Storage and Handling: Handle all materials carefully to avoid damage and contamination with moisture or foreign matter.

Store materials out of direct exposure to the elements. All material stored on the roof overnight should be stored on pallets. When storing materials on the roof, do not overload the deck or structural assembly.

The factory plastic film is not intended as adequate protection from the elements. Cover all material using a breathable cover such as canvas. Polyethylene or other non-breathable plastic coverings are not acceptable.

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Physical and Mechanical Properties

TYPICAL PROPERTIES AND CHARACTERISTICS:

Nominal Thickness inch (mm)	R-Value*	Truckload Quantity sq/ft (sq/m)	Flute Span (max.) inch (mm)
1.0 (25)	6.0	32,384 (3,009)	2 5/8 (67)
1.2 (30)	7.2	27,456 (2,551)	2 5/8 (67)
1.3 (33)	7.8	25,344 (2,355)	2 5/8 (67)
1.5 (38)	9.0	21,824 (2,028)	3 3/8 (86)
1.6 (41)	9.6	20,416 (1,897)	3 3/8 (86)
1.8 (46)	10.9	18,304 (1,701)	3 3/8 (86)
2.0 (51)	12.1	16,192 (1,505)	3 3/8 (86)
2.3 (58)	14.0	14,080 (1,308)	3 5/8 (92)
2.5 (64)	15.3	12,672 (1,177)	3 5/8 (92)
2.7 (69)	16.6	11,968 (1,112)	3 5/8 (92)
2.8 (71)	17.2	11,968 (1,112)	3 5/8 (92)
3.0 (76)	18.5	10,560 (981)	3 5/8 (92)
3.2 (81)	19.8	9,856 (916)	3 5/8 (92)
3.4 (87)	21.1	9,856 (916)	3 5/8 (92)
3.5 (89)	21.7	9,152 (850)	3 5/8 (92)
3.8 (97)	23.7	8,448 (785)	3 5/8 (92)
4.0 (102)	25.0	7,700 (715)	3 5/8 (92)

*Long-term Thermal Resistance (LTTR) Values (determined in conformance with CAN/ULC-S770)

PHYSICAL PROPERTIES:

Property	Test Method	Specification Limits	
		Minimum	Maximum
Compressive Strength, psi (kPa)	ASTM D 1621 ASTM 1289	20 (138) (Grade 2) 25 (172) (Grade 3)	
Moisture Vapor Transmission, perms	ASTM C 355		1.0
Flame Spread (foam core)	ASTM E 84		<75
Service Temperature, range in °F (°C)		-100 (-73)	250 (122)