

PARATHERM & PARATHERM CG POLYISOCYANURATE INSULATION



Commercial Product Data Sheet

Product Description

Paratherm is a rigid roof insulation board comprised of a closed cell polyisocyanurate foam core bonded on each side to fiber-reinforced organic felt facer. Paratherm CG has a coated fiberglass facer. The product provides high thermal R-value, code compliance, and superior physical properties at a low installed cost. Standard product has a compressive strength of 20 psi (Grade 2). Paratherm and Paratherm CG are also available in 25 psi (Grade 3).

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. Alternatively, maximum 4 ft x 4 ft (1.22 m x 1.22 m) panels of Paratherm may be adhered to a prepared existing concrete deck with a full mopping of hot asphalt or approved insulation adhesive. Paratherm CG (coated fiberglass facer - non-organic) is required over new concrete substrates due to the anticipated high moisture content. This includes all layers where multiple layers of Paratherm are used. Contact Siplast for approvals on applications over new concrete decks or other product uses.

Product Approvals

Paratherm meets or exceeds the requirements of ASTM C 1289 Type II, Class 1, Grade 2. Paratherm CG meets or exceeds ASTM C 1289 Type II Class 2, Grade 2 Grade 3 product (25 psi) is also available. Paratherm is Factory Mutual Approved for use in Class 1 constructions when installed 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.

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)

Multiple Layer Configurations: A maximum individual flat-stock panel thickness of 2.7 inches is recommended. For configurations requiring more than 2.7 inches of Paratherm, a multiple layer configuration is recommended.

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%). 1/16 inch slope systems should be used with caution since they have not shown to effectively improve drainage.

Packaging:

Paratherm is shipped to the job site protected by a plastic wrap, plastic bag, or both. This factory packaging is intended for handling the Paratherm in the manufacturing plant and during transit; it should not be relied upon as job site protection from the elements.

Storage & Handling:

Material delivery should be carefully coordinated with the schedule for roofing operations to minimize job site storage time. Interior storage offering dry, well-ventilated conditions should be considered when the product is to be stored for more than 14 days prior to installation. When short-term job site storage is necessary, Paratherm should be stored flat on raised pallets or platforms at least 4 inches above the ground. Pallets should be stored on a finished surface rather than on dirt or grass to avoid upward transpiration of moisture. Pallets should be covered with a waterproof covering, preferably using a breathable material such as canvas.

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

PARATHERM POLYISOCYANURATE INSULATION

Physical and Mechanical Properties

TYPICAL PROPERTIES AND CHARACTERISTICS

Nominal Thickness inch (mm)	LTR* ASTM C 1289-11 (CAN/ULC-S770 -09)	LTR** (CAN/ULC-S770 -03)	Flute Span (max.) inch (mm)
1.0 (25)	5.6	6.0	2 5/8 (67)
1.2 (30)	6.7	7.2	2 5/8 (67)
1.5 (38)	8.5	9.0	3 3/8 (86)
1.8 (46)	10.2	10.9	3 3/8 (86)
2.0 (51)	11.4	12.1	3 3/8 (86)
2.2 (56)	12.6	13.4	3 3/8 (86)
2.3 (58)	13.2	14.0	3 5/8 (92)
2.5 (64)	14.4	15.3	3 5/8 (92)
2.6 (66)	15.0	15.9	3 5/8 (92)
2.7 (69)	15.6	16.6	3 5/8 (92)
The following are not recommended for use in a single layer application.			
2.8 (71)	16.2	17.2	3 5/8 (92)
3.0 (76)	17.4	18.5	3 5/8 (92)
3.1 (78)	18.0	19.1	3 5/8 (92)
3.2 (81)	18.6	19.8	3 5/8 (92)
3.5 (89)	20.5	21.7	3 5/8 (92)
3.8 (97)	22.3	23.7	3 5/8 (92)
4.0 (102)	23.6	25.0	3 5/8 (92)

Information on other thicknesses available upon request.

* Long-term Thermal Resistance (LTR) Value determined in conformance with ASTM C 1289-11 effective Jan. 1, 2014 (CAN/ULC-S770 -09).

** Long-term Thermal Resistance (LTR) Values determined in conformance with CAN/ULC-S770-03.

HIGH THERMAL VALUE CONFIGURATIONS

LTR	ASTM C 1289-11 (CAN/ULC-S770 -09)
20 (20.4)	2 layers of 1.8" Paratherm or Paratherm CG
25 (25.2)	2 layers of 2.2" Paratherm or Paratherm CG
30	2 layers of 2.6" Paratherm or Paratherm CG
35 (36)	2 layers of 3.1" Paratherm or Paratherm CG
40 (41)	2 layers of 3.5" Paratherm or Paratherm CG