

PARADIENE 20 HT SA



Commercial Product Data Sheet

Product Description

Paradiene 20 HT SA is a high performance, self-adhesive, modified bitumen base ply designed for use in homogeneous multi-layer modified bitumen roof membrane systems. Paradiene 20 HT SA consists of a fiberglass scrim/fiberglass mat composite impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen. The back surface is coated with a self-adhesive bitumen layer specifically formulated for optimum adhesion in low-slope membrane applications, and it is lined with a high strength polyolefin release film.

Paradiene 20 HT SA is available with Siplast RoofTag RFID roof asset technology on a Special-Made-To-Order basis. See RoofTag Commercial Product Data Sheet for more information.

Product Uses

Paradiene 20 HT SA is the first ply of all fully adhered Siplast Paradiene 20 HT SA/Paradiene 30 TG Systems. Paradiene 20 HT SA is also used as a stripping ply for reinforcing details at metal flanges, walls, and curbed penetrations. Extending Paradiene 20 HT SA stripping ply onto the top surface of any Paradiene 20 layer requires either removal of the top film surfacing from a film-surfaced Paradiene 20, or priming a sand-surfaced Paradiene 20 using an approved primer.

Paradiene 20 HT SA is lapped 3 inches (7.6 cm) on sides and ends. End laps require heat welding. An alternative to the standard end lap method is seaming end joints using a 12-inch (30.4 cm) wide strip of Paradiene 20 TG. Paradiene 20 HT SA is designed for direct application to approved insulations and roof boards, primed structural concrete decks, and other approved substrates. Paradiene 20 HT SA is to be used as a base ply in multi-layer roof systems with a torch applied finish layer of Paradiene TG, Veral, or Parafor. Prior approval from the Siplast Technical Department is required for SA membrane systems installed without a torch applied finish layer. All laps of the Paradiene 20 HT SA must be heat welded when the Paradiene 30 TG or Parafor TG over-layer is not installed during the same day's application. Contact Siplast for specific approval on other product uses.

Product Approvals

Paradiene 20 HT SA is approved by FM Approvals (FM Standard 4470) for use in Class 1 insulated roof constructions. Contact Siplast for specific information regarding FM Class 1 windstorm resistance classifications.

Paradiene 20 HT SA is classified by Underwriters Laboratories as an acceptable substitute for Paradiene 20 TG in all cULus classification listings and assemblies. Paradiene 20 HT SA has been tested by FM Approvals for wind uplift resistance in various constructions. Contact Siplast for specific approvals.

Paradiene 20 HT SA meets or exceeds the requirements for ASTM D 6163 Type II, Grade S and CSA A123.23-15 Type A, Grade 1 for SBS modified bituminous sheet materials using glass fiber reinforcements.

Siplast Roof Systems have also received the approval of many regional and local code authorities. Contact Siplast for more information.

COMMERCIAL PRODUCT INFORMATION

Unit:	Roll	
Coverage:	1.0 Square	(9.3 m ²)
Coverage Weight Per Square:	Min: 72 lb	(3.5 kg/m ²)
Roll Length:	Min: 33.5 ft	(10.21 m)
Roll Width:	Avg: 3.28 ft	(1.00 m)
Thickness:	Min: 98 mils	(2.5 mm)
	Avg: 102 mils	(2.6 mm)
Selvage Width:	Avg: 3.0 in	(76 mm)
Selvage Surfacing:	Polyolefin Release Tape	
Selvage Surfacing:	Polyolefin Release Tape	
Top Surfacing:	Silica Parting Agent	
Back Surfacing:	Polyolefin Release Film	

A laying line is placed 3 in (76 mm) from each edge of the material. The laying line for this material is green.

Packaging: Rolls are wound onto a compressed paper tube. The rolls are placed upright on pallets cushioned with corrugated cardboard and are adhered with adhesive at the labels. The top of the palletted rolls is covered with Kraft paper. The palletted material is protected by a heat shrink polyethylene shroud.

Pallet: 41 in X 48 in (104 cm X 122 cm) wooden pallet
Number Rolls Per Pallet: 25
Number Pallets Per Truckload: 18
Minimum Roll Weight: 72 lb (32.7 kg)

Storage and Handling: All Siplast roll roofing products should be stored on end on a clean flat surface. Care should be taken that rolls are not dropped on ends or edges and are not stored in a leaning position. Deformation resulting from these actions will make proper installation difficult. All roofing should be stored in a dry place, out of direct exposure to the elements, and should not be double stacked. Material should be handled in such a manner as to ensure that it remains dry prior to and during installation.

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

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Physical and Mechanical Properties

UNITED STATES TEST STANDARDS			CANADA TEST STANDARDS	
Property (as Manufactured)	Values/Units	Test Method	Property (as manufactured)	Test Method CSA A123.23-15 Values/Units
Thickness (minimum)	98 mils (2.5 mm)	ASTM D 5147 section 6	Thickness (minimum)	2.5 mm (98 mils)
Thickness (average)	102 mils (2.6 mm)	ASTM D 5147 section 6	Thickness (average)	2.6 mm (102 mils)
¹ Peak Load @ 73°F (23°C) (average)	80 lbf/inch (14.1 kN/m)	ASTM D 5147 section 7	¹ Peak Load 23°C (73°F) (average)	14.1 kN/m (80 lbf/inch)
¹ Peak Load @ 0°F (-17°C) (average)	150 lbf/inch (26.5 kN/m)	ASTM D 5147 section 7	¹ Peak Load @ -17°C (0°F) (average)	26.5 kN/m (150 lbf/inch)
¹ Elongation @ Peak Load, 73°F (23°C) (average)	5%	ASTM D 5147 section 7	¹ Elongation @ Peak Load, 23°C (73°F) (average)	5%
¹ Elongation @ Peak Load, 0°F (-17°C) (average)	4%	ASTM D 5147 section 7	¹ Elongation @ Peak Load, -17°C (0°F) (average)	4%
¹ Ultimate Elongation @ 73°F (23°C) (average)	50%	ASTM D 5147 section 7	¹ Ultimate Elongation @ 23°C (73°F) (average)	50%
¹ Tear Strength (average)	120 lbf (0.54 kN)	ASTM D 5147 section 8	N/A	N/A
Water Absorption (maximum)	1%	ASTM D 5147 section 10	N/A	N/A
Dimensional Stability (maximum)	0.1%	ASTM D 5147 section 11	Dimensional Stability (maximum)	0.1%
Low Temperature Flexibility (maximum)	-15°F (-26°C)	ASTM D 5147 section 12	Low Temperature Flexibility (maximum)	-26°C (-15°F)
Compound Stability (minimum)	250°F (121°C)	ASTM D 5147 section 16	Compound Stability (minimum)	121°C (250°F)
Cyclic Fatigue	Paradiene 20 HT SA, bonded to an acceptable Paradiene 30, Paradiene 40 FR, or Parafor 50 LT cap sheet with an approved method of attachment, passes ASTM D 5849 both as-manufactured and after heat conditioning according to ASTM D 5147.		Mass Per Unit Area (minimum)	3.5 kg/m ² (72 lb/sq)

1. The value reported is the lower of either MD or XD.
2. The High Temperature Stability of the self-adhesive bitumen coating is 212°F (100°C).