

PARADIENE 20 HV



Commercial Product Data Sheet

Product Description

Paradiene 20 HV is a high performance, heavy duty, modified bitumen base ply designed for use in homogeneous multi-layer modified bitumen roof membrane systems. Paradiene 20 HV consists of a lightweight random fibrous glass mat impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen.

Paradiene 20 HV 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 HV is the first ply of all Siplast Paradiene 20 HV/30 Systems, and is lapped 3 inches (7.6 cm) side and end. Paradiene 20 HV is specifically designed for high elongation requirements and for use in conjunction with Siplast Paradiene Systems requiring extended warranties. Paradiene 20 HV can be applied in approved Type III or Type IV asphalt, PA-1000 Polymer Asphalt, Siplast PA-311 Adhesives, or SFT Adhesive. Contact Siplast for specific approval on other product uses.

Product Approvals

Contact Siplast for specific information regarding FM Class 1 windstorm resistance classifications.

Paradiene 20 HV is classified by Underwriters Laboratories for use in cULus Classified Siplast Paradiene 20 HV/30, Paradiene 20 HV/30 FR, and Paradiene 20 HV/20 PR Roof Systems. Siplast Paradiene 20 HV/30 FR has been classified by Underwriters Laboratories as a Class A roofing system over non-combustible, insulated non-combustible, and insulated combustible decks, and as a Class B roofing system over combustible decks. Siplast Paradiene 20 HV/20 PR has been classified by Underwriters Laboratories as a Class A roofing system over non-combustible and insulated non-combustible decks when surfaced with roofing gravel. Siplast Paradiene 20 HV/30 has been classified as a Class C roofing system over combustible, non-combustible, and insulated combustible decks.

Paradiene 20 HV meets or exceeds the requirements of ASTM D6163 Type I, 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 m²)	
Coverage Weight Per Square:	Min:	90 lb	(4.4 kg/m²)
Roll Length:	Min:	33.5 ft	(10.21 m)
Roll Width:	Avg:	3.28 ft	(1.00 m)
Thickness:	Avg:	132 mils	(3.4 mm)
	Min:	126 mils	(3.2 mm)
Selvage Width:	N/A		
Selvage Surfacing:	N/A		
Top Surfacing:	Silica Parting Agent		
Back Surfacing:	Silica Parting Agent		

Lines: Two laying lines are placed 3 in (7.6 cm) and 4 in (10.2 cm) from each edge of the material. The line color for this material is violet.

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: 23
Number Pallets Per Truckload: 19
Minimum Roll Weight: 90 lb (40.8 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)	126 mils (3.2 mm)	ASTM D5147 section 6	Thickness (minimum)	3.2 mm (126 mils)
Thickness (average)	132 mils (3.4 mm)	ASTM D5147 section 6	Thickness (average)	3.4 mm (132 mils)
¹ Peak Load @ 73.4°F (23°C) (average)	30 lbf/inch (5.3 kN/m)	ASTM D5147 section 7	¹ Peak Load 23°C (73.4°F) (average)	5.3 kN/m (30 lbf/inch)
¹ Peak Load @ 0°F (-18°C) (average)	75 lbf/inch (13.2 kN/m)	ASTM D5147 section 7	¹ Peak Load @ -18°C (0°F) (average)	13.2 kN/m (75 lbf/inch)
¹ Elongation @ Peak Load, 73.4°F (23°C) (average)	3%	ASTM D5147 section 7	¹ Elongation @ Peak Load, 23°C (73.4°F)(average)	3%
¹ Elongation @ Peak Load, 0°F (-18°C) (average)	3%	ASTM D5147 section 7	¹ Elongation @ Peak Load, -18°C (0°F) (average)	3%
¹ Ultimate Elongation @ 73.4°F (23°C) (average)	100%	ASTM D5147 section 7	¹ Ultimate Elongation @ 23°C (73.4°F) (average)	100%
¹ Tear Strength (average)	40 lbf (0.18 kN)	ASTM D5147 section 8	N/A	N/A
Water Absorption (maximum)	1%	ASTM D5147 section 10	N/A	N/A
Dimensional Stability (maximum)	0.1%	ASTM D5147 section 11	Dimensional Stability (maximum)	0.1%
Low Temperature Flexibility (maximum)	-15°F (-26°C)	ASTM D5147 section 12	Low Temperature Flexibility	-15°F (-26°C)
Compound Stability (minimum)	250°F (121°C)	ASTM D5147 section 16	Compound Stability (minimum)	250°F (121°C)
Coating Thickness - Back Surface	≥ 40 mils (1 mm)	ASTM D5147 section 17	Coating Thickness - Back Surface	≥ 40 mils (1 mm)
Cyclic Fatigue	Paradiene 20 bonded to Paradiene 30 FR with an approved method of attachment, passes ASTM D5849 both as-manufactured and after heat conditioning according to ASTM D5147.			

1. The value reported is the lower of either MD or XD.



The above properties have been validated by PRI and are under continuous follow-up to ensure compliance. The product has been validated to meet ASTM D6163-08, TYPE I, GRADE S.