

PARADIENE 20 PR



Commercial Product Data Sheet

Product Description

Paradiene 20 PR is a high performance modified bitumen finish ply designed for use in gravel surfaced, homogeneous multi-layer modified bitumen roof membrane systems. Paradiene 20 PR consists of a fiberglass scrim reinforced/polyester mat composite impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen.

Paradiene 20 PR 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 PR is the surface ply of the Siplast Paradiene 20/20 PR gravel surfaced roof system, and is lapped 3 inches (7.6 cm) side and end. Paradiene 20 PR can be applied in approved Type IV or Type III asphalt, PA-1000 Polymer Asphalt, Siplast PA-311 Adhesives, or SFT Adhesive. Contact Siplast for specific approval on other product uses.

Product Approvals

Paradiene 20 PR is approved by FM Approvals for use in Siplast Paradiene 20/Paradiene 20 PR and Paradiene 20 HT/20 PR Class 1 insulated steel deck constructions and over insulated and non-insulated concrete roof deck constructions, subject to FM conditions and limitations. Paradiene 20 PR is FM Approved for use with Paradiene 20/30 systems for high wind uplift requirements.

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

Siplast Paradiene 20/20 PR, Paradiene 20 HT/20 PR, Paradiene 20 HV/20 PR, and Paradiene 20 EG/20 PR gravel surfaced roof systems have been classified by Underwriters Laboratories as Class A roofing systems over insulated and non-insulated non-combustible roof decks.

Paradiene 20 PR meets or exceeds the requirements of ASTM D6162 (Type I, Grade S), ASTM D6164 (Type I, Grade S) and CSA A123.23-15 (Type C, Grade 2) for SBS-modified bituminous sheet materials.

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

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

COMMERCIAL PRODUCT INFORMATION

Unit:	Roll		
Coverage:	1.5 Squares	(13.9 m ²)	
Coverage Weight Per Square:	Min: 60 lb	(2.9 kg/m ²)	
Roll Length:	Min: 50 ft	(15.24 m)	
Roll Width:	Avg: 3.28 ft	(1.00 m)	
Thickness:	Avg: 94 mils	(2.4 mm)	
	Min: 91 mils	(2.3 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 yellow.

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 palleted rolls is covered with Kraft paper. The palleted 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: 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.

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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)	91 mils (2.3 mm)	ASTM D 5147 section 6	Thickness (minimum)	2.3 mm (91 mils)
Thickness (average)	94 mils (2.4 mm)	ASTM D 5147 section 6	Thickness (average)	2.4 mm (94 mils)
¹ Peak Load @ 73°F (23°C) (average)	60 lbf/inch (10.5 kN/m)	ASTM D 5147 section 7	¹ Peak Load 23°C (73°F) (average)	10.5 kN/m (60 lbf/inch)
¹ Peak Load @ 0°F (-17°C) (average)	115 lbf/inch (20.1 kN/m)	ASTM D 5147 section 7	¹ Peak Load @ -17°C (0°F) (average)	20.1 kN/m (115 lbf/inch)
¹ Elongation @ Peak Load, 73°F (23°C) (average)	65%	ASTM D 5147 section 7	¹ Elongation @ Peak Load, 23°C (73°F) (average)	65%
¹ Elongation @ Peak Load, 0°F (-17°C) (average)	40%	ASTM D 5147 section 7	¹ Elongation @ Peak Load, -17°C (0°F) (average)	40%
¹ Ultimate Elongation @ 73°F (23°C) (average)	60%	ASTM D 5147 section 7	¹ Ultimate Elongation @ 23°C (73°F) (average)	60%
¹ Tear Strength (average)	100 lbf (0.45 kN)	ASTM D 5147 section 8	Strain Energy (before and after conditioning) @ 23°C (73°F) @ -18°C (0°F)	≥ 5.5 kN/m (≥ 31 lbf/in) ≥ 3.0 kN/m (≥ 17 lbf/in)
Water Absorption (maximum)	1%	ASTM D 5147 section 10	N/A	N/A
Dimensional Stability (maximum)	0.5%	ASTM D 5147 section 11	Dimensional Stability (maximum)	0.5%
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 PR, 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)	2.9 kg/m ² (60 lb/sq)

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