

# PARADIENE 20 F



## Commercial Product Data Sheet

### Product Description

Paradiene 20 F is a high performance modified bitumen base ply designed for use in homogeneous multi-layer modified bitumen roof membrane systems. Paradiene 20 F consists of a lightweight random fibrous glass mat impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen. The top surface is covered with a perforated plastic burnoff film.

Paradiene 20 F 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 F is the first ply of all standard Siplast Paradiene 20 F/30 Systems, and is lapped 3 inches (7.6 cm) side and end. Paradiene 20 F can be applied in approved Type IV or Type III asphalt, PA-1000 Polymer Asphalt, or SFT Adhesive. Paradiene 20 F can only be used as a base ply in multi-layer roof systems with a torch applied finish layer of Paradiene TG, Veral, or Parafor. Contact Siplast for specific approval on other product uses.

### Product Approvals

Paradiene 20 F is approved by FM Approvals (FM Standard 4470) for use in Siplast Paradiene 20 F/30, Paradiene 20 F/30 FR, and Paradiene 20 F/20 PR Class 1 insulated steel roof deck constructions and insulated and non-insulated concrete roof deck constructions, subject to FM conditions and limitations.

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

Paradiene 20 F is classified by Underwriters Laboratories for use in  $cUL_{us}$  Classified Siplast Paradiene 20 F/30, Paradiene 20 F/30 FR, and Paradiene 20 F/20 PR Roof Systems. Siplast Paradiene 20 F/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 F/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 F/30 has been classified as a Class C roofing system over combustible, non-combustible, and insulated combustible decks.

Paradiene 20 F meets or exceeds the requirements of ASTM D 6163 Type I, Grade S, and CSA A123.23-15 Type A, Grade 2 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:	1.5 Squares	(13.9 m <sup>2</sup> )
Coverage Weight Per Square:	Min: 62 lb	(3.0 kg/m <sup>2</sup> )
Roll Length:	Min: 50 ft	(15.24 m)
Roll Width:	Avg: 3.28 ft	(1.00 m)
Thickness:	Avg: 91 mils	(2.3 mm)
	Min: 87 mils	(2.2 mm)
Selvage Width:	N/A	
Selvage Surfacing:	N/A	
Top Surfacing:	Perforated Polypropylene Film	
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 white.

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: 93 lb (42.2 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](http://www.Siplast.com).*

Rev 1/2018

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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)	87 mils (2.2 mm)	ASTM D 5147 section 6	Thickness (minimum)	2.2 mm (87 mils)
Thickness (average)	91 mils (2.3 mm)	ASTM D 5147 section 6	Thickness (average)	2.3 mm (91 mils)
<sup>1</sup> Peak Load @ 73°F (23°C) (average)	30 lbf/inch (5.3 kN/m)	ASTM D 5147 section 7	<sup>1</sup> Peak Load 23°C (73°F) (average)	5.3 kN/m (30 lbf/inch)
<sup>1</sup> Peak Load @ 0°F (-17°C) (average)	70 lbf/inch (12.3 kN/m)	ASTM D 5147 section 7	<sup>1</sup> Peak Load @ -17°C (0°F) (average)	12.3 kN/m (70 lbf/inch)
<sup>1</sup> Elongation @ Peak Load, 73°F (23°C) (average)	3%	ASTM D 5147 section 7	<sup>1</sup> Elongation @ Peak Load, 23°C (73°F) (average)	3%
<sup>1</sup> Elongation @ Peak Load, 0°F (-17°C) (average)	3%	ASTM D 5147 section 7	<sup>1</sup> Elongation @ Peak Load, -17°C (0°F) (average)	3%
<sup>1</sup> Ultimate Elongation @ 73°F (23°C) (average)	50%	ASTM D 5147 section 7	<sup>1</sup> Ultimate Elongation @ 23°C (73°F) (average)	50%
<sup>1</sup> Tear Strength (average)	40 lbf (0.18 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 F, 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)	3.0 kg/m <sup>2</sup> (62 lb/sq)

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