

# PARADIENE 20 HT TS



## Commercial Product Data Sheet

### Product Description

Paradiene 20 HT TS is a uniquely designed high performance, semi-adhered modified bitumen base ply designed for use in homogeneous multi-layer modified bitumen roof membrane systems. Paradiene 20 HT TS consists of a fiberglass scrim/fiberglass mat composite impregnated and coated with high quality elastomeric styrene-butadiene-styrene (SBS) modified bitumen.

The unique back surface design consists of factory-applied, heat-activated adhesive stripes combined with a proprietary acrylic coating between the stripes, which provides for uniform bonding of 50% of the total surface area of the sheet.

Paradiene 20 HT TS 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 TS is the first ply of the Siplast Paradiene 20 HT TS/30 System, and is lapped 3 inches (7.6 cm) side and end. Paradiene 20 HT TS is specifically designed for high tensile requirements and for use in conjunction with Siplast Paradiene Systems requiring extended warranties. Paradiene 20 HT TS can only be torch applied. Contact Siplast for specific approval for other product uses.

### Product Approvals

Paradiene 20 HT TS is approved by FM Approvals (FM Standard 4470) for use in Siplast Paradiene 20 HT TS/30, Paradiene 20 HT TS/30 FR, and Paradiene 20 HT TS/20 PR Class 1 insulated steel roof deck constructions and over 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 HT TS is classified by Underwriters Laboratories for use in  $\alpha_{UL_{US}}$  Classified Siplast Paradiene 20 HT TS/30, Paradiene 20 HT TS/30 FR, and Paradiene 20 HT TS/20 PR Roof Systems. Siplast Paradiene 20 HT TS/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 HT TS/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 HT TS/30 has been classified as a Class C roofing system over combustible, non-combustible, and insulated combustible decks.

Paradiene 20 HT TS meets or exceeds the requirements of 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 Squares	(9.3 m <sup>2</sup> )
Coverage Weight Per Square:	Min: 76 lb	(3.7 kg/m <sup>2</sup> )
Roll Length:	Min: 33.5 ft	(10.21 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:	Avg: 3 in	76 (mm)
Selvage Surfacing:	Polyolefin Burn-off Film	
Top Surfacing:	Silica Parting Agent	
Back Surfacing:	Adhesive Stripes, Acrylic Coating between the Stripes, and Polyolefin Burn-off Film.	

Lines: A laying line is placed 3 in (7.6 cm) from the edge of the material. The line color 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: 20  
Minimum Roll Weight: 76 lb (34.5 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).*

\*Thickness does not include the thickness of the adhesive stripes.

Rev 1/2018

# PARADIENE 20 HT TS

## 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)	80 lbf/inch (14.1 kN/m)	ASTM D 5147 section 7	<sup>1</sup> Peak Load 23°C (73°F) (average)	14.1 kN/m (80 lbf/inch)
<sup>1</sup> Peak Load @ 0°F (-17°C) (average)	150 lbf/inch (26.5 kN/m)	ASTM D 5147 section 7	<sup>1</sup> Peak Load @ -17°C (0°F) (average)	26.5 kN/m (150 lbf/inch)
<sup>1</sup> Elongation @ Peak Load, 73°F (23°C) (average)	5%	ASTM D 5147 section 7	<sup>1</sup> Elongation @ Peak Load, 23°C (73°F) (average)	5%
<sup>1</sup> Elongation @ Peak Load, 0°F (-17°C) (average)	4%	ASTM D 5147 section 7	<sup>1</sup> Elongation @ Peak Load, -17°C (0°F) (average)	4%
<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)	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)
Coating Thickness - Back Surface	≥ 40 mils (1 mm)	ASTM D 5147 section 17	Coating Thickness - Back Surface	1 mm (≥ 40 mils)
Cyclic Fatigue	Paradiene 20 HT TS, 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)	3.7 kg/m <sup>2</sup> (76 lb/sq)

1. The thickness does not include the thickness of the adhesive stripes.
2. The value reported is the lower of either MD or XD.