

# 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.

### 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 IV asphalt or Siplast PA-311 Adhesive. Contact Siplast for specific approval on other product uses.

### Product Approvals

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

Paradiene 20 HV is approved by Underwriters Laboratories for use in  $cUL_{us}$  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 D 6163 Type I, Grade S, for SBS-modified bituminous sheet materials using glass fiber reinforcements.

Siplast Roof Systems also have received the approval of many regional and local authorities. Please contact Siplast for specific information as required.

*Current copies of all Siplast Commercial Product Data Sheets are posted on the Siplast Web site at [www.Siplast.com](http://www.Siplast.com).*

### COMMERCIAL PRODUCT INFORMATION

Unit:	Roll		
Coverage:	1.0 Square	(9.3 m <sup>2</sup> )	
Coverage Weight Per Square:	Min:	90 lb	(4.4 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:	118 mils	(3.0 mm)
	Min:	114 mils	(2.9 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 palleted rolls is covered with foiled 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: 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.

# PARADIENE 20 HV

## Physical and Mechanical Properties

Property (as Manufactured)	Values/Units	Test Method
Thickness (minimum)	114 mils (2.9 mm)	ASTM D 5147 section 5
Thickness (average)	118 mils (3.0 mm)	ASTM D 5147 section 5
<sup>1</sup> Peak Load @ 73°F (average)	30 lbf/inch (5.3 kN/m)	ASTM D 5147 section 6
<sup>1</sup> Peak Load @ 0°F (average)	75 lbf/inch (13.2 kN/m)	ASTM D 5147 section 6
<sup>1</sup> Elongation @ Maximum Load, 73°F (average)	3%	ASTM D 5147 section 6
<sup>1</sup> Elongation @ Peak Load, 0°F (average)	3%	ASTM D 5147 section 6
<sup>1</sup> Ultimate Elongation @ 73°F (average)	100%	ASTM D 5147 section 6
<sup>1</sup> Tear Strength (average)	40 bf (0.18 kN)	ASTM D 5147 section 7
Water Absorption (maximum)	1%	ASTM D 5147 section 9
Dimensional Stability (maximum)	0.1%	ASTM D 5147 section 15
Low Temperature Flexibility (maximum)	-13°F (-25°C)	ASTM D 5147 section 10
High Temperature Stability (minimum)	250°F (121°C)	ASTM D 5147 section 11
Coating Thickness - Back Surface	≥ 40 mils (1 mm)	ASTM D 5147 section 16
Cyclic Fatigue	Paradiene 20 HV, 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 D5147.	

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