



**USES:
BASE PLY**

PARADIENE® 20 TS

Commercial Product Data Sheet

Paradiene 20 TS is the high performance base ply of the semi-adhered Paradiene 20 TS/Paradiene 30 System. Designed for use in homogeneous multi-layer modified bitumen roof membrane systems, Paradiene 20 TS consists of a lightweight random fibrous glass mat impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen. The unique back surface design consists of factory-applied, heat-activated adhesive stripes applied over a proprietary acrylic coating between the stripes, which provides for uniform bonding of approximately 50% of the total surface area of the sheet.

Contact Siplast for information on approved product uses.

PRODUCT INFORMATION

Standards	ASTM D6163 Type I, Grade S; CSA A123.23-15 Type A, Grade 3
Roll Length	Min: 33.5 ft (10.21 m)
Roll Width	Avg: 39.4 in (1.0 m)
Coverage	1.0 Square (100.7 ft ²) (9.4 m ²)
Coverage Weight Per Square	Min: 75 lb (3.7 kg/m ²)
Laying Lines	3 in (76.2 mm) Line Color: White
Top Surfacing	Mineral Parting Agent
Back Surfacing	Adhesive Stripes Applied Over Acrylic Coating
Product Options	RoofTag

Application

Refer to the Siplast Technical Guide for detailed application information and slope limitations. Paradiene 20 TS is lapped 3 inches (76.2 mm) side and end.



Storage and Handling

All Siplast roll roofing products should be stored on end on a clean, flat surface. Rolls should not be dropped on ends or edges or stored in a leaning position. Deformation resulting from these actions will make proper installation difficult. All roofing products should be stored in a dry place out of direct exposure to the elements and should not be double stacked. Material should be handled so that it remains dry prior to and during installation.

See product packaging and the Safety Data Sheet for specific information on the safe handling of this product.

Packaging


Pallet: 41 in x 48 in (104 cm x 122 cm) wooden pallet
Rolls Per Pallet: 25
Pallets Per Truckload (Typical): 20
Minimum Roll Weight: 76 lb (34.5 kg)
Max Pallet Weight (Typical): 1975 lb (896 kg)

Listings, Approvals, & Certifications



Classified by UL in accordance with ANSI/UL 790. Refer to UL Product iQ for specific assemblies.
FM Approved - Refer to RoofNav.com for specific assemblies.
Meets or Exceeds CSA A123.23.

U.S. TEST STANDARDS

Property (as Manufactured)		Values / Units	Test Method
*Thickness (minimum)		118 mils (3.0 mm)	ASTM D5147 Section 6
*Thickness (average)		133 mils (3.4 mm)	ASTM D5147 Section 6
**Peak Load	@ 73.4°F (23°C) (average)	30 lbf/inch (5.3 kN/m)	ASTM D5147 Section 7
	@ 0°F (-18°C) (average)	70 lbf/inch (12.3 kN/m)	
**Elongation @ Peak Load	@ 73.4°F (23°C) (average)	3%	ASTM D5147 Section 7
	@ 0°F (-18°C) (average)	3%	
**Ultimate Elongation @ 73.4°F (23°C) (average)		55%	ASTM D5147 Section 7
**Tear Strength (average)		40 lbf (0.18 kN)	ASTM D5147 Section 8
Water Absorption (maximum)		1%	ASTM D5147 Section 10
Dimensional Stability (maximum)		0.5%	ASTM D5147 Section 11
Low Temperature Flexibility (maximum)		-15°F (-26°C)	ASTM D5147 Section 12
Compound Stability (minimum)		250°F (121°C)	ASTM D5147 Section 16
Coating Thickness – Back Surface		≥40 mils (1 mm)	ASTM D5147 Section 17
Cyclic Fatigue		Paradiene 30 finish ply bonded to Paradiene 20 base ply, with an approved method of attachment, passes ASTM D5849 both as manufactured and after heat conditioning, according to ASTM D5147.	
			The above properties have been validated by PRI and are under continuous surveillance. The product has been validated to meet ASTM D6163-08, Type I, Grade S.

CANADIAN TEST STANDARDS

Property (as Manufactured)		Units	CSA A123.23 Requirement	Test Method	Test Performance
*Thickness (minimum)		mm (mils)	2.0 (80)	ASTM D5147	3.0 (118)
*Selvage Thickness (minimum)		mm (mils)	2.0 (80)	ASTM D5147	2.0 (78)
Mass Per Unit Area (minimum)		kg/m ² (lb/100 ft ²)	2.2 (45)	ASTM D5147	3.0 (61)
Back Surface Coating Thickness (minimum)		mm (mils)	1.0 (40)	ASTM D5147	1.0 (40)
**Strain Energy (Before After Heat Conditioning)	@ 23 ± 2°C (73.4 ± 3.6°F)	kN/m (lbf/in)	See Tested Value	CSA A123.23	>0.5 (>2.9)
	@ -18 ± 2°C (-0.4 ± 3.6°F)				>0.3 (>1.7)
**Peak Load (Before and After Heat Conditioning)	@ 23 ± 2°C (73.4 ± 3.6°F)	kN/m (lbf/in)	5.3 (30)	ASTM D5147	>7.5 (>43)
	@ -18 ± 2°C (-0.4 ± 3.6°F)		12.3 (70)		>14.2 (>81)
**Elongation @ Peak Load (Before and After Heat Conditioning)	@ 23 ± 2°C (73.4 ± 3.6°F)	%	2	ASTM D5147	>4
	@ -18 ± 2°C (-0.4 ± 3.6°F)		1		>4
**Ultimate Elongation (Before and After Heat Conditioning), @ 23 ± 2°C (73.4 ± 3.6°F)		%	3	ASTM D5147	>84
Dimensional Stability (maximum)		%	0.5	ASTM D5147	0.5
Low Temperature Flexibility (maximum)		°C (°F)	-18 (-0.4)	ASTM D5147	-26 (-15)
Low Temperature Weathered Flexibility (maximum)		°C (°F)	N/A	ASTM D5147	N/A
Compound Stability (minimum)		°C (°F)	91 (195)	ASTM D5147	91 (195)
Resistance to Puncture		N/A	N/A	CSA A123.23	N/A
Granule Loss		g (oz)	N/A	ASTM D5147	N/A

Data is based upon typical product performance and is subject to normal manufacturing and packaging tolerance and variation.

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

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