

# PARADIENE 30 FR TG BW



## Commercial Product Data Sheet

### Product Description

Paradiene 30 FR TG BW is a high performance, modified bitumen finish ply designed for use in homogeneous multi-layer modified bitumen roof membrane systems. Paradiene 30 FR TG BW consists of a lightweight random fibrous glass mat impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen, and surfaced with highly reflective, white mineral granules. The back surface is coated with a high-performance modified bitumen adhesive layer specifically formulated for torch applications. The adhesive layer is manufactured using a special process that embosses the surface with a grooved pattern to provide optimum burnoff of the plastic film and maximize application rates.

### Product Uses

Paradiene 30 FR TG BW is intended to be used as a highly reflective, cool-roof membrane to meet the energy requirements of government agencies, and state and local building codes. Paradiene 30 FR TG BW is the finish ply of the Siplast Paradiene 20/30 FR TG BW System, and is lapped 3 inches (7.6 cm) side and end. Contact Siplast for specific approval on other product uses.

### Product Approvals

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

Paradiene 30 FR TG BW is classified by Underwriters Laboratories for use in  $\mu$ UL<sub>us</sub> Classified Siplast Paradiene 20/30 FR TG BW Roof Systems. Siplast Paradiene 20/30 FR TG BW 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.

Paradiene 30 FR TG BW meets or exceeds the requirements of ASTM D 6163 Type I, Grade G, and CSA A123.23-15 Type A, Grade 1 for SBS-modified bituminous sheet materials using glass fiber reinforcements.

Paradiene 30 FR TG BW meets the reflectance and emittance requirements of Title 24 Part 6 for the state of California. CCRC rated product ID is 0742-0018. Additionally, Paradiene 30 FR TG BW qualifies for LEED certification points as defined by the United States Green Building Council. Please contact Siplast for specific information on reflective and emittance properties associated with energy regulations and guidelines.

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

### COMMERCIAL PRODUCT INFORMATION

Unit:	Roll		
Coverage:	0.75 Square	(7.0 m <sup>2</sup> )	
Coverage Weight Per Square:	Min:	96 lb	(4.68 kg/m <sup>2</sup> )
Roll Length:	Min:	25.25 ft	(7.70 m)
Roll Width:	Avg:	3.28 ft	(1.00 m)
Thickness:	Avg:	138 mils	(3.5 mm)
Thickness at Selvage:	Avg:	118 mils	(3.0 mm)
	Min:	114 mils	(2.9 mm)

Selvage Surfacing: Burn-off Polyolefin Film

Top Surfacing: Specially formulated bright white mineral granules.

Back Surfacing: Polyolefin Film

Lines: A laying line is placed 3 in (7.6 cm) from selvage edge of the material. The line color for this material is orange.

Packaging: Rolls are wound onto a compressed paper tube. The rolls are placed upright on ends opposite the selvage 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: 72 lb (32.6 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).*

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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 (average)	138 mils (3.5 mm)	ASTM D 5147 section 6	Thickness (minimum)	3.5 mm (138 mils)
<sup>1</sup> Thickness at selvage (minimum) (average)	114 mils (2.9 mm) 118 mils (3.0 mm)	ASTM D 5147 section 6	<sup>1</sup> Thickness at selvage (minimum) (average)	2.9 mm (114 mils) 3.0 mm (118 mils)
<sup>2</sup> Peak Load @ 73°F (23°C) (average)	30 lbf/inch (5.3 kN/m)	ASTM D 5147 section 7	<sup>2</sup> Peak Load 23°C (73°F) (average)	5.3 kN/m (30 lbf/inch)
<sup>2</sup> Peak Load @ 0°F (-17°C) (average)	75 lbf/inch (13.2 kN/m)	ASTM D 5147 section 7	<sup>2</sup> Peak Load @ -17°C (0°F) (average)	13.2 kN/m (75 lbf/inch)
<sup>2</sup> Elongation @ Peak Load, 73°F (23°C) (average)	3%	ASTM D 5147 section 7	<sup>2</sup> Elongation @ Peak Load, 23°C (73°F) (average)	3%
<sup>2</sup> Elongation @ Peak Load, 0°F (-17°C) (average)	3%	ASTM D 5147 section 7	<sup>2</sup> Elongation @ Peak Load, -17°C (0°F) (average)	3%
<sup>2</sup> Ultimate Elongation @ 73°F (23°C) (average)	55%	ASTM D 5147 section 7	<sup>2</sup> Ultimate Elongation @ 23°C (73°F) (average)	55%
<sup>2</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)
Granule Embedment Max. avg. loss Max. individual loss	1.5 grams per sample 2.0 grams per sample	ASTM D 5147 section 15	Granule Embedment Max. avg. loss Max. individual loss	1.5 grams per sample 2.0 grams per sample
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)
Solar Reflectance (Avg)	0.74	ASTM C1549	Solar Reflectance (Avg)	0.74
Thermal Emittance (Avg)	0.91	ASTM C1371	Thermal Emittance (Avg)	0.91
Solar Reflectance Index (Avg)	92	ASTM E1980	Solar Reflectance Index (Avg)	92
Cyclic Fatigue	Paradiene 30 FR TG BW, bonded to an acceptable Paradiene 20 base ply 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	4.68 kg/m <sup>2</sup> (96 lb/sq)

1. Measured on the selvage edge excluding the granule surfacing.
2. The value reported is the lower of either MD or XD.