## **PARADIENE 30 FR BW**



Commercial Product Data Sheet

#### **Product Description**

Paradiene 30 FR BW is a high performance, modified bitumen finish ply designed for use in homogeneous multilayer modified bitumen roof membrane systems. Paradiene 30 FR BW consists of a lightweight random fibrous glass mat impregnated and coated with high quality styrene-butadienestyrene (SBS) modified bitumen, and surfaced with highly reflective, white mineral granules.

### **Product Uses**

Paradiene 30 FR 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 BW is the finish ply of the Siplast Paradiene 20/30 FR BW System, and is lapped 3 inches (7.6 cm) side and end. Paradiene 30 FR BW can be applied in approved Type IV asphalt, Siplast PA-311 Adhesives, or SFT Adhesive. Contact Siplast for specific approval on other product uses.

#### **Product Approvals**

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

Paradiene 30 FR BW is classified by Underwriters Laboratories for use in  $_{\rm c}UL_{\rm us}$  Classified Siplast Paradiene 20/30 FR BW Roof Systems. Siplast Paradiene 20/30 FR 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 BW meets or exceeds the requirements of ASTM D6163 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 BW meets the reflectance and emittance requirements of Title 24 Part 6 for the state of California. CRRC rated product ID is 0742-0018. Additionally, Paradiene 30 FR 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:	1.0 Square		(9.3 m²)		
Coverage Weight Per Square:	Min:	80 lb	(3.9 kg/m²)		
Roll Length:	Min:	33.5 ft	(10.21 m)		
Roll Width:	Avg:	3.28 ft	(1.00 m)		
Thickness: Thickness at Selvage:	Avg: Avg: Min:	130 mils 98 mils 94 mils	(3.3 mm) (2.5 mm) (2.4 mm)		

Selvage Surfacing: Silica Parting Agent

Top Surfacing: Specially formulated bright white mineral granules

Back Surfacing: Silica Parting Agent

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 palleted rolls is covered with 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: 18 Minimum Roll Weight: 80 lb (36.3 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.

Rev 6/2019

# **PARADIENE 30 FR BW**

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)	130 mils (3.3 mm)	ASTM D5147 section 6	Thickness (minimum)	3.3 mm (130 mils)
<sup>1</sup> Thickness at selvage (minimum) (average)	94 mils (2.4 mm) 98 mils (2.5 mm)	ASTM D5147 section 6	<sup>1</sup> Thickness at selvage (minimum) (average)	2.4 mm (94 mils) 2.5 mm (98 mils)
<sup>2</sup> Peak Load @ 73.4 <sup>°</sup> F (23 <sup>°</sup> C) (average)	30 lbf/inch (5.3 kN/m)	ASTM D5147 section 7	<sup>2</sup> Peak Load 23 <sup>°</sup> C (73.4°F) (average)	5.3 kN/m (30 lbf/inch)
<sup>2</sup> Peak Load @ 0 <sup>°</sup> F (-18 <sup>°</sup> C) (average)	75 lbf/inch (13.2 kN/m)	ASTM D5147 section 7	<sup>2</sup> Peak Load @ -18 <sup>°</sup> C (0 <sup>°</sup> F) (average)	13.2 kN/m (75 lbf/inch)
<sup>2</sup> Elongation @ Peak Load, 73.4 <sup>°</sup> F (23 <sup>°</sup> C) (average)	3%	ASTM D5147 section 7	<sup>2</sup> Elongation @ Peak Load, 23 <sup>°</sup> C (73.4 <sup>°</sup> F) (average)	3%
<sup>2</sup> Elongation @ Peak Load, 0 <sup>°</sup> F (-18 <sup>°</sup> C) (average)	3%	ASTM D5147 section 7	<sup>2</sup> Elongation @ Peak Load, -18 <sup>°</sup> C (0 <sup>°</sup> F) (average)	3%
<sup>2</sup> Ultimate Elongation @ 73.4 <sup>o</sup> F (23 <sup>o</sup> C) (average)	55%	ASTM D5147 section 7	<sup>2</sup> Ultimate Elongation @ 23 <sup>°</sup> C (73.4 <sup>°</sup> F) (average)	55%
<sup>2</sup> Tear Strength (average)	40 lbf (0.18 kN)	ASTM D5147 section 8	N/A	N/A
Water Absorption (maximum)	1%	ASTM D5147 section 10	N/A	N/A
Dimensional Stability (maximum)	0.1%	ASTM D5147 section 11	Dimensional Stability (maximum)	0.1%
Low Temperature Flexibility (maximum)	-15°F (-26°C)	ASTM D5147 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 D5147 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 D5147 section 16	Compound Stability (minimum)	121°C (250° F)
Solar Reflectance (Avg) Thermal Emittance (Avg)	0.74 0.91	ASTM C1549 ASTM C1371	Solar Reflectance (Avg) Thermal Emittance (Avg)	0.74 0.91
Solar Reflectance Index (Avg)	92	ASTM E1980	Solar Reflectance Index (Avg)	92
Cyclic Fatigue	Paradiene 20 bonded to Paradiene 30 FR with an approved method of attachment, passes ASTM D5849 both as-manufactured and after heat conditioning according to ASTM D5147.			

1. Measured on the selvage edge excluding the granule surfacing.

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



The above properties have been validated by PRI and are under continuous follow-up to ensure compliance. The product has been validated to meet ASTM D6163-08, TYPE I, GRADE G.