



## PARADIENE® 40 FR

### Commercial Product Data Sheet

Paradiene 40 FR is the modified bitumen finish ply and flashing sheet. Designed for use in multi-layer modified bitumen roof membrane systems, Paradiene 40 FR consists of a fiberglass scrim/fiberglass mat composite impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen and is surfaced with ceramic granules.

Contact Siplast for information on approved product uses.

#### USES: FINISH PLY FLASHING SHEET

#### PRODUCT INFORMATION

##### Application

Refer to the Siplast Technical Guide for detailed application information and slope limitations. Paradiene 40 FR is lapped 4 inches (102 mm) at sides and 6 inches (152 mm) at ends.



##### 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): 18  
Minimum Roll Weight: 84 lb (38.1 kg)  
Max Pallet Weight (Typical): 2225 lb (1009 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.

Standards	ASTM D6163 Type II, Grade G; CSA A123.23-15 Type A, Grade 1
Roll Length	Min: 26.0 ft (7.92 m)
Roll Width	Avg: 39.4 in (1.0 m)
Coverage	0.75 Square (75.1 ft <sup>2</sup> ) (7.0 m <sup>2</sup> )
Coverage Weight Per Square	Min: 115 lb (5.6 kg/m <sup>2</sup> )
Selvage Width	Avg. 3.75 inch (95 mm) Orange laying line is 4 in (102 mm) from the edge of the sheet.
Selvage Surfacing	Mineral Parting Agent
Top Surfacing	No. 11 Ceramic Granules (Standard color finish is #A-720 White)
Back Surfacing	Mineral Parting Agent
Product Options	RoofTag, Eco Activ Granules, Special Colors

Current copies of all Siplast Commercial Product Data Sheets & Safety Data Sheets are posted on our website at [www.siplast.com](http://www.siplast.com)

## U.S. TEST STANDARDS

Property (as Manufactured)		Values / Units		Test Method
Thickness (average)		154 mils (4 mm)		ASTM D5147 Section 6
*Thickness at Selvage		133 mils (3.4 mm) avg.	126 mils (3.2 mm) min.	ASTM D5147 Section 6
**Peak Load	@ 73.4°F (23°C) (average)	80 lbf/inch (14.1 kN/m)		ASTM D5147 Section 7
	@ 0°F (-18°C) (average)	150 lbf/inch (26.5 kN/m)		
**Elongation @ Peak Load	@ 73.4°F (23°C) (average)	5%		ASTM D5147 Section 7
	@ 0°F (-18°C) (average)	4%		
**Ultimate Elongation @ 73.4°F (23°C) (average)		80%		ASTM D5147 Section 7
**Tear Strength (average)		120 lbf (0.54 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
Granule Embedment		1.5 grams per sample Max. avg. loss	2.0 grams per sample Max. individual loss	ASTM D5147 Section 15
Compound Stability (minimum)		250°F (121°C)		ASTM D5147 Section 16
Cyclic Fatigue		Paradiene 40 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 II, Grade G.	

## CANADIAN TEST STANDARDS

Property (as Manufactured)		Units	CASA123.23 Requirement	Test Method	Test Performance
Thickness (minimum)		mm (mils)	2.4 (95)	ASTM D5147	3.8 (152)
*Selvage Thickness (minimum)		mm (mils)	2.0 (80)	ASTM D5147	3.2 (126)
Mass Per Unit Area (minimum)		kg/m <sup>2</sup> (lb/100 ft <sup>2</sup> )	3.2 (65)	ASTM D5147	5.0 (102)
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	>1.9 (>11)
	@ -18 ± 2°C (-0.4 ± 3.6°F)				>0.5 (>2.9)
**Peak Load (Before and After Heat Conditioning)	@ 23 ± 2°C (73.4 ± 3.6°F)	kN/m (lbf/in)	5.3 (30)	ASTM D5147	>17 (>97)
	@ -18 ± 2°C (-0.4 ± 3.6°F)		12.3 (70)		>26.5 (>151)
**Elongation @ Peak Load (Before and After Heat Conditioning)	@ 23 ± 2°C (73.4 ± 3.6°F)	%	2	ASTM D5147	>5
	@ -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	>32
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)	-12 (10)	ASTM D5147	-12 (10)
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)	2.0 (0.07)	ASTM D5147	<2.0 (<0.07)

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

\*Measured on the selvage edge excluding the granule surfacing.

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