

# PARADIENE 30 CR FR TG



## Commercial Product Data Sheet

### Product Description

Paradiene 30 CR FR TG is a high performance, modified bitumen finish ply designed for use in homogeneous multi-layer modified bitumen roof membrane systems. Paradiene 30 CR FR TG consists of a lightweight random fibrous glass mat impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen, and surfaced with reflective, white synthetic chips. The back surface is coated with a high-performance modified bitumen adhesive layer specifically formulated for torch applications.

### Product Uses

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

Paradiene 30 CR FR TG is approved by Underwriters Laboratories for use in  $cUL_{us}$  Classified Siplast Paradiene 20/30 CR FR TG Roof Systems. Siplast Paradiene 20/30 CR FR TG 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 CR FR TG meets or exceeds the requirements of ASTM D 6163 Type I, Grade G, for SBS-modified bituminous sheet materials using glass fiber reinforcements.

Paradiene 30 CR FR TG meets the reflectance and emittance requirements of Title 24 Part 6 for the state of California. CRRC rated product ID is 0742-0005. Additionally, Paradiene 30 CR FR TG 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.

*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:	0.75 Square	(7.0 m <sup>2</sup> )	
Coverage Weight Per Square:	Min: 96 lb	(4.7 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: 130 mils	(3.3 mm)	
Thickness at Selvage:	Avg: 118 mils	(3.0 mm)	
	Min: 114 mils	(2.9 mm)	

Selvage Surfacing: Release Tape

Top Surfacing: Specially formulated white synthetic chips

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 foiled 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.

# PARADIENE 30 CR FR TG

## Physical and Mechanical Properties

Property (as Manufactured)	Values/Units	Test Method
Thickness (average)	130 mils (3.3 mm)	ASTM D 5147 section 5
<sup>1</sup> Thickness at selvage (minimum) (average)	114 mils (2.9 mm) 118 mils (3.0 mm)	ASTM D 5147 section 5
<sup>2</sup> Peak Load @ 73°F (average)	30 lbf/inch (5.3 kN/m)	ASTM D 5147 section 6
<sup>2</sup> Peak Load @ 0°F (average)	75 lbf/inch (13.2 kN/m)	ASTM D 5147 section 6
<sup>2</sup> Elongation @ Peak Load, 73°F (average)	3%	ASTM D 5147 section 6
<sup>2</sup> Elongation @ Peak Load, 0°F (average)	3%	ASTM D 5147 section 6
<sup>2</sup> Ultimate Elongation @ 73°F (average)	55%	ASTM D 5147 section 6
<sup>2</sup> Tear Strength (average)	40 lbf (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 10
Low Temperature Flexibility (maximum)	-13°F (-25°C)	ASTM D 5147 section 11
Granule Embedment	Not applicable	ASTM D 5147 section 14
High Temperature Stability (minimum)	250°F (121°C)	ASTM D 5147 section 15
Coating Thickness - Back Surface	≥ 40 mils (1 mm)	ASTM D 5147 section 16
Solar Reflectance (Avg)	0.72	ASTM C1549
Thermal Emittance (Avg)	0.81	ASTM C1371
Solar Reflectance Index (Avg)	87	ASTM E1980
Cyclic Fatigue	Paradiene 30 CR FR TG, 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 D5147.	

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