# **PARADIENE 20 PR TG**



### Commercial Product Data Sheet

#### **Product Description**

Paradiene 20 PR TG is a high performance modified bitumen finish ply designed for use in gravel-surfaced, homogeneous multi-layer modified bitumen roof membrane systems. Paradiene 20 PR TG consists of a fiberglass scrim reinforced/polyester mat composite impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen. The back surface is coated with a high performance modified asphalt 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.

Paradiene 20 PR TG is available with Siplast RoofTag RFID roof asset technology on a Special-Made-To-Order basis. See RoofTag Commercial Product Data Sheet for more information.

#### **Product Uses**

Paradiene 20 PR TG is the surface ply of the Siplast Paradiene 20 or 20 TG/20 PR TG gravel-surfaced roof system, and is lapped 3 inches (7.6 cm) side and end. Paradiene 20 PR TG is torch applied to approved Siplast sheet materials or approved substrates. Contact Siplast for specific approval on other product uses.

### **Product Approvals**

Paradiene 20 PR TG is approved by FM Approvals for use in Siplast Paradiene 20 series/20 PR TG Class 1 insulated steel deck constructions and over insulated and non-insulated concrete roof deck constructions, subject to FM conditions and limitations.

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

Siplast Paradiene 20 series/Paradiene 20 PR TG gravel-surfaced roof systems have been classified by Underwriters Laboratories as Class A roofing systems over insulated and non-insulated non-combustible roof decks.

Paradiene 20 PR TG meets or exceeds the requirements of ASTM D 6164 Type I, Grade S, and CSA A123.23-15 Type C, Grade 1 for SBS-modified bituminous sheet materials using polyester reinforcements

Siplast Roof Systems have also received the approval of many regional and local code authorities. Contact Siplast for more information.

Unit:	Roll				
Coverage:	1.0 Square		(9.3 m²)		
Coverage Weight					
Per Square:	Min:	96 lb	(4.7 kg/m²)		
Roll Length:	Min:	33.5 ft	(10.21 m)		
Roll Width:	Avg:	3.28 ft	(1.00 m)		
Thickness:	Avg:	138 mils	(3.5 mm)		
	Min:	134 mils	(3.4 mm)		
Selvage Width:	N/A				
Selvage Surfacing:	N/A				

COMMERCIAL PRODUCT INFORMATION

Lines: Two laying lines are placed 3 in (7.6 cm) and 4 in (10.2 cm) from each edge of the material. The line color for this material is yellow.

Packaging: Rolls are wound onto a compressed paper tube. The rolls are placed upright 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: 96 lb (43.5 kg)

Top Surfacing: Silica Parting Agent

Back Surfacing: Polyolefin Film

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.

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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 (minimum)	134 mils (3.4 mm)	ASTM D 5147 section 6	Thickness (minimum)	3.4 mm (134 mils)	
Thickness (average)	138 mils (3.5 mm)	ASTM D 5147 section 6	Thickness (average)	3.5 mm (138 mils)	
¹Peak Load @ 73°F	60 lbf/inch	ASTM D 5147	<sup>1</sup> Peak Load 23 <sup>o</sup> C	10.5 kN/m	
(23°C) (average)	(10.5 kN/m)	section 7	(73°F) (average)	(60 lbf/inch)	
¹Peak Load @ 0°F	115 lbf/inch	ASTM D 5147	<sup>1</sup> Peak Load @ -17°C	20.1 kN/m	
(-17°C) (average)	(20.1 kN/m)	section 7	(0°F) (average)	(115 lbf/inch)	
<sup>1</sup> Elongation @ Peak Load, 73°F (23°C) (average)	65%	ASTM D 5147 section 7	<sup>1</sup> Elongation @ Peak Load, 23 <sup>°</sup> C (73 <sup>°</sup> F) (average)	65%	
¹Elongation @ Peak Load, 0°F (-17°C) (average)	40%	ASTM D 5147 section 7	<sup>1</sup> Elongation @ Peak Load, -17°C (0°F) (average)	40%	
<sup>1</sup> Ultimate Elongation @ 73°F (23°C) (average)	100%	ASTM D 5147 section 7	<sup>1</sup> Ultimate Elongation @ 23°C (73°F) (average)	100%	
¹Tear Strength (average)	100 lbf (0.45 kN)	ASTM D 5147 section 8	Strain Energy (before and after conditioning) @ 23°C (73°F) @ -18°C (0°F)	≥ 5.5 kN/m (≥ 31 lbf/in) ≥ 3.0 kN/m (≥ 17 lbf/in	
Water Absorption		ASTM D 5147	N/A	N/A	
(maximum)	1%	section 10			
Dimensional Stability		ASTM D 5147	Dimensional Stability		
(maximum)	0.5%	section 11	(maximum)	0.5%	
Low Temperature		ASTM D 5147	Low Temperature		
Flexibility (maximum)	-15°F (-26°C)	section 12	Flexibility (maximum)	-26°C (-15°F)	
Compound Stability	0	ASTM D 5147	Compound Stability		
(minimum)	250°F (121°C)	section 16	(minimum)	121°C (250°F)	
Cyclic Fatigue	Paradiene 20 PR TG, bonded to an acceptable Paradiene 30, Paradiene 40 FR, or Parafor 50 LT cap sheet with an approved method of attachment, passes ASTM D 5849 both as-manufactured and after heat conditioning according to ASTM		Mass Per Unit Area (minimum)	4.7 kg/m² (96 lb/sq)	
	D 5147.				

<sup>1.</sup> The value reported is the lower of either MD or XD.