PARADIENE 20 TG



Commercial Product Data Sheet

Product Description

Paradiene 20 TG is a high performance torch grade modified bitumen base ply designed for use in homogeneous multi-layer modified bitumen roof membrane systems. Paradiene 20 TG consists of a lightweight random fibrous glass mat impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen. The top surface is covered with a silica parting agent, and 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 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 TG is the first ply of all Siplast Paradiene 20 TG/30 TG Systems, and is lapped 3 inches (7.6 cm) side and end. Paradiene 20 TG is torch applied to approved substrates. Contact Siplast for specific approval on product uses.

Product Approvals

Paradiene 20 TG is approved by FM Approvals (FM Standard 4470) for use in Siplast Paradiene 20 TG/30 TG and Paradiene 20 TG/30 FR TG Class 1 insulated steel roof deck constructions and 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.

Paradiene 20 TG is classified by Underwriters Laboratories for use in $_{c}UL_{us}$ Classified Siplast Paradiene 20 TG/30 TG and Paradiene 20 TG/30 FR TG Roof Systems. Siplast Paradiene 20 TG/30 FR TG Roof Systems have been classified by Underwriters Laboratories as Class A roofing systems over non-combustible, insulated non-combustible, and insulated combustible decks, and as Class B roofing systems over combustible decks. Siplast Paradiene 20 TG/30 TG Roof Systems have been classified as Class C roofing systems over combustible, non-combustible, and insulated combustible decks.

Paradiene 20 TG meets or exceeds the requirements of ASTM D 6163 Type I, Grade S, and CSA A123.23-15 Type A, Grade 1 for SBS-modified bituminous sheet materials using glass fiber reinforcements.

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

Roll		
1.0 Square		(9.3 m²)
Min:	76 lb	(3.7 kg/m²)
Min:	33.5 ft	(10.21 m)
Avg:	3.28 ft	(1.00 m)
Avg:	114 mils	(2.9 mm)
Min:	110 mils	(2.8 mm)
N/A		
N/A		
	1.0 So Min: Min: Avg: Avg: Min: N/A	1.0 SquareMin:76 lbMin:33.5 ftAvg:3.28 ftAvg:114 milsMin:110 milsN/A

Back Surfacing: Polyolefin Film

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 white.

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: 25 Number Pallets Per Truckload: 18 Minimum Roll Weight: 76 lb (34.5 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.

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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)	110 mils (2.8 mm)	ASTM D 5147 section 6	Thickness (minimum)	2.8 mm (110 mils)	
Thickness (average)	114 mils (2.9 mm)	ASTM D 5147 section 6	Thickness (average)	2.9 mm (114 mils)	
¹ Peak Load @ 73 [°] F	30 lbf/inch	ASTM D 5147	¹ Peak Load 23 ^o C	5.3 kN/m	
(23 [°] C) (average)	(5.3 kN/m)	section 7	(73°F) (average)	(30 lbf/inch)	
¹ Peak Load @ 0 [°] F	75 lbf/inch	ASTM D 5147	¹ Peak Load @ -17 ^o C	75 lbf/inch	
(-17 [°] C) (average)	(13.2 kN/m)	section 7	(0 [°] F) (average)	(13.2 kN/m)	
¹ Elongation @ Peak Load, 73 [°] F (23 [°] C) (average)	3%	ASTM D 5147 section 7	¹ Elongation @ Peak Load, 23 [°] C (73 [°] F) (average)	3%	
¹ Elongation @ Peak Load, 0 ^o F (-17 ^o C) (average)	3%	ASTM D 5147 section 7	¹ Elongation @ Peak Load, -17 [°] C (0 [°] F) (average)	3%	
¹ Ultimate Elongation @ 73 [°] F (23 [°] C) (average)	50%	ASTM D 5147 section 7	¹ Ultimate Elongation @ 23 [°] C (73 [°] F) (average)	50%	
¹ Tear Strength	40 lbf	ASTM D 5147	N/A	N/A	
(average)	(0.18 kN)	section 8			
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		ASTM D 5147	Low Temperature		
Flexibility (maximum)	-15°F (-26°C)	section 12	Flexibility (maximum)	-26°C (-15°F)	
Compound Stability		ASTM D 5147	Compound Stability		
(minimum)	250°F (121°C)	section 16	(minimum)	121°C (250°F)	
Coating Thickness - Back Surface	\geq 40 mils (1 mm)	ASTM D 5147 section 17	Coating Thickness - Back Surface	1 mm (≥ 40 mils)	
Cyclic Fatigue	Paradiene 20 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 D 5147.		Mass Per Unit Area (minimum)	3.7 kg/m (76 lb/sq)	

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