

PARADIENE 20 SA



Commercial Product Data Sheet

Product Description

Paradiene 20 SA is a high performance, self-adhesive, modified bitumen base ply designed for use in homogeneous multi-layer modified bitumen roof membrane systems. Paradiene 20 SA consists of a lightweight random fibrous glass mat impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen. The back surface is coated with a self-adhesive bitumen layer specifically formulated for optimum adhesion in low-slope membrane applications, and it is lined with a high strength polyolefin release film.

Product Uses

Paradiene 20 SA is designed to be used as a base ply for direct application to DensDeck Prime® and DuraGuard roof board products, and other approved substrates. Paradiene 20 SA is also used as a stripping ply for reinforcing details at metal flanges, walls, and curbed penetrations. Extending Paradiene 20 SA stripping ply onto the top surface of any Paradiene 20 layer requires either removal of the top film surfacing from a film-surfaced Paradiene 20, or priming a sand-surfaced Paradiene 20 using an approved primer.

Paradiene 20 SA is the first ply of all fully adhered Siplast Paradiene 20 SA/Paradiene 30 TG Systems. It is lapped 3 inches (7.6 cm) on sides and ends. End laps require heat welding. An alternative to the standard end lap method is seaming end joints using a 12-inch (30.4 cm) wide strip of Paradiene 20 TG. Paradiene 20 SA is designed for direct application to approved insulations, DensDeck Prime®, primed structural concrete decks, and other approved substrates. Paradiene 20 SA is used as a base ply in multi-layer roof systems with a torch applied finish layer of Paradiene TG, Veral, or Parafor. Prior approval from the Siplast Technical Department is required for SA membrane systems installed without a torch applied finish layer. Both layers of roofing (Paradiene 20 SA and finish layer) must be applied in the same day. Contact Siplast for specific approval on other product uses.

Product Approvals

Paradiene 20 SA is approved by Underwriters Laboratories as an acceptable substitute for Paradiene 20 TG in all cUL_{us} classification listings and assemblies. Paradiene 20 SA has been tested by Factory Mutual for wind uplift resistance in various constructions. Contact Siplast for specific approvals.

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.

COMMERCIAL PRODUCT INFORMATION

Unit:	Roll		
Coverage:	1.0 Square	(9.3 m ²)	
Coverage Weight Per Square:	Min:	72 lb	(3.5 kg/m ²)
Roll Length:	Min:	33.5 ft	(10.21 m)
Roll Width:	Avg:	3.28 ft	(1.00 m)
Thickness:	Min:	98 mils	(2.5 mm)
	Avg:	102 mils	(2.6 mm)
Selvage Width:	Avg:	3.0 in	(76 mm)
Selvage Surfacing:	Polyolefin Release Tape		
Top Surfacing:	Sand		
Back Surfacing:	Polyolefin Release Film		

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 foiled 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: 72 lb (32.7 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 20 SA

Physical and Mechanical Properties

Property (as Manufactured)	Values/Units	Test Method
Thickness (minimum)	98 mils (2.5 mm)	ASTM D 5147 section 5
Thickness (average)	102 mils (2.6 mm)	ASTM D 5147 section 5
¹ Peak Load @ 73°F (average)	30 lbf/inch (5.3 kN/m)	ASTM D 5147 section 6
¹ Peak Load @ 0°F (average)	75 lbf/inch (13.2 kN/m)	ASTM D 5147 section 6
¹ Elongation @ Peak Load, 73°F (average)	3%	ASTM D 5147 section 6
¹ Elongation @ Peak Load, 0°F (average)	3%	ASTM D 5147 section 6
¹ Ultimate Elongation @ 73°F (average)	50%	ASTM D 5147 section 6
¹ 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
² High Temperature Stability (minimum)	250°F (121°C)	ASTM D 5147 section 15
Cyclic Fatigue	Paradiene 20 SA, 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 D5147.	

1. The value reported is the lower of either MD or XD.
2. The High Temperature Stability of the self-adhesive bitumen coating is 212°F (100°C).