

PARADIENE 20



Commercial Product Data Sheet

Product Description

Paradiene 20 is a high performance modified bitumen base ply designed for use in homogeneous multi-layer modified bitumen roof membrane systems. Paradiene 20 consists of a lightweight random fibrous glass mat impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen.

Product Uses

Paradiene 20 is the first ply of all standard Siplast Paradiene 20/30 Systems, and is lapped 3 inches (7.6 cm) side and end. Paradiene 20 can be applied in approved Type IV asphalt or Siplast PA-311 Adhesive. Contact Siplast for specific approval on other product uses.

Product Approvals

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

Paradiene 20 is approved by Underwriters Laboratories for use in _{cUL-us} Classified Siplast Paradiene 20/30, Paradiene 20/30 FR, and Paradiene 20/20 PR Roof Systems. Siplast Paradiene 20/30 FR 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. Siplast Paradiene 20/20 PR has been classified by Underwriters Laboratories as a Class A roofing system over non-combustible and insulated non-combustible decks when surfaced with roofing gravel. Siplast Paradiene 20/30 has been classified as a Class C roofing system over combustible, non-combustible, and insulated combustible decks.

Paradiene 20 meets or exceeds the requirements of ASTM D 6163 Type I, Grade S, for SBS-modified bituminous sheet materials using glass fiber reinforcements.

Siplast Roof Systems also have received the approval of many regional and local authorities. Please contact Siplast for specific information as required.

COMMERCIAL PRODUCT INFORMATION

| | | |
|-----------------------------|----------------------|--------------------------|
| Unit: | Roll | |
| Coverage: | 1.5 Squares | (13.9 m ²) |
| Coverage Weight Per Square: | Min: 62 lb | (3.0 kg/m ²) |
| Roll Length: | Min: 50 ft | (15.24 m) |
| Roll Width: | Avg: 3.28 ft | (1.00 m) |
| Thickness: | Avg: 91 mils | (2.3 mm) |
| | Min: 87 mils | (2.2 mm) |
| Selvage Width: | N/A | |
| Selvage Surfacing: | N/A | |
| Top Surfacing: | Silica Parting Agent | |
| Back Surfacing: | Silica Parting Agent | |

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 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: 93 lb (42.2 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.

PARADIENE 20

Physical and Mechanical Properties

| Property (as Manufactured) | Values/Units | Test Method |
|---|---|---------------------------|
| Thickness (minimum) | 87 mils (2.2 mm) | ASTM D 5147 section 5 |
| Thickness (average) | 91 mils (2.3 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) | 70 lbf/inch (12.3 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 |
| High Temperature Stability (minimum) | 250°F (121°C) | ASTM D 5147 section 15 |
| Cyclic Fatigue | Paradiene 20, 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.