



PARADIENE® 40 FR TG BW

Commercial Product Data Sheet

Paradiene® 40 FR TG BW is a modified bitumen finish ply and flashing sheet. Designed for use in homogeneous multi-layer modified bitumen roof membrane systems, Paradiene 40 FR TG BW consists of a fiberglass scrim/fiberglass mat composite impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen and is surfaced with highly reflective, white mineral granules. The back of the sheet is coated with a modified bitumen asphalt layer specifically formulated for torch application, is embossed with a grooved pattern, and is surfaced with a polyolefin burn-off film.

Contact Siplast for information on approved product uses.

USES: FINISH PLY FLASHING SHEET

| Standards | ASTM D6163 Type II, Grade G; CSA A123.23-15 Type A, Grade 1 | | |
|----------------------------------|---|--|--|
| Roll Length | Min: 25.25 ft (7.70 m) | | |
| Roll Width | Avg: 39.4 in (1.0 m) | | |
| Coverage | 0.75 Square (75 ft²) (7.0 m²) | | |
| Coverage Weight Per Square | Min: 108 lb (5.3 kg/m²) | | |
| Selvage Width | Avg. 2.75 in (70 mm) Orange laying line is 3 in (76.2 mm) from the edge of the sheet. | | |
| Selvage Surfacing | Polyolefin Burn-off Film | | |
| Top Surfacing | Bright White Mineral Granules | | |
| Back Surfacing | Polyolefin Burn-off Film | | |
| Product Options | RoofTag | | |
| | | | |

PRODUCT INFORMATION

Application

Refer to the Siplast Technical Guide for detailed application information and slope limitations. Paradiene 40 FR TG BW is lapped 3 inches (76.2 mm) at sides and 6 inches (152 mm) at ends.



Storage and Handling

All Siplast roll roofing products should be stored on end on a clean, flat surface. Rolls should not be dropped on ends or edges or stored in a leaning position. Deformation resulting from these actions will make proper installation difficult. All roofing products should be stored in a dry place out of direct exposure to the elements and should not be double stacked. Material should be handled so that it remains dry prior to and during installation.

See product packaging and the Safety Data Sheet for specific information on the safe handling of this product.

Packaging

Pallet: 41 in x 48 in (104 cm x 122 cm) wooden pallet

Rolls Per Pallet: 25

Pallets Per Truckload (Typical): 18 Minimum Roll Weight: 81 lb (36.7 kg)

Max Pallet Weight (Typical): 2325 lb (1054.6 kg)

Listings, Approvals, & Certifications



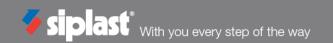






Classified by UL in accordance with ANSI/UL 790. Refer to UL Product iQ for specific assemblies. FM Approved - Refer to RoofNav.com for specific assemblies. Meets or Exceeds CSA A123.23.

Current copies of all Siplast Commercial Product Data Sheets & Safety Data Sheets are posted on our website at www.siplast.com



U.S. TEST STANDARDS

| Property (as Manufactured) | | Values | Test Method | | |
|---|---------------------------|--|---|------------------------|--|
| Thickness (average) | | 154 mils (3.9 mm) | | ASTM D5147 Section 6 | |
| *Thickness at Selvage | | 133 mils (3.4 mm) avg. | 126 mils (3.2 mm) min. | ASTM D5147 Section 6 | |
| **Peak Load | @ 73.4°F (23°C) (average) | 80 lbf/inch (14.1 kN/m) | | ASTM D5147 Section 7 | |
| "Peak Load | @ 0°F (-18°C) (average) | 150 lbf/inch (26.5 kN/m) | | ASTIVI DOTA7 SECTION 7 | |
| **Elongation @ Peak Load | @ 73.4°F (23°C) (average) | 3% | | ASTM D5147 Section 7 | |
| | @ 0°F (-18°C) (average) | 3% | | ASTIVI DS147 SECTION 7 | |
| **Ultimate Elongation @ 73.4°F (23°C) (average) | | 80% | | ASTM D5147 Section 7 | |
| **Tear Strength (average) | | 120 lbf (0.54 kN) | | ASTM D5147 Section 8 | |
| Water Absorption (maximum) | | 1% | | ASTM D5147 Section 10 | |
| Dimensional Stability (maximum) | | 0.5% | | ASTM D5147 Section 11 | |
| Low Temperature Flexibility (maximum) | | -15°F (-26°C) | | ASTM D5147 Section 12 | |
| Granule Embedment | | 1.5 grams per sample Max. avg. loss | 2.0 grams per sample Max individual loss | ASTM D5147 Section 15 | |
| Compound Stability (minimum) | | 250°F (121°C) | | ASTM D5147 Section 16 | |
| Coating Thickness - Back Surface | | ≥40 mils (1 mm) | | ASTM D5147 Section 17 | |
| Cyclic Fatigue | | Paradiene 40 finish ply bonded to Paradiene 20 base ply, with an approved method of attachment, passes ASTM D5849 both as manufactured and after heat conditioning according | | | |



The above properties have been validated by PRI and are under continuous surveillance. The product has been validated to meet ASTM D6163-08, Type II, Grade G.

CANADIAN TEST STANDARDS

| Property (as Manufactured) | | Units | CASA123.23 Requirement | Test Method | Test Performance |
|---|---------------------------|--------------------|---------------------------|----------------|---------------------|
| Thickness (minimum) | | mm (mils) | 2.4 (95) | ASTM D5147 | 3.8 (152) |
| *Selvage Thickness (minimum) | | mm (mils) | 2.0 (80) | ASTM D5147 | 3.2 (126) |
| Mass Per Unit Area (minimum) | | kg/m² (lb/100 ft²) | 3.2 (65) | ASTM D5147 | 5.0 (102) |
| Back Surface Coating Thickness (minimum) | | mm (mils) | 1.0 (40) | ASTM D5147 | 1.0 (40) |
| **Strain Energy (Before After Heat Conditioning) | @ 23 ± 2°C (73.4 ± 3.6°F) | kN/m (lbf/in) | See Tested Value | CSA A123.23 | >1.9 (>11) |
| | @-18 ± 2°C (-0.4 ± 3.6°F) | KIN/III (IDI/III) | See resieu value | | >0.5 (>2.9) |
| **Peak Load (Before and After Heat Conditioning) | @ 23 ± 2°C (73.4 ± 3.6°F) | kN/m (lbf/in) | 5.3 (30) | ASTM D5147 | >17 (>97) |
| | @-18 ± 2°C (-0.4 ± 3.6°F) | | 12.3 (70) | | >26.5 (>151) |
| **Elongation @ Peak Load (Before and After Heat Conditioning) | @ 23 ± 2°C (73.4 ± 3.6°F) | % | 2 | 4 OTM DE 4 4 7 | >5 |
| | @-18 ± 2°C (-0.4 ± 3.6°F) | | 1 | ASTM D5147 | >4 |
| **Ultimate Elongation (Befo Conditioning), @ 23 ± 2°C (7 | | % | 3 | ASTM D5147 | >32 |
| Dimensional Stability (maximum) | | % | 0.5 | ASTM D5147 | 0.5 |
| Low Temperature Flexibility (maximum) | | °C (°F) | -18 (-0.4) | ASTM D5147 | -26 (-15) |
| Low Temperature Weathered Flexibility (maximum) | | °C (°F) | -12 (10) | ASTM D5147 | -12 (10) |
| Compound Stability (minimum) | | °C (°F) | 91 (195) | ASTM D5147 | 91 (195) |
| Resistance to Puncture | | N/A | N/A | CSA A123.23 | N/A |
| Granule Loss | | g (oz) | 2.0 (0.07) | ASTM D5147 | <2.0 (<0.07) |

Data is based upon typical product performance and is subject to normal manufacturing and packaging tolerance and variation.

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

^{*}Measured on the selvage edge excluding the granule surfacing.



SOLAR REFLECTANCE / THERMAL EMITTANCE

| Property (as Manufactured) | Values | Test Method |
|--------------------------------|--------|-------------|
| Solar Reflectance (avg.) | 0.74 | ASTM C1549 |
| Thermal Emittance (avg.) | 0.91 | ASTM C1371 |
| Solar Reflectance Index (avg.) | 92 | ASTM E1980 |

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