

# DYNALASTIC<sup>®</sup> 250 FR

## Fire Retardant, Heavy Duty Polyester-Reinforced, SBS Mineral-Surfaced Cap or Flashing Sheet

### Meets the requirements of ASTM D 6164, Type II, Grade G

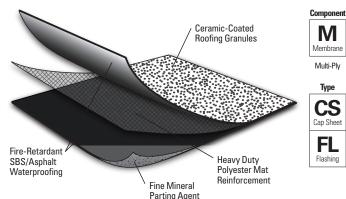
#### **Features and Components**

DynaLastic 250 FR is used as a premium polyester-reinforced cap or flashing sheet in a variety of multi-ply roofing systems.

Ceramic-Coated Roofing Granules: Specifically engineered for optimal embedment in the SBS-blend sheet. The ceramic coating promotes excellent long-term adhesion.

High-Quality SBS Rubber and Asphalt Blend: Lends elasticity and flexibility to the sheet. The elongation and recovery properties allow the product to easily accommodate the continual expansion and contraction experienced on all roofs. The FR blend contains additional fire-retardant additives.

Polyester-Reinforcement Mat: Provides excellent tensile strength, toughness, and puncture resistance and can accommodate stresses created by typical roof top expansion and contraction forces.





System Compatibility This product may be used as a component in the following systems. Please reference product application for specific installation methods and information.

| Ply  | Bl   | JR | A  | P  |    | S   | BS |    | Ply          | TI          | P0         | P\ | /C |    | EPDM |    |
|------|--|----|----|----|----|-----|----|----|--------------|-------------|------------|----|----|----|------|----|
| -ial | HA   | CA | CA | HW | HA | CA  | HW | SA | gle          | MF          | FA         | MF | FA | MF | FA   | BA |
| Ē    | Compatible with the selected Multi-Ply systems above |    |    |    |    | Sir |    | D  | )o not use v | vith Single | Ply systen | 15 |    |    |      |    |

| Key: | HA = Hot Applied | <b>CA</b> = Cold Applied | HW = Heat Weldable | <b>SA</b> = Self Adhered | MF = Mechanically Fastened | FA = Fully Adhered | <b>BA</b> = Ballasted |
|------|------------------|--------------------------|--------------------|--------------------------|----------------------------|--------------------|-----------------------|
|------|------------------|--------------------------|--------------------|--------------------------|----------------------------|--------------------|-----------------------|

#### **Energy and the Environment**

| Test                                    | Initial | 3-Year Aged |  |
|---|---------|-------------|--|
| Reflectivity* (ASTM C 1549)             | 0.26    | 0.27        |  |
| Emissivity* (ASTM C 1371)               | 0.87    | 0.84        |  |
| Solar Reflectance Index* (SRI) - E 1980 | 25      | 25          |  |
| Pre-Consumer Recycled Content           | 0%      |             |  |
| Post-Consumer Recycled Content          | 0%      |             |  |

\*Standard White Granule only

#### **Peak Advantage® Guarantee Information**

| Systems                                    | Guarantee Term |
|--|----------------|
| When used in most 2-5 ply JM SBS systems.* | Up to 30 years |

\*Contact JM Technical Services for specific system requirements or guarantee terms.

#### Codes and Approvals



## **Product Application**



Hot Asphalt Cold Applied

- May be installed in Type IV asphalt or in an approved JM adhesive
- · Laps may be installed using heat-welding techniques
- · Refer to JM SBS modified bitumen specifications and detail drawings for application and slope information

#### **Packaging and Dimensions**

| Roll Coverage*      | 95.8 ft² (8.9 m²)   |  |  |  |  |
|---------------------|---------------------|--|--|--|--|
| Roll Length         | 32' 10" (10.01 m)   |  |  |  |  |
| Roll Width          | 39 ¾" (1 m)         |  |  |  |  |
| Roll Weight         | 115 lb (52.2 kg)    |  |  |  |  |
| Rolls per Pallet    | 20                  |  |  |  |  |
| Pallet Weight       | 2,430 lb (1,102 kg) |  |  |  |  |
| Pallets per Truck** | 19                  |  |  |  |  |

\*Assumes a 4" side lap \*\*Assumes 48' flatbed truck.



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## **Tested Physical Properties**

|                  |                                  |                         |                               | Standard for ASTM D 6164,        | DynaLastic 250 FR      |        |  |
|------------------|----------------------------------|-------------------------|-------------------------------|----------------------------------|------------------------|--------|--|
| Phy              | vsical Properties                |                         | ASTM<br>Test Method           | Type II, Grade G (Min.)          | MD*                    | XMD**  |  |
| ÷                | Tensile Tear                     | D 5147                  | 70 lbf (311 N)                | 181 lbf (805 N)                  | 124 lbf (552 N)        |        |  |
| Strength         | Peak Load at 0°F (-18°C)         | D 5147                  | 100 lbf/in (17.5 kN/m)        | 184 lbf/in (32.2 kN/m)           | 122 lbf/in (21.4 kN/m) |        |  |
| S                | Peak Load at 73.4°F (23°C)       | D 5147                  | 70 lbf/in (12k N/m)           | 106 lbf/in (18.6 kN/m)           | 84 lbf/in (14.7 kN/m)  |        |  |
|                  | Low Town Flowibility             | Unconditioned           | D 5147                        | 0°F (-18°C)                      | -20°F (                | -29°C) |  |
|                  | Low Temp. Flexibility            | 90-Day Heat Conditioned | D 5147                        | 0°F (-18°C)                      | -20°F (                | -29°C) |  |
|                  | Compound Stability               |                         | D 5147                        | 215°F (102°C)                    | 250°F (                | 121°C) |  |
| Ę,               | Granule Loss                     | D 4977                  | 2 g (0.07 oz)                 | 0.7 g (0.02 oz)                  |                        |        |  |
| Longevity        | Thickness                        | D 5147                  | 130 mil (3.3 mm)              | 165 mil (4.2 mm)                 |                        |        |  |
| 2                | Selvage Edge Thickness           | D 5147                  | N/A                           | 134 mil (3.4 mm)                 |                        |        |  |
|                  | Elongation at Peak Load at 0°F   | D 5147                  | 20%                           | 46%                              | 54%                    |        |  |
|                  | Elongation at Peak Load at 73.4  | D 5147                  | 50%                           | 58%                              | 71%                    |        |  |
|                  | Ultimate Elongation at 73.4°F (2 | D 5147                  | 60%                           | 61%                              | 76%                    |        |  |
| e                | 90-Day Heat-Conditioned Peak     | D 5147                  | 100 lbf/in (17.5 kN/m)        | 178 lbf/in (31.2 kN/m)           | 119 lbf/in (20.8 kN/m) |        |  |
| Aged Performance | 90-Day Heat-Conditioned Elong    | D 5147                  | 20%                           | 49%                              | 60%                    |        |  |
| erfor            | 90-Day Heat-Conditioned Peak     | D 5147                  | 70 lbf/in (12 kN/m)           | 133 lbf/in (23.3 kN/m)           | 96 lbf/in (16.8 kN/m)  |        |  |
| ged P            | 90-Day Heat-Conditioned Elonga   | D 5147                  | 50%                           | 58%                              | 68%                    |        |  |
| Ă                | 90-Day Heat-Conditioned Ultin    | D 5147                  | 60%                           | 60%                              | 71%                    |        |  |
| ion              | Dimensional Stability            | D 5147                  | 1.0%                          | 0.3%                             | 0.1%                   |        |  |
| Installation     | Net Mass per Unit Area           | D 146                   | 90 lb/100 ft² (41 kg/9.29 m²) | 110 lb/100 ft² (49.9 kg/9.29 m²) |                        |        |  |
| Inst             | Roll Weight                      | D 146                   | N/A                           | 115 lb (!                        | 52.2 kg)               |        |  |

\*MD = Machine Direction

\*\*XMD = Cross-Machine Direction

Note: All data represents tested values.

## **Supplemental Testing**

| Physical Properties        |  | ASTM Test Method | DynaLastic 250 FR<br>Result |
|----------------------------|--|------------------|-----------------------------|
| Qualia Joint Dianla comont | Initial  | D 5849           | Pass at 500 cycles*         |
| Cyclic Joint Displacement  | After 90-Day Heat Conditioning per ASTM D 5147 | D 5849           | Pass at 200 cycles*         |
| Coefficient of Fristian    | Static   | D 1894           | 1.32                        |
| Coefficient of Friction    | Kinetic  | D 1894           | 0.89                        |

\*In a min 2-ply system when adhered with any combination of cold applied, hot applied and or heat-weld that is approved by JM for application.