



## RubberGard™ EPDM FR Roofing Membrane

### 1. Description

The Firestone RubberGard™ EPDM FR (Fire Retardant) membrane is a 100% cured roofing membrane made of a synthetic rubber Ethylene-Propylene-Diene Terpolymer. The Fire Retardant sheet is made of a bottom ply of standard compound and a top ply of fire retardant compound.



### 2. Preparation

The roofing structure needs to be stable enough to support the temporary loading. Substrates need to be clean, smooth, dry and free of sharp edges, loose or foreign materials, oil, grease and other materials that may damage the membrane. All surface voids greater than 5 mm wide shall be properly filled with an acceptable fill material.

### 3. Application

Allow the membrane to relax for approximately 30 minutes before splicing or final securement. Refer to the Firestone guidelines for specific installation instructions. It is important that the side of the sheet imprinted with "This Side Down" be installed in direct contact with the substrate to achieve the respective fire rating compliance.

### 4. Coverage

The dimensions of the membrane are calculated to cover the substrate, including seam overlaps (100 mm for standard seams - 200 mm for seams with mechanical attachment) and upstands. Provide an additional length (150 mm) at upstands for easy handling.

### 5. Characteristics

#### Physical

- Elastomeric membrane with a good combination of high elasticity and tensile strength.
- Improved fire-resistance properties.
- Excellent resistance to UV and ozone.
- Retains its elasticity even at temperatures as low as -45°C
- Resistant to temperature shocks up to 130°C.
- Excellent resistance to acid rains, less resistant to oil products. Contact with mineral and vegetable oils, petroleum based products, hot bitumen and grease must be avoided.

# Technical Information Sheet



## 6. Technical Specifications

| Physical Properties                        | Test method    | Declared value<br>1.1 mm   | Declared value<br>1.5 mm   |
|--|----------------|--|--|
| Thickness                                  | EN 1849-2      | 1.1 mm   | 1.5 mm   |
| Mass per unit area                         | EN 1849-2      | 1.49 kg/m <sup>2</sup>   | 2.03 kg/m <sup>2</sup>   |
| Watertightness                             | EN 1928 (B)    | Pass   | Pass   |
| Tensile strength (L/T)                     | EN 12311-2 (B) | ≥ 7 N/mm <sup>2</sup>  | ≥ 7 N/mm <sup>2</sup>  |
| Elongation (L/T)                           | EN 12311-2 (B) | ≥ 300%   | ≥ 300%   |
| Resistance to static load - hard substrate | EN 12730 (B)   | ≥ 20 kg  | ≥ 20 kg  |
| Resistance to impact - soft substrate      | EN 12691 (B)   | ≥ 1700 mm  | ≥ 2000 mm  |
| Resistance to impact - hard substrate      | EN 12691 (A)   | ≥ 200 mm   | ≥ 300 mm   |
| Tear resistance (L/T)                      | EN 12310-2     | ≥ 40 N   | ≥ 40 N   |
| Joint peel resistance                      | EN 12316-2     | ≥ 80 N/50 mm   | ≥ 80 N/50 mm   |
| Joint shear resistance                     | EN 12317-2     | ≥ 200 N/50 mm  | ≥ 200 N/50 mm  |
| UV exposure                                | EN 1297        | Pass   | Pass   |
| Foldability at low temperature             | EN 495-5       | ≤ -45°C  | ≤ -45°C  |
| Dimensional stability                      | EN 1107-2      | ≤ 1%   | ≤ 1%   |
| Reaction to fire                           | EN 13501-1     | E  | E  |
| External fire performance (in end-use)     | EN 13501-5     | B <sub>ROOF</sub> (t1)<br>B <sub>ROOF</sub> (t2)<br>B <sub>ROOF</sub> (t3)<br>B <sub>ROOF</sub> (t4) | B <sub>ROOF</sub> (t1)<br>B <sub>ROOF</sub> (t2)<br>B <sub>ROOF</sub> (t3)<br>B <sub>ROOF</sub> (t4) |

Note: As European standards continue to develop, please contact Firestone's Technical Department or visit [www.firestonebpe.com](http://www.firestonebpe.com) for the latest updates on physical properties.

## 7. Packaging / Storage / Shelf life

| Thickness       | Width          | Length         | Weight (incl. Packaging) |
|-----------------|----------------|----------------|--------------------------|
| 1.1 mm (0.045") | 3.05 m (10')   | 15.25 m (50')  | 1.70 kg/m <sup>2</sup>   |
|                 | 3.05 m (10')   | 30.50 m (100') |                          |
|                 | 3.35 m (11')   | 61.00 m (200') |                          |
|                 | 4.04 m (13'4") | 61.00 m (200') |                          |
|                 | 6.10 m (20')   | 30.50 m (100') |                          |
|                 | 9.15 m (30')   | 30.50 m (100') |                          |
| 1.5 mm (0.060") | 3.05 m (10')   | 30.50 m (100') | 2.20 kg/m <sup>2</sup>   |
|                 | 6.10 m (20')   | 30.50 m (100') |                          |

Note: Membranes may be available in additional panel sizes, please contact your Firestone Representative.

**Storage:** Store away from sources of punctures and physical damage. Store away from ignition sources and open flame.

**Shelf life:** Unlimited.

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