

Firestone GeoGard™ EPDM Membrane (1.5 mm)

1. Description

The Firestone GeoGard™ EPDM membrane 1.5 mm (.060") liner is a cured single-ply synthetic rubber membrane made of ethylene-propylene-diene terpolymer (EPDM).

It is available in a variety of panel sizes. Depending on the dimensions of the liner, the waterproofing surface may be seamless (up to 697 m²). In other situations, seams can be made using a self-adhesive tape.



2. Preparation

Product: Allow the membrane to relax for approximately 30 minutes before splicing.

Substrate: The substrate needs to be smooth, dry and free of sharp objects, oil, grease and other materials that may damage the membrane.

3. Application

Install the Firestone GeoGard EPDM in accordance with current specifications and details.

4. Coverage

The dimensions of the membrane are calculated to cover the base of the reservoir, slopes and anchor trenches, including seam overlap.

5. Characteristics

The Firestone GeoGard EPDM is a rubber material with the following properties:

Physical	<ul style="list-style-type: none"> Elastomeric membrane with a good combination of high elasticity and tensile strength Retains its flexibility at low temperature (-45°C) Resists to temperature shocks up to 130°C Excellent resistance to alkali rains Excellent resistance to U.V. radiation and ozone concentration Contact with some kind of oils, petroleum products, hot bitumen and grease must be avoided 	
Technical	• Base	synthetic rubber
• Color	black	
• Solvents	none	
• Solids (%)	100	
• State	cured	

6. Technical specifications

Physical properties	Test method	Declared value	Tolerance	Unit
Mass per unit area	EN 1849-2	1695	± 5%	g/m ²
Tensile strength (MD/CD)	ISO R 527	10	- 1	N/mm ²
Elongation (MD/CD)	ISO R 527	≥ 300		%
Dimensional stability	EN 1107-2	≤ 0.5		%
Flexibility at low temperature	EN 495-5	≤ -45		°C
Resistance to static puncture	EN ISO 12236	0.9	- 0.1	kN
Liquid tightness under high pressure	EN 1928	≥ 4		bar
Water permeability	EN 14150	3.0 10 ⁻⁶	± 10 ⁻⁶	m ³ /m ² d
Methane permeability	ASTM D1434	2.25 10 ⁻³		m ³ /m ² d
Durability - weathering (25y)	EN 12224	Pass		
Durability - oxidation	EN 14575	Pass		
Friction angle	EN ISO 12957-2	27.5	± 1	°
Resistance to root penetration	CEN/TS 14416	Pass		

7. Precautions

Take care when moving, transporting or handling to avoid sources of punctures and physical damage. Isolate waste products, such as petroleum products, greases, oils (mineral and vegetable) and animal fats from Firestone GeoGard EPDM.