

PondGard™ EPDM membrane

1. Description

The Firestone PondGard™ EPDM 1.0 mm (.040") 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 930 m²). In other situations, seams can be made using a self-adhesive tape.



Because of its specific formulation and production process, only the PondGard EPDM membrane is guaranteed to be compatible with aquatic life in accordance with testing reports published by the Water Research Centre in the UK.

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 PondGard EPDM membrane in accordance with Firestone 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 overlaps.

5. Characteristics

Physical	
•	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 UV 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	1288	± 5%	g/m ²
Tensile strength (MD/CD)	EN 12311-2	9	-1	N/mm ²
Elongation without yield point (MD/CD)	EN 12311-2	≥ 250		%
Dimensional stability	EN 1107-2	≤ 0.5		%
Flexibility at low temperature	EN 495-5	≤ -45		°C
Resistance to static puncture	EN ISO 12236	0.6	-0.1	kN
Water permeability (liquid tightness)	EN 14150	3.0 10 ⁻⁶	± 10 ⁻⁶	m ³ m ² /d
Durability - weathering (25y)	EN 12224	Pass		
Durability - oxidation	EN 14575	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 the PondGard EPDM membrane.