

# Technical Information Sheet

## GeoGard™ EPDM Membrane

Packaging	Part Number
1.1 mm from 3.05 m to 15.25 m x 30.5/61.0 m per roll	W56EG4XXXXX
1.5 mm from 3.05 m to 15.25 m x 30.5/61.0 m per roll	W56EG6XXXXX

*Note: membranes are folded or non-folded and available in various panel sizes. Please contact your Elevate Representative for more details.*

### Description

The Elevate™ GeoGard EPDM membrane is a 100% cured lining membrane made of a synthetic rubber Ethylene-Propylene-Diene Terpolymer. 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 m<sup>2</sup>). In other situations, seams can be made using a self-adhesive tape.

### Preparation

The substrate needs to be compacted, clean, smooth, dry and free of sharp edges, stones, small cavities, loose or foreign materials, vegetation, roots, oil, grease and other materials that may damage the membrane. Organic and compressive grounds will be removed. Erosive and dissolvable grounds will be avoided.

The installation of a water and a gas drainage networks are recommended. A protective geotextile will systematically be installed between the substrate and the geomembrane.

### Method of Application

Allow the membrane to relax for approximately 30 minutes before splicing or final securement. Refer to the Elevate GeoGard EPDM guidelines for specific installation instructions.

### Coverage

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

### Characteristics

#### Physical

- Elastomeric membrane with a good combination of high elasticity and tensile strength.
- 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. Contact with mineral and vegetable oils, petroleum based products, hot bitumen and grease must be avoided.

Technical	Test method	Declared value 1.1 mm	Declared value 1.5 mm	Tolerance	Unit
Mass per unit area	EN 1849-2	1288	1695	± 5%	g/m <sup>2</sup>
Tensile strength (MD/CD)	EN 12311-2	9	10	-1	N/mm <sup>2</sup>
Elongation without yield point (MD/CD)	EN 12311-2	≥ 300	≥ 300		%
Dimensional stability	EN 1107-2	≤ 0.5	≤ 0.5		%
Flexibility at low temperature	EN 495-5	≤ -45	≤ -45		°C
Resistance to static puncture	EN ISO 12236	0.7	0.9	-0.1	kN
Distance of the plunger before puncture	EN ISO 12236	110	110	-5%	mm
Liquid tightness under high pressure application (4 bar = 40 m depth)	EN 1928:2000 (B)	Watertight	Watertight		
Water permeability (liquid tightness)	EN 14150	3.0 10 <sup>-6</sup>	3.0 10 <sup>-6</sup>	± 10 <sup>-6</sup>	m <sup>3</sup> /m <sup>2</sup> .d
Methane permeability (gas tightness)	ASTM D1434	2.25 10 <sup>-3</sup>	2.25 10 <sup>-3</sup>		m <sup>3</sup> /m <sup>2</sup> .d
Durability - weathering (25y)	EN 12224	Pass	Pass		
Durability - oxidation	EN 14575	Pass	Pass		
Friction angle	EN ISO 12957-2	27.5	27.5	± 1	°
Resistance to root penetration	CEN/TS 14416	Pass	Pass		

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

## Storage

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

## Shelf Life

Unlimited.

## Precautions

Take care when moving, transporting and handling to avoid sources of punctures and physical damage. Refer to Product Safety Information Sheet (PSIS) for additional safety information.

### Note:

This document is meant only to highlight Elevate products and specifications based on latest knowledge and experience and is subject to change without notice. Above mentioned values are based on tested samples and may vary within applicable tolerances. For latest and complete product and detail information, please refer to the technical information posted on [www.holcimelevate.com](http://www.holcimelevate.com). Holcim Solutions and Products EMEA BV ("Holcim") takes responsibility for furnishing quality materials which meet Holcim's published product specifications. As neither Holcim itself nor its representatives practice architecture, Holcim offers no opinion on and expressly disclaims any responsibility for the soundness of any structure on which its products may be applied. The selection of the appropriate product and its correct application is the responsibility of the customer and not of Holcim. No Holcim Representative is authorized to vary this disclaimer.