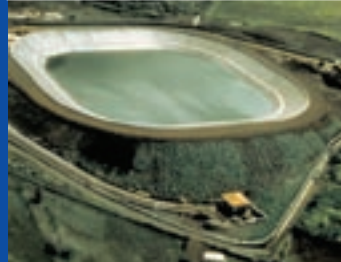
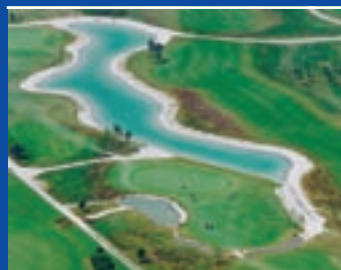


## Firestone Lining Systems



Dependable Performance in Demanding Environments



**Firestone**  
BUILDING PRODUCTS  
NOBODY COVERS YOU BETTER.®

# Firestone EPDM Geomembrane

## Product Line

Thickness	Width	Length	Weight
<b>Standard panel sizes</b>			
1,02 mm (.040") Firestone Pond Liner™	3,05 – 6,10 – 7,62 – 9,15 – 12,20 – 15,25 m	30,50 – 45,75 – 61,00 m	1,25 kg/m <sup>2</sup>
1,14 mm (.045")	3,05 – 6,10 – 7,62 – 9,15 – 12,20 – 15,25 m	30,50 – 45,75 – 61,00 m	1,41 kg/m <sup>2</sup>
1,52 mm (.060")	3,05 – 6,10 m	30,50 m	1,95 kg/m <sup>2</sup>

Note: Special panel sizes are available upon request. Please contact us for additional information.

## Technical Specifications

Physical Properties	Test Method	Result	Unit
Specific weight	direct measurement	1150	kg/m <sup>3</sup>
Shore A durometer	ASTM D 2240	65 ±10	
Tensile strength	UEAtc		
- Unaged		≥ 8,0	N/mm <sup>2</sup>
- Heat aged *		≥ 8,0	N/mm <sup>2</sup>
Elongation	UEAtc		
- Unaged		≥ 300	%
- Heat aged *		≥ 300	%
Tear resistance	UEAtc	11,7	N/mm
Dimensional stability ** (free)	UEAtc	≤ 0,5	%
Low temperature flexibility	DIN 53361	crack free at -30	°C
Static indentation (concrete)	UEAtc	L <sub>4</sub>	
Water absorption	UEAtc	0,21	%
Ozone resistance	DIN 7864	crack free	-
UV resistance	ASTM G53-84	crack free	-
Peel resistance (concrete)	UEAtc	27,8	N

\* 84 days at 80 °C | \*\* 24 hours at 100 °C

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For further information, please contact:

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**Dependable Performance in Demanding Environments**



# A high performing rubber membrane liner

Firestone EPDM Geomembranes are available in panel sizes up to 15 m in width and 61 m in length.



Firestone Lining Systems are based on EPDM Geomembranes, a highly flexible rubber waterproofing membrane offering numerous benefits, as demonstrated in thousands of exposed applications worldwide.

## Firestone EPDM Geomembrane benefits

### ✓ High flexibility

Firestone EPDM Geomembranes remain highly flexible even at low temperatures down to -45 °C, enabling year round installation in a variety of climates and terrain.

### ✓ High elongation

Firestone EPDM Geomembranes can elongate over 300%, which enables the membrane to stretch and conform to irregularities in the sub grade.

### ✓ Puncture resistance

Firestone EPDM Geomembranes provide superior hydrostatic puncture resistance as compared to other lining materials.

### ✓ Superior weathering resistance

Firestone EPDM Geomembranes offer unmatched resistance to ultraviolet radiation and ozone. The Geomembrane can survive normal environmental exposure for well over 30 years.

### ✓ Quick and easy installation

Firestone EPDM Geomembranes are available in large seamless panel sizes up to 15 m in width and 61 m in length resulting in fewer field seams and less installation time.

### ✓ Low maintenance

Firestone EPDM Geomembranes require little or no regular maintenance after installation.

### ✓ Environmentally friendly

Firestone EPDM Geomembranes are inert with low environmental impact during production and use. In addition, Firestone's EPDM manufacturing facilities have received ISO 14001 certification for their environmental management system.

## Critical code approvals

Firestone EPDM Geomembranes meet various international and national standards for physical properties and seam strength, including the French ASQUAL product quality certification, a reference in the lining industry.

The very first Firestone lining project was installed in the South of Spain in 1973. This 12.000 sqm irrigation pond is still in service today.



# The liner of choice for a variety of applications

Firestone Lining Systems are engineered to provide dependable performance in a wide variety of applications.

## Landscape and decorative ponds

Firestone EPDM Geomembranes are particularly suitable for use in the construction of landscape ponds designed to enhance office complexes, golf courses and recreational parks.

## Garden ponds

The 1,02 mm thick Firestone EPDM Geomembrane, commercialized as **Firestone Pond Liner™**, is specially designed for garden pond applications. Because of its specific formulation and production process, only the **Firestone Pond Liner™ membrane is guaranteed to be compatible with aquatic life**. This is certified by toxicity tests performed by the Water Research Centre WRC-NSF.

**Firestone Pond Liner™** is easily identifiable by its special blue packaging, special marking on the membrane and incorporated measure tape.



## Irrigation ponds and canals

Firestone EPDM Geomembrane is a cost-effective liner for irrigation ponds and canals conserving valuable water resources. The success of Firestone Geomembranes in these applications is especially due to the liner's proven durability, unique physical properties and low installation cost resulting from the use of large panels.

## Other applications

Firestone EPDM Geomembranes are also the preferred material for a variety of other lining and environmental containment applications, including:

- ✔ Animal waste containment
- ✔ Artificial snow reservoirs
- ✔ Fire reservoirs
- ✔ Landfill covers
- ✔ Wastewater lagoons



# Quality lining systems from a single source

## A wide accessory product line

Firestone has developed a wide range of accessory products to provide a complete lining system, including a rubber liner membrane, seam tapes, flashings, adhesives, cleaning agents, sealants and other related accessory products.

Multiple Firestone EPDM Geomembrane panels can be assembled on site using the Firestone QuickSeam® Tape System. This technology based on a self-adhesive EPDM/butyl tape is quick and easy to install and offers excellent seam strength. Since its first application in 1987, millions of linear meters of Firestone QuickSeam Tape have been successfully installed.

## Over a century of experience

Firestone Lining Systems are backed by over a century of experience and success in rubber technology. Firestone Building Products Company, a division of Bridgestone/Firestone Diversified Products LLC, is dedicated to carry on the quality tradition established by Harvey S. Firestone in 1900.

## Quality products and services

Firestone Building Products has installed state-of-the-art equipment at each of its plants. From raw materials selection through manufacturing to finished product testing, Firestone Building Products follows stringent quality control guidelines. The company's EPDM manufacturing facilities have received ISO 9001 : 2000 certification for their quality management system and ISO 14001 certification for their environmental management system.

In addition to quality products, Firestone provides an unmatched level of service including:

- ✓ Educational programs
- ✓ Practical hands-on training
- ✓ On site technical support services
- ✓ Technical guidelines on system design and installation

