



## Firestone Reinforced EPDM Geomembrane



### PRODUCT DATA

#### Firestone Item Number

<b>W57SI41020:</b>	<b>3.05 m (10.0') x 60.96 m (200')</b> <b>1.14 mm (0.045")</b>
<b>W57SI41010:</b>	<b>3.05 m (10.0') x 30.48 m (100')</b> <b>1.14 mm (0.045")</b>
<b>W57SI61010:</b>	<b>3.05 m (10.0') x 30.48 m (100')</b> <b>1.52 mm (0.060")</b>
<b>W57SI40710:</b>	<b>2.29 m (7.5') x 30.48 m (100')</b> <b>1.14 mm (0.045")</b>
<b>W57SI60710:</b>	<b>2.29 m (7.5') x 30.48 m (100')</b> <b>1.52 mm (0.060")</b>

#### DESCRIPTION:

Firestone Reinforced EPDM Geomembrane is an internally reinforced cured single-ply geomembrane that features a 9 x 9, 1,000 denier polyester weft inserted reinforcing scrim.

#### PREPARATION OF SUBSTRATES:

1. Substrates must be clean, dry, smooth, and free of sharp edges, fines, loose or foreign materials, oil, grease, and other materials that may damage the geomembrane.
2. All roughened surfaces that can damage the geomembrane shall be repaired as specified to offer a smooth substrate.
3. All substrate voids greater than 0.25" (6.3 mm) wide shall be properly filled with an acceptable fill material.

#### METHOD OF APPLICATION:

Firestone Reinforced EPDM Geomembrane must be installed in accordance with current Firestone Specialty Products specifications and details.

#### PACKAGING:

Thickness	Widths	Lengths	Weight
1.14 mm (0.045")	2.29 m (7.5')	30.48 m (100')	1.6 kg/m <sup>2</sup> (0.32 lb/ft <sup>2</sup> )
	3.05 m (10.0')	30.48 m (100')	
	3.05 m (10.0')	60.96 m (200')	
1.52 mm (0.060")	2.29 m (7.5')	30.48 m (100')	2.0 kg/m <sup>2</sup> (0.42 lb/ft <sup>2</sup> )
	3.05 m (10.0')	30.48 m (100')	

#### STORAGE:

1. Store away from sources of punctures and physical damage.
2. Store away from ignition sources as geomembrane will burn when exposed to open flame.

#### PRECAUTIONARY DATA:

1. Take care when moving, transporting, handling, etc. to avoid sources of punctures and physical damage.
2. Isolate waste products, such as petroleum products, greases, oils (mineral and vegetable) and animal fats from the geomembrane. Contact Firestone Specialty Products for specific recommendations.
3. Refer to Material Safety Data Sheets (MSDS) for safety information.

#### LEED INFORMATION:

Post Consumer Recycled Content:	0%
Post Industrial Recycled Content:	0%
Manufacturing Locations:	Prescott, AR

This sheet is meant only to highlight Firestone's products and specifications. Information is subject to change without notice. Firestone takes responsibility for furnishing quality materials, which meet Firestone's published product specification. As neither Firestone itself nor its representatives practice design, Firestone offers no opinion on and expressly disclaims any responsibility for the soundness of any project on which its products may be applied. If questions arise as to the soundness of a project, or its ability to support a planned installation properly, the Owner should obtain opinions of competent design engineers before proceeding. Firestone accepts no liability for any failure or for resultant damages, and no Firestone Representative is authorized to vary this disclaimer.

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## Firestone Reinforced EPDM Geomembrane

### PHYSICAL PROPERTIES

Property	Test Method	Units	Minimum ASTM	
			D- 7465	
			SI	Eng
Specific Gravity	ASTM D-792	gm/cc	1.1	1.1
Unit Weight	ASTM D-751	kg/m <sup>2</sup> (lb/ft <sup>2</sup> )	1.6	.32
Thickness	ASTM D-412	mm (in)	1.14 +15/-10%	.040 +15/-10%
Coating over the scrim or fabric	D-7004 Type II,III	mm (in)	0.38	0.015
Break Strength, min Grab Method	ASTM D-7004	N (lbf)	400	90
Tear Strength, min B-Tongue Tear	ASTM D-7004	N (lbf)	45	10
Puncture Resistance, min	ASTM D-4833	N (lbs)	270	60
Shore A Durometer	ASTM D-2240		65-10	65-10
Resistance to Ozone 7 days/100@37.8° C (150° F) 50% ext.	ASTM D-1149		No Cracks	No Cracks
Ultimate Elongation , min	ASTM D-412	%	250 <sup>A</sup>	250 <sup>A</sup>
Oven Aging at 116° C (240° F) for 670 hours	ASTM D-573			
Breaking Strength, min Grab	ASTM D-7004	N (lbf)	356	80
Ultimate Elongation, min	ASTM D-7004	%	200 <sup>A</sup>	200 <sup>A</sup>
Linear dimensional change,max%	D-1204	%	+/- 1	+/- 1
Xenon Arc for 5040 kJ/(m <sup>2</sup> .nm)@340nm @80°C	ASTM G-155/151			
Visual Inspection 7X	ASTM D-518		Pass	Pass
No cracks or crazing bent 10% loop				
Brittleness Point, Max °C (°F)	ASTM D-2137		-45°C	-49°F
Water Resistance <sup>A</sup> weight after immersion 166 hrs @ 70° C (158° F)	ASTM D-471	%	+8,-2	+8,-2
Water Vapor Permeability (max.)	ASTM E-96	Perm mils	2.0	2.0
Chronic Toxicity Screening	EPA/821-R-02-013 ASTM E-729	Method 1000.0	passes passes	passes passes
<sup>A</sup> Specimens to be prepared from coating rubber compound, vulcanized in a similar method to the reinforced products.				

**Notes: Certified Firestone Reinforced EPDM Geomembrane production materials are special order items requiring a minimum of two weeks as production lead-time**

**Firestone Reinforced EPDM Geomembrane meets or exceeds the minimum requirements set forth by ASTM D-7465 for Type II scrim-reinforced EPDM Geomembranes.**