



Firestone PondGard™ Rubber Liners

Firestone Item Number:
Various: See Attached Page

DESCRIPTION:

Firestone PondGard Rubber Liners are a cured single-ply membrane made from an EPDM polymer formulated to be fish and plant friendly.

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 6.3 mm (0.25") wide shall be properly filled with an acceptable fill material.

METHOD OF APPLICATION:

Firestone PondGard Rubber Liners are to be installed in accordance with current Firestone Specialty Products specifications and details.

STORAGE:

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

This sheet is meant only to highlight Firestones products and specifications. Information is subject to change without notice. Firestone takes responsibility for furnishing quality materials, which meet Firestones 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.



PRODUCT DATA

PACKAGING:

<u>Thickness</u>	<u>Weight</u>
1.14 m (0.045")	1.42kg/m ² (0.29 lb/ft ²)

See attached page for available length and width options.

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 liner. 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

Firestone Specialty Products
250 West 96th Street, Indianapolis, Indiana 46260
Specialty Products (800) 428-4442
Internet Address: <http://www.firestonesp.com>

Firestone PondGard Rubber Liners

PHYSICAL PROPERTIES

Property	Test method	Units	Minimum Values	
			SI	Eng
Specific Gravity	ASTM D-792	gm/cc	1.2	1.2
Unit Weight	ASTM D-751	kg/m (lb/ft)	1.4	.29
Thickness, Type 1	ASTM D-412	mm (in)	1.14 +10/-20%	.045 +10/-20%
Tensile Strength, Die C	ASTM D-412	MPa (psi)	9.0	1305
Ultimate Elongation, Die C	ASTM D-412	%	300	300
Tear Resistance, Die C	ASTM D-624	kN/m (lbf/in)	26.27	150
Puncture Resistance	ASTM D-4833	N (lbs)	110.8	25
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
Multiaxial Elongation	ASTM D-5617	%	100	100
Oven Aging At 116° C (240° F) for 670 hours	ASTM D-573			
Tensile strength Die C	ASTM D-412	MPa (psi)	8.3	1205
Ultimate elongation, Die C	ASTM D-412	%	200	200
Tear Resistance, Die C	ASTM D-624	kN/m (lbf/in)	21.9	125
Xenon Arc for 5040 kJ/(m ² .nm) @ 340 nm @ 80°C	ASTM G-155/G-151			
Visual Inspection- 7X No cracks or crazing bent loop @ 10% strain	ASTM D-518		Pass	Pass
Brittleness Point	ASTM D-2137		-45°C	-49°F
Water Resistance 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
Linear Dimensional Change,max	ASTM D-1204	%	+/- 1.0	+/- 1.0
Chronic Toxicity Screening	EPA/600/4-89/ 001 ASTM E-729	Method 1000.0	passes passes	passes passes



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Firestone PondGard Rubber Liner Sizes

Firestone PondGard Rubber Liners- 1.14mm (0.045") Thickness								
Dimensions		Packaging Type	Order Number	Coverage		Weight		
SI Units (Meters)	Eng Units (Feet)			SI Unit (Sq Meters)	Eng Units (Sq Feet)	SI Units (kg)	Eng Units (lbs)	
Rolls								
1.52 x 30.48	5 x 100	Roll	W56PL40510	46.45	500	61	135	
3.05 x 15.24	10 x 50	Roll	W56PL41005	46.45	500	61	135	
3.05 x 30.48	10 x 100	Roll	W56PL41010	92.90	1,000	122	270	
3.05 x 60.96	10 x 200	Roll	W56PL41020	185.81	2,000	245	540	
4.57 x 15.24	15 x 50	Roll	W56PL41505	69.68	750	92	203	
4.57 x 30.48	15 x 100	Roll	W56PL41510	139.35	1,500	184	405	
4.57 x 60.96	15 x 200	Roll	W56PL41521	278.71	3,000	367	810	
6.10 x 15.24	20 x 50	Roll	W56PL42005	92.90	1,000	122	270	
6.10 x 30.48	20 x 100	Roll	W56PL42010	185.81	2,000	245	540	
6.10 x 60.96	20 x 200	Roll	W56PL42020	371.61	4,000	490	1,080	
7.62 x 15.24	25 x 50	Roll	W56PL42505	116.13	1,250	153	338	
7.62 x 30.48	25 x 100	Roll	W56PL42510	232.26	2,500	306	675	
7.62 x 60.96	25 x 200	Roll	W56PL42520	464.52	5,000	612	1,350	
9.14 x 15.24	30 x 50	Roll	W56PL43005	83.61	1,500	184	405	
9.14 x 30.48	30 x 100	Roll	W56PL43010	139.35	3,000	367	810	
9.14 x 60.96	30 x 200	Roll	W56PL43020	557.42	6,000	735	1,620	
10.67 x 15.24	35 x 50	Roll	W56PL43505	162.58	1,750	215	473	
10.67 x 30.48	35 x 100	Roll	W56PL43510	325.16	3,500	429	945	
10.67 x 60.96	35 x 200	Roll	W56PL43520	650.32	7,000	857	1,890	
12.19 x 15.24	40 x 50	Roll	W56PL44005	185.81	2,000	245	540	
12.19 x 30.48	40 x 100	Roll	W56PL44010	371.61	4,000	490	1,080	
12.19 x 60.96	40 x 200	Roll	W56PL44020	743.22	8,000	980	2,160	
15.24 x 15.24	50 x 50	Roll	W56PL45005	232.26	2,500	306	675	
15.24 x 30.48	50 x 100	Roll	W56PL45010	464.52	5,000	612	1,350	
15.24 x 45.72	50 x 150	Roll	W56PL45015	696.77	7,500	919	2,025	
15.24 x 60.96	50 x 200	Roll	W56PL45020	929.03	10,000	1,225	2,700	
Boxes								
SI Units (Meters)	Eng Units (Feet)			Dimensions L x W x H (cm)		Dimensions L x W x H (Inches)		Ctn/Pallet
2.44 x 3.05	8 x 10	Box w/ label	W56PL40801	30.48 x 30.48 x 30.48		12 x 12 x 12		48
2.44 x 3.05	8 x 10	Box w/out label	W56PL40197	30.48 x 30.48 x 30.48		12 x 12 x 12		48
3.05 x 3.05	10 x 10	Box w/ label	W56PL41001	30.48 x 30.48 x 30.48		12 x 12 x 12		48
3.05 x 3.05	10 x 10	Box w/out label	W56PL41098	30.48 x 30.48 x 30.48		12 x 12 x 12		48
3.05 x 4.57	10 x 15	Box w/ label	W56PL41015	30.48 x 30.48 x 30.48		12 x 12 x 12		32
3.05 x 4.57	10 x 15	Box w/out label	W56PL41099	30.48 x 30.48 x 30.48		12 x 12 x 12		32

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Firestone PondGard Rubber Liner Sizes

Boxes- Continued									
SI Units (Meters)	Eng Units (Feet)			Dimensions L x W x H (cm)		Dimensions L x W x H (Inches)		Ctn/Pallet	
4.57 x 4.57	15 x 15	Box w/ label	W56PL41515	30.48 x 30.48 x 60.96		12 x 12 x 24		24	
4.57 x 4.57	15 x 15	Box w/out label	W56PL41096	30.48 x 30.48 x 60.96		12 x 12 x 24		24	
4.57 x 6.10	15 x 20	Box w/ label	W56PL41502	30.48 x 30.48 x 91.44		12 x 12 x 36		16	
4.57 x 6.10	15 x 20	Box w/out label	W56PL41095	30.48 x 30.48 x 91.44		12 x 12 x 36		16	
4.57 x 7.62	15 x 25	Box w/ label	W56PL41525	30.48 x 30.48 x 91.44		12 x 12 x 36		16	
4.57 x 7.62	15 x 25	Box w/out label	W56PL41094	30.48 x 30.48 x 91.44		12 x 12 x 36		46	
6.10 x 6.10	20 x 20	Box w/ label	W56PL42002	30.48 x 30.48 x 91.44		12 x 12 x 36		12	
6.10 x 6.10	20 x 20	Box w/out label	W56PL41093	30.48 x 30.48 x 91.44		12 x 12 x 36		12	
6.10 x 7.62	20 x 25	Box w/out label	W56PL40016	27.94 x 27.94 x 121.92		11 x 11 x 48		12	
Mini Rolls									
SI Units (Meters)	Eng Units (Feet)			Width (Meters)	Width (Feet)	Core (cm)	Core (Inches)	SI Units (kg)	Eng Units (lbs)
6.10 x 7.62	20 x 25	Mini Roll	W56PL42025	1.98	6.5	17.78	7.0	61	135
6.10 x 9.14	20 x 30	Mini Roll	W56PL42003	1.98	6.5	17.78	7.0	73	162
7.62 x 9.14	25 x 30	Mini Roll	W56PL42503	1.98	6.5	17.78	7.0	92	203
9.14 x 9.14	30 x 30	Mini Roll	W56PL43003	1.98	6.5	17.78	7.0	110	243