



36 mil FiberTite

Product Data

Seaman Corporation's 36 mil FiberTite membrane was introduced in 1979. Then, as now, the membrane features an 18 x 19 / 840 x 1,000 denier weft reinforced polyester knit fabric, coated with a proprietary compound, utilizing DuPont's™ Elvaloy® Ketone Ethylene Ester (KEE) as the principle polymer in the hybrid vinyl alloy coating.

DESCRIPTION

36 mil FiberTite is a 30-oz sq. yd/nominal 36-mil (0.9 mm) thick membrane and was used as the benchmark membrane for the development of ASTM D 6754-02 Standard Specification for Ketone Ethylene Ester (KEE) Based Sheet Roofing. In addition to exceeding the ASTM minimum standards, 36 mil FiberTite meets or exceeds the physical properties and performance characteristics of most competitive 60-mil membranes.

Seaman Corporation is vertically integrated, which allows complete control over the manufacturing process from the selection of the yarns, to the engineering, knitting and weaving of the base fabrics to the final coating process. Today, FiberTite Roofing Membranes are the result of Seaman Corporation's 60 years of applied fabric engineering and coating technology.

All FiberTite Roofing Membranes are constructed using high tenacity/heavy weight yarns to create a base fabric reinforcement to impart superior puncture, tensile and tear resistance properties. The base polyester fabrics are primed with a unique and proprietary adhesive coat that lays the foundation to physically bond the KEE coatings to the "fiber" to maximize seam strength and overall membrane performance.

36 mil FiberTite is coated face and back with Seaman Corporation's original "KEE" formulation to provide superior hot air welding characteristics, extreme UV resistance, broad chemical resistance and long-term flexibility and reparability for the installed roofing membrane system. Additionally, 36 mil FiberTite exhibits superior tear, puncture, fungus, algae and flame resistance that make FiberTite Roofing Systems some of the most sustainable roofing systems available.

36 mil FiberTite membrane is manufactured in conventional 74-in and 100-in wide by 100-ft roll goods. 36 mil FiberTite is also available in customized prefabricated roll widths and lengths that incorporate integrated fastening tabs, sealing tabs and also "no-tab" rolls of membrane up to 20-ft wide by 100-ft in length. Field seaming of the membrane is accomplished by fusing the thermoplastic membrane with conventional hot air welding equipment.

PHYSICAL PROPERTIES

ASTM D6754-02	Minimum Requirements	36 mil Typical
Thickness, mm (in.) <i>ASTM D 751</i>	0.79 (0.031)	.91 (0.036 nom.)
Thickness over Fiber, mm (in) <i>Optical method (inches)</i>	0.15 (0.006)	.23 (0.009)
Breaking Strength, N (lbf) <i>ASTM D 751 proc. B - strip</i>	1175 (265)	1557 (350)
Elongation at Break, % <i>ASTM D 751 - strip</i>	15	18
Tear Strength, N (lbf) <i>ASTM D 751 Proc. B. Tongue Tear</i>	335 (75)	445 (100)
Linear Dimensional Change <i>ASTM D 1204 max (%)</i>	1.3	0.63
Fabric Adhesion, N/m (lbf/in) <i>ASTM D 751</i>	225 (13)	no peel
Retention of Properties after Heat Aging <i>ASTM D 3045 - 176°/56 days</i>		
Breaking Strength, strip, % original	90	90
Elongation at Break, strip, % original	90	90
Low Temperature Bend after Heat Aging	-30	-30
Low Temperature Bend <i>ASTM D 2136 (°f)</i>	-30	-30
Change in Weight after Exposure in Water <i>D 471 158°f, 166 h, one side only, max. (%)</i>	0.0, +6.0	0.0, +3.7
Factory Seam Strength, N (lbf) <i>ASTM D 751 Grab Method</i>	1780 (400)	> Fabric Break
Hydrostatic Resistance, Mpa (psi) <i>ASTM D751</i>	3.5 (500)	4.8 (700)
Static Puncture Resistance <i>ASTM D 5602 (99 lbf)</i>	pass	pass
Dynamic Puncture Resistance (J) <i>ASTM D 5635</i>	10	20



For more information on FiberTite Systems and accessories please call:
Seaman Corporation (800) 927-8578
International (330) 262-1111
www.fibertite.com

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FiberTite® is a registered trademark of Seaman Corporation.

These specifications are current as of the date of printing. Revisions or additions may be issued periodically. For a listing, presentation, and download of the most recent data, visit:

www.fibertite.com/document-library/product-data-sheets



Subject to the conditions of Approval for a roof covering when installed as described in the current edition of the Approval Guide.



As to an external fire exposure only. See UL directory of products certified for Canada and UL roofing materials and systems directory 34KL, 48P0, 97P9.



DC196



CFFA CHEMICAL FABRICS & FILM ASSOCIATION, INC.



ESR-1456



36 mil FiberTite

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APPLICATION

36 mil FiberTite Roofing Systems carry extensive FM Global and Underwriters Laboratories approvals. 36 mil FiberTite Roofing Systems can be installed by mechanically fastening the membrane with FiberTite Magnum Fasteners and Stress Plates or adhering the membrane in FTR 190e bonding adhesive to pre-approved substrates. 36 mil FiberTite can also be installed in typical ballast configurations using conventional stone or paver ballast.

For specific installation recommendations and requirements, please consult the most current versions of Seaman Corporation's Guide Specifications for the Installation of FiberTite Roofing Systems.

PHYSICAL PROPERTIES (cont.)

ASTM D6754-02	Minimum Requirements	36 mil Typical		
Accelerated Weathering <i>Practice G 155 / xenon</i>	5000hr	>10000hr		
cracking (7x magnification)	none	none		
crazing (7x magnification)	none	none		
Accelerated Weathering <i>Practice G 154 / UVA</i>	5000hr	>10000hr		
cracking (7x magnification)	none	none		
crazing (7x magnification)	none	none		
Fungi Resistance <i>Practice G 21, 28 days</i>	no growth none	no growth none		
Sustained Growth Discoloration				
Abrasion Test, cycles <i>D 3389 H-18 wheel / 1,000 g load</i>	1,500	1,500		
Additional Physical Properties				
Tensile Strength (psi) <i>ASTM D882</i>	8500			
Breaking Strength (lbs) <i>ASTM D751, Grab Method</i>	450			
Puncture Resistance (lbs) <i>ASTM D751, Bursting Strength</i>	350			
Water Vapor Transmission <i>ASTM E96 proc. A (gm/m2/24hrs)</i>	1.3			
Shore A Hardness <i>ASTM D2240</i>	87			
Flame Resistance <i>MIL-C-20696C / Type II Class 2</i>	pass			
Oil Resistance, MIL-C-20696C <i>No swelling, cracking or leaking</i>	none			
Hydrocarbon Resistance, MIL-C-20696C <i>No swelling, cracking or leaking</i>	none			
High Temperature Dead Load <i>ASTM D751 (50 lbs, 160°F, 4 hrs)</i>	pass			
Energy Attributes	DC196 Off White	DC6 White	DC691 CR Gray	DC667 CR Tan
Initial Solar Reflectance <i>ASTM C1549</i>	0.83	0.87	0.69	0.72
Solar Reflectance (3 yr aged) <i>ASTM C1549</i>	0.66	0.71	<i>pending</i>	<i>pending</i>
Initial Thermal Emittance <i>ASTM C1371</i>	0.85	0.85	0.89	0.88
Thermal Emittance (3 yr aged) <i>ASTM C1371</i>	0.74	0.84	<i>pending</i>	<i>pending</i>
Solar Reflective Index (SRI) <i>ASTM E1980</i>	104	110	84	88
Solar Reflective Index (SRI) (3 yr aged) <i>ASTM E1980</i>	76	86	<i>pending</i>	<i>pending</i>
Energy Star	YES	YES	<i>pending</i>	<i>pending</i>
LEED v4 - Heat Island Reduction <i>SS Credit</i>	1 Credit	1 Credit	1 Credit	1 Credit



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