



90 mil FiberTite-XTreme

Product Data

Seaman Corporation's 90 mil FiberTite-XTreme features a 46 x 44 / 1,000 x 1,000 denier woven polyester 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

90 mil FiberTite-XTreme is an 80-oz sq. yd./nominal 90-mil (2.3 mm) thick membrane. 90 mil FiberTite-XTreme is the most intense thermoplastic membrane available. 90 mil FiberTite-XTreme has no equal and surpasses the minimum physical property requirements enumerated in ASTM D6754-02 Standard Specification for Ketone Ethylene Ester (KEE) Based Sheet Roofing as much as three fold.

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.

90 mil FiberTite-XTreme is coated on the face 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. The back side of the membrane is coated with a slightly modified version of Seaman Corporation's original KEE compound. Additionally, 90 mil FiberTite-XTreme exhibits extreme puncture and tear resistance for the most abusive roof areas as well as the historical fungus, algae and flame resistance that make FiberTite Roofing Systems some of the most sustainable roofing systems available.

90 mil FiberTite-XTreme membrane is manufactured in conventional 56-in by 80-ft roll goods. 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	90 mil Typical
Thickness, mm (in.) ASTM D 751	0.79 (0.031)	2.29 (0.090 nom.)
Thickness over Fiber, mm (in) Optical method (inches)	0.15 (0.006)	.76 (0.030)
Breaking Strength, N (lbf) ASTM D 751 proc. B - strip	1175 (265)	3078 (692)
Elongation at Break, % ASTM D 751 - strip	15	30
Tear Strength, N (lbf) ASTM D 751 Proc. B. Tongue Tear	335 (75)	667 (150)
Linear Dimensional Change ASTM D 1204 max (%)	1.3	0.5
Fabric Adhesion, N/m (lbf/in) ASTM D 751	225 (13)	260 (15)
Retention of Properties after Heat Aging ASTM D 3045 - 176°/56 days		
Breaking Strength, strip, % original	90	90
Elongation at Break, strip, % original	90	90
Low Temperature Bend after Heat Aging	-30	-40
Low Temperature Bend ASTM D 2136 (°f)	-30	-40
Change in Weight after Exposure in Water D 471 158°f, 166 h, one side only, max. (%)	0.0, +6.0	0.0, +3.7
Factory Seam Strength, N (lbf) ASTM D 751 Grab Method	1780 (400)	90% of Fabric Break
Hydrostatic Resistance, Mpa (psi) ASTM D751	3.5 (500)	6.9 (1000)
Static Puncture Resistance ASTM D 5602 (99 lbf)	pass	pass
Dynamic Puncture Resistance (J) ASTM D 5635	10	> 50



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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ROOFING SOLUTIONS

FiberTite® is a registered trademark of Seaman Corporation.



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.



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APPLICATION

90 mil FiberTite-XTreme Roofing Systems carry extensive FM Global and Underwriters Laboratories approvals. 90 mil FiberTite-XTreme 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 or FTR 490 bonding adhesive to pre-approved substrates. 90 mil FiberTite-XTreme 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	90 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	2,000+
Additional Physical Properties		
Tensile Strength (psi) <i>ASTM D882</i>	> 9500	
Breaking Strength (lbs) <i>ASTM D751, Grab Method</i>	1096	
Puncture Resistance (lbs) <i>ASTM D751, Bursting Strength</i>	> 800	
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	
Energy Attributes (Color DC196 Off-White)		
Solar Reflectance <i>ASTM E903</i> <i>ASTM E1918</i>	79% 83%	
Solar Reflectance (3 yr aged) <i>ASTM C1549</i>	Un-Cleaned 66%	Cleaned 78%
Solar Emittance <i>ASTM E408</i> <i>ASTM C1371</i>	95% 85%	
Solar Emittance (3 yr aged) <i>ASTM C1371</i>	Un-Cleaned 74%	Cleaned 81%
Energy Star	yes	
Solar Reflective Index (SRI) <i>ASTM E1980</i>	98.54	
LEED 2.2 - Heat Island Effect <i>SS Credit 7.2</i>	1 Credit	



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