



## 45 mil FiberTite-SM-FB

### Product Data

Seaman Corporation's 45 mil FiberTite-SM-FB "fleece back" 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

45 mil FiberTite-SM-FB "fleece back" is a 40-oz sq. yd/ nominal 45-mil (1.1 mm) thick membrane. 45 mil FiberTite-SM-FB not only meets or exceeds the minimum physical property requirements enumerated in ASTM D6754-15 Standard Specification for Ketone Ethylene Ester (KEE) Based Sheet Roofing, but exceeds the physical properties and performance characteristics of 60-mil competitive products.

The 45 mil FiberTite-SM-FB membrane incorporates a 4-oz per sq. yd non-woven polyester felt, heat bonded to the back side of the membrane with a 3-in selvage edge for field welding. 45 mil FiberTite-SM-FB fleece back is manufactured in conventional 100-in by 80-ft roll goods.

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.

45 mil FiberTite-SM-FB 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 (SM) economical version of Seaman Corporation's original KEE compound to control membrane costs while offering additional thickness and weather ability. Additionally, 45 mil FiberTite-SM-FB exhibits excellent tear, puncture, fungus, algae and flame resistance that make FiberTite Roofing Systems some of the most sustainable roofing systems available.

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](http://www.fibertite.com/document-library/product-data-sheets)

#### PHYSICAL PROPERTIES

ASTM D6754-15	Minimum Requirements	45 mil-FB Typical
Thickness, mm (in.) ASTM D 751	0.81 (0.032)	1.14 (0.045 nom.)
Thickness over Fiber, mm (in) Optical method (inches)	0.18 (0.007)	.37 (0.0145)
Breaking Strength, N (lbf) ASTM D 751 proc. B - strip	1499 (338)	1557 (350)
Elongation at Break, % ASTM D 751 - strip	18	18
Tear Strength, N (lbf) ASTM D 751 Proc. B. Tongue Tear	338 (76)	445 (100)
Linear Dimensional Change ASTM D 1204 max (%)	1.3	0.63
Fabric Adhesion, N/m (lbf/in) ASTM D 751	3330 (19)	no peel
Retention of Properties after Heat Aging ASTM D 3045 - 176° F/56 days Breaking Strength, strip, % original Elongation at Break, strip, % original	90 90	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	1955 (440)	> Fabric Break
Hydrostatic Resistance, Mpa (psi) ASTM D751	4.1 (590)	5.2 (750)
Static Puncture Resistance ASTM D 5602 (99 lbf)	pass	pass
Dynamic Puncture Resistance (J) ASTM D 5635	10	25



For more information on FiberTite Systems and accessories please call:  
Seaman Corporation (800) 927-8578  
International (330) 262-1111  
[Fibertite.com](http://Fibertite.com)

Fibertite® is a product and 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, 48PO, 97P9.



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### APPLICATION

45 mil FiberTite-SM-FB Roofing Systems are installed by adhering the “fleece back” membrane in FTR-290 low VOC solvent borne adhesive, FTR-390 water borne asphalt emulsion, FTR-490 water borne elastomeric adhesive, FTR CR-20, or hot asphalt to a variety of pre-approved substrates.

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 D6754-15	Minimum Requirements	45 mil-FB 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+		
<b>Additional Physical Properties</b>				
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/m<sup>2</sup>/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		
<b>Energy Attributes</b>	<b>DC196 Off White</b>	<b>DC6 White</b>	<b>DC691 CR Gray</b>	<b>DC667 CR Tan</b>
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	.61	.63
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	.89	.89
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	73	76
Energy Star	YES	YES	YES	YES
LEED v4 – Heat Island Reduction <i>SS Credit</i>	1 Credit	1 Credit	1 Credit	1 Credit

