

# SINGLE PLY

## Technical Data Sheet FiberTite® XT



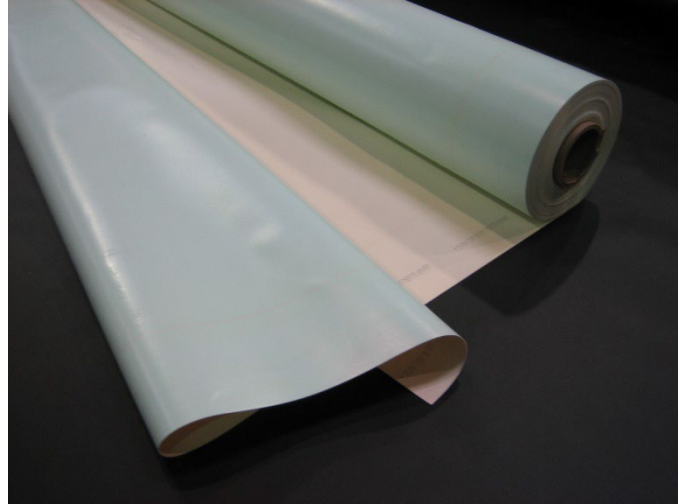
### Product Description / Use:

FiberTite® XT features a reinforced polyester knit fabric, coated with a proprietary compound, utilising ELVALOY™ Ketone Ethylene Ester (KEE) as the principle polymer in the hybrid vinyl alloy coating.

FiberTite XT is a nominal 1.27 mm thick membrane and is an Xtra-Tough version of the FiberTite family of membranes, which not only exceeds the minimum physical property requirements in EN 13956 and ASTM D6754-15 Standard Specification for Ketone Ethylene Ester (KEE) Based Sheet Roofing, but it exceeds the physical properties and performance characteristics versus many other thicker membranes.

Carefully manufactured to allow strict control over the production 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 over 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 provide 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 maximise seam strength and overall membrane performance.



FiberTite XT is coated on the face and back with an 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. FiberTite XT exhibits superior tear, puncture, fungus, algae and flame resistance that make FiberTite Roofing Systems some of the most sustainable roofing systems available.

FiberTite XT membrane is manufactured in 2.54m\* wide by 30.5m\* long rolls. Laps in the membrane sheets are joined by fusing the thermoplastic membrane with appropriate hot air welding equipment, set at the correct welding temperature.

\* Approx.

### Certification:



### System Fire Testing:

Test Standard: CEN/TS 1187: 2012  
Classification Standard BS EN 13501-5: 2016



Determination of external fire performance is a system test which will be influenced by the components within the roofing system.

Whilst FiberTite may be included in compliant B<sub>ROOF</sub> (t1, t2 and t4) systems, always check with MOY Technical Services for the very latest information on fire testing carried out.



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### Technical Specification:

Essential characteristics		Performance		Harmonised Technical Specification
		FiberTite XT nom. 1.27 mm <sup>1)</sup>	Unit	
External Fire Performance	EN 13501-5	F <sup>2)</sup>		EN 13956: 2012
Reaction to fire	EN 13501-1	E		
Watertightness	EN 1928	Pass		
Tensile strength	EN 12311-2	≥ 3000	N/50mm	
Elongation	EN 12311-2	≥ 15	%	
Resistance to static loading	EN 12730 (B)	≥ 20	kg	
Resistance to impact - Aluminum base - EPS base	EN 12691	≥ 500 ≥ 2000	mm mm	
Tear resistance - Warp - Fill	EN 12310-2	≥ 265 ≥ 340	N N	
Joint peel resistance	EN 12316-2	≥ 115	N/50mm	
Joint shear resistance	EN 12317-2	≥ 1500	N/50mm	
Durability - UV exposure	EN 1297	Pass		
Foldability at low temperature	EN 495-5	≤ -20	°C	
Moisture resistance factor	EN 1931	20,875	μ	
Vapour resistance	EN 1931	121	MN.s/g	
Water vapour diffusion - equivalent air thickness (Sd-value)	EN 1931	24.2	m	
Dangerous substances	Note <sup>3)</sup>	NPD		
<b>ASTM D6754-15</b>			<b>Minimum Requirements</b>	
Thickness, mm (in.) ASTM D 751			0.81 (0.032)	1.27 (0.050 nom.) <sup>1)</sup>
Thickness over Fiber, mm (in) Optical method (inches)			0.18 (0.007)	0.38 (0.015)
Breaking Strength, N (lbf) ASTM D 751 proc. B - strip			1499 (338)	1779 (400)
Elongation at Break, % ASTM D 751 - strip			18	18
Tear Strength, N (lbf) ASTM D 751 Proc. B. Tongue Tear			338 (76)	556 (125)
Linear Dimensional Change ASTM D 1204 max (%)			1.3	0.78
Fabric Adhesion, N/m (lbf/in) ASTM D 751			3330 (19)	no peel
Retention of Properties after Heat Ageing ASTM D 3045 - 176°F (80°C)/56 days				
Breaking Strength, strip, % original			90	90
Elongation at Break, strip, % original			90	90
Low Temperature Bend after Heat Ageing °F / (°C)			-30 / (-1.1)	-40 / (-4.4)
Low Temperature Bend ASTM D 2136 °F / (°C)			-30 / (-1.1)	-40 / (-4.4)
Change in Weight after Exposure in Water D 471 158°F (70°C), 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

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Hydrostatic Resistance, Mpa (psi) ASTM D751	4.1 (590)	5.9 (850)		
Static Puncture Resistance ASTM D 5602 (99 lbf)	pass	pass		
Dynamic Puncture Resistance (J) ASTM D 5635	10	30		
Accelerated Weathering Practice G 155 / xenon	5,000hr	>10,000hr		
cracking (7x magnification)	none	none		
crazing (7x magnification)	none	none		
Accelerated Weathering Practice G 154 / UVA	5,000hr	>10,000hr		
cracking (7x magnification)	none	none		
crazing (7x magnification)	none	none		
Fungi Resistance Practice G 21, 28 days	Sustained Growth Discoloration no growth none	no growth none		
Abrasion Test, cycles D 3389 H-18 wheel / 1,000 g load	1,500	2,000+		
<b>Additional Physical Properties</b>				
Tensile Strength (psi) ASTM D882		> 9,500		
Breaking Strength (lbs) ASTM D751, Grab Method		600		
Puncture Resistance (lbs) ASTM D751, Bursting Strength		700		
Water Vapor Transmission ASTM E96 proc. A (gm/m2/24hrs)		1.3		
Shore A Hardness ASTM D2240		87		
Flame Resistance MIL-C-20696C / Type II Class 2		pass		
Oil Resistance, MIL-C 20696C No swelling, cracking or leaking		none		
Hydrocarbon Resistance, MIL-C-20696C No swelling, cracking or leaking		none		
High Temperature Dead Load ASTM D751 (50 lbs, 160°F (71.1°C), 4 hrs)		pass		
<b>Energy Attributes</b>	<b>DC196 Off White</b>	<b>DC6 White</b>	<b>DC691 CR Gray</b>	<b>DC667 CR Tan</b>
Solar Reflective Index (SRI) ASTM E1980	104	110	84	88
Solar Reflective Index (SRI) (3 yr aged) ASTM E1980	76	86	73	76
Initial Solar Reflectance ASTM C1549	0.83	0.87	0.69	0.72
Solar Reflectance (3 yr aged) ASTM C1549	0.66	0.71	0.61	0.63
Initial Thermal Emittance ASTM C1371	0.85	0.85	0.89	0.88
Thermal Emittance (3 yr aged) ASTM C1371	0.74	0.84	0.89	0.89
Energy Star	YES	YES	YES	YES
LEED v4 - Heat Island Reduction SS Credit	1 Credit	1 Credit	1 Credit	1 Credit

NOTE: Performance values above represent expected measurements at the time of manufacture.

- 1) Manufactured to ASTM D6754 standards.
- 2) In accordance with EN 13956:2012 the classification of the product in accordance with EN 13501-5 is limited to class F. Classifications of roof build-ups can be obtained separately.
- 3) This product is an article as defined in article 3 of EC regulation No 1907/2006 (REACH). It contains no components which are intended to be released under normal or reasonably foreseeable conditions of use. Based on current knowledge, this product does not contain substances of very high concern

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as listed in Annex XIV of the REACH regulation or in the "Candidate List of Substances of Very High Concern for Authorisation" published by ECHA in concentrations above 0.1% (w/w). A safety data sheet following Article 31 of REACH is not needed to bring the product to the market, to transport, or to use it.

### Environmental Information:

- **Conformity with LEED v4.1 SSc 5 (Option 1): Heat Island Reduction** – Roof (colour dependent) meets Initial and aged requirements. Additional points available with inclusion of Moy vegetative roofs (subject to criteria).
- **Conformity with LEED v4.1 SSc (Option 1 & Option 2): Rainwater Management** – Points available when used in conjunction with Moy Rainwater Management Systems.
- **Conformity with LEED v4.1 WE Prerequisite (Option 2): Outdoor water use Reduction** – Points available when used in conjunction with Moy Rainwater Management system.
- **Conformity with LEED v4.1 MRc 3 (Option 2): Building Product Disclosure and Optimization** - Sourcing of Raw Materials.
- **Conformity with LEED v4.1 MRc 4 (Option 1 and Option 2): Building Product Disclosure and Optimization** - Material Ingredients.
- **Conformity with LEED v4.1 MRc 2 (Option 1): Building Product Disclosure and Optimization** - Environmental product declarations.
- **Environmental Product Declaration (EPD)** available to ISO 14025:2006 and ISO 21930:2017.

### Roll Dimensions:

2.54m\* x 30.5m\* = 115.2kgs/roll

\* Approx.

**Note:** There may be up to one split roll per pallet, but this will be clearly identified on the pallet where applicable. The minimum length of a single piece contained in a split roll will be no less than 7m.

### Application:

FiberTite XT Roofing Systems carry extensive FM Global and Underwriters Laboratories approvals. FiberTite can be installed by mechanically side lap fastening the membrane using appropriate MOY fasteners with membrane stress plates or using MOY thermally broken tube fasteners.

Also, in addition where specified, membrane can be adhered using the appropriate MOY membrane adhesive onto pre-approved substrates. FiberTite XT can also be installed in typical ballasted applications using river washed stone ballast, concrete paving slabs or green roofing.

For specific installation recommendations and requirements, please consult the most current version of the MOY Installation Guide for FiberTite Roofing Systems.

### Storage:

FiberTite must be stored dry. At the building site, it is important that the materials are stored on pallets (raised above the ground) and covered with light coloured tarpaulin.

The FiberTite materials must be kept under shelter, in order to avoid sudden changes in temperature and potential condensation.

### Cleaning:

Cleaning must be carried out with water and neutral soap. It is recommended to avoid contact with solvents and any abrasive materials.

FiberTite® is a registered trademark of Seaman Corporation.

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