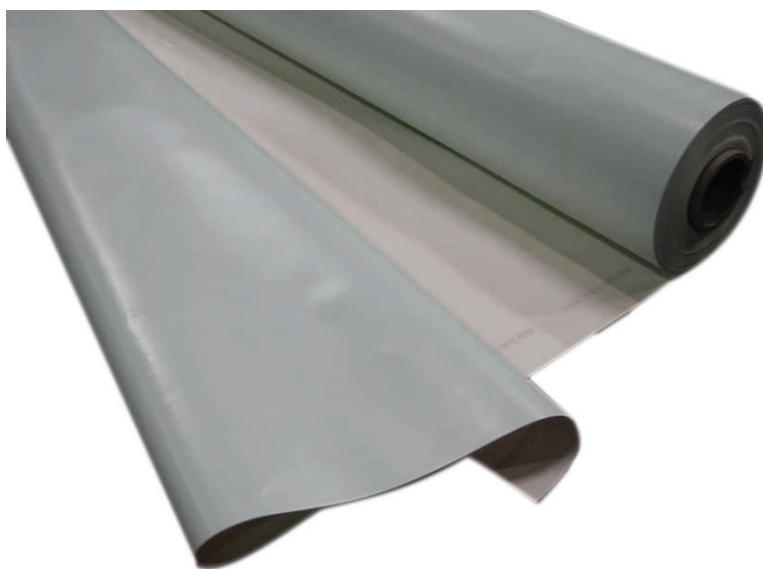


# RL FIBERTITE MEMBRANE-SM

For Ultratherm Xtreme FiberTite Membrane System

Use the FiberTite -SM Membrane on up-stands and around corners.



FiberTite Membrane SM

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## DESCRIPTION

The FiberTite Membrane is the result of Seaman Corporation's 75 years of applied fabric engineering and coating technology.

Each FiberTite Roofing Membrane is crafted using high tenacity/heavy weight yarns, creating a robust base fabric reinforcement that imparts outstanding properties, including superior puncture, tensile, and tear resistance. The base polyester fabrics are primed with a unique adhesive coat, forming a strong bond that maximises seam strength and overall membrane performance.

FiberTite SM features Seaman Corporation's original "KEE" formulation, coating the face of the membrane. This special formulation offers unparalleled benefits, such as superior

hot air welding characteristics, extreme UV resistance, broad chemical resistance, and long-term flexibility and separability for the installed roofing membrane system.

Field seaming of the membrane is achieved by fusing the thermoplastic membrane using conventional hot air welding equipment, ensuring secure and reliable connections.

Available in 1.88m x 30.48m rolls.

## COMPOSITION

FiberTite SM features an 18 x 19 / 840 x 1,000 denier weft reinforced polyester knit fabric, coated with a proprietary compound, utilising DuPont's TM Elvaloy® Ketone Ethylene Ester (KEE) as the principle polymer in the hybrid alloy coating.

FiberTite SM not only meets or exceeds the minimum physical property requirements enumerated in ASTM D6754-02 Standard Specification for Ketone Ethylene Ester (KEE) Based Sheet Roofing, it also exceeds the physical properties and performance characteristics of all 1.5 mm thick competitive products.

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 75 years of applied fabric engineering and coating technology.

## APPLICATION

FiberTite SM should be used for detailing timber plinths, internal sumps, and circle patches.

FiberTite SM membranes can be fully adhered or mechanically attached. FiberTite SM is adhered using RL Adhesive on properly prepared, load bearing substrates that provide sufficient wind uplift for the building type and location.

Refer to RoofLogic specifications for correct installation processes and contact RoofLogic for technical assistance.

FiberTite SM membranes can also be mechanically attached utilising a range of mechanical fixing components supplied by RoofLogic. Contact RoofLogic for specific fixing plans to ensure that the fixing design and substrate will achieve the required wind uplift resistance.



RoofLogic FiberTite SM being adhered to plywood canopy.

| Adhesive Compatibility |                                     |             |                             |
|------------------------|-------------------------------------|-------------|-----------------------------|
| Substrate              | Primer                              | Adhesive    | Coverage                    |
| Plywood                | 190e Primer/or two coat application | 220/190 KEE | 220 (50m²)<br>190KEE (25m²) |
| Concrete               |                                     |             |                             |
| RL Roof-board HDP/LW   | N/A                                 |             |                             |
| RL PIR CF              |                                     |             |                             |



Slate Grey



CR Grey

## PHYSICAL PROPERTIES

| ASTM D6754-02  | Minimum Requirements | FiberTite SM Typical |
|--|----------------------|----------------------|
| Thickness, mm<br>ASTM D 751  | 0.79                 | 0.91                 |
| Thickness over Fiber, mm<br>Optical method   | 0.18                 | 0.23                 |
| Breaking Strength, N<br>ASTM D 751 proc. B – strip   | 1499                 | 1557                 |
| Elongation at Break, %<br>ASTM D 751 – strip   | 15                   | 18                   |
| Tear Strength, N<br>ASTM D 751 Proc. B. Tongue Tear  | 338                  | 445                  |
| Linear Dimensional Change<br>ASTM D 1204 max (%)   | 1.3                  | 0.63                 |
| Fabric Adhesion, N/m<br>ASTM D 751   | 3330                 | no peel              |
| Retention of Properties after Heat<br>Aging ASTM D 3045 – 80oC/56 days<br>Breaking Strength, strip, % original<br>Elongation at Break, strip, % original | 90<br>90             | 90<br>90             |
| Low Temperature Bend after Heat Aging  | -30                  | -30                  |
| Low Temperature Bend<br>ASTM D 2136 (°)  | -30                  | -30                  |
| Change in Weight after Exposure to<br>Water<br>D 471 70oC, 166 h, one side only, max<br>(%)  | 0.0,+6.0             | 0.0, +3.7            |
| Factory Seam Strength, N<br>ASTM D 751 Gram Method   | 1955                 | >Fabric Break        |
| Hydrostatic Resistance, MPa<br>ASTM D 751  | 4.1                  | 4.8                  |
| Static Puncture Resistance<br>ASTM D 5602  | pass                 | pass                 |
| Dynamic Puncture Resistance (J)<br>ASTM D 5635   | 10                   | 20                   |
| Accelerated Weathering<br>Practice G 155 / xenon   | 5000 hr              | >10000 hr            |
| Cracking (7x magnification)  | none                 | none                 |
| Crazing (7x magnification)   | none                 | none                 |



## PHYSICAL PROPERTIES

| ASTM D6754-02  | Minimum Requirements | FiberTite SM Typical |
|--|----------------------|----------------------|
| Accelerated Weathering Practice 154 / UVA                                    | 5000 hr              | >10000 hr            |
| Cracking (7x magnification)  | none                 | none                 |
| Crazing (7x magnification)   | none                 | none                 |
| Fungi Resistance Practice G 2, 28 days<br>Sustained Growth<br>Discolouration | no growth<br>none    | no growth<br>none    |
| Abrasion Test, cycles<br>D 3389 H-18 wheel / 1000 g load                     | 1,500                | 2,000+               |

| Additional Physical Properties   |                      |
|--|----------------------|
| Tensile Strength<br>ASTM D882 (psi)                                      | 8500                 |
| Breaking Strength<br>ASTM D751, Grab Method                              | 2000 N               |
| Puncture Resistance<br>ASTM D751, Bursting Strength                      | 1550 N               |
| Water Vapour Transmission<br>ASTM E96 proc. A (gm/m2/24hrs)              | 1.3                  |
| Shore A Hardness<br>ASTM D2240   | 87                   |
| Test for Flammability of Materials<br>AS1530.2-1993                      | Flammability Index 1 |
| Flame Resistance<br>MIL-C-20696C / Type II Class 2                       | pass                 |
| Oil Resistance, MIL-C-20696C<br>No swelling, cracking or leaking         | none                 |
| Hydrocarbon Resistance, MIL-C-20696C<br>No swelling, cracking or leaking | none                 |
| High Temperature Dead Load<br>ASTM D 751 (23kg/70oC/4hrs)                | pass                 |

| Energy Attributes                                      |          |
|--|----------|
| Initial Solar Reflectance<br>ASTM C1549                | 0.69     |
| Solar Reflectance (3 yr aged)<br>ASTM C1549            | .61      |
| Initial Thermal Emittance<br>ASTM C1371                | 0.89     |
| Thermal Emittance (3 yr aged)<br>ASTM C1371            | .89      |
| Solar Reflective Index (SRI)<br>ASTM E1980             | 84       |
| Solar Reflective Index (SRI) (3 yr aged)<br>ASTM E1980 | 73       |
| Energy Star  | YES      |
| LEED v4 - Heat Island Reduction<br>SS Credit           | 1 Credit |

