

Max-Ply

ROOF RESTORATION SYSTEM

The Fabric Reinforced Roofing Solution

Max-Ply™ is a fully reinforced, seamless membrane roofing system engineered for superior waterproofing and long-term performance. Its core is a high-strength polyester fabric embedded across the roof surface, forming a monolithic barrier against leaks, weathering, and mechanical stress. Built around this reinforcement layer, Max-Ply™ can be finished with silicone, urethane, or acrylic chemistries to meet specific performance needs without compromising integrity. The result is a durable, fully adhered system designed to protect and extend the service life of commercial roof assemblies.

Basic Uses

The Max-Ply™ Roof System is a fabric-centric solution designed for superior waterproofing and durability across commercial and industrial substrates. It is well suited for restoring entire roof surfaces, reinforcing high-stress areas, and protecting seams, penetrations, and flashing. With versatile finish chemistries—silicone, urethane, or acrylic—the system can be tailored to specific performance needs.

Features/Benefits

- Highly Durable Full Fabric Reinforcement
- Seamless Monolithic Membrane
- Versatile Finish Options
- Fully Adhered System
- Reflective & Energy Saving
- Low VOC Formulations

Suitable Substrates

- Single-ply (EPDM, TPO, PVC)
- Modified Bitumen (smooth or granulated)
- Built-up Roofing (BUR)
- Structural concrete

SURFACE PREPARATION

To ensure maximum adhesion, the roof is pressure washed to remove all dirt, dust, debris, and any other foreign contaminants. If needed, a primer is applied.

FABRIC REINFORCED BASE COAT

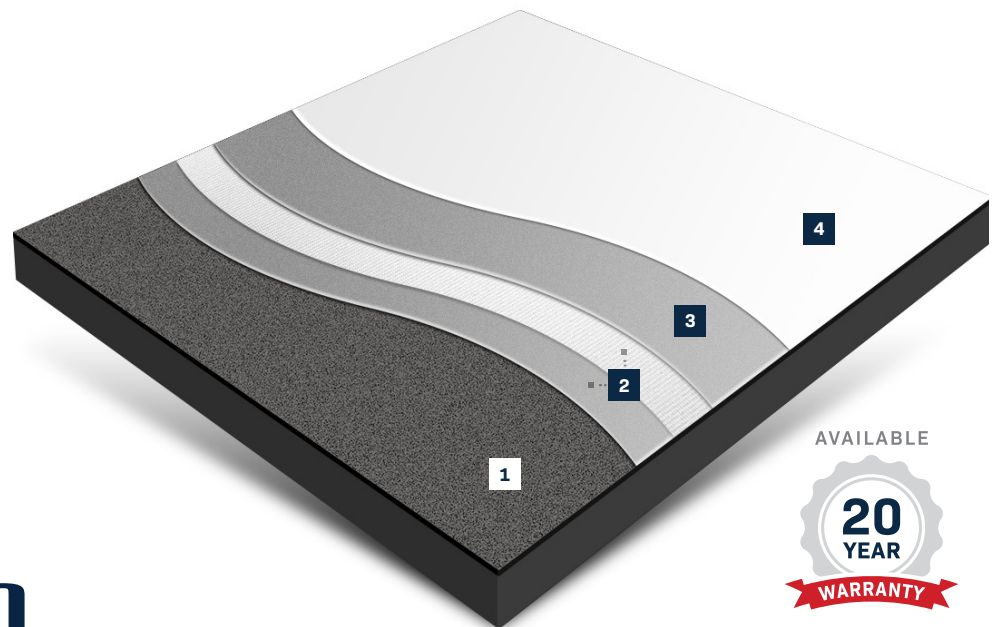
Reinforcing fabric is embedded into a wet base coat, forming a seamless membrane across the roof. The fabric is laid flat and fully adhered to the substrate.

SATURATION COAT

A second coat is applied to encapsulate the fabric, creating a strong, watertight membrane for added durability and performance.

TOP COAT

A protective finish is applied to seal the system, delivering long-term weatherability, UV resistance, and reflectivity.



AVAILABLE



QUICK SPEC

ADHESION TEST

To ensure a successful application, an adhesion test is recommended to ensure maximum adhesion of the Aromatic Urethane 520 base coat to the existing roof substrate(s).

INSTALLATION TIPS

- All roof surfaces to be restored must be cleaned properly.
- Pressure washing at 3000-4000 psi is recommended.
- Existing coatings must be checked for proper adhesion. Before application, any loosely adhered coating must be removed and bare surfaces must be prepared, cleaned, and checked for compatibility.
- All coating applications must be applied to clean, dry, sound surfaces free of contaminants or other foreign matter.
- Allow 24 hours between coating applications. For technical assistance, please contact your American WeatherStar Field Representative.

STORAGE

System components should be stored in original unopened containers at Temperatures between 50°F and 75°F.

Note: Storage for prolonged periods of time at high temperatures may alter the reactivity profile of the product. Additionally, storing the side-B component at increased temperatures or in direct sunlight for prolonged periods may cause a build-up of pressure in the storage vessel. Containers should be opened slowly to release any pressure buildup.

TECHNICAL DATA

ACRYLIC ROOF COATINGS

PROPERTY	ACRYLIC 211	HIGH-TENSILE ACRYLIC 211
Solids by Volume	55% ± 2	55% ± 2
Elongation	233% ± 20	600% ± 50
Tensile Strength	273 ± 20 psi	500 ± 50 psi

SILICONE ROOF COATINGS

PROPERTY	SILICONE 410	HIGH-SOLIDS SILICONE 412
Solids by Volume	69% ± 2	96% ± 2
Elongation	318%	170 ± 25
Tensile Strength	500 psi	450 ± 50 psi

URETHANE ROOF COATINGS

PROPERTY	ALIPHATIC URETHANE 510-CA	AROMATIC URETHANE 520
Solids by Volume	74%	70% ± 2
Elongation	350%	350 ± 50%
Tensile Strength	1100 ± 25 psi	975 ± 25 psi

Please see product data sheets for complete technical data.

SYSTEM	TERM	FABRIC BASE COAT	SATURATION COAT	TOP COAT	TOTAL DFT*
Acrylic	10 years	Acrylic 211	Acrylic 211	Acrylic 211	45
	15 years	Acrylic 211	Acrylic 211	HT Acrylic 211	50
	20 years	Acrylic 211	Acrylic 211	HT Acrylic 211	58
Envir-O-Sil	10 years	HS Silicone 412	HS Silicone 412	HS Silicone 412	40
	15 years	HS Silicone 412	HS Silicone 412	HS Silicone 412	45
	20 years	HS Silicone 412	HS Silicone 412	HS Silicone 412	50
Ure-A-Max	10 years	Urethane 520	Urethane 520	Urethane 510-CA	40
	15 years	Urethane 520	Urethane 520	Urethane 510-CA	45
	20 years	Urethane 510-CA	Urethane 520	Urethane 510-CA	50
Ure-A-Sil	12 years	Urethane 520	Urethane 520	Silicone 410/412	35
	15 years	Urethane 520	Urethane 520	Silicone 410/412	40
	20 years	Silicone 410/412	Urethane 520	Silicone 410/412	45

*Dry film thickness (DFT) is rounded to the nearest mil and is theoretical. Actual DFT varies depending on substrate, application technique, and waste factor. In some cases, an application of Acrylic Bonding Primer 905 may be necessary to protect SPF from UV degradation or to promote adhesion.

NOTE: This document is intended as an overview of installation procedures only. Please refer to application guidelines for complete installation information. Published technical information is subject to change without notice. Please visit www.americanweatherstar.com or contact your Field Representative for current technical data.

