



DATA SHEET

ECO-SMART ELASTOMERIC MEMBRANE FOR ROOF WSM6

WS M6 Lite Elasto Roof Membrane is a liquid-applied, reinforced, high build, low gloss cold roofing system. WS M6 is a perfect fix for sealing any minor cracks and imperfections. With exceptional aging properties, future ruptures, cracks and delaminating are prevented, increasing durability and providing long-lasting protection for any polyurethane foam insulated structures. Its unique molecular structure allows for substrate movement, accommodation to sudden temperature fluctuation, is able to perfectly utilize its tensile strength and elongation abilities and allow the substrate to breathe, preventing damage from moisture and activated salts present. In tandem with the instructions outlined in the following Product Information Sheets, WS M6 creates a strong, solar reflective and UV resistant coating able to withstand fungi and mildew while providing cushion to the structure underneath, going beyond the capabilities of traditional roofing systems.

FEATURES

- Vents through the roof are incorporated seamlessly into the surface of the roof
- Exceptional elongation properties and tensile strength
- Bridges gaps up to 1/16"

See Pages 6 - 8 for Performance Test Report by Architectural Testing Inc.

USES

WS M6 Lite Elasto Roof Membrane becomes an integral piece of a substrate as it:

- Is used for flat roofs, low pitched roofs and roofs with grade
- May be applied directly over asphalt, metal, plywood, polyurethane foam, concrete and polyvinyl chloride (PVC) waterproofing membranes and rubber roofs, for EPDM.
- Keeps structure cool in warmer temperatures by resisting increasing surface temperatures, reducing air conditioning costs
- Protects roof substates and substructures from leakage and moisture intrusion
- Allows substrate to breathe, reducing damage caused by moisture and rot
- Reflects UV rays
- Lowers thermal shock

LIMITATIONS

- Do not apply BaseCoat and TopCoat below 5°C (41°F) or above 35°C (95°F)
- Do not apply BaseCoat and TopCoat if precipitation and freezing temperatures are expected prior to a full cure
- Allow proper UV curing by ensuring a minimum of 4 hour daylight exposure after application
- Maximum operating temperature: 120°C (250°F)
- Minimum operating temperature: -50°C (-58°F)



Surface Preparation

New Surfaces. Prior to the application of WS M6, ensure that the surface is clean, dry and free of any dust, dirt, and loose particles. Power wash at a minimum pressure of 3000 psi to remove surface contaminants. Remove oil, grease and surface salts using Cleaner Degreaser then follow up by rinsing and scrubbing thoroughly using water. Let dry prior to BaseCoat application.

Old roofs. Prior to the application of WS M6, ensure that the surface is clean, dry and free of any dust, dirt, grease and loose particles. Power wash at a minimum pressure of 3000 psi using detergent to remove surface contaminants. Rinse off detergent with water and allow to dry. Repair any surface imperfections before applying BaseCoat.

Metal roofs. Prior to the application of WS M6, ensure that the surface free from any rut down to the bare metal using a power wire brush. Pressure wash metal afterwards. Replace damaged or severely rusted panels.

SYSTEM COMPONENTS

- **Primer** — for porous surfaces, eg. concrete, dilute BaseCoat or TopCoat by 50% (1:1) with water and apply 0.5 gallons /100 sq. ft. or use undiluted PrimeBond.
- **BaseCoat** — apply 1.5 gallons/100 sq. ft. while maintaining a WFT of 24 mils.
- **Reinforcing Fabric** — back roll into BaseCoat on flat/low grade surfaces and overlap adjacent runs of fabric 4 inches minimum by side.
- **Saturation coat** — BaseCoat and TopCoat; apply 1 gallon/100 sq. ft. while maintaining a WFT of 16 mils.
- **TopCoat** — apply 1 gallon/120 sq. ft. while maintaining a WFT of 10-12 mils/ coat.

PRIMING

No priming is required on:

- Plywood or unpainted wood
- Weathered, galvanized metal
- Modified bitumen, roll roofing, built-up, polyurethane foaming and insulation board

Prime:

- Unprotected metals using appropriate metal primer
- Concrete and masonry surfaces using PrimeBond — apply 200 sq. ft./gallon.

Note: PVDF substrates do not require priming with PrimeBond.



Application

To apply WS M6, install cant strips on every internal corners and a flat metal drip edge on the outside perimeters. Repair cracks, nonworking joints and other imperfections using a 6 inch wide strip of BaseCoat and apply at 25 mils WFT. While wet, embed a 6 inch wide strip of Reinforcing Fabric into the BaseCoat layer then saturate immediately after using BaseCoat at 16 mils WFT. Metal roofs. Using BaseCoat, embed all fasteners and apply a minimum of 4 inch wide strip on all joints and seams. While wet, embed Reinforcing Fabric into the BaseCoat layer then saturate immediately after using a coat of BaseCoat. Apply 2 coats of TopCoat at 10-12 mils (70 sq. ft./USG combined). Flat roofs. Coat entire surface using BaseCoat at 24 mils WFT and embed Reinforcing Fabric while coat is wet. Overlap adjacent runs of fabric a minimum of 4 inches per side then immediately saturate using BaseCoat at 16 mils WFT. Let dry.

Flash roof penetrations using TopCoat. Apply at 24-25 mils. Immediately embed and brush in a 6"-12" wide Reinforcing Fabric. Ensure fabric is not stretched and free from wrinkles. Cut of any fish mouths then apply a second coat of TopCoat at the same thickness. When applying TopCoat on an existing roof substrate, apply 2 coats at a minimum WFT of 20 mils per coat.

Apply WS M6 is ready to use straight from the container, eliminating the need for other paints or solvents. Thoroughly stir before application while using care to prevent excessive entrapment of air. WS M6 may be applied using an airless spray, power roller or conventional roller. Apply a liberal coat and check application using a wet film gauge to maintain minimum wet film thickness. Back roll polyester Reinforcing Fabric into BaseCoat on even and low-slope surfaces. Steeper grades do not require Reinforcing Fabric. Apply TopCoat within recoat window. Do not apply to surfaces with excessive moisture content, such as during damp or rainy weather. Do not apply in temperatures below 5°C (42°F).

Power Roller

Apply product generously and frequently monitor application using a film thickness gauge to maintain proper wet film thickness.

Conventional Roller

Keep roller saturated with material and apply product in two crosshatch coats at right angles and frequently monitor application using a film thickness gauge to maintain proper wet film thickness. Allow the first coat to dry for a minimum of 6 hours or until surface dries, prior to a second application. Finish in a downward motion using a dry roller.

Airless Spray

Generously apply in a crosshatch pattern and back roll to prevent a pinhole surface and frequently monitor application using a film thickness gauge to maintain proper wet film thickness. Use equipment that is able to maintain a 2,500 to 2,700 psi at the tip.

- Orifice size: 0.019" (0.48 mm) to 0.023" (0.58 mm)



Thinning/Cleanup

Do not use thinners as it will reduce the sealing ability of the product. Do not add other paints or solvent with this product. Wash all equipment in a warm detergent solution then rinse with water. Spray equipments should be given a final rinse using mineral spirits to prevent rusting. Use completely or properly dispose. Please return totes to PSC. Local disposal requirements vary; refer to your local environmental agencies for more information on disposal options. Recycle any empty containers.

Curing Time

24 mils WFT (1.5 gallons/100 sq. ft.) @ 50% Relative Humidity

SUBSTRATE TEMP.	RECOAT AFTER FULL CURE	5°C/41°F 24 HOURS 72 HOURS
10°C/50°F	24 hours	72 hours
20°C/68°F	12 hours	48 hours
30°C/86°F	8 hours	30 hours

Allow primers to dry 4 hours minimum or until it is dry to touch and may support foot traffic without tracking. For BaseCoat and TopCoat, let coats dry and can support foot traffic without tracking prior to applying a second coat.

Maintenance and Solar Reflectivity

Regard all roofs as a maintenance item. As such, inspect twice a year (fall and spring). Expect solar reflectance to be reduced as excess dirt, dust and other build ups may contribute along with normal aging and weathering. Surface coating may be cleaned with water and a mild detergent by hand or using a low pressure spray equipment. Rinse thoroughly. Coating surfaces should be cleaned every two years to maximize solar reflectance and cooling cost savings. Note: Energy savings from installation of Smart-Roof System will vary from building to building as it is climate specific. Greatest savings will occur in warmer, sunny climates that have a high roof surface to building volume ratio and lower levels of attic/roof insulation.

Safety Precautions

Refer to Material Safety Data Sheet (MSDS) prior to handling this product.

Shelf Life

Unopened, WS M6 has a shelf life of 6 months.

Shipping Information

Non-hazardous.



Minimum Precautions

Keep out of reach of children. Wear protective gloves and goggles. Avoid skin and eye contact. In case of skin contact, wash thoroughly with soap and water. In case of eye contact, rinse immediately with water for 15 minutes and seek medical help immediately.

Packaging

WS M6 5 USG pails
55 USG drum

Warranty Disclaimer

We guarantee our Products adhere to the specifications of Weatherskin Coatings. Weatherskin Coatings makes no warranty or guarantee, expressed or implied, including warranties of fitness for a particular purpose or merchantability, respecting its Products. Liability, if any, is limited to refund or purchase price or replacement of the Product. All consequential damages, labor and cost of labor are hereby excluded.

**Performance Test Report by Architectural Testing Inc.
130 Derry Court York PA 17406-8405
Report #A8344.01-106-31**

Ponding water resistance. This test requires a membrane capable of retaining 25.4 mm water with no passage through the membrane for 2 hours

Test Specimen	Test Duration	Observations
1	2 hours	No water passage though membrane
2	2 hours	No water passage though membrane
3	2 hours	No water passage though membrane
4	2 hours	No water passage though membrane
5	2 hours	No water passage though membrane
6	2 hours	No water passage though membrane
7	2 hours	No water passage though membrane
8	2 hours	No water passage though membrane
9	2 hours then 7 days	No water passage though membrane
10	2 hours then 7 days	No water passage though membrane

Note: Test Specimens 9 and 10 retained ponding water for seven days with no passage of water.



Results of testing WS M6 Lite Elasto Roof Membrane to ASTM D 903, Standard Test Method for Peel or Stripping Strength of Adhesive Bonds using PVC waterproofing membrane substrate, without primer.

Test Specimen **Peel Strength on PVC waterproofing membrane without primer (lb/in)**

1	2.5
2	2.6
3	3.0
4	3.4
5	3.7
6	2.7
7	3.0
8	2.4
9	2.9
10	2.6
Average	2.9

As there are no recognized requirements for peel results from the requested substrate, ASTM D 6083, Standard Specification for liquid-applied Acrylic Coating used in Roofing specifies a minimum of 2.0 lb/in for wet peel results from a galvanized substrate.

The following are results from the evaluation of bond strength for WS M6 Lite Elasto Roof Membrane to ICC-ES AC 212, Acceptance Criteria for Water-Resistive Coatings used as Water-Resistive Barriers over Exterior Sheathing — Section 4.1, Tensile Bond Testing using a Polyvinylidene Fluoride (PVDF) coated metal substrate, with primer.

Specimen	Test Area (in²)	Flatwise Tensile Strength (psi)	AC 212, Section 4.1.2 — Performance Criteria*	Result
1	1.0	123.5	All specimens greater than or equal to 15 psi	Pass
2	1.0	121.6	All specimens greater than or equal to 15 psi	Pass
3	1.0	121.8	All specimens greater than or equal to 15 psi	Pass
4	1.0	135.1	All specimens greater than or equal to 15 psi	Pass
5	1.0	131.2	All specimens greater than or equal to 15 psi	Pass
Mean	1.0	126.6	All specimens greater than or equal to 15 psi	Pass

*Testing was done in accordance with ASTM C 397/C297M-04, Standard Test Method for Tensile Strength of Sandwich Constructions as required by AC 212, Section 4.1.1.

Copies of original test results are available upon request.



General Data for Reinforcing Fabric

Style	Tietex T272
Construction	Stitchbond
Content	100% Polyester
Finished Weight	3.41 oz./sq. yard
Gauge	18
CPI	18

Average Typical Properties

Individual test results may vary.

Tensile Strength (1" jaws)	Warp 74 lbs, Weft 45 lbs Test method using ASTM D-5034.
Elongation at Break	Warp 21.3%, Weft 51.3% Test method using ASTM D-5034.
Ball Burst	111 lbs Test method using ASTM D-3787.
Trapezoid (Tear Strength)	Warp 13.5 lbs Test method using ASTM D-117.
Thickness	0.18 Test method using ASTM D-1777.



General Data for TopCoat and BaseCoat

Type	Acrylic Elastomeric
VOC	Less than 20 g/L
Volume Solids	57% Test method using ASTM D2697. Requirement: >50%
Weight Solids	69% Test method using ASTM D1644. Requirement: >60%
Initial Elongation	>250% Test method using ASTM D2370. Requirement: >100%
Initial Tensile Strength	>230 psi Test method using ASTM D2370. Requirement: >200psi
Initial Reflectance	(4010 white) >84% Test method using ASTM D2824.
Specific Gravity	1.41 g/cm ³ Test method using ASTM D1475.
Weight per USG	11.7 lbs/gallon Coverage: 60 ft./gallon @ 12 mils DFT
Film Thickness (wet)	20 mils per coat, average, refer to system components
Number of Coats	Two coats over BaseCoat (if required)
Viscosity	25,000 CPS @ 6 RPM (Brookfield, 20C)
Flashpoint	N/A
Dries by	Evaporation, Coalescence
Dry Time @ 50% Relative Humidity	@20°C (68°F)
Recoat	12 hours
Full Cure	48 hours
Thin with	Do not thin