



PRODUCT DATA

Exceeds ASTM D 6083, Standard Specification for Liquid Applied Acrylic Coating Used in Roofing. Conforms to California Title 24.

Available in 5 or 55 gallon containers.

Colors: Cool Roof White (M-100). Limited made-to-order colors also available. Please contact MEGA for more information.

Limitations: Do not apply if rain is expected within twenty-four (24) hours of application. Ensure a minimum of four (4) hours of daylight remains after application to allow for proper UV curing. Do not apply if ambient air or surface temperature will fall below 50⁰ F, before curing is complete, or exceed 120⁰ F. All roof surfaces must have a positive slope. All roof surfaces and assemblies must be completely dry as *MEGAFLEX™* forms a vapor retardant barrier. Trapped moisture may cause the coating to blister and delaminate. **KEEP CONTAINER FROM FREEZING!**

1. PRODUCT NAME

MEGAFLEX™ M-100 Cool Roof White Reflective Elastomeric Coating

2. MANUFACTURER

MEGA Industries Corporation
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3. DESCRIPTION

MEGAFLEX™ M-100 Cool Roof Coating is a high performance proprietary water-based, 100% acrylic copolymer resin formulation to ensure the highest degree of adhesion and water resistance. M-100 is ENERGY STAR®, Cool Roof Rating Council Rated and is Underwriters Laboratories Class A Listed. M-100 meets performance requirements for the LEED grading scale.

Extends the useful service life of the existing, or new, roof surface, protects the roof surface and may reduce cooling costs.

May be used to coat smooth or granulated surfaced asphalt built-up roofing, modified bitumen membranes, metal roofs and existing acrylic coated systems. When applied in accordance with specifications, produces a tough, monolithic, fungi resistant reflective coating which expands and contracts with the underlying surface.

4. TECHNICAL INFORMATION

Physical Properties M-100 Cool Roof White:

M-100 PROPERTIES	TEST METHOD	TYPICAL PROPERTY
ENERGY STAR® Qualified	-	Yes
CRRC Qualified	-	Yes
Solar Reflectance, Initial, %	C 1549	> 80%
Thermal Emittance, Initial	C 1371	> .80
Thermal Emittance, Initial	E 408	> .90
Viscosity @ 73 ⁰ F, KU	D 562	105-115
Solids by Volume, %	D 2697	> 50
Solids by Weight, %	D 1644	> 60
Elongation @ 73 ⁰ F, %	D 2370	> 200
Tensile @ 73 ⁰ F, psi	D 2370	> 300
Accelerated Weathering	D 4798	Pass
Water Swelling, %	D 471	< 10%
Permeance, perms	D 1653	< 10
Adhesion, pli	C 794	> 2.0
Fungi Resistance Rating	G 21	Zero
Tear Resistance, lbf/in	D 624	> 60
Low Temp. Flex @ 0 ⁰ F	D 522	Pass
VOC, grams/liter	-	< 100
Flash Point, ⁰ F	-	None
Dry Time: To Touch, Hours	-	1 to 2
To Recoat, Hours	-	16 to 24

FEATURES	BENEFITS
Reduces Surface Temperature	Reduces cooling costs and/or inside air temperature.
Reflects Harmful UV Sunlight	Reduces roof surface "Heat Aging" and weathering.
Lowers "Thermal Shock"	Reduces rapid roof expansion and contraction.
Protects Roof Surfaces	Extends the life expectancy of existing roof surfaces.

5. INSTALLATION

General Surface Preparation: Surfaces to be coated must be clean and free of bitumen exudates, dust, dirt, talc, sand, oil, grease, algae, fungi, mildew, loose granules, loose coating or any foreign matter which will prevent or inhibit proper coating adhesion. To clean, pressure wash all surfaces to be coated and detailed with a TSP and water mixture at a minimum of 3,000 psi. Add chlorine bleach to eliminate mildew and algae. Additional pressure washing and/or the use of a stiff bristle brush may be required to clean stubborn dirty areas. Rinse thoroughly with clean water and allow to dry. Pressure wash up roof slope and rinse down roof slope to drains.

Asphaltic Based Roofing Systems (Aged & New)

Base Coat for “Aged” Surface: For aged (membrane installed a minimum of 12 months prior) smooth surfaced asphalt built-up roofing and modified bitumen membranes use **MEGAFLEX™ M-200** at the rate of .75 gallons per 100 SF . Apply at the rate of 1 gallon per 100 SF on granulated surfaces.

Base Coat for “New” Surface: For new (membrane installed within 0-12 months) smooth surfaced asphalt built-up roofing and modified bitumen membranes use **MEGAFLEX™ M-700** at the rate of .75 gallons per 100 SF . Apply at the rate of 1 gallon per 100 SF on granulated surfaces.

Flashing Details: For asphalt built-up and modified bitumen roof surfaces, flash all roof penetrations using **MEGAFLASH™ M-500 Seam Sealer**. Apply **M-500** at a even thickness of 1/16”. Immediately embed and brush in 6” or 12” wide **MEGAFLEX™ M-600 Polyester Reinforcing Fabric** ensuring the fabric is not stretched and is wrinkle free. Cut out all fish-mouths and wrinkles to lay flat. Apply a second 1/16” coat of M-500 Seam Sealer. Perform same procedure on all edge and vertical flashing details as needed.

Finish Coat: Apply **MEGAFLEX™ M-100 Cool Roof White Roof Coating** evenly over base coat at the rate of 1.25 gallons per 100 SF at a 90° angle to the Base Coat application direction. Allow the finish coat to dry. Inspect for flaws, voids and insufficient coating thickness, etc. Recoat these areas as needed.

Metal Roofing Systems

Further Surface Preparation: On metal roofs, remove all rust down to the bare metal with a power wire brush prior to pressure washing. Damaged or severely rusted panels should be replaced. Etch new panels with an appropriate solution to remove factory oils and ensure proper coating adhesion.

Prime Coat: For metal roofs, apply **MEGAFLEX™ M-800 Metal Primer** at a minimum rate of .50 gallons per 100 SF (100 sf). Ensure rust is totally encapsulated. Allow to dry for a minimum 4 hours. **NOTE:** If metal panels have a Kynar or other unknown finish, do not apply M-800 or **MEGAFLEX™** coatings. Contact MEGA for application instructions and surface adhesion test instructions.

Flashing Details: Metal roofs require all exposed fasteners to be fully encapsulated in **M-500**. For all horizontal seams, penetrations, curbs, rakes and skylights use a two coat application of **M-500** with 6” wide **M-600** embedded between the coats. For vertical seam treatment, brush **M-500** back against the seam until no longer visible. Allow **M-500** Seam Sealer to dry for 16 to 24 hours before application of the coating.

Base Coat: For metal roof systems apply **MEGAFLEX™ M-200 Gray Base Coat** evenly at the rate of 1.0 gallon per 100 SF. On metal roofs, apply M-200 at a 90° angle (perpendicular) to the vertical seams. Allow the base coat to dry and inspect for flaws, voids and insufficient coating thickness, etc. Repair and recoat these areas as needed. Allow the base coat to dry for 16 to 24 hours prior to applying the finish coat.

Finish Coat: Apply **MEGAFLEX™ M-100 Cool Roof White Roof Coating** evenly over base coat at the rate of 1.25 gallons per 100 SF at a 90° angle to the Base Coat application direction.

Allow the finish coat to dry. Inspect for flaws, voids and insufficient coating thickness, etc. Recoat these areas as needed.

Existing Acrylic Coated Systems

Further Surface Preparation: Refer to guide spec. for further preparation instructions.

Base Coat: Apply **M-700 Gray Base** at the rate of .75-1.0 gallons per 100 SF.

Finish Coat: Apply **MEGAFLEX™ M-100 Cool Roof White Roof Coating** evenly over base coat at the rate of 1.25 gallons per 100 SF at a 90° angle to the Base Coat application direction. Allow the finish coat to dry. Inspect for flaws, voids and insufficient coating thickness, etc. Recoat these areas as needed.

6. AVAILABILITY AND COST

MEGAFLEX™ products are sold through MEGA Approved Roofing Applicators and Distributors. Contact MEGA for further information.

7. WARRANTY

MEGA provides a five (5) year material warranty covering the replacement of the material should the material be found to have manufacturing defects. For additional warranty information contact MEGA Industries Corporation.

8. MAINTENANCE and SOLAR REFLECTIVITY

All roofs are a maintenance item and should be inspected twice a year, in the spring and fall. Excess dirt, dust or other foreign material may build up on the roof surface and, along with normal aging and weathering, reduce solar reflectance. The coating surface may be cleaned with a water and mild detergent solution to maximize the Solar Reflectance and cooling cost savings.

MEGA is an ENERGY STAR® Roof Products Partner and Charter Member/Licensed Manufacturer of the Cool Roof Rating Council.



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