



## M-C-THANE 600-AL-SC

### SINGLE-COMPONENT URETHANE WATERPROOFING MEMBRANE

#### 1. OVERVIEW & FEATURES

M-C-THANE 600-AL-SC is a liquid waterproofing membrane designed to maintain, restore and upgrade the performance of aged roof systems. This is a highly reflective, multi-purpose, single-component, aliphatic urethane that provides a finished white roof surface. The M-C-THANE 600-AL-SC formula is VOC compliant and meets South Coast Air Quality Management District standards.

M-C-THANE 600-AL-SC can be used to coat aged single-ply, metal, smooth BUR, and modified bitumen roof systems. It can also be used as a repair material for maintenance applications. M-C-THANE 600-AL-SC can be applied by brush, roller or spray.

**Energy Efficient** - Provides added UV protection to prolong the life of the roof, while helping maintain internal temperatures and reducing cooling costs.

**Waterproofing Protection** - The M-C-THANE 600-AL-SC system will provide 26–53 dry mils of additional waterproofing protection to an existing roof system, extending the life of the roof system.

**UV & Chemical Resistant** - This high-performance aliphatic urethane coating protects the existing roof from the harmful effects of UV radiation, greatly reducing thermal shock. M-C-THANE 600-AL-SC is also uniquely formulated to provide superior chemical resistance to many oils, acids, and other contaminants.

**User Friendly** - Ease of application makes M-C-THANE 600-AL-SC fast and simple to install. This coating can be used to reinforce surfaces even without reinforcing fabrics. It can be used to seal laps, make spot repairs, or restore entire roofing systems.

#### 2. APPLICATION

Ensure all wet insulation is removed. An infrared roof scan is highly recommended. Remove all dirt, dust, and debris from the roof surface. Make any necessary repairs and verify that repairs are securely bonded. Prior to coating any surface, be sure the M-C-THANE 600-AL-SC Base Coat will adhere by performing an adhesion test (ASTM D 903). Proper coverage rate is critical to the success of all coating projects, use a wet mil gauge to ensure proper coverage rates

##### Single-Ply Restoration System

Power wash the surface including flashings with TSP or Simple Green and then thoroughly rinse, paying special attention to drains and low spots. The first coat of M-C-THANE 600-AL-SC Base Coat should be applied at approximately 2 gal./100 sq. ft. (0.82 l/m<sup>2</sup>) or 32 wet mils over all seams, flashings, and repaired areas. Any repaired areas must use cured membranes for the repairs. Allow roof system to dry for 24–48 hours, but no more than 72 hours. Then apply 2 gal./100 sq. ft. (0.82 l/m<sup>2</sup>) or 32 wet mils of M-C-THANE 600-AL-SC to the field of the roof. The first layer may still be tacky at 24 hours.

##### Modified/BUR Reinforced System

Power wash the surface, including flashings, with TSP or Simple Green. Allow roof system to dry for 24–48 hours, then prime the entire roof surface with Enviro-Prime #7-WB or UI-7012 Epoxy Primer at a rate of 250-350 sq. ft. per gallon. For the field of the roof and flashings, apply 2 gal./100 sq. ft. (0.82 l/m<sup>2</sup>) or 32 wet mils of M-C-THANE 600-AL-SC Base Coat. Allow roof system to dry for 24–48 hours, but no more than 72 hours. Apply 2 gal./100 sq. ft. (0.82 l/m<sup>2</sup>) or 32 wet mils of M-C-THANE 600-AL-SC. The first layer may still be tacky at 24 hours.

##### Metal Restoration System

Power wash the entire surface, including flashings, with TSP or Simple Green. All surfaces must be sound, dry, clean, and free of oil, dirt, grease, wax, mildew, loose or flaking paint and rust by scraping, sanding, wire brushing or blasting. Apply a UPI-approved zinc-rich Metal Primer over a small area at 0.25 gal./100 sq. ft. (0.10 l/m<sup>2</sup>) and let set for 20 minutes. Monitor to ensure adhesion and note if sag occurs. If any sag occurs, adjust coverage as necessary. Once adhesion is confirmed, apply a UPI-approved zinc-rich Metal Primer over the entire surface at 0.25 gal./100 sq. ft. (0.10 l/m<sup>2</sup>). The first coat of M-C-THANE 600-AL-SC Base Coat should be applied at approximately 2 gal./100 sq. ft. (0.82 l/m<sup>2</sup>) or 32 wet mils, stripped in over all seams, around penetrations, and fasteners. Allow roof system to dry for 24-48 hours, but no more than 72 hours. Next, apply the finish coat of M-C-THANE 600-AL-SC at 2 gal./100 sq. ft. (0.82 l/m<sup>2</sup>) or 32 wet mils over the entire roof. The first layer may still be tacky at 24 hours.

#### 3. PRECAUTIONS

- Do not apply when temperatures are below 40°F (4.4°C); spray application is not recommended below 50°F (10°C) or if rain is in the forecast within 48 hours
- In areas where the roof is subject to foot traffic, it is recommended to apply walkway pads or a granule walkway surface
- Excess water on the roof surface can cause the roof to become slippery
- Reinforcement fabric should be used when coating over heavily alligatored surfaces, areas that pond water, and over surface irregularities
- Not intended to restore glaze coats of asphalt
- Prior to coating any surface, be sure the coating will adhere by performing an adhesion test (ASTM D 903)

<b>TECHNICAL DATA</b>	<b>M-C-THANE 600-AL-SC</b>
<b>Non-Volatile</b> (Calculated)	Typical 83%
<b>Flash Point</b> (ASTM D 93)	110°F min. (43.3°C)
<b>Density</b> @ 77°F (25°C) (ASTM D 2939)	10.4 lb./gal (1.2 g/m <sup>3</sup> )
<b>Viscosity</b> @ 77°F (25°C); 10 RPM, Brookfield RVT, #4 Spindle	9200 cP
<b>Tear Resistance</b> (ASTM D 624)	160 lbs./in
<b>Elongation</b>	320%
<b>Tensile Strength</b> (ASTM D 412)	2100 psi
<b>Wet Film Thickness</b> @ 2 gal./100 sq. ft. (0.82 l/m <sup>2</sup> )	32 mils (812.8 micros)
<b>Color</b>	White
<b>Shelf Life</b>	1 year, unopened
<b>Coverage*</b> Single-Ply  Modified/BUR  Metal	2 gal./100 sq. ft. on seams – <i>base coat</i> + 2 gal./100 sq. ft. (0.82 l/m <sup>2</sup> ) entire roof  2 gal./100 sq. ft. on entire roof – <i>base coat</i> + 2 gal./100 sq. ft (0.82 l/m <sup>2</sup> ) entire roof  2 gal./100 sq. ft. on seams – <i>base coat</i> + 2 gal./100 sq. ft (0.82 l/m <sup>2</sup> ) entire roof
<b>Packaging</b>	5 gal. pail (18.9 l) 55 gal. drum (208.2 l)

\*All systems are two coat applications; first coat uses M-C-THANE 600-AL-SC Base Coat

<b>ECO-FACTS</b>	<b>M-C-THANE 600-AL-SC</b>
<b>VOC</b>	50 g/l
<b>Reflectance</b>	0.83
<b>Emittance</b>	0.89
<b>SRI</b>	104

For specific application recommendations, please contact your local UPI Representative or UPI Technical Service Department.

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