



AVM System 680SC Vehicular Deck Coating System Low Odor, Low VOC Polyurethane

Sections - 071800/071816/096700/096713

Product Name

AVM System 680SC

Manufactured by

AVM Industries, Inc.
8245 Remmet Ave, Canoga Park, CA 91304
888.414.1041 818.888.0050
www.avmindustries.com

Approvals, Codes & Testing

This system complies with all applicable Federal, EPA, VOC regulations and applicable California Regional Air Quality Regulations and South Coast Air Quality Management District VOC regulations. Meets the performance requirements of ASTM C-957-10, High Solids Contents, Cold Liquid Applied Elastomeric Waterproofing Membrane with Integral Wearing Surface.

Product Description

The AVM System 680SC, vehicular deck coating system is an easy to install, liquid applied, abrasion resistant, low VOC, low odor Polyurethane waterproof system suitable for surfaces subject to vehicular traffic. The AVM System 680SC is a monolithic chemical resistant vehicular deck coating system that can withstand heavy thermal cycling. This elastomeric system is designed to expand and contract with normal structural movements and protect the surfaces against spalling, freeze/thaw damage, and chemicals commonly encountered on vehicular traffic decks. Installed and maintained properly, the AVM System 680SC vehicular deck system will provide years of service.

Where to Use

On new or existing Concrete Decks, Parking Structures, Helicopter Pads and other concrete structures requiring a vehicular grade traffic coating.

Warranty:

Contact AVM Industries for warranty details

Delivery, Storage, and Handling

- Delivery of all the system materials to the job site must be in their original sealed containers and bags, with manufacturer's name and label intact.
- Handle and store containers and bags in accordance with printed instructions.
- Store at temperatures between 50°F and 90°F. Do not store materials in direct sunlight or where they may be damaged by water or rain. Bags must be kept dry!
- Keep all materials out of the reach of children.
- If irritation occurs during use, liberally flush affected areas with water. If irritation continues, see a physician immediately.



Installation

Step 1 Preparation and Sloping: Check area of application to ensure that it conforms to the substrate requirements as stated in AVM's System 680 Installation Instructions. If additional sloping is needed, use AVM Crete 6400/6200 as needed to create the necessary slopes. Fill joints, cracks, and flashings with sealant (AVM Aussie Seal M). Recommended; Reinforce sealant with a 6" wide strip of AVM Mat 800 at all moving cracks, flashings, penetrations and other sensitive areas. For cracks over 1/4" wide and/or expansion joints, contact AVM Industries.

Step 2 Epoxy Primer: Concrete and metal should be primed with AVM 680SC-Epoxy Primer (U-680SC-EP) at a rate of 1 gallon/300 sq.ft. Allow Primer to become tack free before proceeding to Step 3. The base coat must be installed within 8 hours of application of the primer. Otherwise, re-prime.

Step 3 Membrane Layer: Apply the AVM 680SC Base Coat (U-680SC-BC) at a minimum rate of 67 sq.ft./Gal or as needed to achieve a minimum 24 wet mils. Allow 16 to 36 hours curing time before applying the next coat. (If the base or elastomeric membrane should become dirty or contaminated, or lose their surface tack, wipe clean with xylene, acetone or other safe solvent.)

Step 4 Aggregate Broadcast Layer: Once the AVM 680SC Base Coat (U-680SC-BC) has cured, apply the AVM 680-SC Aromatic Top Coat (U-680SC-ARTC) by roller, trowel or squeegee in a uniform coat at a minimum rate of 115 sq.ft./Gal (15 wet mils). While the coating is still fluid, uniformly broadcast and thoroughly encapsulate by back-rolling the proper 16 mesh aggregate into the coating at a rate of 12-15 lbs. of aggregate per 100 square feet. Allow 16 to 36 hours curing time before applying the next layer. Use caution! The proper amount of aggregate must be applied and properly encapsulated.

Step 5 Heavy Duty Traffic Areas (Extra Broadcast Layer where required): In heavy traffic areas, radiuses, and as specified, after the coating in step 4 has cured, apply a 2nd broadcast layer following the same procedures as in step 4.

Step 6 Top Coat: Apply the AVM 680SC Aromatic Top Coat (U-680SC-ARTC) by roller, spray or squeegee followed by back rolling, in one uniform coat at minimum rate of 105 sq.ft./Gal in order to obtain a minimum coating thickness of 16 wet mils and to completely coat the aggregate.

Optional: For improved color retention, in step 6, Apply AVM 680SC Aliphatic Top Coat (U-680SC-ALTC) in lieu of AVM 680SC Aromatic Top Coat (U-680SC-ARTC)

Quality Control

When applied as directed above, the coating thickness in the Regular Traffic Areas, excluding the encapsulated aggregate, shall be a minimum of 45 dry mils. The coating thickness in the Heavy Duty Traffic Areas, excluding the encapsulated aggregate, shall be a minimum of 55 dry mils.

Requires a continuous coating application to minimize lines and/or streaking.

Any optional adhesion test is to be performed seven days after product application.

Striping: It is recommended that an Epoxy paint be used for line striping

Protection of Installed Work

The completed section shall be protected from all traffic for the first 24 hours after application and until the surface is sufficiently cured. (The amount of drying time may vary depending on temperature and humidity conditions) Typically, light foot traffic may resume after 4-6 hours.

Maintenance

Contact AVM for Details

Availability and Cost

Contact AVM Industries or your approved applicator for pricing and availability.

Technical Services

Technical services are available by contacting our offices at: **888.414.1041** or **818.888.0050** or visit **www.avmindustries.com**

System Specifications

See next page.

Physical Properties

Aromatic Base Coat (AVM Part # U-680SC-BC) Single-component, high adhesion, moisture cured, elastomeric polyurethane membrane that meets or exceeds the following properties:

| Composition | Aromatic Polyurethane Base Coat | |
|-----------------------------|---------------------------------|-------------|
| Weight Solids | 92 ± 2% | |
| VOC Content | Less than 100 Grams/Liter | |
| Hardness, Shore A | 65 ± 5 | ASTM D-2240 |
| Tensile Strength | 900 ± 100 PSI | ASTM D-412 |
| Ultimate Elongation | 550 ± 100% | ASTM D-412 |
| Tear Resistance | 150 ± 25 lb./in. | ASTM D-1004 |
| Weather Resistance | Slight Checking @ 500 hours. | ASTM G-23 |
| Adhesion to Primed Concrete | 30 Pli | ASTM D-903 |
| Low Temp Flexibility | -30°F | |

Traffic Resistant Aromatic Top Coat (AVM Part # U-680SC-ARTC) Single Component High Tensile Strength, moisture cured, elastomeric polyurethane Aromatic Top Coat that meets or exceeds the following properties:

| Composition | Aromatic Polyurethane Top Coat | |
|-----------------------|--------------------------------|-------------|
| Weights Solid | 82 ± 2% | |
| VOC Content | Less than 10 Grams/Liter | |
| Hardness, Shore A | 90 ± 5 | ASTM D-2240 |
| Tensile Strength | 3300 ± 300 PSI | ASTM D-412 |
| Ultimate Elongation | 225 ± 50% | ASTM D-412 |
| Tear Resistance | 300 ± 50 Lb./in. | ASTM D-1004 |
| Weather Resistance | No Chalking @ 500 hours. | ASTM D-822 |
| Adhesion to Base Coat | 30 Pli | ASTM D-903 |

Traffic Resistant Aliphatic Top Coat (AVM Part # U-680SC-ALTC) Single-component high tensile Strength, weather resistant Aliphatic Top Coat that meets or exceeds the following properties:

| Composition | Aliphatic Polyurethane Top Coat | |
|-----------------------|---|-------------|
| Weights Solid | 82 ± 2% | |
| VOC Content | Less than 10 Grams/Liter | |
| Hardness, Shore A | 90 ± 5 | ASTM D-2240 |
| Tensile Strength | 3300 ± 300 PSI | ASTM D-412 |
| Ultimate Elongation | 225 ± 50% | ASTM D-412 |
| Tear Resistance | 300 ± 50 Lb./in. | ASTM D-1004 |
| Water Permeability | Less than 0.1 Perm | ASTM E-96 |
| Weather Resistance | No Chalking @ 2,000 hours. | ASTM G-23 |
| Abrasion Resistance | Negligible Change, CS-17 wheels, 1000 cycles, 1000 gm. Load | ASTM C-501 |
| Adhesion to Base Coat | 30 Pli | ASTM D-903 |

| Item | Packaging | Approximate Shipping Weights | Coverages | VOC |
|---------------------------------|---------------------------|------------------------------|----------------|---------|
| U-680SC-EP Epoxy Primer | 2 Gal Kit 10 Gal Kit | 20 Lbs 100 Lbs | 300 Sq.Ft./Gal | 100 G/L |
| U-680SC-BC Base Coat | 1 Gal Can 5 Gal Bucket | 11 Lbs 55 Lbs | 67 Sq.Ft./Gal | 100 G/L |
| U-680SC-ARTC Aromatic Top Coat | 1 Gal Can 5 Gal Bucket | 10 Lbs 52 Lbs | 115 Sq.Ft./Gal | 100 G/L |
| U-680SC-ALTC Aliphatic Top Coat | 1 Gal Can 5 Gal Bucket | 10 Lbs 52 Lbs | 105 Sq.Ft./Gal | 100 G/L |

The above quantities are theoretical with no allowance for application loss, waste or unusual substrate conditions. Spread rates will vary with jobsite conditions and method of application.

For a complete list of details in CAD or PDF, please visit our website at www.avmindustries.com.

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