## RESUFLOR™ TOPFLOOR MER I (MECHANICAL EQUIPMENT ROOM)

Sherwin-Williams Resuflor Topfloor MER I (Mechanical Equipment Room) system

combines Resuflor crack bridging and waterproofing capabilities with a chemically resistant topcoat. An optional wearcourse of Resuflor broadcast with hard aggregate would provide increased wear, impact and abrasion resistance. Resuflor achieves flexibility without the use of plasticizers or other additives, which can separate or migrate as the system ages. This means that the product remains flexible and continues to function for many years. Fiberglass scrim may be incorporated into the system to add tensile strength.

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- Resuflor (20 mils) neat membrane
- Resuflor (12 mils)
   Wearcourse
- 3 Seal Coat

2 Broadcast

#### **BENEFITS**

- Bridges hairline cracks aiding in suppression of cracks reflecting through the system due to substrate movement
- Durable and slip resistant
- Waterproof
- Chemical and stain resistant
- Fiberglass scrim optional for maximum tensile strength

#### **USES**

- Mechanical equipment rooms
- Mezzanines
- Clean rooms
- · Lockers rooms and showers
- · Computer rooms

#### **TYPICAL PHYSICAL PROPERTIES**

Hardness, Shore D ASTM D 2240	50/40		
<b>Tensile Strength</b> ASTM D 412	1,700 psi		
<b>Elongation</b> ASTM D 412	80%		
<b>Adhesion</b> ACI 503R	300 psi concrete failure		
<b>Abrasion</b> ASTM D 4060, CS-17 Wheel, 1,000 cycles	100 mgs lost		
Flammability	Self-Extinguishing over concrete		
Thermal Cycling ASTM C 884 (24 hours, -21°C to 25°C)	No cracking		

#### **INSTALLATION**

Sherwin-Williams High Performance Flooring materials shall only be installed by approved contractors. The following information is to be used as a guideline for the installation of the Resuflor Topfloor MER I System. Contact the Sherwin-Williams Technical Service Department for assistance prior to application.

#### SURFACE PREPARATION — GENERAL

Sherwin-Williams systems can be applied to a variety of substrates if the substrate is properly prepared. Preparation of surfaces other than concrete will depend on the type of substrate, such as wood, concrete block, quarry tile, etc. Should there be any questions regarding a specific substrate or condition, please contact the Sherwin-Williams Technical Service Department prior to starting the project. Refer to Surface Preparation Form G-1.

#### **SURFACE PREPARATION — CONCRETE**

Concrete surfaces shall be abrasive blasted to remove all surface contaminants and laitance. The prepared concrete shall have a surface profile equal to CSP 3-5. Refer to Form-G-1.

After initial preparation has occurred, inspect the concrete for bug holes, voids, fins and other imperfections. Protrusions shall be ground smooth while voids shall be filled with a system compatible filler. For recommendations, consult the Sherwin-Williams Technical Service Department.

#### **TEMPERATURE**

Throughout the application process, substrate temperature should be 60-90°F. Substrate temperature must be at least 5°F above the dew point. Applications on concrete substrate should occur while temperature is falling to lessen off gassing. The material should not be applied in direct sunlight, if possible.

#### **APPLICATION INFORMATION**

VOC MIXED	APPLICATION STEP	MATERIAL	MIXED RATIO	THEORETICAL COVERAGE PER COAT CONCRETE	PACKAGING
<100 g/L	Membrane	3555	1:1	80 sq. ft. / gal.	2 or 10 gals
<100 g/L	Wearcourse	3555	1:1	130 sq. ft. / gal.	2 or 10 gals
0	Broadcast	5310-8 Dry Silica Sand (20-40 mesh) or Other Hard Aggregate		.10 lbs. / sq. ft.	100 lbs.
<50 g/L	Seal Coat	4687	2:1	275-300 sq. ft. / gal.	3 or 15 gals

#### **MEMBRANE**

#### MIXING AND APPLICATION

If priming is done to reduce outgassing, allow to cure overnight before topping.

- Premix 3555A (resin) using a low-speed drill and Jiffy blade.
   Mix for one minute until uniform, exercising caution not to whip air into the material.
- Add 1 part 3555A (resin) to 1 part 3555B (hardener) by volume. Mix with low-speed drill and Jiffy blade for three minutes until uniform.
- 3. Immediately pour the mixed material onto the substrate and pull out using a 1/4" or 1/8" v-notched squeegee to yield 20 mils WFT and cross roll with a 3/8" nap roller. Readings must be taken continuously during application with a wet mil gauge to verify material is being applied at the proper thickness. Allow to cure overnight at 73°F surface temperature. Material cures slower at lower temperatures.
- After the membrane is cured, check for surface blush.
   Remove any blush with detergent wash prior to applying wearcourse.

#### **WEARCOURSE**

#### MIXING AND APPLICATION

- Premix 3555A (resin) using a low-speed drill and Jiffy blade.
   Mix for one minute until uniform, exercising caution not to whip air into the material.
- Add 1 part 3555A (resin) to 1 part 3555B (hardener) by volume. Mix with low-speed drill and Jiffy blade for three minutes until uniform.
- 3. Immediately pour the mixed material onto the substrate and pull out using a 1/4" or 1/8" v-notched squeegee to yield 12 mils WFT and cross roll with a 3/8" nap roller. Readings must be taken continuously during application with a wet mil gauge to verify material is being applied at the proper thickness. Material cures slower at lower temperatures.
- 4. Broadcast 5310-8 Dry Silica Sand (20-40 mesh) or other Hard Aggregate at 0.10 lbs. per sq. ft. (10 lbs. per 100 sq. ft.; 100 lbs. per 1,000 sq. ft.) into wet material so no wet material is visible. Aggregate should be broadcast within one (1) hour of liquid application to ensure they are properly seated.
- 5. Allow to cure. (Cure times vary depending on environmental conditions.) Sweep off excess aggregate with a clean, stiffbristled broom. Clean aggregate can be saved for future use. All imperfections such as high spots should be smoothed before the application of the seal coat.

**NOTE:** The floor's finished appearance depends on the manner in which the aggregate has been applied. In grass seed like fashion, allow the aggregate to fall after being thrown upward and out. DO NOT THROW DOWNWARD AT A SHARP ANGLE USING FORCE.

#### **SEAL COAT**

### MIXING AND APPLICATION DO NOT PREMIX PART B HARDENER.

- Premix 4687A (resin) using a low-speed drill and Jiffy blade.
   Mix for one minute until uniform, exercising caution not to introduce air into the material.
- 2. Add 2 parts 4687A (resin) to 1 part 4687B (hardener) by volume. Mix with low-speed drill and Jiffy blade for three minutes until uniform. To ensure proper system cure and performance, strictly follow mix ratio recommendations.
- 3. Apply 4687 using a 1/4" nap roller at a spread rate of 250-300 square feet per gallon, evenly, with no puddles making sure of uniform coverage. Take care not to puddle materials and ensure even coverage. If a second coat is required, the surface must be abraded with 80-120 grit paper or screen and tack wiped prior to second application.
- 4. Allow to cure 24 hours minimum before opening to traffic. In cool and/or high humidity conditions, a surface film may form which can be washed with soap and water.

#### **CLEANUP**

Clean up mixing and application equipment immediately after use. Use toluene or xylene. Observe all fire and health precautions when handling or storing solvents.

#### SAFETY PRECAUTIONS

Refer to the SDS sheet before use. Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

#### **MATERIAL STORAGE**

Store materials in a temperature controlled environment (40°F to 90°F) and out of direct sunlight. Keep resins, hardeners and solvents separated from each other, and away from sources of ignition.

#### **MAINTENANCE**

Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact the Sherwin-Williams Technical Service Department.

#### **DISCLAIMER**

The information and recommendations set forth in this document are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication.

Consult www.sherwin-williams.com/resin-flooring to obtain the most recent Product Data information and Application instructions.

#### WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams.

NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

#### THE SHERWIN-WILLIAMS DIFFERENCE

Sherwin-Williams High Performance Flooring delivers world-class industry subject matter expertise, unparalleled technical and specification service, and unmatched regional commercial team support to our customers around the globe.