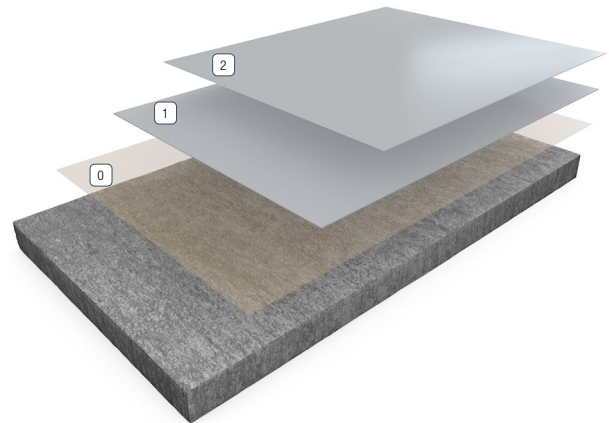


RESUFLOOR™ TOPCOAT SDE

Sherwin-Williams Resuflor Topcoat SDE is a static dissipative epoxy flooring system. Installed at nominal 35 mils, it is comprised of a three-component, high-solids conductive epoxy, applied at 15-20 mils over an electrically insulating coat of epoxy. The system is ideal for moderate-use facilities that require reliable electrostatic discharge (ESD) protection.



- 0 Primer
- 1 Build Coat
- 2 Topcoat

BENEFITS

- LEED® v4 – Indoor Air Quality credits available
- Meets ANSI/ESD S20.20-2007 for resistance readings between 1×10^5 and $<1 \times 10^9$ ohms and <100 volts body voltage generation
- Provides good chemical and stain resistance
- Withstands exposure to many solvents, fuels and chemicals
- Seamless and sanitary; easy to clean and maintain

USES

- Avionics and aerospace hangars
- Semi-conductor and electronics manufacturing
- Pharmaceutical, biotech and life science labs
- Packaging and converting facilities
- Industrial production and assembly

TYPICAL PHYSICAL PROPERTIES

Surface Resistance Point to Point / Point to Ground ESD Assoc. ANSI/ESD 7.1-2005	1×10^5 ohms to $<1 \times 10^9$ ohms
Abrasion Resistance ASTM D4060 Taber Abraser, CS-17 Wheel, 1,000 g load, 1,000 revolutions	90-100 mg/loss
Adhesion to Concrete ASTM D4541	450 psi concrete failure
Adhesion to Concrete ASTM D7234	732 psi concrete failure
Compressive Strength (epoxy) ASTM D695	13,500 psi
Shore D Hardness (epoxy) ASTM D2240	80-85 @ 0 sec 75-80 @ 15 sec
Tensile Strength ASTM D2370	8,000 psi
Percent Elongation ASTM D2370	5%

INSTALLATION

The following information is to be used as a guideline for the installation of the Resuflo Topcoat SDE. 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 depending upon system selected. 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 50-90°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. Protect material from freezing prior to installation.

APPLICATION INFORMATION — SURFACE PREP PROFILE CSP 1-3

VOC	APPLICATION STEP	MATERIAL	MIX RATIO	THEORETICAL COVERAGE	PACKAGING
<50 g/L	Primer	MPE	2:1	321-535 sq. ft. / gal	3, 15 or 105 gals
<50 g/L	Build Coat	MPE	2:1	107-200 sq. ft. / gal	3, 15 or 105 gals
<100 g/L	Topcoat	SCT	Pre-measured kit	133 sq. ft. / gal	3.05 gals

GENERAL PRODUCT INFORMATION

OPTIONS: Use the same color in Resufloor™ MPE and Resufloor™ SCT. White is not recommended for this system.

Colors in Resufloor MPE: Use colorants at a rate of one unit per 3-gallon mix. Standard colorants — Yellow, Light Gray and Rotunda Red — will not impart total hide. Use these colorants at a rate of two units per 3-gallon mix. Similar colorants also may not hide as well. Refer to Color Selection Guide or consult Sherwin-Williams technical support.

Colors in Resufloor SCT: Use colorants at a rate of 1/2 pint (8 fluid ounces) per 3.05-gallon mix. **DO NOT** use White. Light Gray, Canada Gray, Steel Gray, Sandy Beige and Tile Red may be used. Consult Technical Support if additional colorants are desired as they may not be compatible.

LIMITATIONS:

Colors: The use of color is required in Resufloor SCT. **DO NOT USE WHITE.**

Hide: The topcoat must be applied over a pigmented base or existing coating of similar color to obtain color hide in Resufloor SCT. The resulting system color will be closer to the basecoat.

Contamination (Fisheyes): Product may fisheye if oil, silicones, mold release agents or other contaminants are present.

PRIMER – RESUFLOR MPE

A thin coat of primer will wet out concrete, help seal off concrete pores and minimize outgassing bubbles. Apply a tight coat of primer with a clean, flexible squeegee. Backrolling is not recommended. There should be no mil build over the high spots of the concrete.

COVERAGE RATE: Much of this will soak into porous concrete. One gallon of Resufloor MPE will cover:

535 sq. ft. at 3 mils wet/dry film

400 sq. ft. at 4 mils wet/dry film

321 sq. ft. at 5 mils wet/dry film

PREMIX PART A using a Jiffy® mixer blade and slow speed drill. (This is required for both 3-gallon and full-filled 5-gallon units. For full-filled 5-gallon pails, pour out 2 gallons into a measuring container). Then, pour the measured Part A into a mixing pail.

ADD RESUFLOR MPE PART B TO PART A (3 GALLONS TOTAL MIX). For full-filled 5-gallon pails, pour out 1 gallon Part B into a measuring container that is separate from the one used with the Part A. Then, add the measured Part B to the Part A already in the mixing pail. **POTLIFE:** Mix only enough material which can be applied within the work time (time between the addition of Part B to Part A and the completion of all application actions). Check the following chart for work times at various temperatures. For smaller quantities, use 2 parts PART A to 1 part PART B by volume.

APPROXIMATE WORK TIME:

65°F	70°F	73°F	80°F	90°F
40 min	30 min	25 min	20 min	15 min

MIX FOR 2 MINUTES using a Jiffy® mixer blade and slow speed drill. (Failure to do so could result in lower/diminished coating properties.)

IMMEDIATELY POUR ALL OF THE MIXED MATERIAL onto the floor in a single bead.

PUSH THE SQUEEGEE at an even speed and down pressure to apply the desired thickness. A notched squeegee can be used to increase the thickness applied. **NOTE:** The use of spiked shoes will allow freedom of movement on the wet floor. **CAUTION:** The surface will be slippery.

START THE SECOND AND REMAINING PASSES by pushing material parallel to the first stroke. Hold the bead of material near the center of the bar. **NOTE:** Resufloor MPE applied thin may “bridge” holes and cracks momentarily before soaking in — make sure the previously squeegeed area is overlapped (halfway).

TO REDUCE OUTGASSING BUBBLES, it is best to wait until the primer has set up enough to walk on before applying the build coat of Resufloor MPE.

The primer must be coated within 24 hours at floor temperatures of 65-90°F.

BUILD COAT – RESUFLOR MPE

COVERAGE RATE: At least 8 mils on top of the primer are recommended for complete hide. One gallon of Resufloor MPE will cover:

200 sq. ft. at 8 mils wet/dry film

133 sq. ft. at 12 mils wet/dry film

107 sq. ft. at 15 mils wet/dry film

REPEAT STEPS used for mixing and spreading of the primer coat.

COLORS: Premix Sherwin-Williams colorants to ensure uniform color. Colorant is added at the rate of 1 unit per 3-gallon mix.

NOTE: When using colorant in the bulk units, add the colorant to the Part A that has been measured into the “mixing pail.”

BACKROLL THE MATERIAL with a 3/8" nap roller for a smooth, uniform appearance. Backrolling is required to remove the puddles and squeegee lap marks in order to obtain uniform texture and a consistent mil thickness.

If Resufloor MPE is topcoated with Resufloor SCT at floor temperatures of 65-90°F, it does not need to be sanded if the Resufloor SCT is applied within 24 hours.

Resufloor MPE must be sanded if applying Resufloor SCT after 24 hours. Use 80 grit paper. The use of more aggressive paper will introduce deep grooves that will not be covered by a single, thin coat of urethane. We recommend thorough sanding with a swing-type buffer so that multiple scratch marks cause an obvious gloss loss on all areas (depressions will remain shiny), and the floor is uniformly dulled. The ability to see individual scratch marks is an indication that sanding is not adequate. Scrub with detergent, rinse with clean water and allow floor to dry before coating. Tack rag to remove fine dust.

ELECTRICAL GROUNDING

If ResufloTM SCT is the primary ground, then a grounding system that meets the customer's specifications needs to be connected to the common ground of the facility. If copper tape is used, install the copper tape on the insulator coat, underneath the Resuflo SCT.

TOPCOAT - RESUFLO SCT

COVERAGE RATE: One 3.05-gallon kit of Resuflo SCT will cover:

325 sq. ft. at 15 mils wet/dry film

244 sq. ft. at 20 mils wet/dry film

PREMIX PART A USING A JIFFY® MIXER BLADE with slow speed drill. **POTLIFE:** *Mix only enough material which can be used within 25 minutes.*

PREMIX PART B BY SHAKING THE CAN 10 TIMES before adding it to the Part A.

WHILE CONTINUING TO MIX THE PART A, ADD PART B. MIX FOR 1 MINUTE using a Jiffy® mixer blade and slow speed drill.

POUR MIXED PARTS A/B INTO PART C while mixing.

MIX FOR 3 MINUTES using a Jiffy® mixer blade and slow speed drill. Move the blade up and down the sides of the pail and across the bottom to ensure contents are thoroughly mixed so no dry filler remains. **If the filler is not properly dispersed, the electrostatic discharge properties of the coating may be diminished.**

COLORS: Use colorants at a rate of ½ pint (8 fluid ounces) per 3.05 gallons of Resuflo SCT. Premix colorant before adding to the combined Parts A/B/C to ensure uniform color. Add colorant to combined Parts A/B/C and mix using a Jiffy® mixer blade and slow speed drill. Mix until well-blended.

IMMEDIATELY POUR ALL THE MIXED MATERIAL onto the floor in a single bead. Wet out the mohair roller (that will later be used for backrolling) in the bead of material.

PUSH THE NOTCHED SQUEEGEE at an even speed with down pressure.

1/8" notched squeegee to apply 15-20 mils*

*These guidelines were arrived at by using new squeegees on smooth concrete with little applied pressure. The application rate is affected by worn squeegees, applied pressure and texture of the concrete.

ROLL THE MATERIAL PERPENDICULAR TO THE WAY IT WAS SQUEEGEED. Backrolling the material with a mohair roller will more efficiently fill in imperfections (holes).

ALLOW COATING TO CURE 24 HOURS at 75°F before opening to light traffic. Allow more time at low temperatures and for heavier traffic.

TEST THE SURFACE RESISTIVITY after 24 hours, to confirm system falls within product specifications. The final reading should be taken after a 7-day cure period and recorded as a baseline for future audits. Full coating properties take 14 days to develop.

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 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 of 50-90°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.

United States & Canada

sherwin-williams.com/resin-flooring
swflooring@sherwin.com