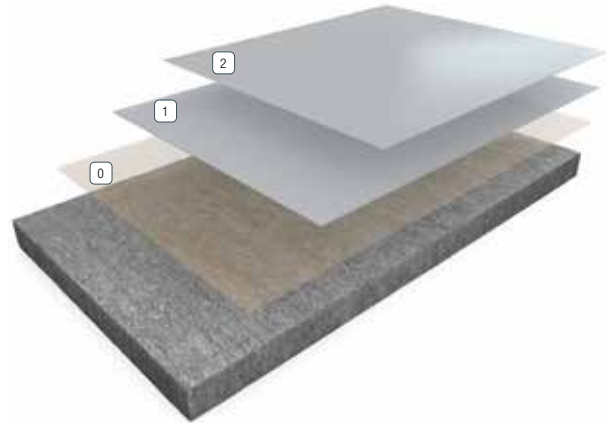


RESUFLOOR™ TOPCOAT SDU

Sherwin-Williams Resuflor Topcoat SDU is a high-performance, static control flooring system. Comprised of a high-solids epoxy base and a light-stable, electrostatic dissipative urethane topcoat, the system provides reliable ESD protection combined with excellent chemical resistance.



- 0 Primer
- 1 Build Coat
- 2 Topcoat

BENEFITS

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

USES

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

TYPICAL PHYSICAL PROPERTIES

Body Voltage Generation ANSI/ESD STM 97.2 (ANSI/ESD S20.20 - Method 2)	12 volts with ESD shoes 32 volts with heel straps
Body Voltage Decay (with ESD shoes or heel straps) AATCC 134-1979 (modified)	1,000 volts to < 10 volts in < 1.0 sec
Resistance to Ground in Combination with a Person ANSI/ESD STM 97.1 (ANSI/ESD S20.20 - Method 1)	$< 3.5 \times 10^7$ ohms (ESD shoes or heel straps)
Surface Resistance Point to Point / Point to Ground ESD Assoc. ANSI/ESD 71-2005	1×10^5 ohms to $< 1 \times 10^9$ ohms
Abrasion Resistance ASTM D4060 Taber Abraser, CS-17 Taber Abrasion Wheel, 1,000 g load, 1,000 revolutions.	38 mg/loss
Adhesion to Concrete ASTM D4541	450 psi concrete failed
Adhesion to Concrete ASTM D7234	732 psi concrete failed
Compressive Strength (epoxy) ASTM D695	13,500 psi
Flammability (topcoat resin) ASTM D635	182 mm/min
Shore D Hardness (epoxy) ASTM D2240	80-85 @ 0 sec 75-80 @ 15 sec
Tensile Strength ASTM D2370	6,250 psi
Percent Elongation ASTM D2370	6%

INSTALLATION

The following information is to be used as a guideline for the installation of the ResufloP™ Topcoat SDU. 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 1-3. Refer to Form G-1.

After initial preparation has occurred, inspect the concrete for bug holes, voids, fins and other imperfections. Excessive surface profile may require a body coat prior to system application. Protrusions shall be ground smooth while voids shall be filled with a Sherwin-Williams system 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 offgassing. 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, 105 or 750 gals
<50 g/L	Build Coat	MPE	2:1	114-133 sq ft / gal	3, 15, 105 or 750 gals
<50 g/L	Topcoat	SDS Satin	Pre-measured kit	600 sq ft / gal	1.09 gals

GENERAL PRODUCT INFORMATION

OPTIONS: Use the same color in Resufloor™ MPE and Resutile™ SDS Satin. 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 Tennant Technical Support.

Colors in Resufloor SDU Satin: Use colorants at a rate of one-half unit per 1-gallon mix.

LIMITATIONS:

Colors: The use of color is recommended in Resutile SDS Satin. DO NOT USE WHITE.

Hide: The topcoat must be applied over a pigmented primer or existing coating of similar color to obtain color hide in Resutile SDS Satin. The resulting system color will be closer to the primer.

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

Chemical Resistance / Staining: Reduced chemical resistance and staining are possible in pigmented versions of the system.

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 that 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:

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

123 sq. ft. at 13 mils wet/dry film

107 sq. ft. at 14 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 Resutile SDS Satin within 24 hours and at floor temperatures of 65-90°F, it does not need to be sanded.

Resufloor MPE must be sanded if applying Resutile SDS Satin 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 Resutile™ SDS Satin 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 Resutile SDS Satin. **NOTE:** Groove the epoxy where the tape will be placed to recess it into the epoxy. Flatten the edges of the tape by tooling the tape with a screwdriver handle. To ensure adequate adhesion, it is recommended that the tape be sanded prior to coating with Resutile SDS Satin.

TOPCOAT - RESUTILE SDS SATIN

PREMIX PART A USING A JIFFY® MIXER BLADE with slow speed drill. **POTLIFE:** Mix only enough material which can be used within 30 minutes. **NOTE:** Once opened, this material cannot be resealed for later use.

CONTINUE TO MIX AND 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. **NOTE:** The Part C is not blended — **DO NOT SPLIT MIX OR PRODUCT MAY NOT MEET PERFORMANCE SPECIFICATIONS.**

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.

COLORS: Use colorants at a rate of one-half unit per 1 gallon of Resutile SDS Satin. Premix Tennant 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. Pour into application tray.

APPLY RESUTILE SDS SATIN at the rate of 600 sq. ft. / gallon with a 3/8" nap roller. For proper appearance and development of physical properties, it is crucial that material is not applied above or below this rate. Material applied at a lower application rate will tend to foam at higher humidities and temperatures. Dip the roller in the coating and lightly roll out excess in the application tray. Apply material in an area no wider than 10 feet. One dip should cover about 45 sq. ft.

SPREAD THE MATERIAL evenly with V-shaped cross passes.

MAKE SURE THE FLOOR HAS JUST ENOUGH COATING TO COVER EVENLY. Excess material could cause the floor to blister, especially in high humidity and will show more roller marks. Insufficient material will cause the floor to look non-uniform. If you cannot see the grit texture, the material is too thick.

LEVEL THE AREA with straight passes that cross the initial material paths. These final strokes will reduce roller marks. If the appearance is not satisfactory, reroll the area.

REMIX THE MATERIAL in the tray occasionally (with the roller) to prevent settling of the Part C (filler).

NOTE: This product cannot be finish-rolled by a separate individual. Late finish rolling may introduce foam in the coating especially at higher humidities and temperatures.

ALLOW COATING TO DRY 24 HOURS at 75°F, 50% relative humidity before opening to light traffic. Allow more time at low temperatures, low humidity or for heavier traffic. Full coating properties take 7-14 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 at 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