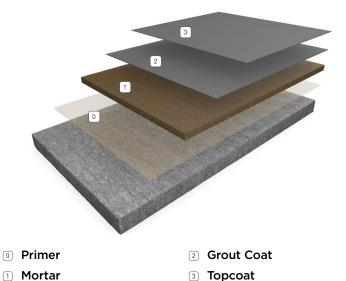
# SHERWIN-WILLIAMS.

## SYSTEM GUIDE

# RESUFLOR<sup>™</sup> SCREED TG46 II

Sherwin-Williams Resuflor Screed TG46 II is a

nominal 1/8" to 1/4" thick, heavy-duty resurfacing system that can help extend the life of concrete floors. Comprised of an epoxy/aggregate mortar, high-build grout coat and topcoat(s), this durable topping is ideal for refurbishing existing surfaces or protecting new concrete substrates.



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High solids and low VOC

**BENEFITS** 

- Economically resurfaces worn, uneven concrete
- Protects substrates from heavy impact and wear
- Resists degradation from many chemicals
- Easy to clean and maintain
- · Standard and unlimited custom colors available

#### **USES**

- Manufacturing and processing locations
- Pulp and paper plants
- Wastewater treatment facilities
- Pharmaceutical plants
- Drum storage areas
- Petroleum refineries
- Food and beverage facilities

## **TYPICAL PHYSICAL PROPERTIES**

<b>Abrasion Resistance</b> ASTM D4060 Taber Abraser CS-17 Wheel, 1,000 cycles	18 mg loss Result based on independent lab testing of Resutile <sup>™</sup> HTS
Hardness, Shore D ASTM D 2240	80-85 @ 0 sec   75-80 @ 15 sec
<b>Elongation</b> (resin) ASTM D2370	6%
Adhesion ASTM D4541	450 psi concrete failure
Adhesion ASTM D7234	732 psi concrete failure
Flammability ASTM D635	182 mm/min

#### **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<sup>™</sup> Screed TG46 II Systems. 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 the 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 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 4-6**

VOC MIXED	APPLICATION STEP	MATERIAL	MIX RATIO	THEORETICAL COVERAGE	PACKAGING
<50 g/L	Primer	MPE	2:1	180-220 sq ft / gal	3, 15, 105 or 750 gals
<50 g/L	Mortar	MPE PT 250 Aggregate	Typical mortar mix: 1 gal MPE Pt A + 0.5 gal MPE Pt B + 3-37.2 lb bags PT 250 aggregate	56-70 sq ft / typical mortar mix	3, 15, 105 or 750 gals 37.2 lbs
<50 g/L	Grout Coat	PT Topcoat	Pre-measured kit	200-267 sq ft / gal	3 gals
<50 g/L	Seal Coat	HTS 100	Pre-measured kit	535 sq ft / gal	1.09 or 5.5 gals

## **GENERAL PRODUCT INFORMATION**

#### **OPTIONS:**

Resuflor<sup>™</sup> PT 250 Mortar is available in 2 kit sizes in Neutral:

900 square feet @ 1/4″ kit includes 30 total gallons of Resuflor<sup>™</sup> MPE and 48 - 37.2 lb bags of aggregate

- Use 6 gallons of MPE as primer
- Use 24 gallons of MPE and 48 37.2 lb bags of aggregate for overlay

11,700 square feet @ 1/4" kit includes 374 gallons of Resuflor MPE and 624 – 37.2 lb bags of PT 250 Aggregate

- 63 gallons of MPE is used as the primer
- 312 gallons of MPE and 624 37.2 lb bags of aggregate are used for the overlay

Other aggregate packaging may be available. Contact your Sherwin-Williams representative for details. For a colored overlay, add colorant at the ratio recommended below.

Colors in Resuflor PT 250: Use colorants at a rate of 1/4 unit (3 ounces) per 3-bag mix. Standard colorants in White, Light Gray, Yellow and Rotunda Red will not impart total hide. Use these colorants at a rate of 1/2 unit (8 ounces) per 3-bag mix.

Colors in Resuflor MPE and Resuflor PT Topcoat: Use colorants at a rate of one unit per 3-gallon mix. Standard colorants — White, 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.

Cove: A seamless, smooth transition can be created between the flooring and wall. Call technical support for assistance or see bulletin on Cove Installation.

#### LIMITATIONS:

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

## **PRIMER - RESUFLOR MPE**

Resuflor PT 250 is applied over Resuflor MPE primer that is still wet or sticky — within 4 hours. It is critical that all concrete is covered to ensure proper adhesion of the overlay.

**NOTE:** The kits come with enough Resuflor MPE to prime at 180-220 square feet per gallon for 1/4" PT 250 applications. If Resuflor PT 250 is being put down at 3/16" and/or the floor is extremely porous or rough, additional primer will be needed.

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. 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 Resuflor MPE will cover:

220 square feet at 7 mils

200 square feet at 8 mils

180 square feet at 9 mils

**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:** Resuflor MPE applied thin may "bridge" holes and cracks momentarily before soaking in — make sure the previously squeegeed area is overlapped (halfway).

**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.

### **MORTAR - RESUFLOR PT 250**

Resuflor PT 250 is applied over Resuflor MPE primer that is still wet or sticky — within 4 hours. It is critical that all concrete is covered to ensure proper adhesion of the overlay.

**COVERAGE RATE:** A 3-bag mix of Resuflor PT 250 will nominally cover (finished floor):

56 square feet at 1/4"

70 square feet at 3/16"

**PREMIX RESUFLOR MPE PART A** using a Jiffy<sup>®</sup> mixer blade and slow speed drill. For full-filled 5-gallon units, pour out 1 gallon into a measuring container. Then, pour the measured Part A into a mixing pail.

**COLORS:** Premix colorant before adding to Resultor MPE to ensure uniform color. Pour out 1/4 pint (1/2 cup, 4 ounces) into a measuring container. Add colorant to Resultor MPE Part A and mix using a Jiffy\* mixer blade and slow speed drill.

## **DESIGNED** TO PERFORM

**POUR THREE BAGS OF PART C** into the mortar mixer. Begin mixing.

## ADD RESUFLOR<sup>™</sup> MPE PART B (0.5 gallon) TO RESUFLOR MPE PART A (1 gallon).

**POTLIFE:** Mix only enough material that can be screeded and troweled in a 15-minute period.

**MIX FOR 1 MINUTE** or until thoroughly mixed using the Jiffy<sup>®</sup> mixer blade and slow speed drill.

**POUR THE MIXED PARTS A AND B** into the mortar mixer. Mix until uniform (approximately one minute). The resin needs to only wet out the sand.

POUR THE MIXED MATERIAL into the screed box.

To achieve a 1/4" finished floor, set the screed box at 5/16".

To achieve a 3/16'' finished floor, set the screed box at 1/4''.

NOTE: If the material is too thick, it will be more difficult to level.

**SCREED** material over desired area. **NOTE:** The use of spiked shoes will allow freedom of movement on the unfinished overlay.

CAUTION: The surface will be slippery.

USE HAND TROWELS for edges and touch-up.

**POWER TROWEL MATERIAL** to compact and achieve finished texture with an epoxy power trowel (<50 rpm) as soon as possible.

**ALLOW RESURFACER TO CURE** 6-8 hours at 75°F before sealing. Allow more time at low temperatures.

USE OF A TERRAZZO GRINDER OR SURFACE GRINDER to

remove high spots and ensure a continuous surface is highly recommended. Vacuum up the loose material.

### **GROUT COAT - RESUFLOR PT TOPCOAT**

Resuflor<sup>™</sup> PT 250 must be sealed with one coat of Resuflor PT Topcoat.

**COVERAGE RATE:** One gallon of Resuflor PT Topcoat will cover:

321 square feet at 5 mils wet/dry film

267 square feet at 6 mils wet/dry film

229 square feet at 7 mils wet/dry film

200 square feet at 8 mils wet/dry film

**PREMIX RESUFLOR PT TOPCOAT PART A** using a Jiffy<sup>®</sup> mixer blade and slow speed drill.

**COLORS:** Premix colorant before adding to Resuflor PT Topcoat to ensure uniform color. Add colorant to Resuflor PT Topcoat Part A and mix using a Jiffy<sup>®</sup> mixer blade and slow speed drill.

ADD RESUFLOR MPE/RESUFLOR PT TOPCOAT PART B TO RESUFLOR PT TOPCOAT PART A and mix well using a Jiffy<sup>®</sup> mixer blade and slow speed drill.

**MIX FOR 2-3 MINUTES** using a Jiffy<sup>®</sup> mixer blade. **POTLIFE:** Mix only enough material that can be applied within 20 minutes.

**POUR THE MIXTURE IN A BEAD** over the cured Resultor PT 250 mortar or epoxy. **WITH A FLAT SQUEEGEE, SPREAD THE RESUFLOR PT TOPCOAT.** Sealing without backrolling will minimize texture. **BACKROLL WITH A 3/8" NAP ROLLER** for a uniform finish. **NOTE:** The use of spiked shoes will allow freedom of movement on the unfinished overlay. **CAUTION:** The surface will be slippery.

**NOTE:** If backrolling, to ensure a more uniform texture, a separate individual may finish roll by pushing or pulling a roller across the floor in one direction. Unpigmented Resuflor PT Topcoat will dry "milky" if put down at more than 6 mils.

If Resuflor PT Topcoat is being topcoated at floor temperatures of 65-90°F, it does not need to be sanded if applied within 24 hours.

## TOPCOAT - RESUTILE<sup>™</sup> HTS 100

**PREMIX PART A FOR 3 MINUTES USING A JIFFY\* MIXER BLADE** with slow speed drill. **POTLIFE:** Mix only enough material that can be used in a two-hour period. **NOTE:** Once opened, this material cannot be resealed for later use.

**COLORS:** Premix colorant before adding to Resutile HTS 100 to ensure uniform color. Add colorant to Resutile HTS 100 Part A and mix using a Jiffy<sup>®</sup> mixer blade and slow speed drill. Use colorants at a rate of one unit per 1-gallon unit of Resutile HTS 100.

POUR PART C INTO PART A while mixing.

#### CONTINUE TO MIX AND ADD PART B.

**MIX FOR 3 MINUTES** using a Jiffy® mixer blade and slow speed drill. Pour into application tray.

**APPLY RESUTILE HTS 100** at the rate of 500 square feet / gal 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. Dip the roller in the coating and lightly roll out excess in the application tray. Apply two 8- to 10-foot-long paths on the concrete, making one stroke left to right and one right to left. Rewet the roller and apply two more paths adjacent to the first pair. Rewet the roller and apply a third pair adjacent to the second.

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. Insufficient material will cause the floor to look non-uniform.

**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:** When multiple applicators are used to apply material, inconsistencies between areas may result. To ensure a more uniform finish, an individual outfitted with spiked shoes may finish by pushing or pulling a roller across all applicator areas.

**ALLOW COATING TO DRY 24 HOURS** at 75°F and 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 all SDSs 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 40-90°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**

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