RESUFLOR™ QUARTZ TQ

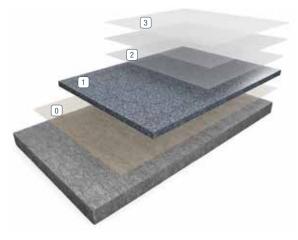
Sherwin Williams Resuflor Quartz TQ is a troweled decorative quartz system comprised of high solids epoxies and colored quartz aggregate. Ideal for resurfacing interior concrete floors, the resulting floor is smooth, aesthetically pleasing and durable. The primary system has a satin, high wear urethane topcoat. Gloss options are also available.

BENEFITS

- Heavy-duty and long-wearing
- High aggregate load accommodates slope to drain on irregular substrates
- · Seamless and impervious
- Wide range of standard and custom colors

USES

- Healthcare and pharmaceutical facilities
- · Laboratories, clean rooms
- Food and beverage facilities
- Schools and universities
- · Locker rooms and showers



Primer

2 Grout Coats (2 Coats)

1 Mortar

3 Seal Coat

TYPICAL PHYSICAL PROPERTIES

Color	Standard pre-blended colors; custom color matching available
Abrasion Resistance ASTM D4060 Taber Abraser CS-17 Wheel, 1,000 gram load, 1,000 revolutions.	18 mg/loss Result based on independent lab testing of Resutile™ HTS
Hardness, Shore D ASTM D 2240	80-85 @ 0 sec 75-80 @ 15 sec
Compressive Strength ASTM C 579	11,000 psi
Tensile Strength (binder resin) ASTM D2370	8,000 psi
Adhesion to Concrete ASTM D4541	450 psi (concrete failed)
Adhesion to Concrete ASTM D7234	732 psi (concrete failed)
Flammability ASTM D635	182 mm/min

Results are based on conditions at 77°F

INSTALLATION

Sherwin-Williams materials shall only be installed by approved contractors. The following information is a guideline for the installation of Resuflor Quartz TQ. 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 4-6. Refer to Form G-1. Consult the Sherwin-Williams Technical Service Department if oil or grease is present.

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	5, 15, 165, or 750 gals
<50 g/L 0 g/L	Troweled Quartz Mortar	MPE + Trowel Grade Quartz	2:1	13 sq ft / mix*	5, 15, 165 or 750 gals 50 lbs
<50 g/L	1st Grout Coat	UVE	2:1	160 sq ft / gal	15 gals
<50 g/L	2nd Grout Coat	UVE	2:1	200 sq ft / gal	15 gals
<50 g/L	Topcoat	HTS 100	pre-measured kit	535 sq ft / gal	1.09 or 5.5 gals

^{*}See mortar mixing instructions

ALTERNATE SYSTEM #1

<50 g/L	Topcoat	UVE	2:1	200-267 sq ft /gal	15 gals
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ALTERNATE SYSTEM #2

<50 g/L	Topcoat	4850	2:1	200-267 sq ft /gal	3 or 15 gals
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GENERAL PRODUCT INFORMATION

STANDARD QUARTZ BLENDS / SOLIDS - 50 POUND BAG / BOX

Blend ratio for the Hybrid Troweled Quartz is 5 parts Q-Grade (trowel), 1.5 parts F-Grade (broadcast). Custom blends are also available.

OPTIONS

Traction: To improve traction in slip hazard areas, consult your representative about anti-slip aggregate options.

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.

APPLICATION - PRIMER - RESUFLOR MPE

The troweled quartz mortar is applied over Resuflor MPE primer applied at 180-220 sq ft at 7-9 mils per gallon and must be applied while the Resuflor MPE is still wet or sticky--within 4 hours. If you prefer to not work in the wet primer, silica sand can be lightly broadcast into the wet primer and allowed to set up before overlaying.

COVERAGE RATE: One gallon of Resuflor MPE will cover:

180 sq ft at 9 mils wet/dry film

200 sq ft at 8 mils wet/dry film

220 sq ft at 7 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).

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	75°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 uniformed appearance. Backrolling is required to remove the puddles and squeegee lap marks in order to obtain uniform texture and a consistent mil thickness.

APPLICATION - MORTAR - TROWELED GRADE QUARTZ

COVERAGE RATE will depend upon thickness. One mix of Resuflor Quartz TQ will nominally cover (finished floor): 13 sq ft at 3/16".

POUR 6-1/2 QUARTS OF RESUFLOR HYBRID PRE-BLENDED QUARTZ into the mortar mixer. Begin mixing.

ADD RESUFLOR MPE PART B (1 PINT) TO RESUFLOR MPE PART A (1 QUART). 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® mixer blade and slow speed drill.

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

POUR THE MIXED MATERIAL into the screed box. If the material is too thick or thin, it will be more difficult to level.

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

USE HAND TROWELS to compact and smooth material.

NOTE: This flooring system cannot be ground to remove defects, because the color of the quartz is changed in a manner that is not consistent. Extreme care must be taken to ensure that the floor is troweled smooth with no trowel marks or open surface areas evident. It is extremely difficult to see troweling defects with normal overhead lighting. Therefore, it is recommended that all overhead lighting be turned off and work lights be used at the floor level to light the area during application.

ALLOW MATERIAL TO CURE 6-8 HOURS at 75°F before applying seal coat. Allow more time at low temperatures.

APPLICATION - GROUT COATS - RESUFLOR UVE

The troweled surface of Resuflor Quartz TQ can be sealed with a standard epoxy for applications that do not require UV light stability; however, for best results over the life of the troweled floor, it should be sealed with an ultraviolet resistant epoxy.

The grout coating should be applied in multiple thin coats. The intent is to fill in any voids without leaving excessive millage on the surface.

COVERAGE RATE: A gallon of Resuflor UVE will cover: 160 sq ft at 10 mils wet/dry film.

PREMIX PART A using a Jiffy® mixer blade and slow speed drill. Pour out 2 gallons into a measuring container. Then, pour the measured Part A into a mixing pail.

ADD RESUFLOR UVE PART B TO PART A (3 GALLONS TOTAL MIX). 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	75°F	80°F	90°F
50 min	40 min	35 min	30 min	25 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 FLAT SQUEEGEE at an even speed with sufficient down pressure to apply the thinnest coat. **NOTE:** The use of spiked shoes will allow freedom of movement on the wet floor. **CAUTION:** The surface will be slippery.

BACKROLL THE MATERIAL with a 3/8" nap roller for a smooth uniformed appearance. Backrolling is required to remove the puddles and squeegee lap marks in order to obtain uniform texture and a consistent mil thickness. NOTE: Get off the Resuflor UVE as soon as possible.

ALLOW SYSTEM TO CURE 8-10 hours at 75°F.

COVERAGE RATE: A gallon of Resuflor UVE will cover: 200 sq ft at 8 mils wet/dry film.

REPEAT STEPS used for mixing and spreading of the first seal coat.

Resuflor UVE must be topcoated with Resutile HTS 100 at floor temperatures of 65-90°F within 24 hours.

APPLICATION - TOPCOAT - RESUTILE 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.

POUR PART C INTO PART A while mixing.

CONTINUE TO MIX AND ADD PART B.

MIX FOR 3 MINUTES using a Jiffy $^{\circ}$ mixer blade and slow speed drill. Pour into application tray.

APPLY RESUTILE HTS 100 at the rate of 535 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. Dip the roller in the coating and lightly roll out excess in the application tray. Apply two 8- to 10-footlong 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 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 spike shoes may finish by pushing or pulling a roller across all applicator areas.

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.

APPLICATION EQUIPMENT

BRUSH / ROLLER

Use 1/4" phenolic core rollers and professional quality, medium stiff natural bristle brushes.

TROWEL

Use steel finishing trowel or epoxy mortar power trowel such as those manufactured by Superior.

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 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.