RESUFLOR™ MECHANICAL ROOM

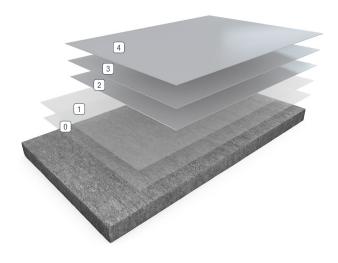
Sherwin-Williams Resuflor Mechanical Room is a flexible flooring system ideal for areas subjected to machine vibration. It is comprised of a prime coat of a flexible waterproofing membrane applied at 3-5 mils. This is followed by two additional applications of the same coating at 20 mils per coat, with the second 20 mil coat receiving a broadcast of silica sand. The grout coat is a high solids epoxy applied at 15 mils, followed by a topcoat of light-stable, satin finish urethane for added chemical resistance and durability.

BENEFITS

- Bridges hairline cracks in concrete; lowers risk of further damage
- Deters cracks from reflecting upward to damage the floor surface
- · Absorbs vibration from equipment and machinery
- Provides excellent waterproofing properties

USES

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



O Primer

- 3 Reinforcement Coat
- 1 1st Flexible Build Coat
- 4 Topcoat
- 2 2nd Flexible Build Coat

PHYSICAL PROPERTIES CHART

Hardness, Shore A (epoxy) ASTM D 2240	85 @ 0 sec. 80 @ 15 sec.
Hardness, Shore D (epoxy) ASTM D 2240	40 @ 0 sec. 35 @ 15 sec.
Tensile Strength (7 mils, 3-day cure) ASTM D2370	18,530 psi
Elongation (7 mils, 3-day cure) ASTM D2370	125%
Adhesion ACI 503R	300 psi concrete failure
Abrasion ASTM D 4060, CS-17 Wheel, 1,000 cycles	18 mg/loss Result based on independent lab testing of Resutile™ HTS
Flammability ASTM D635	182 mm/min

Results are based on conditions @ 77 $^{\circ}\mathrm{F}$

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 Mechanical Floor. 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 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 3-5

VOC MIXED	APPLICATION STEP	MATERIAL	MIX RATIO	THEORETICAL COVERAGE	PACKAGING
<200 g/L	Primer	Flex	1:1	321-535 sq ft/gal	10 gals
<200 g/L	1st Flexible Build Coat	Flex	1:1	80 sq ft/gal	10 gals
<200 g/L	2nd Flexible Build Coat	Flex	1:1	80 sq ft/gal	10 gals
<50 g/L 0	Reinforcement Coat	MPE	2:1	107 sq ft/gal	3 or 15 gals
<50 g/L	Topcoat	HTS 100	pre-packaged kit	535 sq ft/gal	1.09 or 5.5 gals

ALTERNATIVE SYSTEM #1

	<200 g/L	Primer	Flex	1:1	321-535 sq ft/gal	10 gals
	<200 g/L	Membrane Build Coat	Flex	1:1	80 sq ft/gal	10 gals
	<200 g/L 0	1st Broadcast Coat	Flex 5310-8 Dry Silca Sand (20-40 mesh)	1:1	80 sq ft/gal 0.4-0.5 lbs/sq ft	10 gals 50 lbs
	<50 g/L 0	2nd Broadcast Coat	MPE 5310-8 Dry Silca Sand (20-40 mesh)	2:1	107 sq ft/gal 0.4-0.5 lbs/sq ft	3 or 15 gals 50 lbs
	<50 g/L	Grout Coat	UVE	2:1	107 sq ft/gal	15 gals

GENERAL PRODUCT INFORMATION

OPTIONS:

Colors in Resuflor Flex: Use colorants at a rate of one unit per 4-gallon mix. Standard Colorants - White, Yellow and Light Gray will not impart total hide. Use these colorants at a rate of two units per 4-gallon mix.

Colors in Resuflor MPE: Use colorants at a rate of one unit per 3-gallon mix. Standard Colorants - White, Yellow and Light Gray 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 Technical Support.

Colors in Resutile HTS 100: Use Colorants at a rate of one unit per 1-gallon mix. Standard Colorants - White, Yellow and Sandy Beige will not impart total hide. Similar colorants also may not hide as well. Refer to Color Selection Guide or consult Technical Support.

LIMITATIONS:

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

Properties of Resuflor Flex: Product designed as primer and build coat only. For enhanced chemical resistance and wear characteristics, product must be topcoated. Thin urethanes should not be applied directly to Resuflor Flex where there is going to be traffic of any kind. The differences in flexibility may lead to premature wear or bond issues.

PRIMER - RESUFLOR FLEX

MIXING AND APPLICATION

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 will depend upon coating thickness. Much of this will soak into porous concrete. A gallon of Resuflor Flex will cover:

535 square feet @ 3 mils wet/dry film

400 square feet @ 4 mils wet/dry film

321 square feet @ 5 mils wet/dry film

PREMIX PART A using a Jiffy® mixer blade and slow speed drill. (Premixing is required for both 2- and full-filled 5-gallon units.) For full-filled, 5-gallon pails, pour out no more than 2 gallons into a measuring container. Then, pour the measured Part A into a mixing pail.

ADD RESUFLOR FLEX PART B TO PART A (4 GALLONS TOTAL MIX)

For full-filled 5-gallon pails, pour out 2 gallons 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 1 Part A to 1 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 properties.)

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.

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 Flex 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 Resuflor Flex.

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

1st FLEXIBLE BUILD COAT - RESUFLOR FLEX

COVERAGE RATE: A gallon of Resuflor Flex will cover: 80 square feet at 20 mils wet/dry film.

REPEAT STEPS used for mixing and spreading of the primer coat. A 3/16" notched squeegee can be used to increase the thickness applied.

COLORS: Premix Colorants to ensure uniform color. Colorant is added at the rate of 1 unit per 4-gallons 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. **NOTE:** Get off the Resuflor Flex as soon as possible.

Allow the first build coat of Resuflor Flex to set until you can walk on it.

2ND FLEXIBLE BUILD COAT - RESUFLOR FLEX

COVERAGE RATE: A gallon of Resuflor Flex will cover: 80 square feet at 20 mils wet/dry film. Allow the build coat of Resuflor Flex to set until you can walk on it.

REPEAT STEPS used for mixing and spreading of the primer coat. A 1/16" notched squeegee can be used to increase the thickness applied.

TO AVOID INDENTATION/COMPRESSION of heavy objects, Resuflor Flex must be coated with a minimum of 8 mils of Resuflor MPE before traffic or a thin urethane is applied. Resuflor Flex should be set before applying Resuflor MPE. Resuflor Flex must be coated with Resuflor MPE at floor temperatures of 65-90°F within 24 hours.

REINFORCEMENT COAT - RESUFLOR MPE

COVERAGE RATE: One gallon of Resuflor MPE will cover: 160 square feet at 10 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.

APPROXIMATE WORK TIME

65°F	70°F	75°F	80°F	90°F
40 min	30 min	25 min	20 min	15 min

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 A to 1 Part B by volume.

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 NOTCHED 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.

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.

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

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.

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* 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/gallon with a 3/8" (10 mm) 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 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, 50% relative humidity before opening to light traffic. Allow more time at low temperatures, low humidity or for heavier traffic. 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 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.