SHERWIN-WILLIAMS.

SYSTEM GUIDE

RESUFLOR[™] AQUA TOPFLOOR

Sherwin-Williams Resuftor Aqua Topfloor

represents a family of flooring systems all built using a single revolutionary water-based resin technology. System designs include a coating and a 1/16" to 1/8" slurry. All systems can be installed quickly, are environmentally conscious and are NOT susceptible to problems associated with moisture from the concrete.

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BENEFITS

- No testing for moisture necessary
- All systems breathe
- Rapidly installed
- Seamless
- Good chemical resistance
- Can be applied to "green" concrete
- 100 times the permeability of standard epoxy floor systems
- Water cleanup

USES

- Warehouses
- Aircraft hangars
- Manufacturing flooring
- Garages

LIMITATIONS

• Protect material from freezing

TYPICAL PHYSICAL PROPERTIES

Binder Resin 3460 Viscosity, mixed	1,800-2,400 cps		
Pot Life	2-3 hours		
Hardness, @ 14 days Shore D ASTM D 2240	80		
Adhesion ACI 503R	300 psi concrete failure		
System Cure Time Dry to touch Recoat Light Traffic	12-16 hours 12 hours 12 hours		
Resistance to Elevated Temperatures MIL-D-3134J	No slip or flow at required temperature of 158°F		
Impact Resistance ASTM D 4226	Greater than 160 in./lbs (160 lb. load)		
Tensile Strength ASTM E 96-95	2-3 hours		
Hardness, @ 14 days Shore D ASTM D 2240	1,200 psi		
Flexural Strength ASTM C 580	1,200 psi		
Compressive Strength ASTM C 579	5,800 psi		
Permeability	1.4 x 10 ⁻⁷		

ASTM C = Mortar System ASTM D = Resin only

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 Resuflor Aqua Topfloor. 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 @ 1/16" - 1/8" - SURFACE PREP PROFILE CSP 4-5

VOC MIXED	APPLICATION STEP	MATERIAL	MIXED RATIO	THEORETICAL COVERAGE PER COAT CONCRETE	PACKAGING
<50 g/L	Primer	3460 20% potable water	1:4	250 sq. ft./gal	1.25 or 5 gals
<50 g/L 0	Slurry Coat 1/16"	3460 5150	1:4	90 sq. ft./2.5 gals 30 lbs. / 2.5 gals	1.25 or 5 gals 30 lbs.
<50 g/L 0	Slurry Coat 1/8"	3460 5150	1:4	90 sq. ft./2.5 gals 30 lbs. / 2.5 gals	1.25 or 5 gals 30 lbs.
0	Skid Inhibiting Broadcast	5310 20-40 mesh	To Excess	0.7 / sq. ft.	50 lbs.
<50 g/L	Grout Coat	3460	1:4	160-200 sq. ft./gal	1.25 or 5 gals
<50 g/L	Topcoat	3462	3:1	160-200 sq. ft./gal	4 or 20 gals

For additional topcoat options, consult the Sherwin-Williams Topcoat Selection Guide or contact your Sherwin-Williams representative.

PRIMER

MIXING AND APPLICATION

- 1. Premix 3460B (hardener) using a low-speed drill and Jiffy blade. Mix until uniform, exercising caution not to introduce air into the material.
- 2. Add 1 part 3460A (resin) to 4 parts 3460B (hardener) plus 20% potable water. Mix with low-speed drill and Jiffy blade until uniform. To ensure proper system cure and performance, strictly follow mix ratio recommendations.
- 3. 3460 may be applied via spray, roller or brush. Apply at 250 square feet per gallon to yield 6-8 mils WFT evenly with no puddles making sure of uniform coverage. Coverage will vary depending upon porosity of the substrate and surface texture.
- 4. Two applications of 3460 Primer may be necessary to adequately seal and fill the surface imperfections, and protect against outgassing. This can be accomplished by applying two tight, flat squeegee coats (pushing not pulling) in opposite directions at 15-20 minutes apart.

SLURRY @ 1/16"

MIXING AND APPLICATION

- Premix 3460 Part B using a low-speed drill and Jiffy blade. Mix for one minute until uniform, exercising caution not to introduce air into the material.
- 2. Add 1 part 3460A (resin) to 4 parts 3460B (hardener) by volume. Mix with low-speed drill and Jiffy blade until uniform. Slowly add up to 30 lbs. 5150 AquArmor S Aggregate per 2.5 gallons of mixed material. Mix with low-speed drill and Jiffy blade until uniform and no lumps remain.
- 3. Immediately pour the mixed material onto the substrate and pull out using a 1/4" v-notched trowel or 1/4" red rubber squeegee.
- 4. Allow material to self-level, the surface should be lightly backrolled with a looped roller to help smooth. Use a spiny roller to aid in the release of air.
- 5. Allow to cure 18 hours minimum before applying topcoat. (Cure times vary depending on environmental conditions.)

FOR AQUARMOR S:

SLURRY COAT @ 1/8" SKID INHIBITING MIXING AND APPLICATION

- 1. Premix 3460 Part B using a low-speed drill and Jiffy blade. Mix until uniform, exercising caution not to introduce air into the material.
- Add 1 part 3460A (resin) to 4 parts 3460B (hardener) by volume. Mix with low-speed drill and Jiffy blade until uniform. Slowly add up to 30 lbs. of 5150 AquArmor S Aggregate per 2.5 gallons of mixed material. Mix with low-speed drill and Jiffy blade until uniform and no lumps remain.
- 3. Immediately pour the mixed material onto the substrate and pull out using a 1/4" v-notched trowel or 1/4" red rubber squeegee.

- 4. Allow material to self-level. The surface should be lightly backrolled with a looped roller to help smooth. Use a spiny roller to aid in the release of air.
- 5. System must be broadcast with silica sand (5310) 20-40 mesh to build to 1/8" thickness.
- 6. Allow to cure for 18 hours minimum before applying topcoat. (Cure times vary depending on environmental conditions.)

NOTE: Temperatures and environmental conditions may impact leveling. It is acceptable to reduce the aggregate loading up to 10% of the 5150 AquArmor S aggregate to improve leveling. Excess air movement across the surface should be avoided.

GROUT COAT

MIXING AND APPLICATION

- 1. Premix 3460B (hardener) using a low-speed drill and Jiffy blade. Mix until uniform, exercising caution not to introduce air into the material.
- 2. Add 1 part 3460A (resin) to 4 parts 3460B (hardener). Mix with low-speed drill and Jiffy blade until uniform. To ensure proper system cure and performance, strictly follow mix ratio recommendations.
- 3. 3460 may be applied via spray, roller or brush. Apply at 60-200 square feet per gallon to yield 8-10 mils WFT evenly with no puddles making sure of uniform coverage. Coverage will vary depending upon porosity of the substrate and surface texture.

TOPCOAT

MIXING AND APPLICATION

- 1. Premix 3462 Part B using a low-speed drill and Jiffy blade. Mix until uniform, exercising caution not to introduce air into the material.
- Add 3 parts 3462A (resin) to 1 part 3462B (hardener) by volume. Mix with low-speed drill and Jiffy blade until uniform. To ensure proper system cure and performance, strictly follow mix ratio recommendations. Take care not to puddle materials and ensure even coverage.
- 3. Apply 3462 using a tight squeegee coat and backroll with a high quality 3/16" nap roller. Apply at a spread rate of 8-10 mils evenly with no puddles making sure of uniform coverage. Two coats may be required over broadcast AquArmor Slurry system.
- 4. Allow to cure for 12 hours minimum before opening to traffic. (Cure times vary depending on environmental conditions.)

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 sheet 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 $^\circ$ 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.