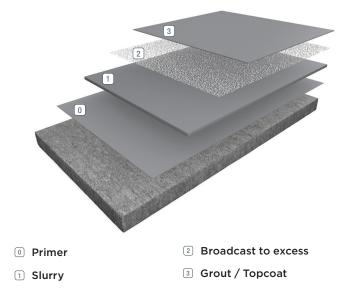
# SHERWIN-WILLIAMS.

## SYSTEM GUIDE

## RESUFLOR<sup>™</sup> AQUA TOPFLOOR AC

#### Sherwin-Williams Resuflor Aqua Topfloor

AC System is designed to provide a 1/8" thick, high gloss, easy-to-maintain floor finish in a hangar or industrial environment. The unique Resuflor Aqua Topfloor technology offers a fast, environmentally friendly installation that is not susceptible to problems associated with moisture in the concrete. The high-performance polyurethane finish coat is resistant to staining and chemical attack from airplane fluids such as jet fuel, acids, alkalis, grease, de-icing salts and Skydrol<sup>™</sup>.



#### **BENEFITS**

- No moisture readings necessary
- Breathable
- Rapidly installed
- Seamless
- Easy to clean
- Good chemical resistance
- Can be applied to "green" concrete
- 100 times the permeability of standard epoxy floor systems
- Water clean up
- Gloss finish

#### USES

- Aircraft hangars
- Warehouses
- Manufacturing flooring

#### LIMITATIONS

- Protect from freezing
- Must be installed at a minimum of 1/8"

#### **TYPICAL PHYSICAL PROPERTIES**

Binder Resin	3460		
Viscosity, Mixed	1,800-2,400 cps		
<b>Cure Time</b> Dry to touch Recoat Light Traffic	12-16 hours 12 hours 12 hours		
Pot Life	2-3 hours		
Hardness, @ 14 days Shore D ASTM D 2240	80		
Tensile Strength ASTM C 307	1,200 psi		
Compressive Strength ASTM C 579	5,800 psi		
Flexural Strength ASTM C 580	1,200 psi		
Adhesion ACI 503R	300 psi concrete failure		
Impact Resistance ASTM D 4226	Greater than 160 in./lbs.		
Permeability ASTM E 96-95	1.4 x 10-7 perm. cm		
Resistance to Elevated Temperatures MIL-D-3134J	No slip or flow at required temperature of 158°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 Aqua Topfloor AC system. 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 of CSP 4-6. 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 (10-32°C). 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.

### **APPLICATION INFORMATION – SURFACE PREP PROFILE CSP 4-6**

VOC MIXED	APPLICATION STEP	MATERIAL	MIXED RATIO	THEORETICAL COVERAGE PER COAT CONCRETE	PACKAGING
<50 g/L	Optional for outgassing Primer	3460 plus 20% potable water	1:4	250 sq. ft./gal	1.25 or 25 gals
<50 g/L 0	Slurry	3460 5150 Aggregate	1:4	80-90 sq. ft. per 2.5 gal 30 lbs. per 2.5 gals @ 1/8"	1.25 gals or 25 gals 30 lb. bag
0	Broadcast	5310 - #7	to excess	0.7 lbs. per sq. ft.	50 lb. bag
<50 g/L	Grout	3460	1:4	100 sq. ft./gal	1.25 or 25 gals
<50 g/L	Topcoat	4410/4411	4:1	400-500 sq. ft./gal	1.25 or 5 gals

For additional topcoat options, contact your Sherwin-Williams representative.

#### PRIMER

#### MIXING AND APPLICATION

- 1. Premix 3460B (hardener) 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) 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 COAT - BROADCAST TO 1/8"**

#### MIXING AND APPLICATION

- 1. Premix 3460B (hardener) using a low-speed drill and Jiffy blade. Mix for one minute until uniform, exercising caution not to introduce air into the material.
- Add 2 quarts 3460A (resin) to 2 gallons 3460B (hardener) by volume. Mix with low-speed drill and Jiffy blade until uniform. Slowly add up to 30 lbs. 5150 Resuflor Aqua 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) to build to 1/8" thickness.
- 6. Allow to cure 18 hours minimum before applying grout coat. (Cure times vary depending on environmental conditions.)

**Note:** Temperatures and environmental conditions may impact levelling. It is acceptable to reduce the aggregate loading up to 10% of the 5150 Resuflor Aqua aggregate to improve levelling. Excess air movement across the surface should be avoided

### **GROUT COAT**

#### MIXING AND APPLICATION

- 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. To ensure proper system cure and performance, strictly follow mix ratio recommendations. Take care not to puddle materials and ensure even coverage.
- 3. Apply 3460 using a tight squeegee coat and backroll with a high quality 3/16" nap roller. Apply at a spread rate of 100 sq. ft. per gallon evenly with no puddles making sure of uniform coverage. Two coats may be required over broadcast Resuflor Aqua Slurry system.
- 4. Allow to cure 12 hours minimum before applying topcoat. (Cure times vary depending on environmental conditions.)

### TOPCOAT

#### MIXING AND APPLICATION

- 1. Premix 4410/4411A (resin) 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 4 parts 4410/4411A (resin) to 1 part 4410/4411B (hardener) by volume. Mix with low-speed drill and Jiffy blade for three minutes until uniform. To ensure proper system cure and performance, strictly follow mix ratio recommendations.
- 3. Apply 4410/4411 using a 1/4" nap roller at a spread rate of 400-500 square feet per gallon, evenly, with no puddles making sure of uniform coverage. Take care not to puddle materials and ensure even coverage.
- 4. Allow to cure 24 hours minimum before opening to light foot traffic.
- 5. To reduce or eliminate nonskid texture, grind or sand prior to application of topcoat.

### **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 (40°F-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.