FASTOP™ TOPFLOOR URETHANE SLURRY SYSTEM

Sherwin-Williams FasTop Topfloor Urethane

Slurry System is a self-leveling slurry to be applied at 3/16" thickness and broadcast to yield a 1/4-3/8" finished system. FasTop Topfloor can be applied with a pin rake, screed rake or flat trowel. It is designed to protect concrete, wood and steel substrates from thermal shock, impact, corrosion, chemical attack and abrasion.

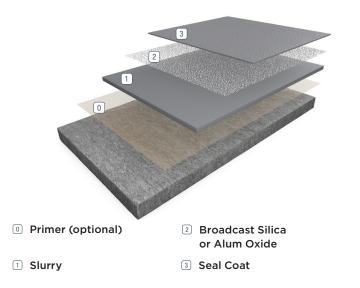
BENEFITS

- Can be applied to "green" concrete
- Rapid cure and hardness development
- · Water based
- · Hot cooking oil and steam resistance
- Low temperature cure
- · Will not lose bond due to thermal shock
- Impact resistant
- · Moisture resistance
- · No moisture testing required.
- Acceptable for use in USDA inspected facilities
- Resistant to:

28 Day Exposure @ 72°F	Result		
	NE= No Effect		
Alcohol	NE		
Ethylene Glycol	NE		
Fats, Oils & Sugars	NE		
Gasoline, Diesel & Kerosine	NE		
Hydrochloric Acid (<35%)	NE		
Lactic Acid (Milk)	NE		
Mineral Oils	NE		
Most Organic Solvents	NE		
Muriatic Acid	NE		
Nitric Acid (<10%)	NE		
Nitric Acid (<30%)	Slight Softening		
PM Acetate	NE		
Phosphoric Acid (<50%)	NE		
Potassium Hydroxide (<50%)	NE		
Sodium Hydroxide (<50%)	NE		
Sulfuric Acid (<50%)	Slight Gloss Loss		
Water	NE		
Xylene	NE		

USES

- Food processing kitchens
- · Commercial kitchens
- Food and beverage plants
- Sugar processing plants
- Meat and poultry plants
- Restrooms and concession stands



TYPICAL PHYSICAL PROPERTIES

Color	Red, Light Gray or Dark Gray		
Decorative Upgrade	Selected Ceramic Carpet Blends		
Cure Time Recoat Foot Traffic Full Service	4-5 hours 6-8 hours 10-12 hours		
Abrasion Resistance ASTM D 4060, CS-17 Wheel, 1,000 cycles	20-30 mgs lost		
Hardness, Shore D ASTM D 2240	75		
Tensile Strength ASTM C 307	600 psi		
Compressive Strength ASTM C 579	5,000 psi		
Flexural Strength ASTM C 580	3,700 psi		
Adhesion ACI 503R	300 psi concrete failure		
Impact Resistance MIL-D-3134, Sec.4.7.3	Withstands 16 ft lbs. without cracking, delamination or chipping		
Flammability	Self-Extinguishing over concrete		
Critical Radiant Flux ASTM E 648	>1.0		
Smoke Density ASTM E 662	287-346		
Coefficient of Friction ASTM D 2047	>0.80		
Service Temperature at 3/16"	-50°F - 300°F		
Shrinkage	Nil		
Water Absorption	Nil		

LIMITATIONS

· Protect material from freezing

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 FasTop Topfloor Urethane Slurry 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 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 Sherwin-Williams system filler. For recommendations, consult the Sherwin-Williams Technical Service Department.

LIMITATIONS

The substrate must be structurally sound and cleaned of any foreign matter that will inhibit adhesion.

Do not apply in temperatures below 40°F or above 85°F or when relative humidity is greater than 85%. If substrate is not concrete or metal as described in Surface Preparation Form G-1, then do not apply. Call Sherwin-Williams Technical Service Department for recommendation. Working time is reduced with air movement and high humidity.

If encountering concrete outgassing when installing FasTop Topfloor, please discontinue installation and apply 3477 Epoxy Water Emulsion Primer/Sealer. Allow to dry until tack free and proceed with the FasTop Topfloor installation.

- Do not featheredge.
- Do not mix partial units.
- Do not hand mix. Do not let mixed material sit in a bucket, even a 2-3 minute delay in pouring will reduce working time.
- Do not apply to cracked or unsound substrates.
- Do not install outside. Call Sherwin-Williams Technical Service Department.

Full chemical resistance is achieved after a 7-day cure. Consult the Sherwin-Williams Technical Service Department for specific chemical resistance.

TEMPERATURE

Throughout the application process, substrate temperature should be 40°-85°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 — SURFACE PREP PROFILE CSP 4-6

VOC MIXED	APPLICATION STEP	MATERIAL	MIXED RATIO	THEORETICAL COVERAGE PER COAT CONCRETE	PACKAGING
0 <50 g/L 0	Cove Base	4040 4060 5055	2:1 1 unit	300 sq. ft. / gal 15-20 lin ft @ 6" cove 1" radius 30 lbs.	1.5, 3,15 gals Short Filled Gallons 30 lbs.
<200 g/L	Optional Primer for outgassing	3477	2:1	250 sq. ft./gal	3 or 15 gals
<50 g/L 0	Slurry 3/16" Broadcast Standard Dry Silica Sand	4050 5050	Pre-measured unit 44 lbs. To Excess	25-30 sq. ft./ unit @ 1/4" 16-20 sq. ft./ unit @ 3/8" 44 lbs.	2 gals (short filled) 44 lbs.
0	20-40 mesh	5310-8		500 lbs. / 1,000 sq.ft.	50 lbs.
<50 g/L 0	Seal Coat	4090TC 5095	Pre-measured A and B components Plus 8 lbs. aggregate (GP5095) TC = 1.25 gallons per kit	80-100 sq. ft./ per unit	0.9 gal 8 lbs.
<50 g/L 0 0	Decorative upgrade Slurry 3/16" Broadcast Quartz	4050 5050 5900F	Pre-measured unit 44 lbs. To Excess	25-30 sq. ft./ unit @ 1/4" 16-20 sq. ft./ unit @ 3/8" 44 lbs. 500 lbs. / 1,000 sq.ft.	2 gals (short filled) 44 lbs. 50 lbs.
<100 g/L	Seal Coat	3746	2:1 Premeasured units	250 sq. ft./gal	3 or 15 gals

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

COVE BASE

Cove base should be installed prior to the floor. Tape out cove with duct tape or a good quality masking tape. Terrazzo strips will also work.

Priming: Prime wall with 4040 FasTop Urethane Primer. Primer only has a 10-minute pot life. Be sure to prime entire surface and about halfway onto tape. Prime only what can be installed within 30 minutes. Begin installing cove base right away. No need to wait for primer to tack up.

Mixing: Do not mix partial units. The fine aggregate and pigment can and will separate. A drill and a paddle work the best, but a KOL mixer works well also. Mix pre-measured unit of 4060A for one minute. Add 4060B pre-measured unit and mix. Slowly add 5055 aggregate and mix until thoroughly wet out. Immediately pour mixed material out of bucket, in a bead, next to the wall. Rough apply cove mortar using a trowel. Do not worry about trowel marks at this time; just get all the mixed material applied to the wall. Material will need to be finished within approximately 20 minutes depending on temperature. Placing a halogen light next to cove base will cast shadows and assist on finishing the cove base with minimal waves and/or trowel marks. Use a minimum of a 3/4" radius cove trowel and finish cove base. Any smaller may result in a loss of the radius once the floor is tied in. Lightly misting cove trowel with water, as a trowel lube, works well. Do not use isopropyl alcohol. Carefully remove tape and finish rough edges. Install floor once cove is hard to the touch, about 2 ½ to 3 hours.

Required Tools: Drill, proper mixing paddle, 3" x 8" trowel works best to apply, margin trowel, and a radius cove trowel – minimum of 3/4" but 1" is preferred.

PRIMER OPTIONAL FOR OUTGASSING

MIXING AND APPLICATION

- Premix 3477A (resin) and 3477B (hardener) separately, using a low-speed drill and Jiffy blade. Mix for one minute until uniform, exercising caution not to whip air into the materials.
- 2. Add 2 parts 3477A (resin) to 1 part 3477B (hardener) by volume. Mix with low-speed drill and Jiffy blade for three minutes until uniform. DO NOT mix more material than can be used within 4 hours. Apply material with a short nap roller at a spread rate of 250 sq. ft. per gallon.

Do not allow to puddle. Any uneven or textured surfaces will require more material than an even surface.

SLURRY COAT

MIXING AND APPLICATION DO NOT PREMIX 4050 PART B HARDENER. OVER EXPOSURE TO AIR AFFECTS PHYSICAL PROPERTIES

- Add 4050A (resin) to 4050B (hardener) and mix with low speed drill and Jiffy mixer for 15-20 seconds, begin adding aggregate.
- Blend materials until no lumps remain. Immediately pour mixed material onto the substrate and pull out using a pin rake, screed rake or flat trowel. Place all material within 15 minutes. Back roll with a loop roller to assist leveling. Allow material to self-level (2-5 minutes).

- 3. Broadcast 5310-8 Silica Sand (20-40 mesh) to saturation (about 500# per 1,000 square feet). As an upgrade, 5900F Ceramic Granule Blends may be used for broadcast for a more decorative finish.
- 4. Allow to cure for a minimum of 3 hrs. before sweeping excess. Allow for more time in temperatures below 55°F. Sweep off excess sand with a clean, stiff-bristled broom. Clean sand can be saved for future use. All imperfections such as high spots should be smoothed before the application of the seal coat. NOTE: Dry Silica Sand distribution is critical to the success of the application. The floor's finished appearance depends on the manner in which the sand has been applied. In grass seed like fashion, allow the sand to fall after being thrown upward and out. **DO NOT THROW DOWNWARD AT A SHARP ANGLE USING FORCE.**

NOTE: At substrate temperature less than 50°F, the application will be adversely affected.

SEAL COAT (STANDARD)

MIXING AND APPLICATION

DO NOT PREMIX Part A or Part B

- Combine 4090TCA (resin) with GP5095 Part C (aggregate) TC = 1.25 gallons per kit and mix until lump-free, approximately 60-90 seconds. The product will thicken and become creamy, which lessens the potential for fine cement pigment balls to form. Add part B and mix until fully combined and uniform in color, approximately 30 seconds.
- 2. Apply 4090TC using trowel, squeegee, grout float and backroll with a 1/4"- 3/8" nap roller to remove any marks and provide uniform texture. In thicker films >10 mils, loop rollers may also prove effective. Spread at a rate of 80-100 square feet per unit, evenly, with no puddles making sure of uniform coverage.

Note: Do not dip and roll. Do not roll out of a puddle or ribbon.

 Allow to cure 6 hours minimum before opening to light foot traffic. If recoating is required, abrade surface before recoating.

SEAL COAT - (UPGRADE)

MIXING AND APPLICATION

(When using decorative quartz broadcast, use clear seal coat options according to the following instructions.)

- Premix 3746A (resin) using a low-speed drill and Jiffy mixer. Mix for one minute until uniform, exercising caution not to whip air into the material.
- Add 2 parts 3746A (resin) to 1 part 3746B (hardener) by volume. Mix with low-speed drill and Jiffy mixer for three minutes.
- 3. Apply 3746 to floor in thin bands and pull out using a red rubber squeegee at a spread rate of 100 sq. ft. per gallon to yield 16 mils WFT. Allow material to cure overnight.

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.