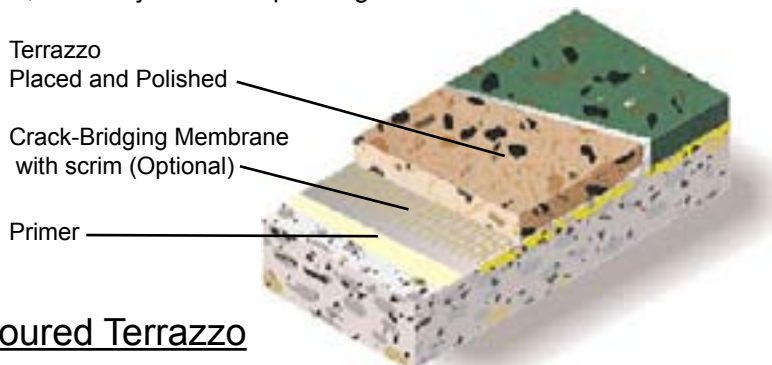




# THIN-SET EPOXY TERRAZZO #1100 System

**General Polymers THIN-SET EPOXY TERRAZZO #1100** is a decorative flooring system combining high solids, pigmented, epoxy resin with colored marble, granite chips or other approved aggregates in a troweled mortar system. This mortar is then ground and polished to reveal the natural beauty of the aggregates surrounded by the coordinating epoxy matrix. Available with a flexible membrane for added adhesion, toughness, durability and waterproofing.



## 1/4" - 3/8" Poured Terrazzo

### Advantages

- Aesthetically pleasing appearance
- Unlimited color and design options
- Durable and wear resistant 1/4" or 3/8" systems
- Chemical and stain resistant
- Fiberglass scrim optional for maximum tensile strength and crack isolation
- Optional waterproofing and/or membrane
- Meets and/or exceeds all NTMA and TTMAC standards
- Meets ADA standards
- Designed for easy to clean and smooth surfaces
- Available with an antimicrobial agent
- 7 Days Chemical Resistance (ASTM D 1308):

	<b>Result</b>
Distilled Water	NE
Mineral Water	NE
Isopropanol	NE
1% Soap Solution	NE
10% Sodium Hydroxide	NE
10% Hydrochloric Acid	NE
5% Acetic Acid	NE
0.25 Detergent Solution	NE
30% Sulfuric Acid	NE
Ethanol	NE

(NE=No Effect)

### Uses

- Commercial, Retail and Institutional facilities
- Animal Care and Animal Research
- Health Care, Research and Pharmaceuticals

### Typical Physical Properties

<b>Binder Resin 3520</b>		
Color		Standard Colors Computerized custom color matching available upon request Able to match NTMA and TTMAC Standard color plates
VOC (Volatile Organic Content) EPA Method 24		< 50 g/L
Hardness, @ 24 hours Shore D		85/65
ASTM D 2240		
Compressive Strength	10,000 psi	68.9 MPa
ASTM D 695		
Tensile Strength	3,000 psi	20.7 MPa
ASTM D 638		
Flexural	4,500 psi	31.0 MPa
ASTM D 790		
Flexural Modulus	500,000 psi	3445 MPa
ASTM D 790		
Abrasion Resistance		70-90 mgs lost
ASTM D 4060, CS-17 Wheel, 1,000 cycles		
Adhesion	300 psi	2.4 MPa
ACI 503R	concrete failure	
Water Absorption		.1%
ASTM D 570		
<b>System</b>		
Critical Radiant Flux		.90
ASTM E 648		
Resistance to		No slip or flow at required
Elevated Temperatures		temperature of 158°F
MIL-D-3134J		
Indentation		None
MIL-D-3134J		
Impact Resistance		Withstands 16 ft lbs
MIL-D-3134, Sec.4.7.3		without cracking, delamination or chipping
Thermal Coefficient of Linear Expansion		25 x 10 <sup>-6</sup>
ASTM D 696		in/in/°

## Installation

General Polymers materials shall only be installed by approved contractors. The following information is to be used as a guideline for the installation of the **THIN-SET EPOXY TERRAZZO #1100 System**. Contact the Technical Service Department for assistance prior to application.

## Surface Preparation – General

General Polymers 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 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 Technical Service Department.

## Temperature

Throughout the application process, substrate temperature should be 60°F – 90°F. Substrate temperature must be at least 5°F above the dew point. Applications on concrete substrates 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	MATERIAL	MIX RATIO	THEORETICAL COVERAGE PER COAT CONCRETE	PACKAGING	
<100 g/L 0	Optional Membrane Optional Scrim	3556 FS38-4.4 oz.	1:1	40 sq. ft. / gal	2 or 10 gals
<50 g/L 0	<b>Option #1</b> Primer	3579	2:1	250 sq ft / gal	3 or 15 gal
<50 g/L 0	Mortar @ 1/4"	3520 Marble, Glass, Granite chips or other approved aggregates	4:1 #0 #1	60-70 sq. ft. / 5 gals 50# 100#	5 -250 gals 50 lb. bag
0		5270		25#	
<50 g/L 0	<b>Option #2</b> Primer	3579	2:1	250 sq ft / gal	3 or 15 gal
<50 g/L 0	Mortar @ 3/8"	3520 Marble, Glass, Granite chips or other approved aggregates	4:1 #0 #1 #2	40-45 sq. ft. / 5 gals 50# 50# 50#	5 -250 gals
0		5270		25#	50 lb. bag
<50 g/L	Grout	3520	4:1	400-500 sq. ft.	1.25 - 5 gals
<50 g/L	Seal Coat	4401	Single Component	500-750 sq. ft. / gal	1, 5 or 55 gals

**Different optional seal coats - Consult individual Technical Data Sheet for mixing and application instructions.**  
4503 Terrazzo Acrylic Sealer

## Membrane Optional

### Mixing and Application

1. Premix 3556A (resin) using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to introduce air into the material.
2. Add 1 part 3556A (resin) to 1 part 3556B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.
3. Immediately pour the mixed material onto the substrate and pull out using a v-notched red rubber squeegee at a spread rate of 40 square feet per gallon to yield 40 mils WFT. Readings must be taken continuously during application with a wet mil gauge to verify material is being applied at the proper thickness. Allow material to cure overnight at 73°F surface temperature. Material cures slower at lower temperatures.

### Fiberglass Scrim (Optional)

#### Application

1. If optional fiberglass scrim is used, the scrim should be laid into the wet surface of the 3556 EPO-FLEX. **DO NOT** push the scrim to the substrate. The pattern of the scrim should be visible.

## Primer

### Mixing and Application

1. Premix 3579A (resin) using a low speed drill and Jiffy blade. Mix for on minute and until uniform, exercising caution not to introduce air into the material.
2. Add 2 parts 3579A (resin) to 1 part 3579B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.
3. 3579 may be applied via spray, roller or brush. Apply at 250 square feet per gallon to yield 5-6 mils WFT evenly with no puddles making sure of uniform coverage. Coverage will vary depending upon porosity of the substrate and surface texture.
4. Wait until primer is tacky (usually one hour), before applying the mortar. If primer is not going to be topped within open time, broadcast silica sand into resin lightly but uniformly and allow to cure overnight.

## Mortar

### Mixing and Application

1. Premix 3520A (resin) using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to whip air into the material.
2. Add 4 parts 3520A (4 gallons resin) to 1 part 3520B (1 gallon hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform. Add 150 lbs. selected aggregate blend or other approved aggregates and 25 lbs of 5270 Epoxy Filler per 5 gallons of mixed 3520 resin. Continue mixing until all aggregates are wet out.

3. Immediately pour the mixed material onto the substrate and hand or power trowel in place.

4. Allow material to cure 18-24 hours minimum.

### Grinding

#### Rough Grinding

1. Grind with 24 and 80 grit stones or with comparable diamond plugs.

## Grout

### Mixing and Application

1. Premix 3520A (resin) using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to introduce air into the material.
2. Add 4 parts 3520A (resin) to 1 part 3520B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform.
3. Apply using a red rubber squeegee or spring-steel trowel to fill all voids completely.
4. Allow to cure 18-24 hours minimum.

### Grinding

#### Fine Grinding

1. Grind with a minimum 80 - 120 grit stone until all grout is removed from surface. Upon completion, terrazzo shall show a minimum of 70% - 75% of marble chips.

**Repeat Rough Grinding and Grout Coat steps if a high number of large voids still exist.**

## Seal Coat

### Mixing and Application

1. Apply 4401 using a lambs wool applicator. Apply at a spread rate of 500-750 square foot per gallon evenly with no puddles making sure of uniform coverage.
2. Allow to cure 2-4 hours before applying second coat. Allow 24 hours minimum before opening to traffic.

**Different optional seal coats - Consult individual Technical Data Sheet for mixing and application instructions.**

4503 Terrazzo Acrylic Sealer

## 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

Refer to the MSDS sheet before use. federal, state, local and particular plant safety guidelines must be followed during the handling and installation and cure of these materials.

Safe and proper disposal of excess materials shall be done in accordance with applicable federal, state, and local codes.

## Material Storage

Store materials in a temperature controlled environment (50°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 Technical Service Department.

## Shipping

- Destinations East of the Rocky Mountains are shipped F.O.B. Cincinnati, Ohio.
- Destinations West of the Rocky Mountains are shipped F.O.B. Victorville, California.

For specific information relating to international shipments, contact your local sales representative.

## 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(s) offered at the time of publication. Published technical data and instructions are subject to change without notice.

Consult [www.generalpolymers.com](http://www.generalpolymers.com) 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.



## To learn more, visit us at

[www.sherwin-williams.com/protective](http://www.sherwin-williams.com/protective)  
or call 1-800-524-5979  
to have a representative contact you.