

Decorative Epoxy Surfacing System

DIVISION 09 67 24.10 - EPOXY TROWEL APPLIED FLOORING

1. GENERAL

1.1 SUMMARY

This specification covers the installation of a natural stone, decorative, trowel applied surfacer for interior walkways, churches, museums, showrooms, retail stores, and casinos.

1.2 WORK INCLUDED

Furnish all labor and materials to prepare surface and install system in accordance with the following specifications.

1.3 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections apply to this section.

1.4 DELIVERY, STORAGE, AND HANDLING

The materials shall be delivered to the job site in the original factory sealed containers bearing the product name, color, manufacturer's lot number, and precautionary labels. All products shall be manufactured or supplied by Specifier Products, Inc., 985 Graceland Ave., Des Plaines, IL 60016. Materials are to be stored in a dry, enclosed area, protected from exposure to moisture, and maintained at a temperature between 60° F and 85° F.

1.5 INSTALLER QUALIFICATIONS

The installer shall be an established firm regularly engaged in the installation of polymeric flooring systems, with a minimum of five (5) years experience in successfully applying the same or similar systems. The installer shall be financially responsible, and able to supply references of jobs of a similar nature completed within the last five years. Where applicable, applicator shall be approved in writing by the materials manufacturer.

1.6 PROJECT CONDITIONS

- (a) Concrete substrate shall have cured thirty (30) days prior to application. If curing compounds have been used, they must be mechanically removed. Concrete shall have a hover troweled finish, and be free of grease or laitance.
- (b) Concrete subfloors on or below grade shall be adequately waterproofed beneath and at the perimeter of the slab. Substrate interior relative humidity must be below 75%, as measured by a Protimeter, and / or calcium chloride test results must not exceed 5.0 pounds per 1,000 square feet per 24 hours.
- (c) General Contractor shall supply utilities including electric, water, and finished lighting. An air and substrate temperature of between 40° F and 100° F, and a relative humidity of 50% or less shall be maintained during installation and curing. Three grades are available, depending upon installation temperatures. Reference Product Data Sheet.
- (d) Job area shall be free of other trades during installation and curing.

1.7 SUBMITTALS

The installer shall submit a finished sample of the product, color, and texture specified, along with complete product data, and Material Safety Data Sheets. All performance properties and cautions contained therein shall be considered part of this specification.

2. PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS / PRODUCTS

Stonecarpet, as manufactured by Specifier Products, Inc., 985 Graceland Ave., Des Plaines, IL 60016. Wide range of colors are available based upon stone selection.

2.2 DESCRIPTION / PROPERTIES

Stonecarpet shall be installed at a minimum 3/8" thickness consisting of (see Section 3 for details):

(a) Lok Down, a 100% solids epoxy binder

COMPONENT PERFORMANCE CHARACTERISTICS

Tensile Strength (ASTM D-638)	8,000 psi.
Elongation (ASTM D-638)	4.0%
Adhesion (ASTM D-4541)	2 500 psi
To Concrete	300 psi. (concrete fails)
Hardness (ASTM D-2240)	
Abrasion Resistance (ASTM D-4060)	35-40 mg.
CS-17, 1kg. load, 1,000 rev	weight loss
Water Absorption (ASTM C-413)	0.6%
Service Temperature	60°F (immersion), 185°F (dry heat)
(b) A selection of dry quartz aggregate, multiple screened to 3mm - 4mm in size.	

2.3 PACKAGING

All materials shall be factory weighed and packaged from a single source manufacturer.

2.4 SUBSTITUTIONS

No substitutions shall be allowed



3. EXECUTION

3.1 EXAMINATION

With installer present, the substrate shall be examined for compliance with requirements for installation tolerances and other conditions affecting performance. (Reference Section 1.6) Proceed with installation only after satisfactory conditions have been corrected.

3.2 PREPERATION

- (a) **CONCRETE** The concrete shall be as necessary. Any deteriorated concrete shall be removed and filled back to the original surface with an epoxy patching material.
- (b) **CRACKS** All cracks shall be routed out to ¼" minimum in width and depth and filled with an elastomeric joint compound.
- (c) <u>CHASING</u>- All areas in which the installed overlayment does not abut against a vertical surface shall be chased. The chase shall be ³/₄"wide with the outside edge chiseled to a straight saw cut with a minimum depth of ¹/₂"
- (d) **FORMS** All forming materials shall be coated with a suitable release agent.

3.3 INSTALLATION

- (a) <u>PRIMER OR VAPOR BARRIER COATING (IF REQUIRED)</u> Primer or vapor barrier shall be installed according to manufacturer's instructions and spread rates.
- (b) **<u>DIVIDER STRIPS (OPTIONAL)</u>** Divider strips shall be installed in accordance with plans as provided by architect or designer and as may be required over joints or cracks.
- (c) <u>SURFACER</u> Surfacer shall be Stonecarpet. Components shall be mixed, screeded to desire height, and hover trowel-applied in strict accordance with manufacturer's instructions. For details, consult Product Data Sheet.
- (d) <u>SEAL COAT (OPTIONAL)</u> If required, components shall be squeegee applied, then back-rolled with a good quality short nap roller according to manufacturer's directions.
- (e) <u>CLEAN-UP</u> All trash and debris shall be properly disposed of and arrangements shall be made to remove all unused material from the job site.

3.4 PROTECTION

The General Contractor shall be responsible for protection of the finished floor from damaged by subsequent trades.

The preceding specifications have been prepared as a guideline for most applications. Product specification is of vital importance to the successful completion of a project. Should you have any questions, please call our Technical Department.

Please contact us for any additional information:



PRODUCT DATA

STONECARPET® Decorative Epoxy Surfacing System

PRODUCT PRESENTATION

STONECARPET® is a decorative, commercial interior flooring system. This natural stone material is composed of individual quartz stones which are carefully sized by multiple screening in an environmentally sound purification process to achieve a stunning and dramatic platform for presentation of products without conflict of décor.

STONECARPET® is a monolithic system which eliminates unsightly hard to maintain grout lines. A new palette of twenty-four standard colors provides a customization of innumerable blending opportunities. This variable blending creates an "exclusivity" of color for every project.

Applicable for new construction or renovations, STONECARPET® is a perfect choice for automobile and motorcycle showrooms, retail stores, churches, museums, art galleries, offices, and public areas.

PRODUCT FEATURES

- unlimited design potential
- → will not flood or puddle
- slip-resistant decorative surface
- easily cleaned and maintained
- long wearing

COVERAGE

Coverage varies with use. One batch of (approximately 200 lbs. of stones and 1.8 gallons of liquids) Stonecarpet will cover approximately 60 square feet at 3/8".

STONECARPET PACKAGING

Unit Size Part A 9.8 gallons 1.2 gallons 0.6 gallons 4x50 lb. bags Total Weight 1 unit 216 lbs.*

INSTALLATION GUIDELINES

Preparation: New concrete should be cured for a minimum of 30 days and installed over an effective moisture vapor barrier. Surface must be clean, dry, and sound - curing agents or other surface contaminents should be removed by mechanical means. Plywood should be primed.

Mixing: Observe all precautions on MSDS and label when using this product. Charge 200 pounds of quartz stones to poly-lined mixing vessel and tumble.

Pre-mix liquids, then blend the entire contents of the pre-measured Part A and Part B liquids with a heavy duty variable speed drill equipped with a jiffy blade for at least 2 minutes.

Add liquid component mixture to stones and blend for an additional 2 - 3 minutes until stones are fully wetted out.

Application: Distribute mix to work area, rake, screed to desired depth, then compact and finish with steel trowel.

Cure: STONECARPET® will be tack-free in 8 - 12 hours at 70°F and suitable for light traffic after 16 - 24 hours. Full curing requires 72 hours.

Clean-up: Clean skin with soap and water, use MEK or proprietary epoxy thinner for equipment.

PHYSICAL PROPERTIES LOK DOWN BINDER CompositionTwo-component amine cured epoxy Colorclear Weight/gal. 8.8 lbs., mixed Solids content100% Mix ratio 2A: 1B by volume PERFORMANCE PROPERTIES, CURED LOK DOWN BINDER Tensile Strength (ASTM D-638) 8,000 psi. Elongation (ASTM D-638)......4.0% Hardness (ASTM D-2240) 79 (Shore D) Adhesion (ASTM D-4541).................. 300 psi. (concrete fails) PERFORMANCE PROPERTIES, STONECARPET SYSTEM Bond Strength (ACI 503R) 300 psi. (concrete fails) Water Absorption (ASTM C-413) 0.6% Flammability (ASTM D-635)...... Self-extinguishing

Impact Resistance (MIL-D-3134F) 16 foot-pounds

Indentation (MIL-D-3134F) No indentation

(concrete fractures)

COLORS

24 standard stone colors, many combinations

SAFETY

Material Safety Data Sheets are available from **SPECIFIER PRODUCTS** and should be consulted prior to use of the product. These products are intended for use by professionals only. Keep away from children and those not trained in the use and potential hazards involved.

STONECARPET is a two-part epoxy system. Part A contains epoxy resins. Part B contains polyamine epoxy adducts. Workers should wear gloves, goggles and body covering clothing when mixing or applying product. Clean up with soap and warm water. Be sure to follow all label and MSDS cautions.

For additional information, visit our web site: www.stonecarpet.com Or e-mail us at - info@stonecarpet.com

CHEMICAL RESISTANCE

Reagent

Acetic Acid 5%L	9
AcetoneL	
Bleach	
Citric Acid-30%	2
Crude Oil	,
Diesel Fuel	ò
Ethylene Glycol	
Fatty AcidsL	
Gasoline	(
Hydrochloric Acid-15%R	Š
Lactic Acid-15%R	?
Methyl Ethyl KetoneL	
Nitric Acid-10%	8
Skydrol	5
Sodium Hydroxide 50%	5
Sulphuric Acid-20%	,
Toluene L	
Urea	
VinegarL	
XyleneL	
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R - Recommended for continuous service L - Limited recommendation, occasional spills

This chart is intended as an aid in evaluating the performance of these systems in various chemical exposures at 75°F. The data is intended as a guide only. In severe or combination exposures, a sample should be tested under actual or simulated use conditions.

WARRANTY

SPECIFIER PRODUCTS warrants its products to conform to its manufacturing standards. SPECIFIER PRODUCTS will replace or refund the purchase price of non-conforming products at the seller's option; such remedy being exclusive of all others and sole remedy available to the buyer. Buyer hereby expressly waives claim to additional damages. Any claim under this warranty must be made in writing within 7 days of discovery of noncompliance and no later than one year from the date of delivery of product. No representative, distributor or applicator of these products is authorized to modify product data or warranty.

IMPORTANT NOTICE

These products are sold subject only to the express warranties contained herein. There are no other warranties by SPECIFIER PRODUCTS of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Buyer agrees that seller assumes no liability for remote or consequential damages of any kind which result from the use or misuse of this product. Information contained herein is based on data believed to be reliable, however, it is the Buyer's responsibility to satisfy itself of the suitability of the product for a particular purpose.

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