

SYSTEM SPECIFICATIONS
SECTION 09400

TERRALITE ® Precast Epoxy Terrazzo Floor & Wall Panel System

PART 1 – GENERAL

1.1 INTRODUCTION

Angelozzi Precast Terrazzo Products, LLC is the manufacturer of TERRALITE ® Precast Epoxy Terrazzo Floor & Wall Panel System and TERRACLIP™ Fastening System. Angelozzi Precast Terrazzo Products, LLC is not liable for defects that are not related to the manufacturing of TERRALITE ® Precast Epoxy Terrazzo Floor & Wall Panel System.

TERRALITE ® is a precast epoxy terrazzo floor & wall panel and is manufactured in 30"x30"x 3/8" and 36"x36"x 3/8" TERRALITE ® is installed with TERRAMORTAR™ a 100% epoxy mortar. All panels are set with a 1/8" joint utilizing the TERRACLIP™ Fastening System and filled with TERRAJOINT™ a 100% epoxy material.

Angelozzi Precast Terrazzo Products, LLC
345 Chestnut Avenue
West Berlin, NJ 08091
(856) 753-3200
Fax (856) 753-3202
www.angelozziterrazzo.com

1.2 SUMMARY

- A. Types of precast terrazzo work included:
 - 1. Precast terrazzo flooring
 - 2. Precast terrazzo wall covering
 - 3. Precast terrazzo accessories (base, stair treads, reducers and trim)
 - 4. Preformed Radius Outcorner Base Pc. For radius CMU
- B. Setting materials, expansions joints, membrane, underlayment
- C. Maintenance
- D. Related work not specified under this section
 - 1. Cast In Place Concrete: Section 03300
 - 2. Sealants: Section: Section 07920
 - 3. Adjacent Floor Finishes: Division 9

1.3 REFERENCES

- A. National Terrazzo & Mosaic Association (NTMA)
- B. Tile Council of America (TCA)

1.4 QUALITY ASSURANCE

A. Acceptable Suppliers

1. Shall provide materials in accordance with the National Terrazzo & Mosaic Association (NTMA) Standards
2. Materials used in panel manufacturing shall be the products of a single manufacturer

B. Acceptable Installer

1. Installer shall be an approved applicator of the TERRALITE ® system.
2. If the installer is not an approved applicator, he or she shall submit a list of completed projects of similar magnitude and complexity
3. Installer must be acceptable to the Architect and Manufacturer
4. Installation shall be performed by an applicator with a minimum of 5 years experience in work of similar nature and scope. Installer must be approved by the manufacturer of the floor surfacing materials. The contractor shall furnish a written statement from the manufacturer that the installer is acceptable
5. Installer shall verify locations of all flexible joints required by the provisions of this section and by the recommendations of the related material manufacturers
 - a. Joint locations may or may not be shown in drawings
 - b. Refer to drawings required under SUBMITTALS
6. Installer to keep daily log of the date of installation, room number, type, color and method of application of product being installed. Log must be available for inspection by the Architect upon request.
7. Mock-up: Prior to starting application of flooring, provided full scale mock-up to establish acceptable quality, durability and appearance. Mock-up area must not be less than 25 sf.
 - a. Acceptable mock-up to be standard of quality for remaining work
 - b. Acceptable work may remain in place. Unacceptable work to be removed and replaced until acceptable.
8. Qualifications:
 - a. Installer: Must be acceptable to Architect and Manufacturer.

1.5 SUBMITTALS

A. Samples

1. Submit a maximum of three samples, 6 inches by 6 inches for each color and type of terrazzo as specified.
2. Manufactures Application Instructions: Submit descriptive data and specific recommendations for mixing, application, curing including any precautions of special handling instruction required to comply with the Occupational Safety and Health Act.
3. Shop Drawings: Shop Drawings shall be furnished showing termination details, base and flexible joints required for flooring in the area of installation.

1.6 DELIVERY, STORAGE AND HANDLING

- A. All materials shall be delivered to project site in original manufacture's sealed cartons.
- B. TERRALITE ® Shall be stored indoors, sheltered from moisture in original packaging. Protect from damage by other trades.

1.7 WARRANTY

TERRALITE ® and precast accessories are warranted for one year from date of completion of the installation.

1.8 PROJECT CONDITIONS

- A. Maintain the ambient room and floor temperature at 50 degrees F. or above for a period extending 72 hours before, during and after floor installation. Concrete to receive surfacing shall have cured for at least 28 days and free of all curing compounds. A calcium chloride test can be performed to assist in determining acceptable moisture levels in the concrete slab prior to installation of the TERRALITE ® system.
- B. Pre-job meeting between General Contractor, Architect and Installer shall be held to discuss concrete substrate, location of joints and/or saw cuts to minimize subfloor cracking and locations of control joints in terrazzo surface.
- C. ACCEPTABLE SUBSTRATES
 - 1. Level tolerance: Concrete subfloor shall be level with a maximum variation from level of 1/4" in 10 feet. Any irregularity of the surface requiring patching and/or leveling shall be done using TERRALITE ® Resin and selected fillers and aggregates as recommended by the manufacturer.
 - 2. Concrete floor shall receive a steel trowel finish.
 - 3. Concrete shall be cured a minimum of 28 days. No curing agents are to be used in areas to receive TERRALITE ®
 - 4. Concrete slab shall have an efficient moisture barrier directly under the concrete slab.
 - 5. Saw cutting of control joints must be done between 12-24 hours after placement of the structural concrete.

PART 2- PRODUCTS

2.1 MANUFACTURES

- A. Specifications based on Angelozzi Precast Terrazzo Products, LLC
TERRALITE ® Precast Epoxy Terrazzo Floor & Wall Panel System, or equal.
- B. Provide conforming products based on:
 - 1. Angelozzi Precast Terrazzo Products, LLC: TERRALITE ® Precast Epoxy Terrazzo Floor & Wall Panel System.
TERRALITE ® is considered the approved quality standard for this job. Any other material bid for this section must have as a minimum the standards set forth in these specifications.
 - 2. Terrazzio by Service Elements, P.O. box 82 Loretto TN 38469
931-845-3439

2.2 MATERIALS

- A. Epoxy Resin: Flammability ASTM D-635 self extinguishing, extent of burning .025 inches max.
Thermal Coefficient of Linear Expansion ASTM D-696
25x10⁻⁶ inches per inch per degree to 140° F
Bond Strength ACI COMM #403, Bulletin 59-43 (pages 1139-1141) 300 psi (100% concrete failure)
- B. Aggregate: All aggregate to meet ASTM C-33, ASTM C-131 specifications
- C. Elastomeric Membrane: Flexible (TERRALITE ® ISO Crack Membrane)
- D. Terrazzo Cleaner: Shall have a pH factor between 7 and 10 where applicable. Cleaner shall be biodegradable and phosphate free.
- E. Sealer: Shall have a pH factor between 7 and 10 where applicable. Shall not discolor or amber. Flash Point; ASTM D-56, 80° F minimum, where applicable. Special stain and/or chemical resistance sealers are needed for certain areas such as resistance to iodine, Betadine or particular acids. Consult the manufacturer, should this be a considered factor.

2.3 MANUFACTURED UNITS

- A. Precast Terrazzo Floor Panels
 - Size: 30"x30"x 3/8" 28.5 lbs. (approximately)
 - 36"x36"x 3/8" 41.0 lbs. (approximately)

PART 3-EXECUTION

3.1 INSPECTION

- A. Examine areas to receive TERRALITE ® for:
 - 1. Defects in existing work that affect proper execution of TERRALITE ® work.
Note: Cracks in substrate will usually be transmitted through TERRALITE ® to surface. Flexible membranes shall be used to minimize chance of subfloor cracks transferring to the TERRALITE ® surface.
 - 2. Deviations beyond allowable tolerance for the concrete slab work.
Note: Subfloor not to vary more that 1/4" from true plane in 10 feet.
TERRALITE ® as specified, is not intended to level substrate and will only follow the contour of the concrete slab. If for any reason the subcontractor questions the suitability of the substrate, any work required to eliminate nonconformity of subsurface specifications is the responsibility of others. Any materials used to correct nonconformity must be compatible with the TERRALITE ® system and approved by the TERRALITE ® contractor.
- B. Start work only when all defects have been corrected.**

3.2 INSTALLATION

- A. Subfloor:
 - 1. Prepare substrate to receive TERRALITE ® system in accordance with manufacturer's recommendations.

2. Route out all cracks and fill with TERRALITE ® joint filler. Apply TERRALITE ® Iso-Crack Membrane across the crack and 6 inches on either side at a spread rate of 50 square feet per gallon to achieve 25-30 mils dry.
 3. Alternate to step#2: Apply TERRALITE ® Membrane over entire floor surface as a crack prevention membrane at a spread rate of 50 square feet per gallon to achieve 25-30 mils dry.
- B. Installing TERRALITE ® system
1. Mix TERRALITE ® system mortar as per manufacturer's manufacturer's recommendations
 2. Trowel TERRALITE ® system mortar using ½"x½" notch trowel. Install TERRACLIP™ to align panels and fasten per manufacturer's instructions.
 3. Roll entire TERRALITE ® panel with hand roller to assure panel is embedded into the epoxy mortar.
 4. After 24 hours and the TERRALITE ® has cured, proceed with the TERRALITE ® seaming epoxy per manufacturer's recommendations.
 5. After 24 hours and the TERRALITE ® seaming epoxy has cured, remove the plastic protective film and trim any excess seaming epoxy as required.
- C. Cleaning and Sealing
1. Wash all surfaces with a neutral cleaner that has a pH factor between 7
 2. and 10.
 3. Rinse with clean water and allow surface to dry.
 4. Apply sealer in accordance with manufacturer's directions.
- B. Protection
1. Upon completion, the work shall be ready for final inspection and acceptance by the owner or his agent.
 2. The General Contractor shall protect the finished floor from the time that the TERRALITE ® contractor completes the work.

END OF SECTION #09400