SECTION 09672

SEAMLESS EPOXY QUARTZ AND MARBLE-CHIP FLOORING

Display hidden notes to specifier by using "Tools"/"Options"/"View"/"Hidden Text". For Office 2007, Office Button (top left) | Word Options | Display

Office 2010 - Click the **Microsoft Office Button**, and then click **Word Options**. In the **Word Options** dialog box, click **Display**, and then under **Always show these formatting marks on the screen**, select the **Hidden text** check box.

PART 1 GENERAL

- 1.1 SECTION INCLUDES
 - A. Fluid applied epoxy quartz and marble-chip flooring and cove base.
 - B. Everlast Glaze.

1.2 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Selection Samples: For each finish product specified, submit two samples 4 by 4 inches (102 mm by 102 mm) in size illustrating color, chip size and variation, and matrix color.
- D. Verification Samples: For each finish product specified, submit two samples 4 by 4 inches (102 mm by 102 mm) in size in color, chip size and variation, and matrix color, representing actual product scheduled.

1.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
- B. Installer Qualifications: Installation shall be performed by an applicator approved by the manufacturer of the floor surfacing materials. The Contractor shall furnish a certified installer certificate.
- C. Pre-Application Meeting: Convene a pre-application meeting two weeks before the start of application of the floor coating system. Require attendance of parties directly affecting work of this section, including the Contractor and Applicator. Review the surface preparation, application, cleaning, protection and coordination with other work.
- D. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and

application workmanship.

- 1. Finish areas designated by Architect.
- 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
- 3. Refinish mock-up area as required to produce acceptable work.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Store materials in accordance with the manufacturer's instructions.
 - 1. Store materials in dry, enclosed area with adequate protection from moisture.
 - 2. Keep containers sealed until ready for use.
- C. Storage Temperature: Store between 65 degrees F (18 degrees C) and 90 degrees F (32 degrees C).

1.5 PROJECT CONDITIONS

- A. Roof shall be completed and building enclosed prior to flooring commencement.
- B. Maintain temperature range of between 65 degrees F (18 degrees C) and 90 degrees F (32 degrees C) 24 hours before, during, and 72 hours after installation of flooring.
- C. Ventilate area where flooring is being installed. Post and enforce NO SMOKING or OPEN FLAME signs until flooring has cured.
- D. Provide uniform lighting of 50 fc in area of installation.
- E. Restrict traffic from area where flooring is being installed or is curing.
- 1.6 WARRANTY
 - A. Provide ten year warranty under provisions of Section 01770.
 - B. Warranty: Include coverage for delamination (separating of layers) of floor and cove base materials and degradation of surface finish.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Everlast Epoxy Systems Inc, which is located at: 637 NW State Road 47 ; Lake City, FL 32025; Tel: 386-719-9979; Fax: 386-719-6982; Email: info@everlastepoxy.com ; Web: www.everlastepoxy.com
- B. Substitutions: Not permitted.

2.2 MATERIALS

- A. Everlast Floor: A 100 percent solids epoxy, marble-chip and quartz aggregate that is a troweled in place, evenly textured, slip-resistant finish of between 1/8 inch (3 mm) and 3/16 inch (4.8 mm) thickness.
 - 1. System shall not require primer (unless needed due to the substrate), bond coat, grout or sealer components for application.
 - 2. System shall comply with the USDA guidelines for use in federally inspected

facilities.

B. Everlast Glaze: The finish of Everlast Floor can range anywhere from glass smooth to a sandpaper-like finish. The texture can be adjusted during or long after by applying multiple coats of glaze (for a smoother finish) or by broadcasting anti-skid into the glaze (for a coarser finish).

The specified finish is:

- Smooth finish. Everlast Floor with 1 coat of Everlast Glaze and no anti-skid.
- Standard finish Everlast Floor with 1 coat of Everlast Glaze and no anti-skid. This
 finish is easy to clean with a mop or any other cleaning method and still has some
 slip-resistance, it is recommended for pet care facilities, public restrooms and any
 other area that needs to be consistently cleaned and is not always wet.
- Anti-Skid finish Everlast Floor with 1 coat of Everlast Glaze with medium antiskid broadcast into the during application. This finish is easy to clean with a deck brush and squeegee or power scrubber, but is not moppable. It is slip-resistant even when wet It is recommended for aquatic facilities, commercial kitchens and any other area that needs to be consistently cleaned and is always wet.
- Super Anti-Skid finish Everlast Floor with 1 coat of Everlast Glaze with coarse anti-skid broadcast into the during application. This finish is easy to clean with a deck brush and squeegee or power scrubber, but is not moppable. It is slipresistant even when wet. It is recommended for commercial kitchens and any other area that needs to be consistently cleaned and is always wet and frequently has grease and/or oil on the floor. Note: This finish is extra abrasive and will need to have the glaze and anti-skid reapplied as the skid will wear off in high traffic – frequency depends on traffic.

Acceptable Manufacturer and Product: Seamless flooring material shall be Everlast Epoxy Systems Inc's Everlast Floor, as manufactured by Everlast Epoxy Systems Inc of Lake City, FL.

- 1. Material shall include select silica quartz and marble-chip aggregate fillers.
- 2. Floor system shall be a 100 percent solid, unpigmented epoxy resin system.
- 3. Base: A three-component, integral troweled base and cove consisting of Everlast Epoxy Systems Inc's Everlast Floor resin and hardner, silica quartz and marble-chip aggregates as used in the floor, and finely graded silica aggregate, 6 inches (152 mm) height or as scheduled.
- 4. Everlast Glaze: Everlast Epoxy Systems Inc's Everlast Glaze, a high performance, chemical resistant, two-component, clear sealer.
- 5. Color as selected by Architect from manufacturers standard color range.

PART 4 EXECUTION

- 4.1 EXAMINATION
 - A. Do not begin installation until substrates have been properly prepared.
 - 1. Verify that substrate is ready to receive work, and that sub-floor surface is clean, dry, and free of substances which could affect bond.
 - 2. Concrete hydrostatic, capillary or moisture pressure must be no greater than 3.0 lbs./1000 sf/24 hours. Substrates in contact with the ground must have a properly installed, functioning and effective vapor barrier to help prevent potential problems resulting from hydrostatic, capillary or moisture vapor emission. Concrete must contain less than 3% moisture when tested per ASTM D1864.

- 3. Maintain minimum concrete surface temperature between 55° and 85° F., and relative humidity below 80% for a minimum of 48 hours before, during, and after installation, or until cured. Surface temperature must be 5° F. Above dew point.
- 4. Beginning work constitutes acceptance of substrate.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

4.2 PREPARATION

- A. Substrate Requirements:
 - 1. Contractor to provide positive drainage at floor drains.
 - 2. Floor drains shall be set no higher than 1/8 inch (4 mm) above slab.
 - 3. Floor sinks shall be set in accordance with local codes and regulations.
 - 4. Gaps between wall sheathing and substrate shall be filled prior to flooring commencement per flooring manufacturer's requirements.
 - 5. FRP and any other wall finish should terminate with a J-mould or other trim at least 6 inches (152 mm) above finish floor.
 - 6. The substrate shall be clean, dry and sound. Remove dust, laitance, grease, curing compounds, waxes, foreign particles and any previously applied potentially incompatible coatings by scarifying, chipping, wire brushing, acid etching, or pressure washing. If pressure washing or any other liquid method is used for preparation, substrate should be fully rinsed, squeeze-dry mopped and allowed to completely dry.
 - 7. Concrete: New concrete must cure for at least 28 days at 70°F (21°C), and have been free from water for at least 7 days. Older floors should be scarified and thoroughly cleaned. If badly cracked, crumbling, punky or deeply contaminated with oil or fat, a new concrete topping of proper thickness and strength should be installed. Swollen areas should be chipped out and any cracks, spalls, joints or other depressions filled with our underlayment. The concrete should be at least 2500 psi. Concrete hydrostatic, capillary or moisture pressure must be no greater than 3.0 lbs./1000 sf/24 hours.
 - 8. Wood Floors: Plywood floors shall consist of 2 layers of at least 5/8 inch (16 mm) material with offsetting joints, and screwed (nailing not acceptable) into 16 inches (406 mm) o.c. joists Alternatively, install 1/2 inch (12 mm) concrete backer board, using a quality sub-floor adhesive and deck screws. Seams in the plywood or concrete backer board shall be treated with fiber tape and a blend of Everlast Floor resin and cove base additive. All wood floors are to be treated with a blend of 90% Everlast Glaze and 10% Xylene, and allowed to cure for 12 hours prior to installing Everlast Floor.
 - 9. Vinyl Tile and Sheet Flooring: Thoroughly clean to eliminate wax buildup. Loose tiles and adhesive shall be removed and areas patched with flooring manufacturer's underlayment. Sheet flooring and adhesive shall be completely removed.
 - 10. Quarry / Ceramic Tile: Tile and grout shall be thoroughly cleaned. Loose tile shall be removed and filled in with underlayment. Surface of the tile shall be scratched with a diamond grinder to remove the glaze.
 - 11. Steel Decks: Clean free from oil, grease, rust and loose scale. The deck shall be wiped with denatured alcohol. Allow deck to dry before application of flooring.
 - 12. Radiant Heating System: Everlast Floor can be installed over a radiant heating system if the following 3 conditions are met:

a)The wires are not exposed directly to the floor material. They must be covered by the substrate.

b)The radiant heat system is not more than 140F at the source.

c)Moisture vapor transmission reading must be 3lbs or less.

Everlast Floor should not be used over hydronic (liquid) systems.

More detailed floor preparation guidelines can be found at www.everlastepoxy.com/how-to

- 4.3 INSTALLATION FLOORING
 - A. Apply flooring in accordance with manufacturer's instructions. Apply to a minimum thickness of 1/8 inch (3 mm). Finish to smooth level surface sloped to drains.
 - B. Provide base and cove at vertical surfaces.
 - C. Apply Everlast Glaze (and anti-skid, if required).

Review more detailed Everlast Floor installation instructions at www.everlastepoxy.com/how-to

- 4.4 TOLERANCES
 - A. Maximum Variation from Flat Surface: 1/8 inch in 10 feet (3 mm in 3 m).
- 4.5 PROTECTION
 - A. Protect finished installation during construction.
 - B. Do not permit traffic over finished floor surfaces for 42 hours.

4.6 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION