

SECTION 09727

GRANITEX COLOR CHIP FLOORING (LIGHT BROADCAST)

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Moisture vapor emission testing.
 - 2. Surface preparation.
 - 3. Furnishing and installation of seamless color chip flooring.

1.02 RELATED SECTIONS

- A. Section 03300 - Cast-In-Place Concrete:
 - 1. Concrete slabs on or below grade shall be installed over an effective moisture vapor barrier.
 - 2. Concrete slabs shall be cured 30 days, be structurally sound and have a steel trowel finish.
 - 3. Surface shall be well sloped to drains, straight and level with the permissible degree of tolerance of 1/4" in 10'-0" in any direction.
 - 4. No curing compounds or surface contaminants shall be used in placing new concrete.

1.03 SUBMITTALS

- A. Submit manufacturer's product data, literature and brochures.
- B. Submit manufacturer's samples showing color choices and texture.
- C. Prior to commencing work, installer shall prepare two 6" x 6" samples of the resinous flooring chosen for the project showing actual color, thickness and texture. These samples shall serve as a basis for comparison throughout the duration of the work.

1.04 QUALITY ASSURANCE

- A. All materials used in the seamless color chip flooring system shall be manufactured by a single manufacturer to ensure compatibility and proper bonding.
- B. Applicator shall be a licensed contractor, trained and approved by the manufacturer and shall have a minimum of 3 years experience in the application of special polymer flooring.
- C. All work shall be performed in strict accordance with the manufacturer's written instructions.

1.05 DELIVERY, STORAGE AND HANDLING

- A. All material shall be delivered to the jobsite in unopened containers clearly labeled by the manufacturer and stored in a dry location at a minimum of 65 degrees F.

1.06 WARRANTY

- A. Manufacturer shall guarantee that his materials are free from defects and comply with his published specifications.
- B. Applicator shall warranty against faulty workmanship for a period of three years from substantial completion of the project.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Resin systems and color chips shall be as supplied by Arizona Polymer Flooring, Phoenix, Arizona.

2.01 MATERIALS

- A. Primer shall be two-component, thermosetting epoxy resin.
- B. Base coat shall be a two-component, VOC compliant polyurethane.
- C. Color chips shall be 3-5 mil thick colorfast vinyl acrylic paint chips.
- D. Glaze coat shall be a two-component, VOC compliant aliphatic polyurethane.

2.03 SYSTEM DESCRIPTION

- A. Flooring system shall be 8-12 mils thick with color and texture to match the sample chosen.
- B. Finished flooring system shall have the following performance characteristics:
 - 1. Tensile Strength (ASTM D 638): 5000 psi.
 - 2. Tensile Elongation (ASTM D 638): 25%
 - 3. Compressive Yield Strength (ASTM D 695): 7075 psi.
 - 4. Impact Resistance (ASTM D 2794): Passes 160 inch pounds.
 - 5. Tabor Abrasion (C517 wheel, 1000 gr. load, 1000 cycles): 40 mg.
 - 6. Thermal Shock Resistance (ASTM C 1884): passes
- C. Chemical Resistance: (ASTM D 1308 - 24 hour exposure) Unaffected by the following:
 - 1. Urine
 - 2. Blood
 - 3. Alcohol
 - 4. Black Ink
 - 5. Gasoline
 - 6. Brake Fluid
 - 7. Skydrol B-4
 - 8. Xylene
 - 9. 25% Hydrochloric Acid
 - 10. 25% Sulfuric Acid
 - 11. 10% Acetic Acid

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verification of Conditions:
 - 1. Inspect surfaces to receive seamless color chip flooring.
 - 2. Conduct calcium chloride moisture vapor emission testing according to ASTM 1869-04. If test reading is above three pounds, consult Arizona Polymer Flooring before proceeding.
 - 3. Before starting work, report in writing to the architect any unsatisfactory condition.
 - 4. Application of any material shall signify that surfaces have been inspected and are satisfactory.

3.02 SURFACE PREPARATION

- A. Remove substrate ridges and protrusions by grinding or sanding.
- B. Concrete surfaces to receive flooring system shall be abraded to a minimum of 5 mil profile using shot blasting or acid etching. If acid etching is used, it shall be done in strict accordance with the manufacturer's written instructions. Etching shall be accomplished using a mechanical scrubber with an aggressive "nylogrit" type brush.
- C. Control joints and cracks should be filled with Epoxy 300 Flex Paste according to the manufacturer's instructions. All expansion joints should be honored.

3.03 INSTALLATION

- A. Allow sufficient time for the installation of the flooring system. At no time shall the speed of project completion be allowed to detrimentally affect the application.
- B. Provide sufficient light, power, heat and working conditions to permit proper application of the material. Substrate temperature shall be at a minimum of 50 degrees F during application and for 48 hours thereafter.
- C. Apply Epoxy 100 water-based primer at the rate of 250-275 sq. ft. per gallon. Allow to cure overnight.
- D. Apply pigmented Polyurethane 100 at the rate of 300-325 sq. ft. per gallon. Broadcast premixed color chips into the wet base coat.
- E. After the base coat has cured, sweep excess chips and scrape aggressively with drywall scraper. Sweep again and vacuum loose chips.
- F. Apply finish coat of Polyurethane 100 or Polyurethane 501 at a rate of 300-325 sq. ft. per gallon.

3.04 PROTECTION OF FINISHED WORK

- A. Prohibit traffic on floor for 48 hours after installation.
- B. Avoid heavy abrasion and chemical exposure for five days.

3.05 MAINTENANCE

- A. Floor should be cleaned with ammonia and water or a mild, non-filming detergent. For difficult stains, paint thinner may be used without harming the finish.
- B. Waxing is not required but may be done if desired. Periodic re-glazing will completely renew the surface. This should be accomplished according to manufacturer's written instructions.

END OF SECTION