

**GUIDE SPECIFICATION  
FOR  
TERRAZZO STYLE GROUND CONCRETE FINISH  
REVISED MAY 2003**

SECTION 33\_\_ GROUND CONCRETE FINISH

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes mechanically processed concrete finish applied to cast-in place concrete surfaces as follows:
  - 1. Ground (TERRAZZO STYLE) Concrete Floor Finish.

1.3 SUBMITTALS

- A. Submit each item in this article according to the conditions of the Contract and Division 1 Specification Sections.
- B. Submit \_\_\_ samples of concrete with ground finish. (General Contractor to provide 2'x2' cured samples for grinding and finishing by Advance Terrazzo).

1.4 QUALITY ASSURANCE

- A. Mockups: Prior to applying special concrete finishes, construct mockup for each finish required to verify selections made under the sample submittals and to demonstrate aesthetic effects. Build mockups to comply with the following requirements, using materials for final unit of the work.
- B. Locate mockups on-site in the location and size indicated or, if not indicated, as directed by the Architect. Provide an area of 4'x4' min. in a typical floor condition to be used as a control sample.
- C. Installer Qualifications: Engage an experienced terrazzo grinder and finisher who has completed special concrete finish work similar in material, design and extent to that indicated for this project and with a documented record of successful in-service performance.

PART 2 – PRODUCTS

2.1 FINISHES

- A. Finishes by Advance Terrazzo or approved equal.

2.2 MATERIALS

- A. Use materials indicated in Section 03300, Cast-In-Place Concrete, except as modified

in this section.

- B. Normal Weight Aggregate: ASTM C33.0, (suggest Size 57, or specify nominal aggregate sizes: 1"-, \_"-, \_"-).
- C. Concrete Mix Design: Conform with Specification requirements.
- D. Integral matrix color: Bayferrox or approved equal (insert number of pounds of color powder per 94 lb. sack if integral color concrete is required).

## 2.3 CONCRETE SEALER

- A. Concrete Sealer for Polished Concrete interior locations. A clear, highly penetrating solvent based acrylic sealer to form a tack free barrier against stains from oils, greases, water, acids, and chemical discoloration. Sealer shall intensify color of ground aggregates, shall not discolor or amber.
- B. Manufacturers: Subject to compliance with requirements, products that may be incorporated in the work include, but are not limited to the following:
  - 1. Penetrating Sealer: Key Acrylic Sealer by Key Resin Company (or equal).

## PART 3 – EXECUTION

### 3.1 POLISHED CONCRETE

- A. General: Decorative ground concrete is produced by grinding and finishing trowel finished cured concrete in a manner similar to that for terrazzo.**
- B. Do not consolidate concrete with the use of vibrating or tamping. Allow concrete to cure minimum 28 days.**
- C. Preparation: Clean concrete of loose foreign matter.
  - 1. Cleaner: Chemically neutral, liquid cleaner, with Ph factor between 7 and 10, biodegradable and phosphate free that will not stain or otherwise effect color of concrete.
  - 2. Remove “fuzzing” of glass fiber reinforced concrete with torch prior to grinding. (Optional).
- D. Saw cut control joints and accent lines as indicated, (by General Contractor).
- E. Clean dust and debris from saw cut joints and fill with \_” (nom) silica sand bed and approved epoxy joint filler colored to match (or contrast) with concrete color. (OPTIONAL)
- F. Finishing:
  - 1. Rough Grinding: Grind with **26 grit diamond plugs** to remove surface fines and expose aggregate. Maintain specified concrete flatness.
  - 2. Following initial grind with two additional grinds using **80 grit diamonds** and **80 grit stones (max depth of grind = 1/8”)**.
  - 3. Wash floor with clean water and rinse. Remove excess rinse water to prevent staining and allow to dry..

4. Steel trowel Portland Cement grout onto surface to fill all voids, cement grout to match color of concrete, allow to cure overnight.
5. Fine Grinding: Grind with 80 grit (or finer) stones to remove grout and 120 grit diamonds until polished **terrazzo-like** surface is achieved. Concrete shall show a minimum of 60 percent aggregate.
6. Wash all surfaces with neutral cleaner with Ph factor between 7 and 10, biodegradable and phosphate free.
7. Rinse with clear water and allow surface to dry thoroughly.
8. Seal surface with two coats of approved solvent based acrylic penetrating sealer.

### 3.2 CLEANING, FINISHING, AND PROTECTING

- A. Clean ground concrete after initial sealing operations are complete, complying with sealer manufacturer's instructions.
- B. Apply hard surface seal and liquid floor finish to cleaned ground concrete surfaces to comply with manufacturer's instructions.
  1. Apply two coats SC Johnson FORTIFY hard surface seal (or approved equal).
  2. Apply two coats SC Johnson VECTRA liquid floor finish (or approved equal).
- C. Protection:
  1. Upon completion, the work shall be ready for final inspection and acceptance by the Owner.
  2. The General Contractor shall protect the finished floor from damage and wear from the time that the concrete grinder completes the work.

### 4.1 FINAL CLEANING (**OPTIONAL**)

- A. Clean ground concrete finished areas as recommended by the manufacturer of the sealer and finisher. Machine buff terrazzo floor as required when building is ready for occupancy.