

RetroPlate Patented System for Concrete Polishing

Suggested Guideline Specification: Concrete Finishes Sec 3,9

(Contact RetroPlate at 1-888-942-3144 for Electronic Copy)

PART 1 GENERAL

1.01 SUMMARY

- A. This section includes the following:
1. Applying RetroPlate Densifier, Sealer and Hardener, and polishing concrete to specified finish level.
- B. Related Work:
1. Section 03300 Cast-In Place Concrete
 2. Section 03360 Special Concrete Finishes
 3. Section 09639 Concrete Hardening/Sealing

1.02 REFERENCES

- A. American Society for Testing and Materials:
1. ASTM-C779, Standard Test Method for Abrasion Resistance of Horizontal Concrete Surfaces.
 2. ASTM C805, Impact Strength
 3. ASTM G23-81, Ultraviolet Light & Water Spray
 4. ASTM 1028, Co-efficient of Friction
- B. American Concrete Institute:
1. ACI 302,1R-89, Guide for Concrete Floor and Slab Construction
- C. Other Test:
1. Reflectivity
- D. The contractor providing this work must be trained and have current Certification as an Authorized RetroPlate Applicator. A list of Certified Applicators may be obtained from RetroPlate:
- RetroPlate
PO Box 50533
Provo UT 84605
888-942-3144 (o) 801-812-3400 (fx)
www.retroplatesystem.com

1.03 SUBMITTALS

- A. Comply with pertinent provisions of section 01600-Product Requirements.
1. Provide submittal information within 35 calendar days after the Contractor has received the owners notice to proceed.
- B. Product Data:
1. Submit special concrete finishes manufacturer's test data, and other data required for each type of manufactured material and product indicated.
 2. Submit special concrete finishes describing product to be Provided, giving manufacturer's name and product for the Specified material proposed to be provided under this section.
 3. Submit special concrete finishes manufacturer's recommended Installation procedures; which when approved by the Architect, will become the basis for accepting or rejecting actual installation procedures used on the work.
 4. Submit special concrete finishes technical data sheet giving descriptive data, curing time and application requirements.
 5. Submit special concrete finishes manufacturer's Material safety Data Sheet (MSDS) and other safety requirements.
 6. Follow all special concrete finishes published manufacturer's installation instructions.
- C. Test Reports
1. Provide Certified Test Reports, prepared by an independent Testing laboratory, confirming compliance with specified Performance criteria.

D. Samples

1. Each floor has its own unique appearance when completed. Manufacturer's lab samples are supplied only to show a smooth surface indicative of the gloss, not the mix color or aggregate size, color or amount exposed. The final appearance of a finished floor cannot be guaranteed to match a sample due to the natural variations in concrete.

E. Product Variations: RetroPlate (and if included, Acid Stain)

1. The variegated colors and appearance produced are unique to each concrete surface and depend on the chemical composition, mix design, porosity, age, texture, and color of the concrete substrate. Mottling and wide variations in color and intensity may occur. If contaminants remain on the surface, the penetration of the RetroPlate (and Acid stain) may be blocked. Concrete from different loads or pours, and in patched areas, may appear significantly different in color than adjacent areas, when treated with RetroPlate (and if included, Acid Stain).

1.04 QUALITY ASSURANCE

A. Installer Qualifications:

1. **ONLY** use a Certified Applicator and an adequate number of skilled workmen who are thoroughly trained and experienced in the grinding, polishing, and application of the RetroPlate.
2. The special concrete finish manufacturer shall certify applicator.
3. Applicator shall be familiar with the specified requirements and the methods needed for proper performance of the work of this section.
4. The Certified applicator should have successfully performed a minimum of five projects of similar scope to the project being specified.

B. Manufacturer's Certification:

Provide letter of Certification from concrete finish manufacturer stating that installer is a certified applicator of their special concrete finishes, and is familiar with proper procedures and installation requirements required by the manufacturer.

C. Mock-ups:

1. Apply mock-ups of each type finish, to demonstrate typical joints, surface finish, color variation (if any), and standard of workmanship.
2.
 - a. Build mock-ups approximately 30 square feet in the location indicated or if indicated, as directed by the Architect or Owner Representative. Sample should be on an interior slab slab similar in color and finish to the slab that will receive the RetroPlate.
 - b. Notify Architect or Owner Representative seven days in advance of dates and times when mock-ups will be placed, when practical.
 - c. Obtain from Architect or Owner Representative written approval of mock-up before starting actual work.
 - d. If the Architect or Owner Representative determines that the mock-ups do not meet requirement, demolish and remove from site and cast additional mock-ups until approved. If mock-up is performed on existing concrete that will be covered with another floor finish, then the failed mock-up does not have to be demolished and removed.
 - e. Maintain mock-ups during construction in an undisturbed condition as a standard for judging completed work.
 - f. Approved mock-ups may become part of the completed work if undisturbed at time of substantial completion, and if it matches the project slab color and finish.

D. Protection:

1. No satisfactory chemical or cleaning procedure is available to remove petroleum stains from the concrete surface. Prevention is therefore essential:
 - a. Diaper all hydraulic equipment
 - b. Keep all parked vehicles off interior slab, or use drop cloths.
 - c. There should be no pipe cutting on interior slab.
 - d. Steel will not be placed on interior slab to avoid rusting.