

Smith Paint Products
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Architectural Specification for Polishing Smith's Color Floor

SECTION 09935 - COLOR FLOOR STAIN

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including general and supplementary conditions and Division 1 specifications sections apply to this section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Color Floor application and Surface Guard application to properly prepared interior, horizontal porous substrates including, but not limited to concrete.

1.3 SUBMITTALS

- A. Manufacturer's technical information and instructions for surface preparation, product application, material storage, and handling.
- B. Color: Color floor samples as manufactured in 33 colors. Color charts are available in the following forms:
 - 1. Stain on 2 x 2.5 inch concrete chips.
 - 2. Printed color chart.
- C. Product specifications and application instructions.

1.4 QUALITY ASSURANCE

- A. Applicator Qualifications: Experienced applicator as well as successful installation of Color Floor or similar waterborne stains.

- B. Dilution: When diluting color concentrate, use only distilled, de-ionized or reverse osmosis water in conjunction with Smith's Base Boost as per instructions.
- C. Sample Area:
 - 1. Apply stain to intended substrate to ensure desired appearance and durability
 - 2. Apply stain to sample area following step by step procedures outline Section 3.
 - 3. Obtain Architects acceptance of sample area before beginning full installation.
- D. Pre-installation: Before start of stain application, require that all parties/trades working in or around intended application surface are in full understanding of surface preparation, application and protection of subsequently stained and polished area.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Color Floor is not freeze thaw stable in liquid state.
- B. Packing: Deliver materials in manufacturer's original, unopened packages and containers, with labels identifying manufacturer, product name, product number and stain color.
- C. Storage and Protection: Store materials not in use in tightly covered containers, out of direct sunlight in an ambient temperature between 40 – 115 degrees F. Store diluted stain in clean, carefully sealed containers. Stain diluted with Base Boost has shelf life of less than 1 month
- D. Handling: Protect materials from freezing and/or contamination during handling and application.

1.7 PROJECT CONDITIONS

- A. Temperature Conditions: Apply stain only when temperature of substrate and surrounding air temperatures is between 45 – 110 degrees F.

1.8 SEQUENCING

- A. Application of stain shall begin following grinding the substrate as per application directions. Instructional Videos are available for review at www.smithpaints.com
- B. In ideal curing conditions are 70° and 50% Relative Humidity.

PART 2 – PRODUCT

2.1 MANUFACTURER

- A. Smith Paint Products, 2200 Paxton Street, Harrisburg, PA 17111. Telephone Number (717) 233-8781. Facsimile (717) 232-5199. Website www.smithpaints.com. E-Mail info@smithpaints.com.

2.2 WATERBORNE STAIN, ADDITIVE, SURFACE GUARD & FLOOR POLISH

- A. Waterborne Stain: Smith's Color Floor
1. Description: Water-based, modified acrylic and pigments.
 2. Concentrate Percent Solids: 29.4 – 36 percent.
 3. VOC: Diluted 9.14 – 11.11 g/l.
 4. Color: as selected
- B. Additive: Smith's Base Boost
1. Description: Blend of silicates used as an additive to Smith's Color Floor to promote substrate adhesion for base or primary colors as well as increase stain durability.
 2. Solids: 10% \pm 2%
 3. VOC: 0 g/l
 4. Diluted Smith's Color Floor as follows: 1 part Color Floor concentrate, 2 parts distilled deionized or reverse osmosis water, 2 parts Smith's Base Boost.
- C. Surface Guard: Smith's Seal WB or Smith's Surface Guard
1. Description: Single component high solids urethane/acrylic polymer-based coating.
 2. Solids 25%
 3. VOC: 10.8 g/l
- D. Maintenance: Smith's ME-1000
1. Description: Acrylic polymer-based, liquid floor polish maintenance product
 2. Sheen: High Gloss
 3. VOC 192 g/l

2.3 REQUIRED MATERIALS

- A. Diamond encrusted pad for high speed burnishing. 400, 800, 1500 and 3000 (or equivalent). Brand name: Twister pads, SpinFlex pads.
- B. High speed burnisher – 1500 rpm or greater
- C. Commercial grinding equipment coupled with
1. 40 and 70 grit metal bonded diamonds (or equivalent)
 2. 100 grit resin bonded diamond (or equivalent)

PART 3 - INSTALLATION

3.1 EXAMINATION

- A. Examine substrate and conditions, with application contractor present, to determine compliance with application requirements.
- B. Notify Architect in writing of anticipated problems and/or unsatisfactory conditions.
- C. Do not begin surface preparation or stain application until unsatisfactory conditions have been corrected.

3.2 GRINDING

- A. Remove or mask fixtures and areas that are not to be stained.
 - 1. Ensure concrete has cured a minimum of 28 days.
- B. Grinding:
 - 1. Prepare substrate for application of stain by grinding the surface with 40 grit metal bonded diamonds (or equivalent).
 - 2. Dirt, powder, foreign particulate must be removed before proceeding to next step.
 - 3. Make a second pass on intended application surface with 70 grit metal bonded diamonds (or equivalent).
 - 4. Dirt, powder, foreign particulate must be removed before proceeding to next step.
 - 5. Make a third pass of intended application surface by wet grinding with 100 grit resin bonded diamonds (or equivalent).
 - 6. Wet slurry and/or powder must be extracted before proceeding to next step.
 - 7. Noticeable scratches from grinding procedure should not be visible.
- C. Surface
 - 1. Surface must be free of all contaminants and appear dry. Follow manufacturer's instruction for "tape test" to verify proper surface preparation resulting in optimal durability.

3.3 STAIN

- A. Dilute product concentrate to achieve desired appearance. Recommended dilution ration is 1 part concentrate with 2 parts distilled, de-ionized or reverse osmosis water and 2 parts Smith's Base Boost
- B. Apply stain to prepared substrate via a micro-fiber mop. It is recommended to apply stain to small areas. Utilize control joints if possible for stop and starts. Continue to massage stain into the substrate until stain appears uniform with little to no streaking.

3.4 BURNISH

- A. Once stain is dry to touch, utilizing a high speed floor buffer (1500 rpm) in conjunction with a 400 grit (or equivalent) diamond encrusted pad, burnish the application area.
- B. Reapply stain to the application area following steps provided in Section 3.3
- C. Once stain is dry to touch, utilizing a high speed floor buffer (1500 rpm) in conjunction with a 400 grit diamond encrusted pad, burnish the application area.
- D. Continue to high speed buff treated area with 800, 1500, 3000 grit (or equivalent) diamond encrusted pad.

3.5 SURFACE GUARD

- A. Apply Smith's Seal WB or Smith's Surface Guard to burnished area with a micro-fiber mop.
- B. After dry to the touch, burnish area with hogs hair pad.
- C. Re-apply Smith's Seal WB or Smith's Surface Guard.
- D. Allow to cure for 10 hours.
- E. High speed burnish treated area if desired. The burnishing process will increase sheen.

3.6 MAINTENANCE

- A. In order to maintain gloss and durability of installed floor, the use of ME-1000 is recommended.
- B. Apply ME-1000 with a micro-fiber mop. 1 gallon will treat approximately 1000 square feet.
- C. Allow ME-1000 to dry to the touch, then high speed burnish with a white pad.