SECTION 03.35.11
CONCRETE FLOOR FINISHES

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Stained and polished surface treatments for concrete floors and slabs.

1.02 RELATED REQUIREMENTS
A. Section 03.30.00 - Cast-in-Place Concrete: Finishing of concrete surface to tolerance; floating, troweling, and similar operations; curing.
B. Section 03.30.00 - Cast-in-Place Concrete: Curing compounds that also function as sealers.

1.03 ADMINISTRATIVE REQUIREMENTS
A. Coordinate the work with concrete floor placement and concrete floor curing.

1.04 SUBMITTALS
A. See Section 01.30.00 - Administrative Requirements, for submittal procedures.
B. Product Data: Manufacturer's published data on each finishing product, including information on compatibility of different products and limitations.
C. Maintenance Data: Provide data on maintenance and renewal of applied finishes.

1.05 MOCK-UP
A. For coatings, construct mock-up area under conditions similar to those that will exist during application, with coatings applied.
B. Mock-Up Size: 10 feet square.
C. Locate where directed.
D. Mock-up may remain as part of the work.

1.06 DELIVERY, STORAGE, AND HANDLING
A. Deliver materials in manufacturer's sealed packaging, including application instructions.

1.07 FIELD CONDITIONS
A. Maintain light level equivalent to a minimum 200 W light source at 8 feet above the floor surface over each 20 foot square area of floor being finished.
B. Do not finish floors until interior heating system is operational.
C. Maintain ambient temperature of 50 degrees F minimum.

PART 2 PRODUCTS

2.01 CONCRETE FLOOR FINISH APPLICATIONS
A. Unless otherwise indicated, all concrete floors are to be finished using liquid densifier/hardener.
B. Liquid Densifier/Hardener:
   1. Use at following locations: All except West Club.
C. High Gloss Clear Sealer:
D. Polished Finish:
1. Use at following locations: West Club, Hospitality and contiguous spaces.

2.02 DENSIFIERS AND HARDENERS
A. Liquid Densifier/Hardener: Penetrating chemical compound that reacts with concrete, filling the pores and dustproofing; for application to concrete after set.
   1. Composition: Sodium silicate.
   2. Products:
      d. Substitutions: See Section 01.60.00 - Product Requirements.

2.03 COATINGS
A. Concrete Stain or Dye: Translucent, penetrating compound for interior or exterior use; must be finished with a topical sealer.
   1. Composition: Polymer based, chemically reactive.
   2. Number of Coats: Minimum of two.
   3. VOC: 50 g/L or less.
   4. Primary Color: Bucs Blue (Pantone 282), in a formulation to match approved mock-up.
   5. Secondary Color: Bucs Gold (Pantone 123), applied after primary color has completely dried, in a formulation to match approved mock-up.
   6. Application:
      a. Primary Color: Spray applied.
   7. Products:
B. High Gloss Clear Sealer: Transparent, non-yellowing, water- or solvent-based coating.
   2. Nonvolatile Content: 40 percent, minimum, when measured by volume.
   3. Products:

2.04 POLISHED CONCRETE SYSTEM
A. Polished Concrete System: Materials, equipment, and procedures designed and furnished by a single manufacturer to produce dense polished concrete of the specified sheen.
   1. Acceptable Systems:
      a. ARDEX Engineered Cements; ULTRAFLOR Polished Concrete System; ARDEX PC-T Concrete Topping; ARDEX PC Finish sealer: www.ardexamericas.com.

PART 3 EXECUTION

3.01 EXAMINATION
A. Verify that floor surfaces are acceptable to receive the work of this section.
B. Verify that flaws in concrete have been patched and joints filled with methods and materials suitable for further finishes.
3.02 GENERAL
   A. Apply materials in accordance with manufacturer's instructions.

3.03 COATING APPLICATION
   A. Verify that surface is free of previous coatings, sealers, curing compounds, water repellents, laitance, efflorescence, fats, oils, grease, wax, soluble salts, residues from cleaning agents, and other impediments to adhesion.
   B. Verify that water vapor emission from concrete and relative humidity in concrete are within limits established by coating manufacturer.
   C. Protect adjacent non-coated areas from drips, overflow, and overspray; immediately remove excess material.
   D. Apply coatings in accordance with manufacturer's instructions, matching approved mock-ups for color, special effects, sealing and workmanship.

3.04 CONCRETE POLISHING
   A. Execute using materials, equipment, and procedures specified by manufacturer, using manufacturer approved installer.
      1. Final Polished Sheen: Satin finish; other sheens are included as comparison to illustrate required sheen; final sheen is before addition of any sealer or coating, regardless of whether that is also specified or not.
      2. Semi-Gloss Finish: Reflecting overhead and side images from 35 to 45 feet away.
   B. Protect finished surface as required and as recommended by manufacturer of polishing system.

END OF SECTION