SECTION 03361 – COLOR TEXTURED (STAMPED) CONCRETE FINISHES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Color textured concrete where indicated to provide stamped concrete textures noted as follows:
 1. Patterned Concrete for exterior slabs adjacent to building.
- B. Related Sections:
 1. Section 03310 Structural Concrete and Exterior Concrete Slabs: Concrete for color textured concrete.
- C. Refer to section 03310 for all requirements not specifically identified in this section

1.2 SUBMITTALS

- A. Section 01330 Submittal Procedures: Procedures for Submittals
- B. Submit to Structural consultant
- C. Product Data:
 - 1. Submit product data for all concrete materials and admixtures prior to beginning production to verify compatibility of materials with coloring agents for color textured concrete
 - 2. Pattern and release agent to be used.
 - 3. Color floor hardener to be used.
 - 4. Color matching curing and sealing materials
 - 5. Color matching joint sealant/filler materials
- D. Mix Design: Submit mix designs for color textured concrete in accordance with Section 03310 prior to field sample construction.
- E. Submit product data and mix design submittals within 21 days of installation.
- F. Installer Qualifications:
 - 1. Provide documentation showing installer is licensed from the manufacturer to install the material to be used.
 - 2. Provide minimum of 10 projects with locations within the last 3 years of similar in type, size and complexity to Work of this contract.
 - 3. Ensure Lead finisher is certified under the Concrete Flatwork Finisher Training and certification Program per the American Concrete Institute.

1.3 QUALITY ASSURANCE

- A. Color Textured Concrete Field Samples:
 - 1. Prior to commencing color textured concrete work, prepare a 24" x 24" reference sample of each type color textured concrete surface for approval by Walmart Construction Manager. The sample shall be the standard for acceptance for color textured concrete.
 - 2. Once accepted by Walmart Construction Manager, store sample on site as directed.

1.4 ENVIRONMENTAL REQUIREMENTS

A. Conform to requirements of Section 03310 for Hot Weather and Cold Weather Concreting

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with project requirements, provide products for color textured concrete as manufactured by the following to the extent as specified hereinafter for the specific product:
 - 1. Bomanite Corporation, (800) 854-2094.
 - 2. H & C distributed by Sherwin-Williams. (800) 321-8194.
 - 3. Increte Systems Inc., (800) 752-4626.
 - 4. L. M. Schofield Co., (800) 800-9900.
 - 5. Patterned Concrete Industries, Inc., (800) 252-4619.
 - 6. Brickform by Solomon Colors, Inc., (800)624-0261. Contact: Ross Urshan (407) 792-6446 or (407) 257-5967, <u>rurshan@solomoncolors.com</u>
- B. Substitutions: Not permitted.

2.2 CONCRETE MATERIALS, ADDITIVES, AND CONCRETE MIX

A. Conform to the requirements of Section 03310.

2.3 IMPRINT TOOLS

1

- A. Provide tool patterns as follows:
 - Exterior Patterned Concrete: 6"x 6".
 - a. Increte Granite Tile.
 - b. Bomanite Granite Setts stamp.
 - c. Brickform Granite Sets (FM-250)

2.4 COLORED HARDENER

- A. Dry-shake colored hardener. Subject to compliance with project requirements, provide colored hardener as manufactured by one of the following:
 - 1. Exterior Patterned Concrete:
 - a. Lithochrome Color Hardener by Schofield. #A-21 "Deep Charcoal" with Release Agent of same color.
 - b. Bomanite Color Hardener Color: #CH-00061-60, BC-1, "Cobblestone Gray" with Release Agent #CH-00167-60, BC-1 "Natural Gray".
 - c. Increte Systems Color Hardener by Increte, "Gray" with Release Agent "Gray" or "Clear".
 - d. Brickform Color Hardener #CH-200 "Medium Gray" with Release Agent of same color.

2.5 SEALER

- A. Color textured concrete sealer shall consist of a mixture of 20 parts of sealer to one part skid-resistant additive.
 - 1. Sealer: Solvent based concrete sealer having a minimum 25% solids similar to High Solids Clear Seal manufactured by Increte Systems Inc. or Gem-Seal manufactured by Brickform.
 - 2. Additive: "Sharkgrip" Skid-Resistant Additive by H & C distributed by Sherwin-Williams.

PART 3 - EXECUTION

- 3.1 PREPARATION AND CONCRETE PLACING AND FINISHING
 - A. Conform to the requirements of Section 03310.
 - B. Prior to color texturing, float freshly placed concrete with wood float to create an open and uniform surface.

3.2 COLOR TEXTURING PROCESS

- A. Color Hardener Application:
 - 1. Dry-Shake Method: Evenly apply color hardener in two or more applications to fresh concrete. Apply at a minimum rate of 100 pounds per 100 square feet. Wood float after each shake.
 - 2. Release Agent: Apply evenly to troweled surface before imprinting.

B. Imprinting:

- 1. Exterior Patterned Concrete: Layout defined pattern as indicated with proper alignment with respect to building lines. Apply imprint to concrete surface with a consistent pressure while concrete is plastic providing a uniform texture.
 - a. Layout texture area at 90 degrees to edge of sidewalk. Provide uniform balance of texture spacing, centering pattern between ends of detectable warning area.
 - b. Hand-tool in areas where imprinting tools are not practical.
- 2. Detailing: When necessary, after concrete has set for at least 24 hours, chisel to remove marks left by imprinting tool.
- C. Sealing: Apply color textured concrete sealer per manufacturer's requirements. Wait 28 days after placement of color textured concrete to apply sealer.
 - 1. If dissipating curing compound has been applied, remove compound prior to application of sealer. Remove compound by cleaning and scrubbing in accordance with manufacturer's instructions.

3.3 CURING

A. Cure color textured concrete floor surfaces by the moisture cure method in accordance with applicable requirements of Section 03310 and ACI 308 or when curing compound is permitted as specified in Section 03310 when surfaces are subject to freezing temperatures.

3.4 DEFECTIVE CONCRETE

A. Concrete that does not satisfy the performance requirements of this specification and Section 03310, including but not limited to, tolerance, strength, durability and finish shall be removed and replaced at no extra cost to the Owner if repair cannot be accomplished to the satisfaction of Walmart Construction Manager.

3.5 PROTECTION

- A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and damage.
- B. After curing and after application of sealer, cover imprinted concrete area with polyethylene. Lay panels of hardboard over polyethylene at traffic paths. Remove protection material from finish surfaces only after Work in the area has been completed.
- C. Patch or replace damaged portions of concrete.

END OF SECTION