



**Section 32 13 16**  
**Decorative Concrete Paving-StellaCrete**

**PART I GENERAL**

1.1 SECTION INCLUDES

- A. Full depth *StellaCrete*.

1.2 DESCRIPTION – *StellaCrete* Includes:

- A. Furnish materials, labor, transportation, services, and equipment necessary to furnish and install *StellaCrete* textured architectural monolithic concrete paving system as indicated on Drawings, Samples and as specified herein.
  - 1. Materials: concrete, color hardener, surface deactivator.
  - 2. Fibermesh 150 / Stealth
  - 3. Diamond Dowels or Speed Dowels
  - 4. Pressurized cleaning equipment
  - 5. Concrete placement and finish
  - 6. Surface treatment
  - 7. Sealer Application

1.3 SUBMITTALS

- A. Concrete mix design
- B. Submit samples, as required, showing color, finish and sealer
- C. Contractor qualifications as listed below including a job list of 5 *StellaCrete* or *Actacrete* project including address, dated installed and a contact for the project.

1.4 CONTRACTOR

- A. Cast-in-place *StellaCrete* is to be installed by a decorative concrete contractor with a minimum of 5 years' experience installing *StellaCrete* or *Actacrete* concrete and having installed a minimum of 30,000 s.f. within a 100 mile radius of the job site. The contractor shall submit a list of five prior installations for the customer to view in order to evaluate the overall level of quality and expertise demonstrated by the contractor.
- B. Preferred installer in Arizona to be Progressive Hardscapes. Please contact:  
Progressive Hardscapes 623-582-2274, Fax: 623-582-1751  
Mike Riggs – [Mike@ProgressiveHardscapes.com](mailto:Mike@ProgressiveHardscapes.com)



- C. Contractor will be required to place an 4' x 4' on-site referee sample indicating Consistency of finish, isolation joints, control joints, sealing and caulking.

## **PART 2 PRODUCTS**

### **2.1 CONCRETE**

- A. Mix Design
  - a. Concrete shall have a minimum of 3000 psi (per ACI 318) or as required by local building codes or industry standards, whichever is higher
  - b. Portland Cement shall conform to ASTM C150, C595 or C1157 depending on soil conditions.
  - c. Aggregate shall conform to ASTM C33

### **2.2 COLORING, TEXTURE AND SEALING MATERIALS**

- A. Color with added aggregates, integral color and color hardener to match sample \_\_\_\_\_. Including custom color to be approved by Architect or Landscape Architect. The StellaCrete Gem Series Finish is to include any mirror glass, jelly beans and other specialty aggregates as selected by the Architect or Landscape Architect. The samples are available at the architect's office or Progressive Hardscapes for reference.
- B. StellaCrete Surface Deactivator will be used to achieve the desired finish.
- C. Slabs shall be sealed with a silane sealer in accordance with the manufacturer's recommendations.

## **PART 3 EXECUTION**

### **3.1 INSTALLATION**

- A. The area to receive *StellaCrete* concrete shall have the sub-grade prepared as required as for any concrete slab on grade on the site. (Note a minimum 2" ABC subbase will be required for all slabs on grade to ensure the concrete sets uniformly so that a consistent StellaCrete finish is achieved.)
- B. The formwork shall be installed in accordance with the drawings. StellaCrete concrete shall be a minimum of 4" thick for new slab-on-grade concrete and a minimum of 3" for interior slab-on-slab construction with required control joints. A minimum 6" turndown is required at the perimeter of all slabs on grade and at construction joints.
- C. Diamond Dowels 4¼" square x ¼" thick. Encase 50 percent of each dowel in a plastic sleeve to allow lateral movement of each dowel. Construction joints are to be 6" thick and Diamond Dowels are to be installed 3" below the top of the slabs on grade.
- D. Reinforcement shall include Fibermesh 150 and any other reinforcing show on the plans.



- E. Control joints and/or isolation joints shall be provided in accordance with the drawings and the guidelines established by the American Concrete Institute. As with any concrete slab, *StellaCrete* usually contains construction joints, control joints and expansion joints. The contractor shall advise and work with the architect/engineer to determine the best location for these joints to minimize the visibility of the joints and to minimize unsightly cracking.
- F. All concrete flatwork shall be performed under the supervision of a craftsman who has completed the American Concrete Institute (ACI) Concrete Flatwork Finisher and Technician training and has five years of experience installing *StellaCrete* or *Actacrete*®.
- G. The concrete shall be placed and screeded to the finished grade, and floated to a uniform surface using standard finishing techniques.
- H. Apply color with specialty sand, aggregate and glass to match sample.
- I. Surface Deactivator will be applied and cleaned off with proper equipment.
- J. After the initial curing period the surface of the slab shall be sealed with approved silane based sealer.

### 3.3 INSTALLATION TOLERANCES

- A. Uniformly place the concrete to the specified elevations
- B. Apply color with specialty aggregate at approximately 70 s.f. per pail
- C. Complete the finishing process to create a smooth, compacted surface to the concrete.
- D. Uniformly apply the *StellaCrete* surface treatment
- E. Install control joints in a timely manner to minimize random cracking
- F. Remove the surface down to the fine aggregate using pressurized equipment. Care shall be taken to not leave any deep or shallow inconsistencies in the overall *StellaCrete*.
- G. Evenly apply the recommended silane sealer after recommended cure time.
- H. Final clean up of job site