DIVISION 03 - CONCRETE

Exposed concrete finishes shall be sealed (See Division 7).

For exposed architectural concrete where appearance is important, require formwork design submittal and mock-ups. Set clear tolerances for finish surfaces acceptance.

EXPOSED AGGREGATE SIDEWALKS AND FLATWORK

General Requirements
Application of the following exposed aggregate concrete specification is primarily intended to be used in conjunction with new building construction or extensive hardscape developments where an accepted uniform concrete finish and overall appearance for exterior concrete hardscape is desired. This specification, therefore, applies to the new sidewalks, pathways, courtyards and plaza areas of and surrounding new campus buildings. Additionally, when existing campus facilities are undergoing renovation and replacement of sidewalks, pathways, courtyards and similar areas, evaluation of utilizing this specification is required. When the scope of the work is limited to relatively small areas, the guidelines specified in the University's Standard Specification SECTION 01732 - CUTTING, PATCHING AND MATCHING shall take precedence.

Scope of Work
Exterior concrete sidewalks, pathways, courtyards and plazas shall conform to the following design criteria:

1. Consist of concrete panels with 12-inch wide smooth banded perimeter sections surrounding interior sections of exposed aggregate.
2. Width, length and spacing of individual concrete panel sections to be a function of the surrounding physical requirements and constraints and shall attempt to incorporate the desired architectural theme of the campus improvement.
3. Sidewalks and pedestrian pathways shall have a cross-sectional thickness conforming to the following:

<table>
<thead>
<tr>
<th>Width of Walkway</th>
<th>Thickness of Concrete Slab</th>
<th>Reinforcing Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 6-feet wide</td>
<td>Slab thickness = 4 inches thick</td>
<td>#4 rebar surrounding each Panel w/6&quot; x 6&quot; - 10G x 10G welded wire mesh throughout panel</td>
</tr>
<tr>
<td>Less than 6-feet wide</td>
<td>Slab thickness = 6 inches thick</td>
<td>None</td>
</tr>
<tr>
<td>Greater or equal to 6-feet wide, less than or equal to 8-feet wide</td>
<td>Slab thickness = 6 inches thick</td>
<td>#4 rebar surrounding each panel w/6&quot; x 6&quot; - 10G x 10G welded wire mesh throughout panel</td>
</tr>
</tbody>
</table>
Materials

1. a. Course aggregate: Cache Creek 3/8\" x #8 pea gravel, (1,650 lbs, 9.94 cubic feet, +/- 5\% by volume).
   
   b. Stone color: Red, black, brown and a minor amount of white evenly distributed.
   NOTE: Contractor to coordinate with the University's Representative regarding mix and finish. This may require, at the discretion of the University's Representative that a sample panel be provided by the Contractor for evaluation and approval by the University.

   c. Reference mix design: Mix Number X8W6041A (Teichert Cache Creek Plant), or equal. NOTE: A reference site to serve as a control sample for finished appearance of this mix design is present in sidewalks located on the south and west sides of Hunt Hall on the UC Davis Campus.

Refer to Drawings section of Campus Standards & Design Guide for typical sidewalk detail.