

SECTION 32 14 00

UNIT PAVING AND VENEER

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section describes the requirements for providing the following types of unit pavers, curbs, steps as indicated:
 - 1. Unit pavers, curbs, steps, veneer and miscellaneous unit paving installed over reinforced mortar bed and 4-inch concrete slab.

1.02 SUBMITTALS

- A. Product Data: Manufacturer's technical data for each product, including certification that each product complies with specified requirements.
- B. Samples: Three full size pavers, 2 with specified sealer and one unsealed, and full range of grout colors available for initial selection prior to construction of mock-ups.

1.03 QUALITY ASSURANCE

- A. Installer Qualifications: Successful completion of at least three similar applications in type and size within the last three years.
- B. Field-Constructed Mock-Up: Prior to installation, fabricate mock-up of each type of unit paver using materials, pattern and joint treatment specified, including special features for expansion joints and contiguous work.
 - 1. Build mock-up in form of panel at the site, in location indicated or directed, full thickness, approximately 4-foot square, unless otherwise indicated.
 - 2. Provide range of color, texture, and workmanship to be expected in the completed work. Precast concrete pavers shall be sealed with specified sealer.
 - 3. Cure grout as specified.
 - 4. Obtain County's Representative's approval of mock-up before starting work.
 - 5. Retain mock-up during construction as a standard for judging completed work. Do not move or destroy until directed by County's Representative.
- C. Do not change source of brands for paver units, setting materials, or grout during progress of work.
- D. Furnish layout drawings using field dimensions for review.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Protect unit pavers and aggregate during storage and construction against wetting by rain or ground water, and against soilage or intermixture with earth and other materials.
- B. Protect grout and mortar materials from deterioration by moisture and temperature. Store in a dry location or in waterproof containers.

1.05 JOB CONDITIONS

- A. Hot Weather Requirements: Protect work in hot weather to prevent excessive evaporation of setting beds and grout. Provide shade, wind breaks, and use cooled materials as required.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Granite Pavers: 2-feet x 2-feet x 1-1/2-inch thick granite pavers, color to match Hall of Justice.
- B. Solid Granit Steps and Risers:
- C. Granite Veneer: 1 1/2-inch thick granite veneer at entry plaza and stairs as indicated and specified in Section 04 42 00.
- B. Aggregate: ASTM C144 with a fineness module of 2.25 plus or minus 0.10.
- C. Portland Cement: ASTM C150, Type I.
- D. Colored Pigmented Grout: Manufacturer's standard factory pre-packaged mixture of cement, fine aggregates and color-fast pigments formulated for mixing with liquid latex-admixture; provide color match as selected by County's Representative from manufacturer's standard colors.
- E. Liquid Admixture for Setting Bed, Bond Coat and Grout: Acrylic resin or styrene butadiene rubber formulations in factory pre-diluted or concentrated form; designated for use with thick bed mortar, bond coat and grout applications; producing mortar and grout with a compressive strength of 3000-psi, and bond strength of 214-psi. H.B. Fuller, "Acrylbond TA-865", Laticrete International, Inc., "Laticrete 3701" for setting bed and grout and "Laticrete 4237" for bond coat, Upco "Hydroment Multipurpose Acrylic Latex Additive" or approved equal.
- F. Setting Bed Reinforcement: Galvanized welded wire fabric, 2- x 2-inch - W0.3 x W0.3; complying with ASTM A185 and ASTM A82, except for minimum wire size.
- G. Water: Clean and potable.

PART 3 - EXECUTION

3.01 INSTALLATION, GENERAL

- A. Do not use unit pavers with chips, cracks, voids, discolorations or other defects which might be visible or cause staining in finished work.
- B. Cut unit pavers with motor-driven saw to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly.
- C. Set unit pavers in patterns shown and with uniform joints of indicated width.
- D. Tolerances: Do not exceed 1/16-inch unit-to-unit offset from flush, and a tolerance of 1/8-inch in 2'-0" and 1/4-inch in 10'-0" from level or slope as indicated, for finished surface.
- E. Install joint filler where sealant type joints are shown. For joint filler and sealant materials and for installation requirements, refer to Section 07 92 00.

3.02 LATEX-MODIFIED PORTLAND CEMENT APPLICATIONS

- A. Clean concrete subbase to remove dirt, dust, debris and loose particles.

- B. Install cleavage membrane where pavers are installed over interior structural slabs.
- C. Mix setting bed in proportions of one-bag of portland cement to 3-cu. ft. of sand to quantity of liquid admixture recommended by admixture manufacturer.
- D. Spread and screed setting bed to uniform thickness at subgrade elevations required for accurate setting of unit pavers to finished grades indicated.
 - 1. Mix and place only the amount which can be covered with unit pavers prior to initial set.
 - 2. Cut back, bevel edge, remove and discard setting bed material which has reached initial set prior to placing unit pavers.
 - 3. Place setting bed reinforcement approximately in center of bed.
- E. Place unit pavers before initial set of cement occurs. Immediately prior to placing unit pavers on green setting bed, apply uniform 1/16-inch thick slurry bond coat to bed with a flat trowel using mix of cement and liquid bond coat admixture. Apply skim coat of same material to back of each unit paver prior to placing on setting bed.
- F. Tamp and beat unit pavers to level and embed in setting bed prior to initial set of bed. Do not re-level unit pavers once set.
- G. Grout joints as soon as possible after initial set of setting bed. Force grout into joints without smearing on adjoining unit pavers. After initial set of grout, finish joints by tooling to produce a slightly concave polished joint, free from drying cracks.
 - 1. Mix grout consisting of factory-prepared color pigmented grout and liquid admixture in proportions recommended by grout manufacturer.
 - 2. Cure grout by maintaining in a damp condition for 7-days except as otherwise recommended by grout admixture manufacturer.

3.03 REPAIR, POINTING, CLEANING AND PROTECTION

- A. Remove and replace unit pavers which are loose, chipped, broken, stained or otherwise damaged, or if units do not match adjoining units.
- B. Pointing: During tooling of joints, enlarge voids or holes and completely fill with mortar or grout. Point-up joints at sealant type joints to provide a neat, uniform appearance, properly prepared for application of sealant.
- C. Cleaning: Remove excess mortar and grout from exposed unit paver surfaces; wash and scrub clean.
 - 1. Remove wax protective coating using methods recommended by unit paver and grout admixture manufacturer. Exercise care not to damage grout in joints.
- D. Protect unit paver work from damage or deterioration until time of Substantial Completion.

END OF SECTION