SECTION 32 14 16
BRICK UNIT PAVING

SPEC WRITER NOTE: Delete text between // ______ // not applicable to project.
Edit remaining text to suit project.

PART 1 - GENERAL

1.1 SUMMARY
A. Section Includes:
   1. Brick pavers set in mortar on a rigid base.

1.2 RELATED REQUIREMENTS

SPEC WRITER NOTE: Update and retain references only when specified elsewhere in this section.

A. Color and Texture of // Mortar // Brick //: Section 09 06 00, SCHEDULE FOR FINISHES.

1.3 APPLICABLE PUBLICATIONS
A. Comply with references to extent specified in this section.
B. ASTM International (ASTM):
   1. C144-11 - Aggregate for Masonry Mortar.
   4. C270-14a- Mortar for Unit Masonry.

1.4 SUBMITTALS
A. Submittal Procedures: Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
B. Submittal Drawings:
   1. Show brick paving layout and patterns.
   2. Show special brick shapes.
C. Manufacturer's Literature and Data:
   1. Description of each product.
D. Samples:
   1. Brick: Full size of each type and color.
      a. Minimum five individual samples to show full color and texture range.
   2. Mortar: Samples of brick with mortar joints of each color.
1.5 QUALITY ASSURANCE

SPEC WRITER NOTE: Verify mockup location and size are shown on drawings. Otherwise, specify size and location.

A. Mockups: Provide mockup of size indicated on drawings to confirm paving materials and pattern and to establish workmanship quality.

1.6 DELIVERY

A. Deliver products in manufacturer's original sealed packaging.
B. Mark packaging, legibly. Indicate manufacturer's name or brand, type, color, production run number, and manufacture date.
C. Before installation, return or dispose of products within distorted, damaged, or opened packaging.

1.7 STORAGE AND HANDLING

A. Store masonry materials under waterproof covers on planking clear of ground.
B. Protect products from damage during handling and construction operations.

1.8 FIELD CONDITIONS

A. Environment:
   1. Product Temperature: Minimum 4 degrees C (40 degrees F) for minimum 48 hours before installation.

1.9 WARRANTY

SPEC WRITER NOTE: Always retain construction warranty. FAR includes Contractor's one year labor and material warranty.

A. Construction Warranty: FAR clause 52.246-21, "Warranty of Construction."

PART 2 - PRODUCTS

2.1 SYSTEM PERFORMANCE

A. Design brick complying with specified performance:

2.2 PRODUCTS - GENERAL

A. Basis of Design: Section 09 06 00, SCHEDULE FOR FINISHES.
B. Provide each paving system component from one manufacturer and from one production run.

2.3 BRICK

SPEC WRITER NOTE: Class SX, Type I pavers are suitable for freeze-thaw exposure and are abrasion resistant for use in public spaces.

A. Paving Brick: ASTM C902; Class SX, Type I.

SPEC WRITER NOTE: Application PS is intended for general use. For more exacting tolerances, specify Application PX pavers which have tighter dimensional tolerances and allow consistently narrow joints between pavers.

1. Manufacturing Tolerances: // Application PS // Application PX //.

2.4 MORTAR

A. ASTM C270, Type S, cement-lime proportion specification mix. Admixtures and Type N lime are not acceptable.
B. Hydrated Lime: ASTM C207 Type S.
C. Sand: ASTM C144.
D. Portland Cement: ASTM C150/C150M.
E. Coloring Pigments: Pure mineral pigments, lime proof and non-fading; added to mortar by the manufacturer. Job colored mortar is not acceptable.

PART 3 - EXECUTION

3.1 PREPARATION

A. Examine and verify substrate suitability for product installation.
   1. Verify substrate depth accommodates brick paving installation thickness.
B. Protect existing construction and completed work from damage.
   1. Prevent damage from contact with mortar.
C. Clean substrates. Remove contaminants capable of affecting subsequently installed product's performance.

3.2 INSTALLATION - GENERAL

A. Install products according to manufacturer's instructions and approved submittal drawings.
3.3 **BRICK INSTALLATION**

A. Do not use bricks with chips, cracks, discoloration, or other visible defects.

B. Layout brick paving according to pattern indicated on drawings.

C. Installation with Portland Cement Mortar:
   1. Install brick in full bed joint. Remove excess mortar. Strike joints flush with top surface of brick and tool slightly concave.
   2. Cure mortar by maintaining damp condition for seven days.

D. Installation Tolerances:
   1. Finished surface true to plane within 1 mm in 1000 mm (1/8 inch in 10 feet), non-cumulative.
   2. Joint width deviation maximum 25 percent of dimension indicated.

3.4 **CLEANING**

A. Remove excess mortar before fully set.

B. Clean exposed brick and mortar surfaces. Remove contaminants and stains.

3.5 **PROTECTION**

A. Protect brick paving from traffic and construction operations.

B. Cover brick paving with reinforced kraft paper, and plywood or hardboard.

C. Remove protective materials immediately before acceptance.

D. Repair damage.

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