

## SECTION 04 21 13 - CLAY BRICK UNIT MASONRY

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section includes:

1. Clay face brick – thin brick.

#### 1.2 SUBMITTALS

A. Samples for each type and color of exposed masonry units.

1. Submit sample within 30 days of contract award.

B. Material Certificates: For each type of product indicated. Include statements of material properties indicating compliance with requirements including compliance with standards and type designations within standards.

1. Provide statement from masonry unit manufacturer that proposed masonry cleaner will not discolor or cause fading of masonry color.

C. Material Test Reports: For masonry units, substantiating compliance with requirements.

#### 1.3 QUALITY ASSURANCE

A. Single Source Responsibility for Brick Units: Obtain exposed masonry units of uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, from one manufacturer for each different product required for each continuous surface or visually related surfaces.

B. Field Constructed Mock-Ups: Build mock-up to verify selections made under sample submittals and to demonstrate aesthetic effects.

1. Build mock-up as part of unit masonry mock-up as specified in Division 04 Section “Common Work Results for Masonry” to represent completed masonry work for qualities of appearance, materials and construction to be approved by the Owner’s Representative.

#### 1.4 PROJECT CONDITIONS

A. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace unit masonry damaged by frost or by freezing conditions. Comply with cold-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

1. Remove any ice or snow formed on masonry bed by carefully applying heat until top surface is dry to the touch.
- B. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.
- C. Do not place brick units directly on the ground while being stored.

## PART 2 - PRODUCTS

### 2.1 BRICK

- A. General: Provide shapes indicated and as follows:
  1. For ends of sills and caps and for similar applications that would otherwise expose unfinished brick surfaces, provide units without cores or frogs and with exposed surfaces finished.
  2. Provide special shapes for applications where shapes produced by sawing would result in sawed surfaces being exposed to view.
- B. Clay Face Brick: ASTM C 216, Grade SW, Type FBS.
  1. Product: Provide product matching one of the manufacturer's colors specified on drawings or in Division 01 Section "Exterior Finishes and Colors" or a substitution approved by Architect and Owner.
  2. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of **3000 psi (20.7 MPa)**.

### 2.2 MASONRY ACCESSORIES

- A. Refer to Division 04 Section "Common Work Results for Masonry" for ties and anchors, embedded flashing materials, miscellaneous masonry accessories, insulation, and masonry cleaners.

### 2.3 MASONRY CLEANERS

- A. Proprietary Cleaner: Concentrated, general-purpose acidic cleaner
  1. Products: As specified in Division 04 Section "Common Work Results for Masonry."

### 2.4 MORTAR AND GROUT MIXES

- A. Refer to Division 04 Section "Common Work Results for Masonry" for mortar and grout mixes.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. General: Install units in the bond pattern indicated in strict accordance with manufacturer's instructions and as specified in Division 04 Section "Common Work Results for Masonry."
- B. Wetting of Brick: Wet brick before laying if initial rate of absorption exceeds 30 g/30 sq. in. (30 g/194 sq. cm) per minute when tested per ASTM C 67.
  - 1. For units with surface temperatures above 32°F (0°C), wet with water heated to above 70°F (21°C).
  - 2. For units with surface temperatures below 32°F (0°C), wet with water heated to above 130°F (54°C).

### 3.2 FIELD QUALITY CONTROL

- A. Refer to Division 04 Section "Common Work Results for Masonry."
- B. Clay Masonry Unit Test: For each type of unit provided, per ASTM C 67.

END OF SECTION 04 21 13

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