

SECTION 04300

UNIT MASONRY SYSTEM

1 PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract including General and Supplementary Conditions and Division 1 specification sections apply to Work of this section.

1.2 SECTION INCLUDES

- A. Concrete masonry and brick units, reinforcement, anchorage, and accessories.

1.3 SUBMITTALS

- A. Product data: Submit product data for masonry items, indicating compliance with requirements.

1.4 REGULATORY REQUIREMENTS

- A. Conform to applicable code for requirements for fire rated masonry construction.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 530 and ACI 530.1.

1.6 ENVIRONMENTAL REQUIREMENTS

- A. Cold Weather Requirements: IMIAC - Recommended Practices and Guide Specifications for Cold Weather Masonry Construction.
- B. Hot Weather Requirements: IMIAC - Recommended Practices and Guide Specifications for Hot Weather Masonry Construction.

2 PART 2 PRODUCTS

2.1 CONCRETE MASONRY UNITS

- A. Hollow Load Bearing Block Units: ASTM C90, Type I - Moisture Controlled; normal weight.
- B. Solid Load-Bearing Block Units: ASTM C90, Type I - Moisture Controlled; normal weight.

2.2 REINFORCEMENT AND ANCHORAGE

- A. Reinforcing Steel: ASTM A615, 60 ksi yield grade, deformed billet bars, galvanized finish.

2.3 MORTAR AND GROUT

- A. Mortar and Grout: As specified in Section 04100.

2.4 FLUE LINER

- A. Flue liner: Minimum 5/8" thick fire clay liner; ASTM C315.

2.5 FLASHINGS

- A. Copper Flashings: 16 oz/sq ft sheet copper.

2.6 ACCESSORIES

- A. Weeps: Preformed plastic tubes, cotton wick filled.
- B. Cleaning Solution: Non-acidic, not harmful to masonry work or adjacent materials, recommended by masonry unit manufacturer.

3 PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

- A. Verify that field conditions are acceptable and are ready to receive Work.
- B. Coordinate placement of anchors supplied to other Sections.

3.2 COURSING

- A. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.
- B. Concrete Masonry Units:
  - 1. Bond: Running. .
  - 2. Coursing: One unit and one mortar joint to equal 8 inches.
  - 3. Mortar Joints: Concave.

3.3 WEEPS

- A. Install weeps in veneer at 24 inches oc horizontally above through-wall flashing.

3.4 REINFORCEMENT AND ANCHORAGE - SINGLE WYTHE MASONRY

- A. Install joint reinforcement as indicated.

3.5 FLUE LINER

- A. Install flue liner from a point a minimum of 8" below lowest vent and extend full height of chimney. Provide air space between liner and masonry enclosure. Extend liner above top of chimney and provide mortar wash.

### 3.6 MASONRY FLASHINGS

- A. Extend flashings horizontally at roof intersection.
- B. Turn flashing up minimum 8 inches and bed into mortar joint of masonry.
- C. Lap end joints and seal watertight.
- D. Turn flashing, fold, and seal at corners, bends, and interruptions.

### 3.7 TOLERANCES

- A. Maximum Variation from Plumb: 1/4 inch per story non-cumulative; 1/2 inch in two stories or more.
- B. Maximum Variation from Level Coursing: 1/8 inch in 3 ft and 1/4 inch in 10 ft; 1/2 inch in 30 ft.

### 3.8 CUTTING AND FITTING

- A. Cut and fit for chases, pipes, conduit, and sleeves. Coordinate with other sections of work to provide correct size, shape, and location.

### 3.9 CLEANING

- A. Remove excess mortar and mortar smears as work progresses.
- B. Clean soiled surfaces with cleaning solution.

...END OF SECTION