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 FACE BRICK

- A. Modular sized, red colored, Face Brick: ASTM C216, by Morin Brick Co. or equal, model: Old Port Narrow Flashed Range.
- B. Brick size and shape Nominal size of 8x4x2-2/3 inches.

2.2 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.

2.3 REINFORCEMENT AND ANCHORAGE

- A. Reinforcing Steel: ASTM A615, 60 ksi yield grade, deformed billet bars, hot dip galvanized finish.
- B. Wall ties: Formed steel wire, triangular shape, 3/16" diameter, adjustable, with 12 gauge sheet metal anchor section, stainless steel finish.

2.4 MORTAR AND GROUT

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

2.5 FLUE LINER

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

2.6 FLASHINGS

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

2.7 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