

## SECTION 04085

## MASONRY ANCHORS AND ACCESSORIES

1 PART 1 GENERAL

## 1.1 SECTION INCLUDES

- A. Masonry veneer anchors and ties.

## 1.2 RELATED SECTIONS

- A. Section 04810 - Unit Masonry Assemblies.

## 1.3 REFERENCES

- A. ASCE/ACI 530.1 – Specifications for Masonry Structures; 2002.
- B. ASTM A 153/A 153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 1998.
- C. ASTM A 580/A 580M - Standard Specification for Stainless Steel Wire; 1998.

## 1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data on each type of product furnished.
- C. Performance Design, Design Calculations:
  - 1. Provide complete design calculations for masonry anchors and their attachment prepared and stamped and signed by a registered Professional Engineer licensed in the State of Maine. Allowable stress methodologies shall be employed in the design.
  - 2. Anchor Design Criteria: Design Loads: Anchors and their attachments shall be design for the following loads, calculated per the International Building Code, 2003 edition and ASCE 7, 2002 edition.
    - a. Wind Pressures (service loads)
      - 1. Field Wind Pressures (U. N. O.): 31.8 psf (direct), -31.8 psf (suction)
      - 2. Corner Zone Wind Pressures (within 10 feet of salient corners): 31.8 psf (direct), -58.4 psf (suction)
    - b. Seismic Loads (ultimate loads):
      - 1. Design Force: 0.443 x Weight of Component

## 2 PART 2 PRODUCTS

### 2.1 MANUFACTURER

- A. Acceptable Manufacturer:
  - 1. Hohmann & Barnard, Inc.
  - 2. No Substitutions.

### 2.2 APPLICATIONS

- A. Provide anchoring systems that comply with ACI 530.1/ASCE 6/TMS 602.
- B. Masonry Anchors: HB-200 unless noted otherwise.
- C. Masonry Ties
  - 1. Masonry Veneer Ties: Provide sufficient length to achieve minimum 2 inches (50 mm) embedment in mortar, or as required by Design.
    - a. Wire Minimum 3/16 inch diameter, of length as required by exterior wall assemblies; ASTM A 580 - AISI Type 304 stainless steel.
    - b. Other Applications: Where details or installation conditions require, provide ties fabricated of shape and size to suit conditions and provide adequate anchorage.

### 2.3 MATERIALS

- A. Masonry Anchors:
  - 1. Sheet Metal Materials: ASTM A 167 – AISI Type 304 stainless steel.
    - a. Minimum Thickness: 12 gauge.
  - 2. Wire Pintle Materials: ASTM A 580 - AISI Type 304 stainless steel.
    - a. Wire: Minimum 3/16 inch (4.76 mm) diameter ASTM A 580/A 580M.

## 3 PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Masonry Anchors:
  - 1. Spacing: 16" oc horizontally (maximum), 16" vertically at corner zones, 24" oc horizontally and 16" vertically at interior zone, as indicated on structural drawings, horizontal spacing to be provided in design calculations.
  - 2. Fasteners: Fasteners shall be as required by design utilizing the following types:
    - a. Metal Stud Backup: Install anchors with self tapping, self drilling, hot dipped galvanized screws through exterior wall sheathing into metal

- studs. Provide neoprene separation washer between anchors and screws. Minimum 4 threads shall penetrate far side of stud material. Size to be indicated by design.
- b. Structural Steel Backup: Install anchors self tapping, self drilling, hot dipped galvanized screws through exterior wall sheathing into metal studs. Provide neoprene separation washer between anchors and screws. Size and embedment to be indicated by design.
  - c. Concrete Backup: Install anchors with stainless steel Tapcon concrete screws by ITW Ramset/Red Head or stainless steel Kwik-Con II+ concrete screws by Hilti. Size and embedment to be indicated by design.
4. Pintle Wire Ties: Configure ties to prevent flow of water to anchor and to transfer lateral loads without excess mechanical play or deformation. Do not exceed eccentricity indicated in design.

...END OF SECTION