

This section includes site installed steel anchor devices that are intended to secure vertical natural stone panels in position. This section includes performance, proprietary and descriptive type specifications; edit to avoid conflicting requirements.

## **PART 1      General**

### **1.1            SECTION INCLUDES**

In this article, select the components that are intended to be part of the content of this section and will not be included in other sections.

- A.     Steel anchors for placement of stone panels.
- B.     Anchors attach to substrate for a secure assembly.

### **1.2            RELATED SECTIONS**

- A.     Section [\_\_\_\_\_ - \_\_\_\_\_]: Substrate providing structural support for anchors.

### **1.3            REFERENCES**

List reference standards that are included within the text of this section. Edit the following as required for project conditions.

- A.     ASTM A276-03 - Standard Specification for Stainless Steel Plate Bars and Shapes.

### **1.4            SYSTEM DESCRIPTION**

Use this article carefully; restrict statements to describe the combined result of the components used to assemble the system. If more than one type and weight of load is anticipated, create a schedule of loads, types of anchors, and locations.

- A.     Anchor Assembly: Anchor plates and attachment to resist loads as follows:
  - 1.     Downward (shear) load of [\_\_\_\_\_] kN ([\_\_\_\_\_] lb,
  - 2.     Lateral (tension) load of [\_\_\_\_\_] kN ([\_\_\_\_\_] lb,
  - 3.     each without damage or permanent set under load.

### **1.5            SUBMITTALS FOR REVIEW**

Do not request submittals if drawings sufficiently describe the products of this section or if proprietary specifying techniques are used. The review of submittals increases the possibility of unintended variations to drawings, thereby increasing the Specifier's liability. The following submittals are intended for review and acceptability.

- A.     Section 01300: Submission procedures.
- B.     Shop Drawings: Indicate component profiles, sizes, connection attachments, anchorage, size and type of fasteners, and accessories.

### **1.6            SUBMITTALS FOR INFORMATION**

The following submittals are for information only; do not request these submittals if the information submitted will be assessed for acceptability.

- A.     Section 01300: Submission procedures.
- B.     Test Reports: Submit substantiating engineering data, test results of previous tests [by independent laboratory] which purport to meet performance criteria, and other supportive data.

## 1.7 QUALITY ASSURANCE

This article is to address a potential regulatory requirement for structural and load considerations affecting the selection and anchorage of required anchors.

- A. Manufacture by fabricator with at least five years experience in the manufacture of anchoring components.
- B. Manufacture by fabricator with experience in projects of similar scope.
- C. Manufacture in accordance with an established quality assurance program.

## 1.8 PRE-INSTALLATION MEETING

This article is to identify a possible requirement for those parties directly affected by this section.

- A. Section 01300: Pre-installation meeting: Attendees to include installers of the anchor components and the affected concrete/masonry parties.
- B. Convene [one] [\_\_\_\_\_] week before starting Work of this section.

## 1.9 COORDINATION

- A. Section 01300: Coordination with other Work having a direct bearing on work of this section.
- B. Coordinate the Work with installation of anchor assembly onto structural supporting components.

## PART 2 Products

### 2.1 MANUFACTURERS:

- A. Halfen Anchoring Systems, A Division of Meadow Burke Products, Converse TX 78109, Phone: 800-323-6896, Fax: 888-277-1695, Website: www.halfenusa.com, Email: halfen@meadowburke.com.
- B. Substitutions: [Refer to Section 01600.] [Not permitted.]

### 2.2 MATERIALS

Edit the following paragraph to suit placement in concrete form work for casting in place using stud type anchors.

- A. Steel Wall Bracket:
  - 1. Halfen: HRM Stone Fixing Clip, Part Number [\_\_\_\_\_].
  - 2. Material: ASTM A276 Type [304] [\_\_\_\_\_] stainless steel.
  - 3. Wall Bracket: Toughened stainless steel.
  - 4. Anchors to Substrate: [Bolted] [\_\_\_\_\_] type.

Refer to manufacturer's literature to identify the required anchor type(s).

- 5. Stone Anchor: Toughened stainless steel:
  - a. Type [N - secured pin, free expansion joint] [B - half pin, lowest stone panel joint] [C - 30 degree extension arm edge, non-visible joint] pin for anchoring stone,

- b. Adjustable flat faced bolt, horizontal face to support stone panel,
- c. adjustable nut, and
- d. locking nut.

**2.3 FABRICATION**

- A. Shop assembles items for delivery to site in the variety of sizes required.
- B. [Individually package each] [Package] anchor sets.

**PART 3 Execution**

**3.1 EXAMINATION**

- A. Section 01600: Verification of existing conditions before starting work.
- B. Verify dimensions, tolerances, and method of attachment with other work.

**3.2 INSTALLATION**

- A. Establish setting templates in correct positions prior to drilling mount holes for expansion anchors.
- B. Install items plumb and level, accurately fitted, free from distortion or defects.
- C. Obtain approval prior to site cutting or making adjustments.

**3.3 ERECTION TOLERANCES**

- A. Section 01400: Tolerances.
- B. Wall Bracket: Maximum Variation from [Plumb] [Level]: [3] [6] [\_\_\_\_] mm ([1/8] [1/4] [\_\_\_\_] inch).

**END OF SECTION**