

## SECTION 10350 - FLAGPOLES

### City of San Diego, CWP Guidelines

#### PART 1 - GENERAL

##### 1.1 WORK OF THIS SECTION

- A. The WORK of this Section includes providing [a] tapered aluminum flagpole[s], complete with a 50-star U.S. Flag [and a State of California flag] and all fittings, ropes, guys, top ornament, lighting, ground spike with plate, foundation, grounding facilities, and all appurtenant work.

##### 1.2 RELATED SECTIONS

- A. The WORK of the following Sections applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.
  - 1. Section 03300 Cast-in-Place Structural Concrete
  - 2. Section 03310 Cast-in-Place Sitework Concrete

##### 1.3 SPECIFICATIONS AND STANDARDS

- A. Except as otherwise indicated, the current editions of the following apply to the WORK of this Section:
  - 1. Federal Specifications:

CCC-C-439	Cloth, Bunting, Mercerized
CCC-C-476	Cloth, Bunting, Nylon; Nylon and Wool

##### 1.4 SHOP DRAWINGS AND SAMPLES

- A. The following shall be submitted in compliance with Section 01300:
  - 1. Manufacturer's catalogue containing technical data and application instructions.
  - 2. Shop drawings indicating erection and grounding details.
- B. Samples of all the materials and colors proposed for use on the WORK. The samples shall be clearly marked to show the manufacturer's name and product identification.

##### 1.5 DESIGN CRITERIA

- A. Flagpole[s] and related installation construction shall be designed to withstand a 90 mph wind velocity when flying a flag of indicated size.

##### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Flagpole[s] shall be spiral wrapped with heavy kraft paper or other protective wrapping and shipped in hard fiber tube or other protective container.

## PART 2 - PRODUCTS

### 2.1 FLAGS

- A. A 4-foot by 6-foot, 50-star United States flag [and a 4-foot by 6-foot State of California flag] shall be furnished with each of the flagpole[s]. Flag[s] shall be heavy-weight [nylon conforming to FS CCC-C-476] [cotton bunting conforming to FS CCC-C-439].

### 2.2 FLAGPOLE

- A. **General:** The flagpole shall be a tapered aluminum section and shall be provided complete with all fittings, top ornament, lighting, and ground spike with plate.
- B. **Fabrication:** Pole shall be a machine made, cone tapered, seamless, extruded aluminum pole. Pole shall be made of 6063-T6 aluminum alloy and shall have a minimum wall thickness of 0.188 inches, 6-inch minimum diameter butt, 3-1/2-inch minimum diameter top, and a height of 30 feet above base. [Pole and all exposed aluminum fittings shall have a clear anodized finish having a minimum thickness of 0.0008-inch and a minimum weight of 32 mg per square inch.] [Pole and all exposed aluminum fittings shall have hard anodized finish, "Duranodic," minimum thickness of 0.7 mils, Aluminum Association A-42-Class 1 finish, dark bronze color].
- C. The [6-inch diameter ball] [15-inch high eagle with wings] at top shall be 14-gauge [aluminum] [gold anodized aluminum] [stainless steel].
- D. Truck shall be [bronze] [heat-treated aluminum] non-fouling, stainless steel ball bearing revolving truck, with nylon-bushed bronze sheaves.
- E. Cleat shall be 8-inch cast bronze or anodized aluminum, 2 per pole, matching pole color, with stainless steel fasteners.
- F. Halyard shall be 3/8-inch braided nylon with dacron jacket rope, supplied with 4 bronze swivel snaps. Snaps shall have little or no movement between the swivel and the snap. The snap head opening diameter shall be larger than the area to be snapped to prevent wear between snap and grommets.
- G. Base shall be ground set base with aluminum ground protector and flash collar.
  - 1. A minimum 16-gauge galvanized, corrugated steel tube or a 12-gauge rolled steel tube, sized to suit flagpole and installation shall be provided. Tube shall be complete with welded steel bottom base and support plate, lightning ground spike, and steel centering wedges, all of welded construction.
  - 2. Loose hardwood wedges shall be provided at top of tube for plumbing pole after erection.
  - 3. All steel parts shall be galvanized after assembly, including foundation tube.
- H. Sleeve shall be 16-gauge galvanized corrugated steel foundation tube or 10-gauge galvanized steel tube.

- I. **Finial Ball:** Finial shall be manufacturer's standard flush seam ball of same material and finish as pole, sized as indicated, or, if not indicated, to match pole butt diameter.

## 2.3 MANUFACTURERS

- A. Flag pole and flag shall be manufactured by one of the following (or equal):
  1. Acme Flagpole Co.
  2. Concord Industries, Inc.
  3. Hortle-Van Manufacturing Co.

## **PART 3 - EXECUTION**

### 3.1 INSTALLATION

- A. Flag pole, concrete base, and copper ground rod shall be provided as per manufacturer's published recommendations and specifications. Installation shall be secure, true, and plumb.
- B. Portions of ground-set flagpole which occur below grade shall be painted with a heavy coat of bituminous paint complying with Section 09800.

**\*\* END OF SECTION \*\***