

SECTION 10 75 00

FLAGPOLES

PART 1 - GENERAL

1.01 DESCRIPTION

A. This Section describes the requirements for furnishing and installing:

1. Ground-mounted flagpoles.
2. Flags will be furnished by the County.

1.02 PERFORMANCE REQUIREMENTS

A. Structural Performance: Flagpole assemblies, including anchorages and supports, shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated according to the following design criteria:

1. Seismic Load: As required by California Building Code (CBC) requirements.
2. Wind Load: As required by CBC requirements and NAAMM FP 1001 "Guide Specifications for Design of Metal Flagpoles"
3. Base flagpole design on nylon flags of maximum standard size suitable for use with flagpole.

1.03 SUBMITTALS

A. General: Comply with Section 01 33 00.

B. Product Data: For each type of flagpole, include construction details, material descriptions, dimensions of components and profiles, operating characteristics, fittings, accessories, and finishes.

C. Shop Drawings: Include plans, elevations, details, and attachments to other work. Show arrangement, jointing, fittings, accessories, grounding, anchoring, and support.

1. Include section and details of foundation system for ground-mounted flagpoles.

D. Samples: Furnish samples of each finished metal for flagpoles, and accessories as requested.

E. Furnish analysis data signed and sealed by a professional engineer responsible for their preparation.

1.04 QUALITY ASSURANCE

A. Manufacturing Standards: Provide each flagpole as a complete unit produced by a single manufacturer, including fittings, accessories, bases and anchorage devices.

1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. General: Comply with Section 01 61 00.

B. Spiral wrap flagpoles with heavy Kraft paper or other weather-tight wrapping and prepare for shipment in hard fiber tube or other protective container.

C. Deliver flagpoles and accessories identified for installation procedure. Handle and store flagpoles to prevent damage or soiling.

PART 2 - PRODUCTS

2.01 APPROVED MANUFACTURERS

- A. American Flagpole, Baartol Company, Concord Industries, Inc., Lingo Inc. or approved equal.

2.02 FLAGPOLES

- A. Flagpole Construction: Construct flagpoles in one piece if possible. If more than one piece is necessary, comply with the following:
 - 1. Fabricate shop and field joints without using fasteners, screw collars or lead calking.
 - 2. Provide flush hairline joints using self-aligning, snug-fitting, internal sleeves or self-aligning, snug-fitting joints.
- B. Exposed Height: As indicated.
- C. Stainless Steel Flagpoles: Provide cone-tapered flagpoles fabricated from pipe, tube or plate complying with ASTM A312, ASTM A269 or ASTM A666, Alloy UNS S30400 Alloy UNS S31603 for marine environments.
- D. Metal Foundation Tube: Corrugated steel foundation tube, not less than 16-gauge thickness. Provide 3/16-inch steel bottom plate and support plate, 3/4-inch diameter steel ground spike, and steel centering wedges welded together. Galvanize steel after assembly. Provide loose hardwood wedges at top of foundation tube for plumbing pole.
 - 1. Provide flashing collar of same material and finish as flagpole.

2.03 FITTINGS

- A. Finial Ball: Flush-seam ball, sizes to match flagpole butt diameter.
 - 1. 0.063-inch spun aluminum with gold anodized finished.
- B. Internal Halyard Winch System: Manually operated winch with control stop device and removable handle, stainless-steel cable halyard, and concealed revolving truck assembly with plastic-coated counterweight and sling. Provide flush access door secured with cylinder lock. Finish truck assembly to match flagpole.
 - 1. Halyard Flag Snaps: Provide two stainless steel swivel snap hooks per halyard.

2.04 MISCELLANEOUS MATERIALS

- A. Non-shrink, Non-metallic Grout: Factory-packaged, non-staining, non-corrosive, non-gaseous grout complying with ASTM C1107.
- B. Drainage Material: Crushed stone, or crushed or uncrushed gravel; coarse aggregate.
- C. Sand; ASTM C33, fine aggregate.
- D. Elastomeric Joint Sealant: As specified in Section 07 92 00.
- E. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187.

2.05 STAINLESS STEEL FINISH

- A. Surface Preparation: Remove tool and die marks and stretch lines or blend into finish.

- B. Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.
 - 1. Run grain of directional finishes with long dimension of each piece.
 - 2. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.
 - 3. Directional Satin Finish: No. 4.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas, and conditions with installer for compliance with requirements for installation tolerances, including foundation; accurate placement, pattern, orientation of anchor bolts, and other conditions affecting performance of the work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Prepare uncoated metal flagpoles that are set in foundation tubes by painting below-grade portions with a heavy coat of bituminous paint.
- B. Foundation Excavation: Excavate to neat clean lines in undisturbed soil. Remove loose soil and foreign matter from excavation and moisten earth before placing concrete. Place and compact drainage material at excavation bottom.
- C. Provide forms where required due to unstable soil conditions and for perimeter of flagpole base at grade. Secure and brace forms to prevent displacement during concreting.
- D. Place concrete as specified in Section 03 30 00. Compact concrete in place using vibrators. Moist-cure exposed concrete for not less than 7-days or use non-staining curing compound.
- E. Trowel exposed surfaces to a smooth, dense finish, free of trowel marks, and uniform in texture and appearance. Provide positive slope for water runoff to perimeter of concrete base.

3.03 FLAGPOLE INSTALLATION

- A. General: Install flagpoles in accordance with shop drawings and manufacturer's instructions.
- B. Ground Set: Place foundation tube or sleeve, center, and brace to prevent displacement during concreting. Place concrete. Plumb and level foundation tube or sleeve and allow concrete to cure. Install flagpole plumb in foundation tube or sleeve.
 - 1. Foundation Tube: Place tube seated on bottom plate between steel centering wedges and install hardwood wedges to secure flagpole in place. Place and compact sand in foundation tube and remove hardwood wedges. Seal top of foundation tube with a 2-inch layer of elastomeric joint sealant and cover with flashing collar.

END OF SECTION