

ITEM 01615.8080 M - ALUMINUM FLAGPOLE

DESCRIPTION

This work consists of furnishing and installing flagpoles complete with fittings, and including the concrete foundations in accordance with the Contract Documents or as directed by the Engineer.

MATERIALS

Excavation required for the installation of the flagpole shall conform to Subsection 203-1.01, Unclassified Excavation.

The materials used in the fabrication and installation of the flagpoles shall conform to the following requirements:

1. Pole. The pole shall be made of aluminum in accordance with ASTM B-241. The finish on the pole shall be as specified on the contract plans. The pole shall have an exposed length of 7.620 m and have a uniform conical taper. The butt diameter shall be a minimum of 127 mm. The wall thickness shall be 4.775 mm. The pole construction shall be seamless throughout and comprised of one section.
2. Flagpole Fittings.
 - a. The ball shall be 127 mm in diameter. It shall be spun from 1.8 mm (14 gauge) aluminum with watertight and flush seams and shall have a gold anodized finish. The ball shall be mounted on a 19 mm seamless aluminum tube over a 16 mm non-corrodible rod attached to the truck.
 - b. The truck shall be a standard revolving type. It shall have a cast aluminum body with stainless steel needle bearings mounted on an aluminum spindle with two cast aluminum sheaves that rotate on 13 mm diameter stainless steel pins.
 - c. Provide two 9.5 mm No. 13 Nylon braided halyard per pole, each having two brass swivel type snaphooks.
 - d. Provide two standard cast aluminum cleats per pole; fasten with two 19 mm zinc chromate plated screws.
 - e. Provide one cast aluminum flash collar per pole, having a minimum diameter of 610 mm and height of 51 mm.
3. Foundation. Portland cement concrete used for the foundation shall meet the requirements for Class A concrete for structures as specified in Section 501, Portland Cement Concrete – General, and shall have a minimum compression strength of 20,700 kPa at twenty-eight days.

The corrugated steel pipe sleeve shall be 1.5 mm thick (16 gauge), and shall meet the requirements specified for Type I and II in AASHTO M36 and M190.

All steel, except the steel reinforcing bar, shall be galvanized in accordance with Type I and III coating as specified in Subsection 719-01, Galvanized Coating and Repair Methods.

Sand shall meet the requirements of Subsection 703-03, Mortar Sand.

Concrete grouting material shall meet the requirements of Subsection 701-05, Concrete Grouting Material.

Wooden wedges shall be oak.

Caulking compound shall meet the requirements of Subsection 705-06, Caulking Compound for Structures.

CONSTRUCTION DETAILS

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The contractor shall construct the flag pole base and install the flag pole according to the details shown on the contract plans and as directed by the Engineer. All work shall be done in a workmanlike manner to insure a neat finished appearance.

Concrete shall be furnished and placed as shown on the plans and in accordance with Section 555, Structural Concrete, excluding Subsections 555-4, Method of Measurement and 555-5, Basis of Payment.

All steel in the foundation, except for the corrugated steel pipe and the reinforcing bar, shall be welded together before galvanizing.

METHOD OF MEASUREMENT

The flagpole shall be measured for payment by the number of flagpoles supplied and installed in accordance with the Contract Documents and the direction of the Engineer.

BASIS OF PAYMENT

The unit price bid for each flagpole shall include the cost of the furnishing all labor, excavation, equipment and material, including all foundation work, necessary to satisfactorily complete the work.