

706 - BEARINGS AND PADS FOR STRUCTURES

SECTION 706

BEARINGS AND PADS FOR STRUCTURES

706.1 DESCRIPTION

Install the complete factory produced bearings and pads as designated in the Contract Documents.

BID ITEMS

Elastomeric Bearing Pad (**)

Bearing (*) (**)

*Type (Steel Reinforced Elastomeric, TFE/Elastomeric, Pot, Disc, Steel, Spherical, etc.)

** Size, if applicable

UNITS

Each

Each

706.2 MATERIALS

Provide bearings and pads of the types, dimensions and configurations shown in the Contract Documents that comply with **DIVISION 1700**.

- Elastomeric bearing pads are non-reinforced pads consisting of elastomer only.
- Steel reinforced elastomeric bearings consist of layers of elastomer restrained at their interfaces by bonded non-elastic laminates. Provide bearings with the dimensions, material properties, elastomer grade and type of laminates shown in the Contract Documents.
- TFE/elastomeric bearings consist of a stainless steel sliding plate and a steel reinforced elastomeric bearing. Bond a stainless steel or structural steel back-up plate to the top of the steel reinforced elastomeric bearing. Bond the other side of the back-up plate with a layer of teflon.
- Pot and disc bearings consist of a circular non-reinforced neoprene, elastomer or rubber pad, of relatively thin section. For a pot bearing, this pad is confined and sealed in a steel pot or hydraulic cylinder. For a disc bearing, this pad is not confined.
- Steel bearings consist of rocker, roller and sliding bearings.
- Spherical bearings consist of bearings with spherical elements for unidirectional deflection rotation.

706.3 CONSTRUCTION REQUIREMENTS

Submit shop drawings for each location, type and model according to **subsection 105.10**. Show all details of fabrication and installation. With the exception of plain elastomeric pads, which do not require drawings, do not perform any fabrication until shop drawing are approved by the Engineer. Changes to approved shop drawings are subject to the approval of the Engineer. Submit revised sheets of the same size as those originally approved.

Fabricate and paint steel bearings according to **SECTIONS 705** and **714**, respectively.

Install the bearings and pads as detailed in the Contract Documents.

Unless shown otherwise in the Contract Documents, place the bearing plates on bearing mats or pads that comply with **SECTION 1701**. Do not place steel masonry bearing plates upon bridge seat bearing areas that are improperly finished, deformed or irregular, or until elevations have been verified. Set bearing plates level in position as shown in the Contract Documents, and with a full and even bearing upon the masonry.

Adjust the nuts on anchor bolts at the expansion ends of spans to permit the free movement of the span. Provide lock nuts or burr the threads of the anchor bolts.

Protect bearings and pads from damage before installation. Clean the operating surfaces thoroughly before final assembly. Provide protection from contamination or damage by other construction operations during and after installation.

706.4 MEASUREMENT AND PAYMENT

The Engineer will measure each bearing and pad of the various types and sizes.

Payment for "Elastomeric Bearing Pad" and "Bearing" at the contract unit prices is full compensation for specified work.