

BEARING DEVICE ASSEMBLY, PREFORMED FABRIC PAD

****From Middlebury WCRS(9)**

- xx. DESCRIPTION. This work shall consist of furnishing and installing fabric bearing devices as detailed in the Plans.

The work under this Section shall be performed in accordance with these provisions, the Plans, and Section 531 of the Standard Specifications.

- xx. MATERIALS. Preformed fabric bearing pads shall meet the requirements of Subsection 731.01.

- xx. FABRICATION DRAWINGS. Bonding procedures shall include details of surface preparation and adhesive applications for bonding polytetrafluoroethylene (PTFE) to fabric.

- xx. FABRICATION.

- (a) Tolerances. After fabrication and application of surface protection, bearing devices or components shall be within the following tolerances:

(1) Dimensions (Length, Width, Thickness, Hole Locations, and Position of Welded Components). The tolerance shall be ± 1.6 mm (1/16 inch).

(2) Flatness.

a. Top Sole Plate. Bearing surfaces shall be flat with maximum permissible variation of 0.25 mm (0.01 inch) from a plane determined by any three corners of the plate.

b. Bottom Sole Plate (Masonry Plate). Bearing surfaces shall be flat with a maximum permissible variation of 1.00 mm (0.04 inch) from a plane determined by any three corners of the plate.

c. Sliding Surfaces. For stainless steel mating with PTFE bonded to steel, the tolerance shall be the "nominal dimension" in millimeters (inches) times 0.0005. The "nominal dimension" shall be the distance between any diagonal corners or opposite edges of the bearing surface. The tolerance is applicable to both surfaces.

For stainless steel mating with PTFE bonded to fabric bearing pad material, the tolerance shall be 0.25 mm (0.01 inch) from a plane determined by any three corners of the plate.

- (b) Fabric Bearings.

(1) Fabric bearings shall be constructed of material conforming to Subsection 731.01.

- (2) Expansion bearings shall have sliding contact surfaces of PTFE and stainless steel. The PTFE shall normally be bonded to the preformed fabric bearing pad material and the stainless steel shall normally be welded or bonded to the structural steel.

The design coefficient of friction between the PTFE and the stainless steel shall not exceed 0.06 at 5.5 MPa (800 pounds per square inch) compressive loading.

xx. METHOD OF MEASUREMENT. The quantity of Special Provision (Bearing Device Assembly, Preformed Fabric Pad) to be measured for payment will be the number of units used in the complete and accepted work. All bearing device components and anchor bolt assemblies will be included as part of the measured unit. Anchor bolt assemblies include bolts, threaded rods, nuts, washers, and beveled plates required for attachment of bearing devices to the superstructure and substructure.

xx. BASIS OF PAYMENT. The accepted quantity of Special Provision (Bearing Device Assembly, Preformed Fabric Pad) will be paid for at the Contract unit price for each. Payment will be full compensation for detailing, furnishing, handling, transporting, and placing the material specified, including surface preparation, protective coating, testing, anchor bolt assemblies, drilling for anchor bolts, mortar, proprietary anchoring systems, bearing device components, and welding; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
900.620 Special Provision (Bearing Device Assembly, Preformed Fabric Pad)	Each
900.620 Special Provision (Bearing Device Assembly, Preformed Fabric Pad)(Stringer)	Each
900.620 Special Provision (Bearing Device Assembly, Preformed Fabric Pad)(Truss)	Each