Supplemental Specification
2017 Standard Specification Book

SECTION 05822M

ELASTOMERIC BEARINGS

Delete Paragraph 1.1 C and replace with the following:

C. Components of elastomeric bearings such as masonry, sole and shim plates, anchor bolts, guide devices, and polytetrafluoroethylene (PTFE) surfacing.

Delete Paragraph 1.3 G through 1.3 J and replace with the following:

G. ASTM F 1554: Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength

H. AWS D1.6: Structural Welding Code – Stainless Steel

I. American Institute of Steel Construction (AISC)

Delete Paragraph 1.5 D1 and replace with the following:

1. Refer to this Section, Article 2.7.

Delete Article 2.5 through 2.9 and replace with the following:

2.5 STAINLESS STEEL PLATE

A. ASTM A 240, Type 304.

B. Limit thickness to at least $^{1}/_{8}$ inch.

C. Provide a mirror-like finish of 8 micro inch or less (root mean square) on the side that contacts the PTFE.

2.6 ANCHOR BOLTS

A. ASTM F 1554, Grade 36, 55, or 105-ksi.
   1. Galvanize according to ASTM A 153.

2.7 MANUFACTURE

A Fabricate according to AASHTO LRFD Bridge Construction Specifications, Section 18.1.4 and AASHTO M 251.

1. AISC Highway Metal Components Certification (CPT) is required for fabrication of metal bearing components.

B. Elastomeric bearings with sliding surfaces.
   1. Recess and bond PTFE to top plate at manufacturer's facility.
      a. Recess at least one-half of PTFE thickness.
      b. Do not bond the PTFE to the stainless steel sliding plate.
      c. Make the bonded PTFE surface smooth and free from bubbles.
      d. Polish the filled PTFE surfaces.
   2. Weld the stainless steel with ⅛ inch continuous fillet welds to the sole plate.
      a. Use a single piece of stainless steel.
      b. Do not allow the weld metal to project beyond the plane of the sliding surface.
      c. Use welding procedures compatible with the stainless steel specified.
         1) Refer to AWS D1.6 Structural Welding Code – Stainless Steel.
      d. Stainless steel sheet must be flat, free from wrinkles, and in continuous contact with the sole plate after welding.
   3. Protect stainless steel and PTFE sliding surfaces during manufacture, shipment, and erection.
      a. Clean the sliding surfaces immediately before setting the girder in place.
      b. The Department considers the unit damaged when the sliding surfaces are damaged by scratches, weld splatter, gouges, overspray from painting, and other defects.
   4. Do not exceed coefficient of friction shown.

2.8 TESTING

A. Test according to AASHTO LRFD Bridge Construction Specifications and and AASHTO M 251.

Add the following to Article 3.1:

D. Do not epoxy bond or adhesively bond elastomeric bearing to concrete.