

**KANSAS DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION TO THE  
STANDARD SPECIFICATIONS, EDITION 2007**

**SECTION 1701**

**BEARINGS AND PADS FOR STRUCTURES**

**Page 1700-1, subsection 1701.2c. Delete this subsection and replace with the following:**

**c. Steel Reinforced Elastomeric Bearings.** Except as modified by the material, testing and acceptance requirements of this specification, provide steel reinforced elastomeric bearings that satisfy the requirements of AASHTO M 251.

Provide a virgin neoprene (polychloroprene) elastomer. A Shore A Durometer hardness of  $60 \pm 5$  and an AASHTO low temperature Grade 3 elastomer is required, unless shown otherwise in the Contract Documents.

Provide laminates for the bearings that comply with ASTM A 36, AASHTO M 270 (ASTM A 709) Grade 36, ASTM A 1011 SS Grade 36 or A 1008 SS Grade 40, unless otherwise specified in the Contract Documents.

Refer to the Contract Documents for the design method used:

(1) For steel reinforced elastomeric bearings designed using Design Method A, provide bearings that conform to and are tested according to the requirements of AASHTO M 251, sections 8.6 and 8.8.2, and Appendices X1 and X2. The testing requirements of section 8.8.1 will apply if a maximum value for compressive strain is shown in the contract documents. Follow the test procedure described in section 8.8.2, except load the sampled bearing to 1500 psi.

(2) For steel reinforced elastomeric bearings designed using Design Method B, provide bearings that conform to and are tested in accordance with AASHTO M 251, sections 8.6 and 8.8, including the shear modulus test of section 8.8.4. Report the test method used to determine shear modulus. The testing requirements of section 8.8.1 will apply if a maximum value for compressive strain is shown in the Contract Documents. Report the percent creep at 25 years (section 8.8.3) if an allowable value is shown in the Contract Documents. Follow the test procedure described in section 8.8.2, except load the sampled bearing to 2400 psi.

For sampling and testing of finished bearings, a lot is defined as being of the same size, thickness, design, and type - manufactured in a reasonably continuous manner for a single bridge.

**Page 1700-1, subsection 1701.2f. Change "Type I or II" to "AASHTO M 314 Grade 36 or Grade 55".  
Change "ASTM A 153" to "ASTM F 2329".**

**Page 1700-2, subsection 1701.5b. Delete this subsection and replace with the following:**

**b. Bearings** (all types except Steel) Accepted on the basis of the following:

(1) Receipt and approval of a Type A certification as specified in **DIVISION 2600**.

(2) Receipt and approval of a certification from the bearing producer describing the results of a visual examination by QC personnel performed during the testing of AASHTO M 251, section 8.8.2. Reject bearings having cracks exceeding the criteria of section 8.8.2, having bulging that suggest poor laminate bond, or bulging patterns that imply laminate placement does not meet the tolerance requirements of M 251, section 6. Include the following with the certification:

(a) A statement certifying the bearings conform to the design, material, and manufacturing requirements of this specification.

(b) High resolution pictures of all four sides of the loaded bearing. Take the pictures from an angle and distance, using appropriate lighting, to clearly indicate the amount of bulging and bulging patterns.

(c) A detailed description of any surface cracks

(3) Visual inspection for condition and compliance with the shop drawings by the Field Engineer at the project site.

**Page 1700-2, subsection 1701.5c. In the last bullet, change "SECTION 703" to "SECTION 705".**

12-01-08 M&R (CFN)  
Mar-09 Letting