OKLAHOMA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISIONS
FOR
ELASTOMERIC BEARING PADS

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the 2009 Standard Specifications for Highway Construction, English and Metric.

(Replace with the following:)

733.06 ELASTOMERIC BEARING PADS

A. Description

Provide plain and laminated elastomeric bearing pads for bearings used in, on, or under structural members with the dimensions and physical test parameters shown in the contract documents. Provide shop drawings to the Engineer for review and approval before beginning pad manufacture.

B. Materials

Provide materials, fabrication, fabrication tolerances, markings, certification testing, and installation for elastomeric bearing pads in accordance with ***AASHTO LRFD Bridge Construction Specifications***. Provide low temperature Grade 2 elastomer compounds made containing only virgin crystallization resistant polychloroprene (neoprene) as the raw polymer. Provide ⅛ in [3.2 mm] embedded laminate edge covers or connection members for steel reinforced bearing pads. Provide steel laminates in accordance with AASHTO M270 Grade 50 or ASTM A 1011 Grade 40. If the contract documents require the anchor plate to be bonded to the bearing pad, ensure a heat-bonded connection is made by the pad manufacturer during the vulcanization process. Ensure the steel anchor plate meets the requirements for the appropriate sub-section of Section 724 and the contract documents before beginning the vulcanization process.

An elastomeric bearing pad is tested and accepted in one of two ways based on the manner in which the contract documents specify the pad.

(1) Pad specified with Shear Modulus

When the contract documents specify the elastomeric bearing pad by the Shear Modulus only, or the Shear Modulus and Durometer Hardness, provide the bearing pad in accordance with AASHTO M251. When the Durometer Hardness is specified, ensure the Durometer Hardness meets the tolerances of AASHTO M251 Appendix X1 for Hardness when tested in accordance with ASTM D 2240.

(2) Pad specified by Durometer only

When the contract documents specify the elastomeric bearing pad by the Durometer Hardness only, provide the bearings pad in accordance with AASHTO M251 using Appendix X1, and ensure

the Shear Modulus when tested in accordance with AASHTO M251 meets the requirements in Table 733:1

Table 733:1
Shear Modulus for Durometer Hardness

Durometer Hardness	Shear Modulus, psi [Mpa], minimum
50	110 [0.76]
60	150 [1.03]
70	235 [1.62]

C. Acceptance

The Engineer will accept elastomeric bearing pads on the following:

- Submit to the Engineer a Type A certification showing compliance with the contract requirements.
- Submit to the Engineer one full-size finished bearing pad, per lot, size, type or shipment, for physical testing by the Department's Materials Division or it's representative. The Department's Materials Division may conduct on-site inspection of bearing pads for slab bridges or other pads deemed by the Materials Engineer to be too cumbersome for submission to the laboratory.
- Upon test completion, approved bearing pads may be collected by the Contractor or the pad manufacturer from the Department's Materials Laboratory or it's representatives test facility. The Department will not return failed bearing pads.