

SOUTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

Qualified Product Policy  
for  
Authorized Manufacturers of Elastomeric Bearing Pads  
Qualified Product List 24

This policy covers the material requirements for plain and laminated elastomeric bridge bearings. Elastomeric bearings furnished under this policy shall adequately provide for thermal expansion and contraction, rotation, camber changes, and creep and shrinkage, where applicable, of structural members. All bearings shall comply with AASHTO M 251 and shall be designed in accordance with specifications contained in the latest edition of the AASHTO Standard Specifications for Highway Bridges.

Request to qualify a manufacturer along with samples and certifications should be submitted to:

Aly A. Hussein, PhD, P.E.  
Structural Materials Engineer  
SCDOT Office of Materials and Research  
PO Box 191  
Columbia, SC 29202  
(803) 737-6687  
Fax No.: (803) 737-6649  
Email: [husseinaa@scdot.org](mailto:husseinaa@scdot.org)

The procedure outlined in this policy will be followed by the Office of Materials and Research in the inspection and acceptance of bridge bearing pads constructed according to the SCDOT Standard Specifications.

The contractor will notify the Department's Structural Materials Engineer of the supplier of the bearing pads at the time of placing an order so that arrangements can be made to provide necessary inspection.

Plain Elastomeric Pads. The manufacturer of the elastomer will submit prequalification samples and certifications to the Office of Materials and Research prior to its first use on Department projects after the effective date of this policy. Two bearings typical of the formulation and workmanship will be sufficient for testing and acceptance. Subsequent to qualification of a manufacturer, further samples will not be necessary for additional projects awarded at a later date. However, the Department reserves the right to sample and test bearings at any time or to require repeat prequalification. Manufacturers qualified as stated above to supply elastomeric pads will be listed on the Department's list of qualified elastomeric bearing pad manufacturers.

The contractor must furnish to the Resident Engineer copies of the manufacturer's certified test reports showing compliance with the specifications in both the physical tests and dimensional tolerances. If a supplier, rather than the elastomer manufacturer, perform the final cutting of

the plain pad, a certification shall also be included from the supplier certifying that the material was cut from the elastomer represented by the manufacturer's certified test report and that the plain pad meets the dimensional tolerances of the specification.

The Resident Engineer will forward copies of the certifications to the Office of Materials and Research. The pads may be used based on the certification unless there is an obvious deficiency, the Resident Engineer is notified by the Office of Materials and Research to delay acceptance or to take a sample for further testing. The certification shall include at least the following physical test results on the elastomeric material:

- (1) Tensile Strength
- (2) Elongation
- (3) Hardness
- (4) Bond Strength
- (5) Ozone Resistance

Laminated Bearing Pads. In addition to the tests conducted for plain bearings, the special provision Level I test criteria requires one of every ten laminated bearings undergo a compression test. The Department's policy will include an initial trip to a manufacturer to sample and observe the required number of compression tests.

***The Department may authorize an independent laboratory to witness the compression tests and certify compliance with the compression test specification to the Department.***

When the Office of Materials and Research is satisfied with the manufacturer's performance in fabrication and testing, only occasional witnessing of testing may be made or the manufacturer may be authorized to conduct the tests and certify the results.

The manufacturer of the laminated bearings shall certify all dimensional tolerances in the specification. When the manufacturer is authorized to make the compression test without a Department representative, the manufacturer shall also certify the results of the compression test.