

TO: All Design Section Staff  
FROM: Bijan Khaleghi  
DATE: April 13, 2016  
SUBJECT: Seismic Isolation Bearings Requirements

This design memorandum describes WSDOT's policy for seismic isolation bearings. The usage and design of isolation bearings shall conform to the requirements of WSDOT Bridge Design Manual Section 9.2, and the AASHTO Guide Specifications for Seismic Isolation Design. This design memorandum is pertinent to all isolation bearings regardless of contracting method or sole source procurement. The use of seismic isolation bearings for WSDOT bridges shall comply with the requirements as listed herein, and a Design Report shall not be accepted in lieu of complying with these five items:

1. **Shop Drawings:** Shop drawings shall be submitted as complete engineered documents, both for documentation of contractual material and design requirements, and for engineer-of-record design documentation for design evaluation during the design life of the overall structure.
2. **Bearing Materials and Fabrication:** Modular methods of bearing manufacturing shall accommodate WSDOT QA requirements to track the material certifications, the modular fabrication process, and American-Made material requirements, along with submitting mill certification documentation. Stainless steel shall be incorporated as specified on all sliding or articulating surfaces. Bearings with seals shall be water-tight systems.
3. **Paint:** All non-stainless steel surfaces shall have a full coat (3-part) paint system applied in accordance with WSDOT Standard Specifications and Special Provisions. The full coat paint system shall be applied to all non-stainless and non-plastic internal and external surfaces.
4. **Bearing Specifications:** WSDOT bearing specifications shall be enumerated in the contract. As the responsible owner, WSDOT needs to retain control over the specification of any finished bearings used in our structures. Deletion or ignorance of the Bearing specification in the Special Provisions is a violation of the contract.
5. **Fabrication Inspection:** Third party fabrication inspectors shall be provided by the manufacturer and shall have access for Contracting Agency QA inspection as stipulated by Section 1-05.6 and the bearing Special provisions to inspect all aspects of the bearing assembly fabrication. Hold points as specified in the Standard Specifications and Special Provisions shall be adhered to.

**Background:**

This policy memorandum is to ensure that isolation bearings used for WSDOT projects are properly designed, manufactured, and inspected in accordance with project requirements. All materials used in bearing manufacturing, dimensions, coating, sealing, etc. shall be clearly specified in the contract document for future repairs and replacement if necessary. This is regardless of project contracting method or sole source procurement.

If you have any questions regarding this policy memorandum, please contact [Bijan.Khaleghi@wsdot.wa.gov](mailto:Bijan.Khaleghi@wsdot.wa.gov) at 705-7181.

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