rating should be based on the full temperature range and not the rise or fall from a mean temperature.

Calculation of the movement rating shall include thermal movement and anticipated shortening due to creep, shrinkage and prestressed shortening. For cast-in-place post-tensioned concrete box girder bridges both the elastic and long term prestress shortening effects shall be considered.

An initial offset of the top sliding surface from the centerline of bearing should be calculated and shown on the plans so that the top sliding surface will be centered over the bottom sliding surface and the centerline of bearing after all shrinkage, creep and post-tensioning shortening has taken place in the sperstructure.

Permissible bearing types include neoprene strips, elastomeric bearing pads, steel bearings, sliding elastomeric bearings and high-load multi-rotational bearings (pot, disc or spherical).

Neoprene strips, elastomeric bearing pads and steel bearings are generic and shall be detailed on the plans and/or covered in the standard specifications and special provisions. High-load multi-rotational bearings are proprietary bearing types and require that the designer include a Bearing Schedule in the plans. It is the responsibility of the designer to review the Stored Specification to ensure that the bearings are properly specified and compatible with the design requirements. Sliding elastomeric bearings are both generic and proprietary in that a generic bearing should be designed and detailed on the plans with proprietary alternates allowed.

All bearings types except elastomeric bearing pads shall be designed for impact.

603.02 NEOPRENE STRIPS

Neoprene strips consist of a sliding plate on a continuous neoprene pad. Where appropriate, neoprene strips are the preferred bearing type for post-tensioned box girder bridges. However, neoprene strips are not appropriate for the following applications: curved bridges, skews greater than 20 degrees, contributing spans greater than 50 meters, where initial shortening due to prestressing is greater than 25 millimeters and where the movement rating including elastic shortening, long term creep and shrinkage and temperature is greater than 40 millimeters.

603.03 ELASTOMERIC BEARING PADS

Elastomeric bearing pads shall conform to the requirements of Section 14 of AASHTO. Bearing pads shall be designed to be constructed using either steel or fiberglass laminates, with the controlling case determining the size. The following data should be shown on the plans:

Length, width and thickness of pad
Durometer Hardness
Design Method (A or B)
Design Load
Low Temperature Zone (A, B or C)
Elastomer Grade (0, 2 or 3)
Shear Modulus

Generally, bearing pads shall be Durometer 60 - Elastormer with steel reinforcement.

Normally Design Method A will be used in design, however, where only steel reinforced pads will work Design Method B may be used provided the special testing is performed.

The following should be used as a guide for determining low temperature zones:

Elevation (meters)	*Zone*
Below 900	A
900-1800	B
1800 and above	C

Pads shall have a minimum thickness of 25 millimeters and be designated in 10 millimeter increments. The use of elastomeric bearing pads should generally be limited to a thickness not greater than 100 millimeters. Holes will not be allowed in the pads.

Width and length dimensions shall be detailed in even 50 millimeter increments. When used with prestressed I-girders, pads shall be sized a minimum width of 50 millimeters less than the nominal width of the girder base to accommodate the 20 millimeter side chamfer and shall be set