

*****THIS IS A NEW APPENDIX. – PLEASE READ CAREFULLY.*****

TENSIONING OF HIGH STRENGTH BOLTS (SNUG-TIGHT)

High strength bolts shall be installed in all holes of the connection and brought to a “snug-tight” condition.

Bolts shall be considered snug-tight when tensioned to approximately 20% of the minimum bolt tension. For minimum bolt tension, refer to [Article 2408.39E](#) of the Standard Specifications where the bolt diameter and minimum bolt tension are listed.

NOTE: If full contact of faying surfaces is not achieved after all bolts have been tensioned to 20% of the bolt minimum tension, the contractor shall submit a corrective procedure to the engineer for approval.

When all fasteners in the connection are snug-tight, the face of the connecting part, the nut, and the bolt point shall be match-marked using paint or crayon to provide reference for determining the relative rotation of the parts during final tightening. Tightening shall progress systematically from the center of the joint to the free edge.