

ITEM 445

STRUCTURAL BOLTING

- 445.1 Description. This item shall govern for the materials to be used, and for the method of installation of bolts used in structural connections.
- 445.2 Material. Unless otherwise indicated on the plans, bolts, nuts and washers shall conform to the requirements of ASTM Designation A325. The length of the bolt shall be such that the point of the bolt will be flush with or outside the face of the nut when installed. Unless otherwise specified, threads for structural bolts and nuts up through 1-inch diameter shall be the UNC series and over 1-inch diameter and larger shall be the 8UN Series as specified in ANSI B1.1 and shall have Class 2A tolerance for Bolts and Class 2B tolerance for Nuts. Galvanized nuts shall be tapped or chased after galvanizing.
- 445.3 General. Bolted connections shall not be used unless specifically authorized. If bolted connections are permitted, the bolts shall be as specified. Bolts shall have hexagonal heads and nuts and shall be of such length that they will extend through the nut, but not more than 1/4-inch beyond.
- Unfinished bolts in shear, shall have not more than one thread within the grip. The diameter of the unfinished bolt shall be not more than 1/16-inch smaller than the diameter of the hole.
- The threads of turned bolts shall be entirely outside the grip. The bolts shall be given a finishing cut. Approved nut locks or flat washers 1/4-inch thick shall be furnished, as specified. The holes for turned bolts shall be reamed and their diameters shall be not more than 1/32-inch greater than the diameter of the finished bolt.
- Special types of lock bolts may be used with written approval of the Engineer.
- 445.4 Measurement & Payment. No direct compensation will be made for the installation of bolts or fasteners. Measurement and payment for the bolts required for structural steel joints shall be in accordance with the Item, "Metal for Structures".

There are line code(s), description(s), and unit(s) for this item.

END OF ITEM 445

SUMMARY SHEET

ITEM 445 - STRUCTURAL BOLTING

Other Specifications Required
Item 442 - Metals for Structures

Reference Standards
ASTM Designation A325

Description:
Describes materials required for structural connections.

Payment:
None

DO NOT INCLUDE THIS SHEET IN THE CONTRACT SPECIFICATIONS