

# EXPECTED IMPLEMENTATION JULY 2015

## 470 TIMBER STRUCTURES. (REV 10-20-14) (FA 10-27-14) (7-15)

ARTICLE 470-12 is deleted and the following substituted:

### 470-12 Hardware.

**470-12.1 General:** Use hardware, including bolts, drift pins, dowels, rods, nuts, washers, spikes, nails and all similar incidental metal items, necessary to complete the work in accordance with the details shown in the Plans. Use common wire nails as commercially manufactured. Use ogee washers of cast or malleable iron. The Contractor may use other hardware of steel, iron, or any similar material ordinarily used in the manufacture of such articles.

**470-12.2 CCA, ACQ-D, and CA-C, Treated Timber Structures:** Use the fasteners and connectors as described in the following table:

Environmental condition where structure will be located	Fasteners	Connectors
Permanent wood foundations and/or where salt spray if prevalent	304 or 316 Stainless Steel	304 or 316 Stainless Steel
Structures that will be exposed to standing water or rainwater	304 or 316 Stainless Steel	304 or 316 Stainless Steel
Structures that will be situated indoors and remain dry in service	304 or 316 Stainless Steel Hot-dipped galvanized fasteners meeting ASTM A-153 requirements	304 or 316 Stainless Steel Hot-dipped galvanized connectors meeting the requirements of ASTM A-653 Class G185 sheet or better

Do not use aluminum in direct contact with treated wood.

**470-12.3 Bolts:** Use bolts of the sizes shown in the Plans with square heads and nuts and with screw threads that make close fits in the nuts. Upon completion of the installation, check all nuts for tightness, and cut off protruding bolt ends so that not more than 1/4 inch extends beyond the nut.

**470-12.4 Inspection:** The Engineer will inspect the hardware for quality of manufacture and accuracy of size prior to use on wood structures.