

Part 1. General

1.1 Scope

- A. Wood roof trusses.
- B. Wood floor trusses.
- C. Wood girder trusses.
- D. Truss accessories.
(see Division 6 Section 06100 Rough Carpentry for supplementary framing and permanent bracing.

1.2 Quality control

- A. Provide metal-plate-connected wood trusses capable of withstanding design loads indicated without exceeding TPI 1 deflection limits.
- B. Metal connector-Plate Manufacturer Qualifications: A manufacturer that is a member of TPI and that complies with TPI quality-control procedures for manufacture of connector plates published in TPI 1.
- C. Fabricator Qualifications: shop that participates in a recognized quality –assurance program that involves inspection by SPIB, Timber Products Inspection, TPI, or other independent testing and inspecting agency acceptable to Architect and authorities having jurisdiction.
- D. Comply with TPI 1, “National Design Standard for Metal Plate Connected Wood Truss Construction,” and TPI HIB, “commentary and Recommendations for Handling, Installing & Bracing Metal Plate Connected Wood Trusses.
- E. Wood Structural Design Standard: Comply with applicable requirements in AFPA’s “national Design Specifications for Wood Construction” and its “Supplement.”

1.3 Delivery, storage and handling

- A. The Contractor shall store materials to prevent their deterioration or damage due to moisture temperature changes, contaminants or other causes. Materials that have exceeded the manufacturer's recommended shelf life shall not be used.

Part 2. Products

2.1 Generally

- A. Lumber shall be DOC PS 20 and applicable rules of lumber grading agencies certified by the American Lumber Standards Committee Board of Review.
- B. Any species for truss chord and web members, graded visually or mechanically, and capable of supporting required loads without exceeding allowable design values according to AFPA's "National Design Specifications for Wood Construction " and its "Supplement."
- C. Fabricate connector plates to comply with TPI from hot-dip galvanized steel sheet complying with ASTM A653/A653M, G60 (Z180) coating designation; Designation SS, Grade 33, and not less than 0.036 inch (0.9mm) thick.
- D. Where trusses are exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A153/A153M.
- E. Provide framing anchors made from hot-dip, zinc-coated steel sheet complying with ASTM A653/A653M, G60 (z180) coating designation.
- F. Assemble truss members in design configuration indicated; use jigs or other means to ensure uniformity and accuracy of assembly with joints closely fitted to comply with tolerances in TPI 1. Position members to produce design chamber indicated.

Part 3. Execution

3.1. Installation

- A. Install and brace trusses according to TPI recommendations and as indicated. Install trusses, plumb, square, and true to line and security fasten to supporting construction.
- B. Anchor trusses securely at bearing points; use metal framing anchors. Install fasteners through each fastener hole in metal framing anchor according to manufacturer's fastening schedules and written instructions.
- C. Securely connect each truss ply required for forming built-up girder trusses. Anchor trusses to girder trusses as indicated.
- D. Install and fasten permanent bracing during truss erection and before construction loads are applied. Anchor ends of permanent bracing where terminating at walls or beams.

- E. Install wood trusses within installation tolerances in TI 1.
- F. Do not cut or remove truss members.
- G. Return wood trusses that are damaged or do not meet requirements to fabricator and replace with trusses that do meet requirements.