

SECTION 061753 – SHOP-FABRICATED WOOD TRUSSES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Structural Performance: Engineer, fabricate, and erect metal-plate-connected wood trusses to withstand design loads without exceeding deflection limits of ANSI/TPI 1, "National Design Standard for Metal-Plate-Connected Wood Truss Construction."
- B. Submittals: Product Data, Shop Drawings, and structural analysis data signed and sealed by a qualified professional engineer registered in the state where the Project is located.
- C. Engage a fabricator who participates in a recognized quality-assurance program that involves inspection by an independent inspecting and testing agency acceptable to authorities having jurisdiction.
- D. Comply with ANSI/TPI 1; TPI HIB, "Commentary and Recommendations for Handling Installing & Bracing Metal Plate Connected Wood Trusses"; and AFPA's "National Design Specification for Wood Construction" and its "Supplement."

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Dimension Lumber: Comply with DOC PS 20, "American Softwood Lumber Standard," any species, graded visually or mechanically.
- B. Connector Plates: Structural-quality steel sheet, zinc coated, complying with ASTM A 653, Grade 33, G60 coating designation; at least 0.0359 inch thick.
- C. Fasteners: Hot-dip galvanized per ASTM A 153 or stainless steel, Type 304 or 316, where exposed to weather or to high relative humidities. Size and type indicated.
- D. Metal Framing Anchors: Manufactured from hot-dip, zinc-coated steel sheet complying with ASTM A 653, G60 coating designation; structural, commercial, or lock-forming quality, as standard with manufacturer for type of anchor indicated.

2.2 FABRICATION

- A. Fabricate wood trusses within manufacturing tolerances of ANSI/TPI 1 and connect truss members by metal connector plates.
- B. Fabricate wood trusses in profiles indicated using nominal sizes of member components indicated, unless design conditions require larger members.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install and brace trusses according to recommendations of TPI. Space trusses as indicated; install plumb, square, and true to line; and securely fasten to supporting construction.
- B. Anchor trusses securely at all bearing points using metal framing anchors and fasten securely.
- C. Securely connect each truss ply required for forming built-up girder trusses. Anchor trusses to girder trusses.
- D. Install and fasten permanent bracing during truss erection. Anchor ends of permanent bracing where terminating at walls or beams.
- E. Install wood trusses within installation tolerances of ANSI/TPI 1.
- F. Do not alter, cut, or remove truss members.
- G. Remove and replace wood trusses that are damaged or deficient.

END OF SECTION 061753