

SECTION 061753
SHOP-FABRICATED WOOD TRUSSES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A Shop-fabricated wood trusses.
- B Truss bridging.

1.02 RELATED REQUIREMENTS

- A Section 061000 - Rough Carpentry: Material requirements for blocking, bridging, plates, and miscellaneous framing.

1.03 REFERENCE STANDARDS

- A ANSI/TPI 1 - National Design Standard for Metal-Plate-Connected Wood Truss Construction 2014.
- B ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process 2022.
- C SBCA (BCSI) - Building Component Safety Information: Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses 2018 (Updated 2020).
- D TPI DSB-89 - Recommended Design Specification for Temporary Bracing of Metal Plate Connected Wood Trusses 1989.
- E WWP A G-5 - Western Lumber Grading Rules 2021.

1.04 SUBMITTALS

- A Product Data: Manufacturer's data sheets on plate connectors, bearing plates, and metal bracing components.
- B Shop Drawings: Show truss configurations, sizes, spacing, size and type of plate connectors, cambers, framed openings, bearing and anchor details, and bridging and bracing.
 - 1. Include identification of engineering software used for design.
 - 2. Provide shop drawings stamped or sealed by design engineer.

1.05 QUALITY ASSURANCE

- A Designer Qualifications: Perform design by or under direct supervision of a Professional Structural Engineer experienced in design of this Work and licensed in the State in which the Project is located.
- B Fabricator Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

- A Handle trusses in accordance with SBCA (BCSI).
- B Store trusses in vertical position resting on bearing ends.

PART 2 PRODUCTS

2.01 TRUSSES

- A Wood Trusses: Design and fabricate trusses in accordance with ANSI/TPI 1 and to achieve specified design requirements indicated.
 - 1. Design and fabricate temporary bracing in accordance with TPI DSB-89.

2. Species and Grade: Douglas Fir, WWP A G-5 Grade No. 2 or better.
3. Connectors: Steel plate.
4. Structural Design: Comply with applicable code for structural loading criteria.
5. Roof Deflection: 1/240, maximum.

2.02 MATERIALS

- A Lumber:
 1. Moisture Content: Between 7 and 9 percent.
 2. Lumber fabricated from old growth timber is not permitted.
- B Steel Connectors: Hot-dipped galvanized steel sheet, ASTM A653/A653M Structural Steel (SS) Grade 33/230, with G90/Z275 coating; die stamped with integral teeth; thickness as indicated.
- C Truss Bridging: Type, size and spacing recommended by truss manufacturer.

2.03 ACCESSORIES

- A Wood Blocking, Bridging, Plates, and Miscellaneous Framing: As specified in Section 061000.
- B Fasteners: Electrogalvanized steel, type to suit application.

PART 3 EXECUTION

3.01 EXAMINATION

- A Verify that field measurements are as indicated on shop drawings.
- B Verify that supports and openings are ready to receive trusses.

3.02 PREPARATION

- A Coordinate placement of bearing items.

3.03 ERECTION

- A Install trusses in accordance with manufacturer's instructions, SBCA (BCSI); maintain a copy of applicable documents on site until installation is complete.
- B Set members level and plumb, in correct position.
- C Make provisions for erection loads, and for sufficient temporary bracing to maintain structure plumb, and in true alignment until completion of erection and installation of permanent bracing.
- D Do not field-cut or alter wood trusses without approval of manufacturer.
- E Install permanent bridging and bracing.
- F Install headers and supports to frame openings required.
- G Coordinate placement of decking with work of this section.

3.04 TOLERANCES

- A Framing Members: 1/2 inch maximum, from true position.

END OF SECTION