

SECTION 061753 – WOOD TRUSSES

PART 1: GENERAL

1.1 Scope of Standard

- A. This standard provides general guidance concerning the specific preferences for wood trusses. Blocking and supports to join members and anchor framework to other construction.
- B. Project conditions and requirements vary, thus precluding the absolute adherence to the items identified herein in all cases. However, unless there is adequate written justification, it is expected that these guidelines will govern the design and specifications for WVU projects.

1.2 Quality Control

- A. Roof trusses are to be designed, fabricated and installed to carry a roof live load as per the latest edition of the IBC International Building Code and any applicable dead loads.
- B. Shop Drawings shall show all details of truss construction including design of truss and:
 - 1. Engineering analysis showing the determination of both axial forces and bending moments for each member, and shear at ends of trusses, under full load.
 - 2. Each reaction force.
 - 3. Plate type, thickness or gauge, size, basic plate design value, the dimensioned location of each plate and a design analysis of each joint showing that proper plates have been used.
 - 4. Lumber size, species, and grade for each member.
 - 5. Connections to poles and to beams.
 - 6. A certification by a professional engineer, currently registered in West Virginia, shall be submitted with the shop drawings. The certificate shall certify that the trusses, truss connections to the poles and with bracing to the poles will carry the loads called for.
- C. All lumber used in the design of wood trusses shall be kiln dried and graded in accordance with the current and applicable grading rules.
- D. The design and fabrication criteria of all wood trusses shall meet with "National Design Specifications for Stress-Grade-Lumber and Its Fastenings" by "National Forest Products Association (latest revision); "Timber Construction Standards" by American Institute of Timber Construction (latest revision); and "Design

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Specifications for Light Metal Plate Connected Wood Trusses" by Truss Plate Institute (latest revision), the same as if those specifications and all their references were set out in full herein.

- E. Connector plate approvals shall meet current code requirements.
- F. Trusses shall be of uniform sizes and camber.
- G. Gang nail connector plates shall be galvanized steel.
- H. Any trusses, or parts of trusses with defective materials or if improperly fabricated, installed or protected against damage, and including loose or improperly installed gang nail connectors, will be rejected.

PART 2: PRODUCTS – NOT USED

PART 3: EXECUTION – NOT USED

END OF SECTION 061753