

Engineered Wood Structures with Glue Laminated Wood Poles – Engineering, Manufacturing, and Delivery Recommendations

I. Engineering / Design - Including Foundations

- A. All glue laminated wood poles shall be designed utilizing a maximum 95% fiber stress usage.
- B. All poles shall be designed using the LWS proprietary design program. Poles designed using third party software should be verified by independent methods to verify a complete structure design, which includes but is not limited to: pole orientation, hardware requirements, deflection limits, and foundation design.
- C. Partially-guyed “floating corner” poles should be designed so that each span acts independently.
- D. Complete Engineering Design with detailed drawings normally completed within five working days after receipt of an order.

II. Manufacturing

- A. All glue laminated wood poles shall be manufactured and treated in accordance with LWS specification “*Standard Specifications For Manufacturing & Treatment of Laminated Southern Pine & Douglas-fir Poles*”
- B. All multiple layup poles shall have a full length inner raceway in addition to the unglued edge joints to allow for full penetration of preservative treatment and to allow for moisture drainage. In the absence of an internal raceway, all unglued edge joints shall be permanently sealed on the top of the pole and along the full length of the cut side.

III. Delivery / Packaging

- A. All glue laminated poles shall be delivered with all attachment and foundation holes pre-drilled.
- B. All foundation systems and attachment hardware shall be kit packaged in solid, wooden crates. The crates shall be clearly marked with engraved metal plates containing the following information:
 - a. LWS order number
 - b. Customer PO number
 - c. Structure number
- C. All hardware crates shall contain the following documents:
 - a. LWS bill of material (packing list)
 - b. LWS installation drawings
 - c. LWS drilling detail drawing
- D. Typical shipment shall be within 6 to 8 weeks after design and drawing approval.