

#### TREATED WOOD SIGN POSTS MGS-92-03E

- **1.0 DESCRIPTION.** This specification covers treated wood sign posts.
- **1.1** The American Wood Preserver's Association Standards (AWPA) referred to in these specifications shall be the latest version in effect at the time of the request for bids for this material.
- **1.2** The Southern Pine Inspection Bureau Grading Rules and the Standard Grading Rules for West Coast Lumber of the West Coast Lumber Inspection Bureau shall be the latest edition in effect at the time of the request for bids for this material.

#### 2.0 MATERIALS.

- **2.1** Posts shall be Southern Pine or Douglas Fir of the West Coast Region as defined in ASTM D 1165, and shall be rough sawn or surface finished on all four sides (S4S) with square cut ends.
- **2.1.1 Southern Pine.** Southern Pine shall be furnished in accordance with the provisions of the Southern Pine Inspection Bureau Grading Rules and specifically as follows:
  - 4" x 4" posts shall be No. 2 or better, conforming to paragraph 313.
  - 4' x 6" posts shall be No. 2 or better, conforming to paragraph 313.
  - 6" x 6" and larger posts shall be No 2 Sr or better, conforming to paragraph 407.
  - All posts shall be kiln dried or air dried in accordance with paragraph 164.
- **2.1.2 Douglas Fir.** Douglas Fir shall be furnished in accordance with the provisions of the Standard Grading Rules for West Coast Lumber of the West Coast Lumber Inspection Bureau and specifically as follows:
  - 4" x 4" posts shall be No. 2 grade or better, conforming to paragraph 124-c.
  - 4" x 6" posts shall be No. 2 grade or better, conforming to paragraph 123-c.
  - 6" x 6" and larger posts shall be No. 1 structural grade or better, conforming to paragraph 131-b.
  - All posts shall be kiln dried or air dried in accordance with Section 1, paragraph 3 and its subsections.
- **2.2** After preservative treatment, the posts shall be straight and of good appearance. All posts shall be free from bends in more than one plane and free from short or reverse bends. However, the following tolerance will be permitted.
- **2.2.1** A straight line drawn from the center of one end of the post to the center of the opposite end shall not deviate from the longitudinal axis of the post at any point more than one percent of the length of the post.

- **3.0 PRESERVATIVE TREATMENT.** The posts shall be pressure or vacuum treated with either pentachlorophenol solution or water-borne preservatives (ACA or CCA) in accordance with the requirements of AWPA C2, except that the final retention shall be not less than 0.40 pound per cubic foot, by assay, of wood for both pentachlorophenol and water-borne preservatives.
- **3.1.** Water-borne preservatives shall meet the requirements of AWPA P5.
- **3.2** Pentachlorophenol preservative shall be pentachlorophenol meeting the requirements of AWPA P8- in a hydrocarbon solvent meeting the requirements of AWPA P9, Type A.
- **3.3** Posts treated with pentachlorophenol shall be cleaned by a final steam bath in accordance with AWPA C2 or strip stacked and air dried for a minimum of 60 days after treatment.

# 4.0 INSPECTION.

- **4.1** The posts shall be rigidly inspected at the treating plant prior to and after treatment for compliance with these specifications. Inspection procedures shall be in accordance with AWPA M2.
- **4.2** All costs of inspection for material treated shall be borne by the supplier. The supplier shall contract with an approved inspection agency for inspection. The Missouri Department of Transportation reserves the right to inspect the treated posts at destination for compliance with these specifications.
- **4.2.1** An approved inspection agency is defined as a laboratory which has been accredited by the American Lumber Standards Committee, P. O. Box 210, Germantown, MD 20875-0210, or an experienced and qualified testing laboratory approved by the engineer.
- **5.0 PACKAGING.** Posts of the same size in each shipment shall be bundled together to facilitate the unloading, counting and stockpiling at destination. The horizontal rows of each bundle shall have spacers between each row of posts. The spacers shall allow a minimum ¼ inch of space between horizontal rows after the posts have been bundled together.

# 6.0 REPORT.

#### 6.1 Approved Inspection Agencies.

- **6.1.1** The supplier shall furnish to the engineer at destination a certification statement stating that the material furnished complies with all requirements of these specifications and that any material found by the engineer to deviate from these specifications will be replaced at no cost to the Commission. The certification shall include or have attached the number and sizes of posts shipped, purchase order number, and destination.
- **6.1.2** The certification shall have attached a copy of the inspectors report as detailed in Section 7.2 of AWPA M2.

# 7.0 ACCEPTANCE.

**7.1** Posts will be accepted on the basis of a satisfactory supplier's certification as required and inspector's report, and upon the results of any tests deemed necessary by the engineer at destination to ascertain compliance with these specifications.