

ITEM 681

TREATED TIMBER POLES

- 681.1 Description. This Item shall govern for furnishing treated timber pole generally for use as signal, luminaire and electrical service support.
- Poles shall be in accordance with the Latest Edition of the American National Standards Institution (ANSI) 05.1 "Specifications and Dimension for Wood Poles", except as modified herein.
- Poles other than for electric service shall be ANSI Class 2 unless otherwise specified. Poles for electrical service shall be ANSI Class 4 or 5 unless otherwise specified. The length of poles will be specified in the purchase requisition or project drawings.
- 681.2 Material. Pole specimen shall be of long or short leaf Southern Yellow Pine with a minimum fiber stress strength of 8,000 psi. Seasoning and conditioning of poles may be either air seasoned or steam conditioned. The maximum air seasoning period shall be limited to 120 days except by permission of the engineer.
- 681.3 Defects. Tops and butts of poles shall be free from pith holes. Scars (cat face) or depressions in the body of the pole resulting from tree wounds wherein the process of healing has not re-established the normal cross-section of the pole will be permitted provided the deformity is not such as to impair the strength of the pole. Poles having scars greater than 1 inch in depth, within 1/10 the diameter of the pole, and pole location of scar shall be rejected unless, in the judgement of the County's representative, the strength of the pole is not impaired.
- Any deviation from straightness shall not exceed 2 inches in a 5 foot (or less) section. A pole may have sweep in one plane and one direction (single sweep) provided a straight line joining the midpoint of pole at the top does not at any intermediate point, pass through the external surface of the pole. No poles with sweep in two planes (double sweep) shall be accepted.
- No pole shall have more than one complete twist of spiral grain. Butt slivering due to felling shall be permitted if the distance from the outside circumference is not less than 1/4 of the butt diameter and the height is not more than 1 foot.
- 681.4 Manufacturer Requirements. Pole shall be cut from live timber preferably during the winter season. Poles shall be smoothly trimmed either by hand or machine. The depth of cut shall be kept to practical minimum on the surface and in no case to be more than 1/4 inch except at knot whorls. The circumference at any point between knot whorls shall not be reduced by more than 1 inch. All work shall be done in a neat and workmanlike manner. The top side surfaces shall be free of injurious checks.

681.5 Treatment. Poles for signal and luminaire support shall be in accordance with American National Standard Institute (ANSI) Class 2, and the United States Federal Supply Service (USFSS) Specification TT-W-571 that references to the American Wood Protection Association (AWPA) standards C1 and C3 for pressure treatment.

681.6 Inspection and Delivery. Before and after treatment all poles shall be subject to inspection by the Engineer or authorized inspection agency. The inspector shall be allowed free access to all points from which materials are being produced or processed and producer shall render him whatever assistance is necessary for proper inspection of materials. Excessive splitting, or checking shall be gauged as follows:

1. A check or split which will permit a number 10 B & S (.102" diameter) wire to be extended 3" into the body of the pole.
2. Checking and splitting of such size that at any point along the pole, two checks or splits occur into which a number 10 wire may be inserted by a depth of more than 7/8 inch.

Whenever there is any sign of incipient decay visible in untreated timber, and in cases where the condition of the timber is doubtful, the inspector shall insist that a section 2 inches thick, or more be cut from the butt or tip, or both ends of poles.

When there is any evidence of decay, such as softness of the wood fibers, sponginess or brownish discoloration, even though there are no definite areas of breakdown in the wood fibers, the material shall be rejected.

681.7 Measurement and Payment. The basis of payment for Treated Timber Poles shall be each by specified length as they appear on the bid sheets. Payment shall be full compensation for furnishing and/or installing of material and all other labor, tools, equipment and incidentals necessary to complete the work.

There are line code(s), description(s), and unit(s) for this Item.

END OF ITEM 681