POLES AND TEMPORARY CONSTRUCTION POWER

A. POLES
The minimum size of a wood pole used to support low voltage (below 600 Volts) conductors in conformance with Article 225 of the California Electrical Code (C.E.C.) shall be 6 inches by 6 inches (nominal) if square, or have a top diameter of at least 5 inches if round, and be of sufficient length to maintain all required overhead clearances specified in Section 225-18, but not less than 20 feet long. The lower end shall be embedded not less than 4 feet in the ground. An approved self-supporting pole of a material other than wood, if of equivalent strength, may be used. The minimum size of pole arrangement, type, strength and construction requirement used to support high voltage (over 600 V) conductors, and the required overhead line clearance and method of compliance shall be in accordance to the State of California Rules for Overhead Electric Line Construction, General Order No. 95. See Electrical Service Requirements of the Department of Water and Power for poles exceeding more than 16 feet above grade.

EXCEPTION: For low voltage distribution poles used to support temporary wiring in conformance with Article 305 of the C.E.C. and located in areas accessible to pedestrians only, a 4-inch x 4-inch (nominal) wood pole, or equivalent, embedded 4 feet in the ground, may be permitted.

B. PROVISIONS FOR TEMPORARY CONSTRUCTION SERVICES.
The following applies to the construction and installation of temporary construction electric services intended to provide temporary low voltage power for general building construction purposes:

1. Service Equipment. The service equipment including meter enclosures shall be of the approved type and shall be identified for the purposes.

2. Wiring Methods. Raceways on temporary construction service poles shall be rigid metal conduit, electrical metallic tubing or schedule 80 rigid nonmetallic conduit. The raceways shall be supported at intervals not to exceed 3 feet. Metallic raceways shall be enclosed by wood molding or nonmetallic conduit not less than 8 feet below the service head, supported as required for the raceway.

3. Protective Wood Block. A 4-inch x 4-inch protective wood block shall be through bolted to wooden poles immediately above metallic service heads or open uninsulated conductors. The block shall be placed in a 1/2-inch gain on round wood poles.

4. Overcurrent Protection. Lighting and appliance branch circuit panelboards shall have overcurrent protection not exceeding the rating of the panelboards.

NOTE: See Section 384-16 of the C.E.C.
5. **Grounding Electrode.** A No. 8 AWG minimum copper grounding electrode conductor shall be installed in a metallic raceway or cable armor connected to one or more grounding electrodes complying with Article 250 of the C.E.C.

Grounding electrode could be one or a combination of the following provided that the system grounding resistance meets the minimum requirement of the Code.

a. 1/2-inch minimum diameter rod of copper clad steel, stainless jacketed, solid brass or copper, identified for the purpose.

b. 5/8-inch minimum diameter solid steel, or iron rod.

c. 3/4-inch minimum inside diameter galvanized rigid steel pipe or conduit.

The grounding electrode(s) shall be driven at least 8 feet into the earth and shall not be less than 18 inches from the pole.

6. **Bonding of Metallic Parts.** Metallic raceway(s) containing service conductors or grounding electrode conductor shall be bonded by one of the following methods:

a. Threaded couplings and threaded bosses on enclosures with joints made up wrenchtight where metallic raceways are involved.

b. Bonding-type locknuts and bushings, approved for the purpose.

c. Bonding jumpers used with approved grounding bushings. Bonding jumpers shall be used around concentric and eccentric knockouts.

d. Bonding jumpers used with approved ground lugs or ground terminals.

7. **Receptacle Outlets.** 120-volt, single-phase, 15, 20 and 30 ampere receptacle outlets shall have ground-fault interrupters for personnel protection. Receptacles of different voltage and current ratings shall not be interchangeable.

8. **Feeder Pole Grounding.** Where open wiring on feeder poles are used for power distribution, a continuous grounding conductor shall be run with the customers overhead circuit conductors throughout the system and shall be sized according to the Code.

9. **Service Pull Box.** Where a service pull box is required, it shall comply with the latest edition of the Los Angeles Department of Water and Power Electric Service Requirement.