

ELECTRICAL INSPECTION BULLETIN

(Effective 2000-03-01)

Ground Rod Electrode Requirements

NSPI Wiring Inspectors have been encountering some electrical installations where electrical contractors have installed 1.8 m (6 ft) ground rods. The Canadian Electrical Code, Part 1 requires manufactured electrodes.

Effective immediately, the installation of 1.8 m (6 ft) rod electrodes will not be acceptable.

A manufactured rod electrode installation shall consist of not less than two (2), 3m (10 ft) rods, spaced no less than 3m (10 ft) apart, and driven to a depth of no less than 3m (10 ft) as per Rule 10-700.

Where rock bottom is encountered before the entire rod has been driven into the ground, the following rod installation practice shall be followed:

- If the 3 m (10 ft) rod encounters rock at a depth of 1.2 m (4 ft) or more, then the rod shall be driven to rock bottom and the remaining rod section shall be bent and buried at least 600 mm (2 ft) below finished grade level in a horizontal trench.
- If the 3 m (10 ft) rod encounters rock at a depth of less than 1.2 m (4 ft), then the rod shall be buried at least 600 mm (2 ft) below finished grade level in a horizontal trench.

An acceptable alternative to the rod electrode is to use a manufactured plate electrode which complies with Rule 10-700(2).

Note: Manufactured electrodes (rods and plates) must comply with CSA C22.2 No.41.