

SECTION 26 05 26

GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 GENERAL No Requirements

PART 2 PRODUCTS

2.01 MATERIALS

- A. Ground Rods: copper-encased steel, 3/4" diameter, minimum length 10'.
- B. Grounding Conductors, Bonding Jumpers and Wires: copper.
- C. Ground Bushings: OZ type BLO or equivalent.
- D. Cold water pipe clamps and associated hardware shall be bronze.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Provide a separate insulated equipment grounding conductor in all feeder and branch circuits. Terminate each end on a grounding lug, bus or bushing.
- B. Provide connection of grounding electrode conductors to metal water pipe. Connections are to be made to flanged piping at the street side of the flange. Provide bonding jumper around water meter. Make readily accessible connections.
- C. For isolated grounding systems, provide an insulated full-size grounding conductor terminated at the nearest grounding electrode in compliance with NEC.
- D. Continuous conduit system may not be used for grounding path.
- E. The main service ground shall be terminated on a 1/4" x 4" x 2'-0" section of copper bus on stand-off supports, located in main electrical equipment room, adjacent to main switch gear.
 - 1. Ground terminations to this bus shall be by means of exothermic welding, in accordance with IEEE-80, Chapter 9, "Selection of Conductors and Joints."
- F. Permanent power shall not be turned on until all breaker settings are received and set, the correct CTs and PTs are installed, metering is installed correctly and wired correctly, grounding system is correctly installed, ground fault levels are properly set and all the above is verified by an independent testing agency, the A/E and the DPS.

3.02 FIELD QUALITY CONTROL

- A. Grounding system to be tested.
- B. Tests to be performed in the presence of a representative of the District's Facility Modernization Office.
- C. Provide written test results of all field tests to the DPS.

END OF SECTION 26 05 26