

SECTION 26 05 26

GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Service ground system.
- B. Feeder and branch circuit wiring grounding.
- C. Electrical equipment and raceway grounding and bonding.
- D. Telecommunications system grounding.

1.2 RELATED SECTIONS

- A. Section 26 05 19 – Low-Voltage Electrical Power Conductors.

1.3 REFERENCES

- A. NFPA 70 - National Electrical Code.

1.4 REGULATORY REQUIREMENTS

- A. Conform to requirements of NFPA 70.

1.5 SERVICE GROUND SYSTEM DESCRIPTION

- A. The Contractor shall provide a new service ground to meet all requirements in Article 250 of NFPA 70. Provide grounding service conductors and fittings as may be necessary for code conformance.

1.6 FEEDER AND BRANCH CIRCUIT GROUNDING DESCRIPTION

- A. All feeders and branch circuits shall include a separate insulated (green) grounding conductor.

1.7 TELECOMMUNICATIONS SYSTEM GROUNDING DESCRIPTION

- A. The telecommunications service termination board shall include a separate ground conductor connected to the main service ground system.
- B. All network racks shall include a separate ground conductor connected to the system ground at the telecommunications service termination board.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Feeder and Branch Circuit Ground Conductors: Insulated conductors per Section 26 05 19.
- B. Service Ground Conductor: Bare copper stranded wire, sized per NFPA 70, Article 250.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Confirm that the existing service ground is connected to service ground electrodes as well as to the water service entrance pipe (attach ground ahead of water meter).
- B. Install all ground system components in conformance with Article 250 of NFPA 70.
- C. Inspect grounding and bonding system conductors and connections for tightness and proper installation.
- D. Measure ground resistance from the existing system neutral connection at the service entrance to confirm that resistance does not exceed 10 ohms. Take corrective actions as may be required, including the provision of additional grounding electrodes, to achieve a maximum resistance to ground of 10 ohms

END OF SECTION 25 05 26