

## 26 05 26 Grounding and Bonding for Electrical Systems

Revision 01/04/2019

### **Purpose:**

The Architect and/or Engineer shall incorporate the Rice specific requirements indicated in this standard's section into their design. The Architect and/or Engineer shall further produce project specifications in line with industry standards that are updated to reflect these Rice specific requirements.

### **1. General requirements**

- a. Protect grounding electrode conductors using schedule 40, PVC conduit. Where metallic conduit must be used, conduit shall be electrically continuous and bonded to conductor at both ends
- b. Provide separate green wire ground conductor for each branch circuit and feeder conduit.
- c. Grounding electrodes shall be irreversibly connected to the main ground bar. Ground bars shall be provided in each electrical room and shall be interconnected via irreversible means.

### **2. Grounding conductors**

- a. Grounding electrode and conductors: Bare copper.
- b. Equipment grounding and bonding conductors: Copper with green insulation or tape.

### **3. Connectors**

- a. Grounding Electrode System
  - i. Material: Bronze or copper-alloy products.
  - ii. All connectors shall be UL 467 Listed grounding connectors.
  - iii. Bonding connections to ground bars shall use 2-hole lugs.
  - iv. Irreversible connections shall be via exothermic weld or hydraulic crimp.

### **4. Ground Bars**

- a. 4 inch by ¼" copper bar. Minimum of 16 inches long.
- b. Pre-drilled to support NEMA 2-hole spacing. See details at end of this section.
- c. Wall mounted with heavy duty brackets and insulators.
- d. Connections from grounding electrodes shall be via exothermic weld and shall not interfere with the use of pre-drilled holes.

