SECTION 26 0526

GROUNDING AND BONDING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Grounding and bonding electrical systems and equipment.

1.2 REFERENCES

A. IEEE STD 142

B. NFPA 70

C. ASTM F467 and F468

D. UL 467

1.3 SUBMITTALS

A. Product data: Ground connections.

PART 2 - PRODUCTS

2.1 MANUFACTURED UNITS

A. Ground conductor, unless specifically noted otherwise, shall be copper, 98 percent conductivity, solid for No. 10 AWG and smaller and stranded for No. 8 AWG and larger.

B. Mechanical type ground connectors:

1. Connectors: IEEE 837 and UL 467 compliant, equal to FCI Burndy G Series, listed for use for specific types, sizes, and combinations of conductors and connected items.
2. Nuts, bolts, and washers: Silicon bronze alloy type B per ASTM F467 and F468.

C. Exothermic type ground connections: Exothermic welding systems shall be equal to "Cadweld," manufactured by Erico International Corporation.

D. Lugs: Lugs shall be two- or four-hole, equal to Burndy Hylug series.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Provide the complete grounding of conduit systems, electrical equipment, conductor and equipment enclosures, motors, and neutral conductors in accordance with applicable codes. Grounded phase and neutral conductors shall be continuously identified. Continuity of metal raceways shall be insured by double locknuts.

B. Ground system connections which are beneath the floor and in a concealed or inaccessible location shall be brazed or welded. Brazing and welding shall be "CADWELD."

C. Bonding straps and jumpers: Install in locations accessible for inspection and maintenance except where routed through short lengths of conduit.

1. Bonding to structure: Bond straps directly to basic structure, taking care not to penetrate any adjacent parts.
2. Bonding to equipment mounted on vibration isolation hangers and supports: Install bonding so vibration is not transmitted to rigidly mounted equipment.
3. Use exothermic-welded connections for outdoor locations; if a disconnect-type connection is required, use a bolted clamp secured with a minimum of two bolts and lock washers.

3.2 EQUIPMENT GROUNDING AND BONDING

A. Provide insulated equipment grounding conductors with feeders and branch circuits.

3.3 IDENTIFICATION

A. Comply with requirements in Section 26 0553, Identification for Electrical Systems.

END OF SECTION

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