

**Part 1            General**

**1.1                REFERENCES**

- .1    The latest adopted version of:
  - .1    American National Standards Institute (ANSI)/Institute of Electrical and Electronics Engineers (IEEE)
    - .1    ANSI/IEEE 837, Qualifying Permanent Connections Used in Substation Grounding.
  - .2    Canadian Standards Association, (CSA International).

**Part 2            Products**

**2.1                EQUIPMENT**

- .1    Grounding conductors: bare stranded copper, tinned, soft annealed, size as indicated.
- .2    Insulated equipment grounding conductors: stranded copper except sizes 6mm<sup>2</sup> (10 AWG) and smaller to be solid copper. Insulation color continuous green except wire sizes 25mm<sup>2</sup> and larger be identified as per CEC.

**Part 3            Execution**

**3.1                INSTALLATION GENERAL**

- .1    Install connectors in accordance with manufacturer's instructions.
- .2    Protect exposed grounding conductors from mechanical injury.
- .3    Use mechanical connectors for grounding connections to equipment provided with lugs.
- .4    Soldered joints not permitted.
- .5    Install bonding wire for flexible conduit, connected at both ends to grounding bushing, solderless lug, clamp or cup washer and screw. Neatly cleat bonding wire to exterior of flexible conduit.
- .6    Install flexible ground straps for bus duct enclosure joints, where such bonding is not inherently provided with equipment.
- .7    Make grounding connections in radial configuration only, with connections terminating at single grounding point. Avoid loop connections.
- .8    Bond single conductor, metallic armoured cables to cabinet at supply end, and load end.

**3.2 SYSTEM AND CIRCUIT GROUNDING**

- .1 Install system and circuit grounding connections of primary system, and neutral of secondary 208V system.

**3.3 EQUIPMENT GROUNDING**

- .1 Install grounding connections to lighting equipment.

**END OF SECTION**