

## SECTION 16195

### ELECTRICAL IDENTIFICATION

#### PART 1 - GENERAL

##### 1.01 WORK INCLUDED

- A. Nameplates and Tape Labels.
- B. Wire and Cable Markers.
- C. Conductor Color Coding.

##### 1.02 RELATED SECTIONS

- A. Section 09900: Painting.
- B. Section 16010: Basic Electrical Requirements.

##### 1.03 REQUIREMENTS

- A. Label all panelboards plus circuits on all spaces of switchboards and distribution panels, all safety switches, controls, relays, junction boxes, pull boxes, pilot lights, special switches and outlets.
- B. Nameplates shall identify function of device, space controlled, voltage conditions, fuse size, panel serving switch, as indicated or required without abbreviations. Details shall be as approved.
- C. Conform to requirements of ANSI/NFPA 70. (N.E.C.) Art. 210, Color code for branch circuits.

##### 1.04 SUBMITTALS

- A. Submit Shop Drawings, in accordance with Section 01300 - Submittals.
- B. Only include if details of nameplates, wiring markers and conductor color code are not as specified below.

#### PART 2 - PRODUCTS

##### 2.01 MATERIALS

- A. Nameplates: Engraved three-layer laminated plastic, white letters on a black background.
- B. Tape Labels: Embossed adhesive tape, with 3/16 inch white letters on black background.
- C. Junction Box Labels: Hand lettered with indelible black marker. Indicate voltage and circuit.
- D. Wire and Cable Markers: Cloth markers, split sleeve or tubing type.
- E. Fire Alarm Junction Boxes: Paint red.

## PART 3 - EXECUTION

### 3.01 INSTALLATION

- A. Install nameplates and tape labels parallel to equipment lines.
- B. Secure nameplates to equipment fronts using screws, or rivets, or adhesive. Secure nameplate to inside face of recessed panelboard doors in finished locations.
- C. Use embossed tape only for identification of individual wall switches and receptacles, control device stations.

### 3.02 WIRE IDENTIFICATION

- A. Conductors throughout the building shall be color coded to identify voltage and phases.
  - 1. All metallic bonding conductors - Green.
  - 2. Insulated Isolated Grounding Conductor: Green with yellow stripe.
  - 3. Phase Conductors of 120/208 Volt System: Black, red, blue. Neutral: white.
- B. All circuit conductors of the same color shall be connected to the same ungrounded feeder conductor throughout the installation.
- C. Where Conductors Are Not Available in the Colors Indicated, Due to Size, Prewired Cable, or Other Reason: Install identifying adhesive bands 3/4" wide of colors indicated above around each conductor within six inches (6") and twelve inches (12") of each end and at a maximum of five foot (5') intervals along wireways, at back of panelboards, and wherever conductors are accessible.
- D. Power and Lighting Circuits in Panelboard Gutters, Pull Boxes, Outlet and Junction Boxes, and at Load Connection: Provide wire markers on each conductor and Identify with branch circuit or feeder number.
- E. Conductors of different system voltages shall not enter the same raceway, box, gutter, or other types of enclosures.
- F. System Control Wires at Control Panel and Load Connection:
  - 1. Provide wire markers on each conductor and identify with number as indicated on manufacturer's schematic and interconnection diagrams equipment manufacturer's Shop Drawings.
  - 2. Fire Alarm System: Follow local Fire Department color code and labeling standards.

END OF SECTION