Section 260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

1. GENERAL
   * + 1. DESCRIPTION
          1. Clearly and properly identify the complete electrical system to indicate the loads served or the function of each item of equipment connected under this work.
          2. Provide conduit and cable identification as shown on the Drawings.
       2. REFERENCES
          1. ANSI: American National Standards Institute

ANSI Z535.4: Product Safety Signs and Labels

* + - * 1. NEC: National Electric Code

NEC Article 110: Requirements for Electrical Installation

* + - * 1. OSHA: Occupational Safety and Health Administration

1. PRODUCTS
   * + 1. LABELS
          1. Pre‑Printed: Permanent material pre‑printed with black on white, with adhesive backing. Brady, 3M, or equal.
          2. Laminated Plastic: 3‑ply laminated plastic, color as indicated, with 1/2‑inch high white letters for low voltage and 1‑inch high white letters for high voltage. Lamicoid, or equal.
          3. Plastic Tape: Black or red with white letters, adhesive backing, field-printed with proper tool. Dymo‑tape, or equal.
          4. Marker Tape: Clear adhesive-backed tape with black letters, for device plates. Kroy, or equal.
          5. Wire Markers: White with black numbers, adhesive-backed tape on dispenser roll. Brady, 3M, or equal.
          6. Marker Pen: Black permanent marker suitable for writing on metallic surfaces.
          7. Clearance Warning Tape: 2-inch-wide self-adhesive vinyl type, black/yellow stripes. Seton, Brady, or equal.
2. EXECUTION
   * + 1. BRANCH CIRCUIT PANELBOARDS
          1. Indicate panel number, source, and if applicable, transformer number from which the panel is fed with laminated plastic labels attached to face trim.
          2. Provide typewritten or power system software generated panel directories, with protective, clear transparent covers, accurately accounting for every breaker installed, including spares. Schedules shall use the actual loads and room designations assigned by name or number near completion of the work. Do not use the designations from the drawings.
       2. EQUIPMENT
          1. Label all disconnect switches, individual circuit breakers, security and communications panels, relays, contactors, time switches, and indicating equipment with laminated plastic labels indicating equipment number, source, and circuit number.
          2. Where the controlling device is remote mounted from the serving panel, include the serving panel designation and circuit number with additional plastic tape labels.
       3. DEVICES
          1. All receptacle plates shall be marked in black permanent marker tape on the face of the plate, with the receptacles panel and branch circuit designation. The identification shall be made with clear self-adhesive tape with black 10-point letters. Apply the tape at the top of the device plate.
          2. Receptacles specified or noted on the drawings to be engraved, shall have the circuit information engraved in 3/16‑inch letters on the front face of the plates. The alphabetic and numeric marking shall be made on the inside of the plate.
          3. Receptacles connected to a GFCI-protected circuit downstream from the protecting device shall be labeled “GFCI Protected.”
       4. CONDUIT AND CABLE
          1. Label all conduit runs and open cable wiring routed in cable tray or accessible ceiling spaces. Attach labels at the end of the conduit run and at least one per room. Place at entrances of all distribution panels, MCC, panelboards, and the like.
          2. Label all conduit runs and open cable wiring routed in cable tray or accessible ceiling spaces. Space labels a maximum of 50 feet apart and at least one per room. Place at entrances of all “J” boxes, distribution panels, MCC, panelboards, and the like.
          3. Complete installation of labels prior to ceiling installation.
       5. OUTLET, PULL, AND JUNCTION BOXES
          1. Label all pull boxes and junction boxes for security, surveillance, and communications systems with plastic tape, red with white letters. Where boxes are recessed in finished areas, mount label on inside of cover.
          2. Label power junction boxes neatly by hand, indicating source and circuit number.
       6. SYSTEMS
          1. Complex control circuits may utilize any combination of colors with each conductor identified throughout, using wrap‑around numbers or letters. Use the number or letters shown where the drawings or operation and maintenance data indicate wiring identification.
          2. Label the fire alarm and communication equipment zones, controls, indicators, and the like, with pre-printed labels or indicators appropriate for the equipment installed, as supplied or recommended by the equipment manufacturer.
          3. Label each end of pull wires left in empty conduits with tags or tape indicating location of other end of wire.
       7. CLEARANCE WARNING TAPE
          1. Affix to floor clearance warning tape to define area in front and around electrical switchgear, panels, and motor control centers. Type layout shall conform to the requirements of NEC 110 and OSHA.
          2. Remove debris and clean area prior to installing tape.

END OF SECTION 260553