



SECTION 26 05 54 – IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Nameplates.
 2. Labels.
 3. Wire markers.
 4. Conduit markers.
 5. Permanent Marking.
 6. Underground Warning Tape.
 7. Lockout Devices.

1.2 SUBMITTALS

- A. Product Data:
1. Submit manufacturer's catalog literature for each product required.
 2. Submit electrical identification schedule including list of wording, symbols, letter size, color coding, tag number, location, and function.

1.3 ENVIRONMENTAL REQUIREMENTS

- A. Install labels and nameplates only when ambient temperature and humidity conditions for adhesive are within range recommended by manufacturer.

PART 2 - PRODUCTS

2.1 NAMEPLATES ON EQUIPMENT

- A. Engraved Plastic Nameplates and Signs:
1. Engraving stock, melamine plastic laminate, minimum 1/16 inch (1.6 mm) thick for signs up to 20 sq. in. (129 sq. cm) and 1/8 inch (3.2 mm) thick for larger sizes. Engraved legend with white letters on black face for normal power, white letters on red face for emergency power.
 - a. Punched or drilled for mechanical fasteners.
 - b. Text is at 1/2-inch (13 mm) high lettering
- B. Nameplates shall adequately describe the function of the particular equipment involved. Where nameplates are detailed on the drawings, inscription and size of letters shall be as shown and shop drawing submitted for approval. Nameplates for panelboards and switchboards shall include the panel designation, voltage, phase and wire. The next item shall be either: LAWA, Concessions, or Airline panel, depending on loads served. In addition, describe where the panel is fed from. New panelboards & switchboards (including



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retrofit kits) shall additionally include LAWA project tracking number under which equipment was installed.

For example,

PANEL 1LA, 120/208V, 3PH, 4W
LAWA PANEL
FED FROM MS
(T-LAX-1234)

- C. Nameplates shall be secured to equipment front using stainless steel screws or rivets.
- D. Concessions feeder breakers shall additionally include permanent marking (separate from the nameplate) indicating concessions name (e.g. STARBUCKS) & produced by P-TOUCH or other label machine having black lettering on white tape.
- E. Custom metal master nameplates shall be furnished and installed by the manufacturer on each distribution section, switchboard section, and motor control center indicating the manufacturer's name, ampere rating, short-circuit rating (bus bracing) and date. Paper stickers are not acceptable.

For example,

ABC SWITCHBOARD CO.
AMPERE RATING: 5000A
SHORT CIRCUIT RATING: 100KAIC
DATE: 01/01/2011

2.2 PERMANENT MARKINGS

- A. All conduits, busways, cable trays and pull boxes shall be identified with permanent stenciled black letters and numbers which indicate the source panel (feeder supply source), circuit numbers and designated panel or load. For example, "PA-1, 3, 5 TO MG." For conduits, the letter height shall be one-third (1/3) the conduit size with 1/4 inch minimum height. For pull boxes and busways, the letter height shall be 1/2 inch minimum height and not larger than 3/4 inch in height.
- B. The identifications for conduits, busways and cable trays shall be placed at every 50 feet intervals and within 10 feet of wall and floor penetrations, pull boxes, panels, distribution boards, switchboards and electrical equipment.
- C. Spare conduits, pull boxes, busways, and abandoned raceways (that are to remain) shall be identified as described above (A, B).
- D. The permanent marking identifications on the raceways and pull boxes shall be visible after the installations are made.
- E. All receptacle and switch faceplates shall be labeled with the source panel and circuit number. Label shall be Arial font, produced by a P-Touch or other label machine. Black lettering on white tape for normal power and white lettering font on red tape for emergency power.
- F. All boxes and enclosures (including transfer switches, generators, and power panels) for emergency circuits shall be permanently marked in red with the words, "EMERGENCY SYSTEM", so they will be readily identified as a component of an emergency circuit or system.



2.3 LABELS

- A. Labels: Embossed adhesive tape, with 3/16 inch black letters on white background for normal power; white letters on red background for emergency power.

2.4 WIRE MARKERS

- A. Description: Cloth tape, split sleeve, or tubing type wire markers.
- B. Legend:
 - 1. Power and Lighting Circuits: Branch circuit or feeder number.
 - 2. Control Circuits: Control wire number.

2.5 UNDERGROUND RACEWAY MARKERS

- A. Description: Permanent, detectable, red colored, continuous printed, polyethylene tape with suitable warning legend describing burial electrical lines. Taps shall be minimum 6 inches wide by 4 mils thick.
- B. Color:
 - 1. (Normal Power): Black lettering on white background;
 - 2. (Emergency Power): White lettering on red background.
- C. Legend:
 - 1. Medium Voltage System: 5k, 15kV or 35kV as applicable.
 - 2. 480 Volt System: 480 VOLTS.
 - 3. 208 Volt System: 208 VOLTS.

2.6 LOCKOUT DEVICES

- A. Lockout Hasps:
 - 1. Anodized aluminum hasp with erasable label surface; size minimum 7-1/4 x 3 inches.

2.7 PANELBOARD DIRECTORIES

- A. Panelboard directories shall be computer generated, arranged in numerical order, and shall list each circuit load and room number in which each load is located. Directories shall be mounted in a 6 by 8 inch metal frame under transparent plastic inside each panelboard door.
- B. Changes to existing circuiting, loads or room number shall require updated typed panelboard directories. Revised panelboard directories shall be made available at the time of change.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install identifying devices after completion of painting.



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- B. Nameplate Installation:
1. Install nameplate parallel to equipment lines.
 2. Install nameplate for each electrical distribution and control equipment enclosure with corrosive-resistant mechanical fasteners.
 3. Install nameplates for each control panel and major control components located outside panel with corrosive-resistant mechanical fasteners.
 4. Secure nameplate to equipment front using screws, or rivets.
 5. Secure nameplate to inside surface of door on recessed panelboard in finished locations.
 6. Install nameplates for the following:
 - a. Switchgear.
 - b. Switchboards.
 - c. Panelboards.
 - d. Transformers.
 - e. Disconnect Switches
 - f. Motor Control Centers.
 - g. Pushbutton Stations,
 - h. Terminal Cabinets.
 - i. Control Panels.
 - j. Enclosed circuit breakers.
 - k. Generators.
 - l. Transfer Switches.
 - m. Enclosed Controllers.
 - n. Variable-Frequency Controllers.
 7. Install nameplate to maintain NEMA rating of enclosure.
- C. Label Installation:
1. Install label parallel to equipment lines.
 2. Install label for identification of individual control device stations.
 3. Install labels for permanent adhesion and seal with clear lacquer.
 4. Wire Marker Installation:
 - a. Install wire marker for each conductor at panelboard gutters; pull boxes, outlet and junction boxes, and each load connection.
 - b. Mark data cabling at each end. Install additional marking at accessible locations along the cable run.
 - c. Install labels at data outlets identifying patch panel and port designation.
- D. Underground Warning Tape Installation:
1. Install underground warning tape along length of each underground conduit, raceway, or cable 6 to 8 inches below finished grade, directly above buried conduit, raceway, or



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cable.

END OF SECTION 26 05 54