

**SECTION 26 05 53
ELECTRICAL IDENTIFICATION**

PART 1 GENERAL

1.1 SESSION INCLUDES

- A. Nameplates
- B. Wire and conduit markers
- C. Box color coding
- D. Lighting and power junction boxes
- E. Panel directories
- F. Conduit

1.2 SUBMITTALS

- A. Submit shop drawings under provisions of Section 01 33 00.
- B. Include schedule for nameplates.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Nameplates: Engraved three-layer laminated plastic, white letters on a colored background.
 - 1. Background color shall match box color coding schedule, see section 26 05 33 3.4A
- B. Underground-Type Plastic Line Marker:
 - 1. Manufacturer's standard permanent bright-colored continuous-printed plastic tape intended for direct-burial service not less than 6" wide x 4 mils thick.
 - 2. Provide tape with printing which most accurately indicates the type of the buried conduit.
- C. Wire and Cable Markers: Provide cloth markers, split sleeve, or tubing type.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Degrease and clean surfaces to receive nameplates.
- B. Install nameplates parallel to equipment lines.
- C. Secure nameplates to equipment fronts using screws, rivets, or adhesive.
 - 1. Secure nameplate to outside face of recessed panel board doors in finished locations.
- D. Do not use embossed tape for any application.
- E. Provide underground-type plastic line marker above exterior underground conduits.
 - 1. Bury 6" to 8" below finish grade.
 - 2. Provide line markers on each side of trench if wider than 16".

3.2 WIRE IDENTIFICATION

- A. Wire Color Coding:
 - 1. 120/208-volt system, "A" phase - black, "B" phase -red, "C" phase - blue, neutral - white, and ground green.
 - 2. 277/480-volt system, "A" phase - brown, "B" phase - purple, "C" phase - yellow, neutral - gray, and ground - green.
- B. Maintain A, B, C, phase relation left to right or top to bottom when viewed from front.
 - 1. Maintain color-coding including switch legs and travelers throughout entire project.
 - 2. Switch legs and travelers may be marked with tape or wire markers to identify them but must maintain the phase color code.
- C. Conductors' #10 and smaller shall have a continuous outer factory finish, meeting the requirements of 26 05 53-3.2a.

1. Neutrals and equipment-grounding conductors' #6 or smaller shall have a continuous outer factory finish (NEC 200.6 and 250.119.).

3.3 NAMEPLATE ENGRAVING SCHEDULE (EXAMPLE)

- A. Provide nameplates of minimum letter height as scheduled below.
- B. Panelboards, Switchboards, and Motor Control Centers: $\frac{1}{2}$ " identify equipment designation, and $\frac{1}{4}$ " identify voltage rating.
- C. Individual Circuit Breakers, Switches, and Motor Starters, Switchboards, and Motor Control Centers: $\frac{3}{8}$ " identify circuit and load served, including location.
- D. Safety Switches, Enclosed Switches, and Motor Starters: $\frac{1}{4}$ " identify panel load served, and room number if not obvious.
- E. Transformers: $\frac{3}{8}$ " identify equipment designation, $\frac{1}{4}$ " identify primary and secondary voltages.
- F. Electrical Cabinets and Enclosures: $\frac{3}{8}$ " identify equipment designation.
- G. System Terminal Cabinets: $\frac{3}{8}$ " identify equipment designation.
- H. Switches Not Within Sight of the Equipment or Light(s) Controlled: $\frac{1}{8}$ " identify load served.
- I. Electrical equipment located above suspended or hard ceilings: $\frac{1}{8}$ ", identify circuit number on grid or hard ceiling.
- J. Hand hole and manhole: $\frac{1}{4}$ ", labeled on the outside to identify system or panel.

3.4 BOX COLOR CODING SCHEDULE

- A. Paint junction box and cover in the following manner:
 1. Emergency power - red
 2. Fire alarm - orange
 3. Optional Standby Power - green
 4. Intercom system - blue
 5. Security system - black
 6. ITV system - brown
 7. Data and Telephone systems - yellow
 8. AC and EMS controls - purple
 9. Video Surveillance system - Gold
 10. Card Access system - Tan
- B. In exposed finished painted areas, occupied by students, identify junction box with $\frac{1}{2}$ " diameter self-adhesive colored dot (same as in 26 05 53-3.4 A) instead of painting.
- C. For junction boxes above suspended ceilings, install $\frac{1}{2}$ " diameter self-adhesive colored dot (same as in 26 05 53-3.4 A) on ceiling "T" bar below each junction box to show location.

3.5 LIGHTING AND POWER JUNCTION BOX IDENTIFICATION

- A. Permanently identify lighting and power junction box covers with circuit and panel board number on the outside.
- B. In exposed finished student occupied areas, place circuit and panel board number on inside of cover.

3.6 PANEL DIRECTORY

- A. Each panel directory shall be typewritten, indicate specific and clear area of control, using official school district room numbers, and protected by a plastic covering.
- B. Each panel directory shall include the conductor color code.
- C. Each panel directory shall indicate the voltage and phase of the feeder, ID of the feeder, and location of the feeder disconnect.

The School District of Palm Beach County

Project Name:

SDPBC Project No.:

3.7 Arc Fault Hazard Warning

- A. Each switchboard, panel board, industrial control panel, meter socket, and motor control center shall be marked to warn of the potential electric arc flash hazards to comply with NFPA 70E and ANSI Z535.41998.

END OF SECTION