

SECTION 26 0553 - ELECTRICAL IDENTIFICATION

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK:

- A. Systems and equipment requiring identification are shown on the drawings, and extent of identification is specified herein and in individual sections of work.
- B. Types of electrical identification include:
 - 1. Exposed conduit color marking.
 - 2. Buried cable and conduit warnings.
 - 3. Cable/conductor identification.
 - 4. Operational instructions and warnings.
 - 5. Danger signs.
 - 6. Equipment/system identification signs (nameplates).

1.2 SUBMITTALS:

- A. Manufacturer's Data:
 - 1. Product specifications and installation instructions for each material and device.
- B. Samples:
 - 1. Provide for each color, lettering style and other graphic representation.

PART 2 - PRODUCTS

2.1 ELECTRICAL IDENTIFICATION MATERIAL:

- A. Color-Coded Conduit Markers:
 - 1. Color code all conduit with _ inch wide band of vinyl plastic electrical tape, 3M Company A Scotch 35", applied two (2) full turns around conduit, 6" from all conduit terminations into switchboards, panelboards, motor control centers, starters, cabinets, control panels, pullboxes, outlet boxes, etc., on each side of walls, floors or roof penetrated by conduit and where conduit enters wall to outlets below.

CONDUIT COLOR CODE

<u>SYSTEM</u>	<u>COLOR</u>
Life Safety Branch	Yellow
Critical Branch	Orange
Equipment Branch	Green
Fire Alarm	Red

- B. Color-Coded Plastic Tape:
 - 1. Manufacturer's standard self-adhesive vinyl tape, minimum 3 mils thick by 1-1/2" wide.
- C. Underground Plastic Line Marker:
 - 1. Manufacturer's standard permanent, bright-colored, continuous-printed plastic tape, for direct-burial service; minimum 6" wide x 4 mils thick. Printing to indicate type service of cable.
- D. Cable/Conductor Identification Bands:
 - 1. Manufacturer's standard vinyl-cloth self-adhesive cable/conductor markers, wrap-around type; pre-numbered plastic coated, or write-on type with clear plastic self-adhesive cover flap, lettered to show circuit identification.
- E. Self-Adhesive Plastic Signs:
 - 1. Manufacturer's standard, self-adhesive, pre-printed, flexible vinyl signs for operational instructions or warnings. Sizes suitable for application and visibility, with proper wording for application.
 - 2. Color: Orange with black lettering.
- F. Danger Signs:
 - 1. Manufacturer's standard "DANGER" signs, baked enamel finish on 20 gage steel; standard red, black and white graphics; 14" x 10" unless 10" x 7" is largest which can be applied, or where larger

size is needed for visibility use recognized explanation wording (as examples: HIGH VOLTAGE, KEEP AWAY, BURIED CABLE, DO NOT TOUCH SWITCH).

- G. Engraved Signs (Nameplates):
 - 1. 1/8" thick melamine plastic laminate, engrave with standard letter style of sizes and wording indicated (1/4" letters minimum) white field, black letters for normal service; red field, white letters for essential service. Punched for screws.
 - 2. Fasteners: Self-tapping stainless steel screws, except contact epoxy adhesive where screws cannot or should not penetrate substrate.
- H. Lettering and Graphics:
 - 1. Coordinate names, abbreviations and other designations used with those shown or specified. Provide numbers, lettering, and wording as indicated or required for identification and operation/maintenance.

PART 3 - EXECUTION

3.1 APPLICATION AND INSTALLATION:

- A. General Installation Requirements:
 - 1. After completion of painting.
 - 2. Comply with governing regulations and requests of governing authorities for identification of electrical work.
- B. Underground Cable Identification:
 - 1. During back-filling of underground cable, install continuous marker, directly over buried line 6" to 8" below finished grade. Where multiple lines are buried in common trench not exceeding 24" width, install a single line marker.
 - 2. Install line marker for every buried ductbank.
- C. Operational Identification and Warnings:
 - 1. Provide operational signs for main switch.
- D. Danger Signs:
 - 1. Provide as required by codes.
- E. Engraved Plastic Laminated Signs: Install on each major unit of electrical equipment in the building. Provide single line of text, 1/4" high lettering on 1" high sign (1-1/2" high where 2 lines required). Matching terminology and numbering of contract documents. Provide signs for each unit of the following categories:
 - 1. Electrical cabinets and enclosures. Indicate voltage.
 - 2. Access panel/doors to electrical facilities.
 - 3. Major electrical switchgear (indicate voltage).
 - 4. Safety switches and circuit breakers.
 - 5. Transformers.
 - 6. Feeders in pull and junction boxes and in all switchgear. Fasten with nylon ties.
 - 7. All equipment furnished in this Division of the specifications.
- F. Install signs where indicated or most visible. Secure with screws or epoxy adhesive. Secure to feeder cables with nylon ties.

END OF SECTION