

**SECTION 10440
IDENTIFYING DEVICES**

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Contractor shall furnish all the materials for and shall properly erect and install all identifying devices at the locations determined by the Engineer, and as specified herein.
- B. This shall include all identification signs and warning signs, including supports, fastening devices, and accessories, and all labor, materials, tools, and appurtenances required to complete the Work.
- C. It is the intent of this Specification that the installation shall be complete in all respects and ready for use. The Contractor shall be responsible for all incidental details and for any special construction necessary to complete the work in an acceptable manner.
- D. Related Work specified elsewhere:
 - 1. Section 10520 - Fire Extinguishers.
 - 2. Section 15060 - Piping and Appurtenances.

1.02 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data and installation instructions for each type of sign required.
- B. Samples: Submit samples of each sign form and materials showing finished, colors, surface textures and qualities of manufacturer and design of each sign component including graphics.

1.03 QUALITY ASSURANCE

- A. Uniformity of manufacturer: For each sign form and graphic image process indicated furnish products of single manufacturer.
- B. Quality of signage shall be not less than ASI-SPE construction.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. General: Identifying devices shall be of the type and materials specified for each category. Unless otherwise indicated, signs shall be the manufacturer's stock items.
- B. Life Safety Signs: Signs shall be butyrate with red lettering on white background, and conforming to OSHA regulations. Sign denoting fire extinguisher location shall be vinyl with pressure-sensitive adhesive backing.
 - 1. NO SMOKING: Located at all entrance doors. Size – 7-in. x 10-in.
 - 2. FIRE EXTINGUISHER: Located above all extinguishers. Size – 4-in. x 12-in.

3. **CONFINED SPACE** – Located at all entrances to confined spaces. Size – 14-in. x 10-in.
 4. **OVERHEAD CRANE** – Located at each crane, two signs per crane at location directed by Engineer. Size – 14-in. x 10-in.
- C. **Interior and Directional Signs:** Signs shall be ASI/2 type A, constructed of 0.015-inch vinyl laminated to 1/4-inch acrylic backing. Letters shall ASI/2 pressure-sensitive vinyl letters. Signs shall have 1-inch border around perimeter.
1. Two (2) each: **Electrical, Mechanical and Control Rooms.** Size: 10-in. x 14-in.
 2. **EXIT.** Shall be posted at all exterior doors. Size: 10-in. x 14-in.
 3. **RESTROOM.** Shall be posted at the restroom. Size: 7-in. x 5-in.
- D. **Exterior Signs:** Signs shall be as listed below.
1. **NO PARKING:** No parking sign shall be 12" x 18" embossed steel with cast iron base and 1-inch diameter pipe standard, 36-inches high, with black enamel finish. Location to be determined by the Engineer.
 2. **NO TRESPASSING AUTHORIZED PERSONNEL ONLY.** Sign shall be 7-in. x 5-in. with a white background and red and black design. Four signs shall be supplied. Location to be determined by the Engineer.
- E. **Environmental Signs.** Signs shall be butyrate with white background and red and black design, conforming to OSHA regulations.
1. **NON-POTABLE WATER DO NOT DRINK:** Signs shall be posted at all hose bibs and post and yard hydrants on the site and in the buildings. Signs shall be 7-in x 5-in.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. **General:** Locate sign units and accessories where directed, using mounting methods of the type described and in compliance with the manufacturer's instructions.
1. Install signs level, plumb and at the height indicated, with sign surfaces free from distortion or other defects in appearance.

3.02 CLEANING AND PROTECTION

- A. At completion of the installation, clean soiled sign surfaces in accordance with the manufacturer's instructions. Protect units from damage until acceptance by the Engineer.

END OF SECTION 10440

**SECTION 10520
FIRE EXTINGUISHERS**

PART 1 - GENERAL

1.01 SCOPE

- A. Work described in this Section includes furnishing all labor, materials, equipment, tools and incidentals required for a complete installation of all wall mounted fire extinguishers. All equipment shall be installed, adjusted and tested in accordance with these Specifications, the manufacturer's recommendations and as shown on the Drawings.

- B. Contract drawings show only functional features and some of the required external connections. They do not show all components required for a complete installation nor exact dimensions particular to any manufacturer's equipment. Contractor shall supply all parts, devices and equipment necessary to meet the requirements of the Contract Documents and shall make all dimensional adjustments particular to the equipment being furnished. All costs associated with such changes and adjustments shall be included in the price bid for the Work shown and specified.

- C. Related Work specified elsewhere:
 - 1. Section 10440 - Identifying Devices.

1.02 SUBMITTALS

- A. Submittals shall be made in accordance with the requirements of the General Conditions of the Contract Documents. In addition, the following specific information shall be provided:
 - 1. Manufacturer's certification.
 - 2. Manufacturer's data and installation instructions.

1.03 QUALITY ASSURANCE

- A. Reference Standards. Comply with all Federal and State laws or ordinances, as well as the latest edition of all applicable codes, standards, regulations and/or regulatory agency requirements including the partial listing below:
 - 1. NEC, National Electric Code.
 - 2. NEMA, Standards of National Electrical Manufacturers Association.
 - 3. OSHA, Occupational Safety and Health Act.
 - 4. NFPA, National Fire Protection Association.

1.04 QUALITY STANDARDS

- A. The fire extinguishers shall be furnished by a single manufacturer who shall assume sole responsibility for providing a complete, operating system designed for long life with a minimum of required maintenance meeting the requirements specified herein and as shown on the Drawings.

- B. Manufacturer shall provide written certification that the equipment provided under this Specification has been designed in accordance with these specifications, in accordance with NFPA10, and is a suitable application for these service conditions.
- C. Manufacturer's offering products that comply with these specifications include:
 - 1. Larsen's Manufacturing Co.
 - 2. J. L. Industries
 - 3. Modern Metal Products by Muckle
 - 4. Or equal.

1.05 WARRANTY

- A. Provide a warranty against defective equipment and workmanship in accordance with the requirements of the General Conditions of the Contract Documents.

PART 2 - PRODUCTS

2.01 FIRE EXTINGUISHERS

- A. Provide fire extinguishers in accordance with the following:

Product	Hand held, dry chemical fire extinguisher
Capacity	10 Pounds
Class	C
Extinguishing agent (As indicated) Electrical Room and Mechanical Equipment Room	Potassium Bicarbonate (11)
Mounting	Wall Brackets

- B. Unit shall be UL labelled. Unit shall have pressure indicating gauge rated for Class C fires.
- C. Service, charge and tag each fire extinguisher not more than ninety-five (95) calendar days prior to the Date of Substantial Completion of the Work as that Date is established by the Engineer.
- D. A universal emergency sign shall be attached to building structure above each fire extinguisher.

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 INSTALLATION

- A. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.
- B. Install the work of this Section in strict accordance with the original design, the approved Shop Drawings, pertinent requirements of governmental agencies having jurisdiction, and the manufacturer's recommended installation procedures as approved by the Engineer.

END OF SECTION 10520

