

## SECTION 15077

### IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section

##### 1.2 SUMMARY

- A. Section Includes
  - 1. Equipment labels
  - 2. Warning signs and labels
  - 3. Pipe labels
  - 4. Stencils

##### 1.3 COORDINATION

- A. Coordinate installation of identifying devices with completion of covering and painting of surfaces where devices are to be applied
- B. Coordinate installation of identifying devices with locations of access panels and doors
- C. Install identifying devices before installing acoustical ceilings and similar concealment

#### PART 2 - PRODUCTS

##### 2.1 EQUIPMENT LABELS

- A. Plastic Labels for Equipment
  - 1. Material and thickness: Multilayer, multicolor, plastic labels for mechanical engraving, 1/8-inch thick, and having predrilled holes for attachment hardware
  - 2. Letter color: White
  - 3. Background color: Black
  - 4. Maximum temperature: Able to withstand temperatures up to 160°F
  - 5. Minimum label size: Length and width vary for required label content, but not less than 2½ by ¾-inch
  - 6. Minimum letter size
    - a. ¼-inch for name of units if viewing distance is less than 24 inches
    - b. ½-inch for viewing distances up to 72 inches
    - c. Proportionately larger lettering for greater viewing distances
    - d. Include secondary lettering two-thirds to three-fourths the size of principal

- lettering
7. Adhesive: Contact-type, permanent adhesive, compatible with label and with substrate

## 2.2 WARNING SIGNS AND LABELS

- A. Material and Thickness: Multilayer, multicolor, plastic labels for mechanical engraving, 1/8-inch thick, and having predrilled holes for attachment hardware
- B. Letter Color: Black/White
- C. Background Color: Red/Yellow
- D. Maximum Temperature: Able to withstand temperatures up to 160°F
- E. Minimum Label Size: Length and width vary for required label content, but not less than 2½ by ¾-inch
- F. Minimum Letter Size
  1. ¼-inch for name of units if viewing distance is less than 24 inches
  2. ½-inch for viewing distances up to 72 inches
  3. Proportionately larger lettering for greater viewing distances
  4. Include secondary lettering two-thirds to three-fourths the size of principal lettering
- G. Adhesive: Contact-type, permanent adhesive, compatible with label and with substrate
- H. Label Content: Include caution and warning information, plus emergency notification instructions

## 2.3 PIPE LABELS

- A. General Requirements for Manufactured Pipe Labels: Preprinted, color-coded, with lettering indicating service, and showing flow direction
- B. Pretensioned Pipe Labels: Precoiled, semirigid plastic formed to cover full circumference of pipe and to attach to pipe without fasteners or adhesive
- C. Self-Adhesive Pipe Labels: Printed plastic with contact-type, permanent-adhesive backing
- D. Pipe Label Contents: Include identification of piping service using same designations or abbreviations as used on Drawings, pipe size, and an arrow indicating flow direction
  1. Flow direction arrows: Integral with piping system service lettering to accommodate both directions, or as separate unit on each pipe label to indicate flow direction
  2. Lettering size: At least 1½-inches high

## 2.4 STENCILS

- A. Stencils: Prepared with letter sizes according to ASME A13.1 for piping; minimum letter height of 1¼ inches for ducts; and minimum letter height of ¾ inch for access panel and door labels, equipment labels, and similar operational instructions
  - 1. Stencil paint: Exterior, gloss, alkyd enamel black unless otherwise indicated. Paint may be in pressurized spray-can form
  - 2. Identification paint: Exterior, alkyd enamel in colors according to ASME A13.1 unless otherwise indicated

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Clean piping and equipment surfaces of substances that could impair bond of identification devices, including dirt, oil, grease, release agents, and incompatible primers, paints, and encapsulants

### 3.2 EQUIPMENT LABEL INSTALLATION

- A. Install or permanently fasten labels on each major item of mechanical equipment
- B. Locate equipment labels where accessible and visible

### 3.3 PIPE LABEL INSTALLATION

- A. Locate pipe labels where piping is exposed or above accessible ceilings in finished spaces; machine rooms; accessible maintenance spaces such as shafts, tunnels, and plenums; and exterior exposed locations as follows:

### 3.4 WARNING-TAG INSTALLATION

- A. Write required message on, and attach warning tags to, equipment and other items where required

END OF SECTION