### **SECTION 21 05 53**

## **IDENTIFICATION FOR FIRE SUPPRESSION PIPING AND EQUIPMENT**

## **PART 1 GENERAL**

### 1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

### 1.02 SECTION INCLUDES

- A. Nameplates.
- B. Pipe markers.
- C. Ceiling tacks.

# 1.03 REFERENCE STANDARDS

- A. ASME A13.1 Scheme for the Identification of Piping Systems; 2023.
- B. ASTM D709 Standard Specification for Laminated Thermosetting Materials; 2017.

## 1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. List: Submit list of wording, symbols, letter size, and color coding for mechanical identification.
- C. Chart and Schedule: Submit valve chart and schedule, including valve tag number, location, function, and valve manufacturer's name and model number.
- D. Product Data: Provide manufacturers catalog literature for each product required.
- E. Manufacturer's Installation Instructions: Indicate special procedures, and installation instructions.
- F. Project Record Documents: Record actual locations of tagged valves.

## **PART 2 PRODUCTS**

# 2.01 IDENTIFICATION APPLICATIONS

- A. Control Panels: Nameplates.
- B. Instrumentation: Nameplates.
- C. Major Control Components: Nameplates.
- D. Piping: Pipe markers.
- E. Pumps: Nameplates.
- F. Small-sized Equipment: Nameplates.
- G. Valves: Nameplates and ceiling tacks where above lay-in ceilings.

# 2.02 NAMEPLATES

- A. Manufacturers:
  - 1. Brimar Industries, Inc.: www.pipemarker.com.
  - 2. Kolbi Pipe Marker Co.: www.kolbipipemarkers.com.
  - 3. Substitutions: See Section 01 60 00 Product Requirements.
- B. Description: Laminated three-layer plastic with engraved letters.
  - 1. Letter Color: White.
  - 2. Letter Height: 1/4 inch (6 mm).
  - 3. Background Color: Red.
  - 4. Thickness: 1/16 inch (\_\_\_ mm).
  - 5. Plastic: Comply with ASTM D709.
- C. Metal rectangular nameplates to be used valves. Indicate "NORMALLY OPEN" or "NORMALLY CLOSED" on all valves.

## 2.03 PIPE MARKERS

- A. Manufacturers:
  - 1. Brimar Industries, Inc.; F3 R/W, 28038, or 1F1 R/W: www.pipemarker.com.
  - 2. Kolbi Pipe Marker Co.; Model Adhesive Style B, C, or D: www.kolbipipemarkers.com.
  - 3. Craftmark
  - 4. Substitutions: See Section 01 60 00 Product Requirements.
- B. Color: Comply with ASME A13.1.
- C. Plastic Pipe Markers: Factory fabricated, flexible, semi- rigid plastic, preformed to fit around pipe or pipe covering; minimum information indicating flow direction arrow and identification of fluid being conveyed.
- D. Plastic Tape Pipe Markers: Flexible, vinyl film tape with pressure-sensitive adhesive backing and printed markings.
- E. Underground Plastic Pipe Markers: Bright colored continuously printed plastic ribbon tape, minimum 6 inches (150 mm) wide by 4 mil (0.10 mm) thick, manufactured for direct burial service.
  - 1. Underground tape to be detectable-type and run continuously and be electrically continuous from an accessible location to another accessible location to facilitate detection.
- F. Lettering to be "FIRE PROTECTION WATER' or submit other text as appropriate.
- G. Color code as follows:
  - 1. Fire Quenching Fluids: Red with white letters.

### 2.04 CEILING TACKS

- A. Manufacturers:
  - 1. Craftmark Pipe Markers; Ceiling Valve Marker: www.craftmarkid.com/#sle.
  - 2. Substitutions: See Section 01 60 00 Product Requirements.
- B. Description: Adhesive vinyl with 3/4 inch (20 mm) diameter color coded head.
- C. Color code as follows:
  - 1. Sprinkler Valves: Red.

# PART 3 EXECUTION

## 3.01 PREPARATION

A. Degrease and clean surfaces to receive adhesive for identification materials.

## 3.02 INSTALLATION

- A. Install nameplates with corrosive-resistant mechanical fasteners, or adhesive. Apply with sufficient adhesive to ensure permanent adhesion and seal with clear lacquer.
- B. Install valve nameplates with corrosion resistant chain.
- C. Install plastic pipe markers in accordance with manufacturer's instructions.
- D. Install plastic tape pipe markers complete around pipe in accordance with manufacturer's instructions.
- E. Install underground plastic pipe markers 6 to 8 inches (150 to 200 mm) below finished grade, directly above buried pipe. Underground tape to be detectable-type and run continously and be electrically continuous from an accessible location to another accessible location to facilitate detection.
- F. Locate ceiling tacks to locate valves above T-bar type panel ceilings. Locate in intersection of grid closest to equipment.

# **END OF SECTION**