

## SECTION 22 0553

### IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Nameplates.
- B. Tags.
- C. Stencils.
- D. Pipe markers.
- E. Ceiling tacks.

##### 1.02 RELATED REQUIREMENTS

- A. Section 09 9123 - Interior Painting: Identification painting.
- B. Section 22 6005 - Medical Air, Gas, and Vacuum Systems: Supply of pipe labels for placement under this section.

##### 1.03 REFERENCE STANDARDS

- A. ASME A13.1 - Scheme for the Identification of Piping Systems; 2007.
- B. ASTM D709 - Standard Specification for Laminated Thermosetting Materials; 2013.

##### 1.04 SUBMITTALS

- A. See Section 01 3000 - 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.
- F. Project Record Documents: Record actual locations of tagged valves.

#### PART 2 PRODUCTS

##### 2.01 IDENTIFICATION APPLICATIONS

- A. Air Handling Units: Nameplates.
- B. Air Terminal Units: Tags.
- C. Automatic Controls: Tags. Key to control schematic.
- D. Control Panels: Nameplates.
- E. Dampers: Ceiling tacks, where located above lay-in ceiling.
- F. Heat Transfer Equipment: Nameplates.
- G. Instrumentation: Tags.
- H. Major Control Components: Nameplates.
- I. Piping: Tags.
- J. Pumps: Nameplates.
- K. Relays: Tags.
- L. Small-sized Equipment: Tags.
- M. Tanks: Nameplates.
- N. Valves: Tags and ceiling tacks where located above lay-in ceiling.
- O. Water Treatment Devices: Nameplates.

## 2.02 NAMEPLATES

- A. Manufacturers:
  - 1. Brimar Industries, Inc.; \_\_\_\_\_: [www.pipemarker.com](http://www.pipemarker.com).
  - 2. Kolbi Pipe Marker Co.; \_\_\_\_\_: [www.kolbipipemarkers.com](http://www.kolbipipemarkers.com).
  - 3. Seton Identification Products; \_\_\_\_\_: [www.seton.com](http://www.seton.com).
- B. Description: Laminated three-layer plastic with engraved letters.
  - 1. Letter Color: White.
  - 2. Letter Height: 1/4 inch.
  - 3. Background Color: Black.

## 2.03 TAGS

- A. Manufacturers:
  - 1. Advanced Graphic Engraving; \_\_\_\_\_: [www.advancedgraphicengraving.com](http://www.advancedgraphicengraving.com).
  - 2. Brady Corporation; \_\_\_\_\_: [www.bradycorp.com](http://www.bradycorp.com).
  - 3. Brimar Industries, Inc.; \_\_\_\_\_: [www.pipemarker.com](http://www.pipemarker.com).
  - 4. Kolbi Pipe Marker Co.; \_\_\_\_\_: [www.kolbipipemarkers.com](http://www.kolbipipemarkers.com).
  - 5. Seton Identification Products; \_\_\_\_\_: [www.seton.com](http://www.seton.com).
  - 6. Substitutions: See Section 01 6000 - Product Requirements.
- B. Plastic Tags: Laminated three-layer plastic with engraved black letters on light contrasting background color. Tag size minimum 1-1/2 inch diameter.
- C. Metal Tags: Brass with stamped letters; tag size minimum 1-1/2 inch diameter with smooth edges.
- D. Valve Tag Chart: Typewritten letter size list in anodized aluminum frame.

## 2.04 STENCILS

- A. Manufacturers:
  - 1. Brady Corporation; \_\_\_\_\_: [www.bradycorp.com](http://www.bradycorp.com).
  - 2. Kolbi Pipe Marker Co.; \_\_\_\_\_: [www.kolbipipemarkers.com](http://www.kolbipipemarkers.com).
  - 3. Seton Identification Products; \_\_\_\_\_: [www.seton.com](http://www.seton.com).
  - 4. Substitutions: See Section 01 6000 - Product Requirements.
- B. Stencils: With clean cut symbols and letters of following size:
  - 1. 3/4 to 1-1/4 inch Outside Diameter of Insulation or Pipe: 8 inch long color field, 1/2 inch high letters.
  - 2. 1-1/2 to 2 inch Outside Diameter of Insulation or Pipe: 8 inch long color field, 3/4 inch high letters.
  - 3. 2-1/2 to 6 inch Outside Diameter of Insulation or Pipe: 12 inch long color field, 1-1/4 inch high letters.
  - 4. 8 to 10 inch Outside Diameter of Insulation or Pipe: 24 inch long color field, 2-1/2 inch high letters.
  - 5. Over 10 inch Outside Diameter of Insulation or Pipe: 32 inch long color field, 3-1/2 inch high letters.
  - 6. Ductwork and Equipment: 2-1/2 inch high letters.

## 2.05 PIPE MARKERS

- A. Manufacturers:
  - 1. Brady Corporation; \_\_\_\_\_: [www.bradycorp.com](http://www.bradycorp.com).
  - 2. Brimar Industries, Inc; \_\_\_\_\_: [www.pipemarker.com](http://www.pipemarker.com).
  - 3. Kolbi Pipe Marker Co; \_\_\_\_\_: [www.kolbipipemarkers.com](http://www.kolbipipemarkers.com).
  - 4. MIFAB, Inc; \_\_\_\_\_: [www.mifab.com](http://www.mifab.com).
  - 5. Seton Identification Products; \_\_\_\_\_: [www.seton.com](http://www.seton.com).
- B. 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. Underground Plastic Pipe Markers: Bright colored continuously printed plastic ribbon tape, minimum 6 inches wide by 4 mil thick, manufactured for direct burial service.
- E. Color code as follows:
  - 1. Potable, Cooling, Boiler, Feed, Other Water: Green with white letters.
  - 2. Fire Quenching Fluids: Red with white letters.
  - 3. Toxic and Corrosive Fluids: Orange with black letters.
  - 4. Flammable Fluids: Yellow with black letters.
  - 5. Combustible Fluids: Brown with white letters.
  - 6. Compressed Air: Blue with white letters.

## **2.06 CEILING TACKS**

- A. Manufacturers:
  - 1. Craftmark; \_\_\_\_\_: [www.craftmarkid.com](http://www.craftmarkid.com).
  - 2. Substitutions: See Section 01 6000 - Product Requirements.
- B. Description: Steel with 3/4 inch diameter color coded head.
- C. Color code as follows:
  - 1. HVAC Equipment: Yellow.
  - 2. Fire Dampers and Smoke Dampers: Red.
  - 3. Plumbing Valves: Green.
  - 4. Heating/Cooling Valves: Blue.

## **PART 3 EXECUTION**

### **3.01 PREPARATION**

- A. Degrease and clean surfaces to receive adhesive for identification materials.
- B. Prepare surfaces in accordance with Section 09 9123 for stencil painting.

### **3.02 INSTALLATION**

- A. Install plastic nameplates with corrosive-resistant mechanical fasteners, or adhesive. Apply with sufficient adhesive to ensure permanent adhesion and seal with clear lacquer.
- B. Install tags with corrosion resistant chain.
- C. Apply stencil painting in accordance with Section 09 9123.
- D. Install plastic pipe markers in accordance with manufacturer's instructions.
- E. Install plastic tape pipe markers complete around pipe in accordance with manufacturer's instructions.
- F. Install underground plastic pipe markers 6 to 8 inches below finished grade, directly above buried pipe.
- G. Use tags on piping 3/4 inch diameter and smaller.
  - 1. Identify service, flow direction, and pressure.
  - 2. Install in clear view and align with axis of piping.
  - 3. Locate identification not to exceed 20 feet on straight runs including risers and drops, adjacent to each valve and Tee, at each side of penetration of structure or enclosure, and at each obstruction.
- H. Install ductwork with plastic nameplates. Identify with air handling unit identification number and area served. Locate identification at air handling unit, at each side of penetration of structure or enclosure, and at each obstruction.
- I. Locate ceiling tacks to locate valves or dampers above lay-in panel ceilings. Locate in corner of panel closest to equipment.

**END OF SECTION 22 0553**

