SECTION 23 0553
IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT

PART 1 GENERAL
1.01 SECTION INCLUDES
   A. Nameplates.
   B. Tags.
   C. Adhesive-backed duct markers.
   D. Stencils.
   E. Pipe markers.
   F. Ceiling tacks.

1.02 RELATED REQUIREMENTS
   A. Section 09 9123 - Interior Painting: Identification painting.

1.03 REFERENCE STANDARDS

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. 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. Ductwork: Nameplates.
   H. Instrumentation: Tags.
   I. Major Control Components: Nameplates.
   J. Piping: Tags.
   K. Pumps: Nameplates.
   L. Relays: Tags.
   M. Small-sized Equipment: Tags.
   N. Tanks: Nameplates.
   O. Thermostats: Nameplates.
   P. Valves: Tags and ceiling tacks where located above lay-in ceiling.
   Q. Water Treatment Devices: Nameplates.

2.02 NAMEPLATES
   A. Manufacturers:
5. Substitutions: See Section 01 6000 - Product Requirements.

2.03 TAGS
A. Manufacturers:
   6. Substitutions: See Section 01 6000 - Product Requirements.

B. Plastic Tags: Laminted 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. Stencils: With clean cut symbols and letters of following size:

2.05 PIPE MARKERS
A. Manufacturers:
   6. Substitutions: See Section 01 6000 - Product Requirements.

B. Color: Conform to 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. Color code as follows:
   1. Heating, Cooling, and Boiler Feedwater: Green with white letters.
   2. Toxic and Corrosive Fluids: Orange with black letters.
   3. Compressed Air: Blue with white letters.

2.06 CEILING TACKS
A. Manufacturers:
   2. Substitutions: See Section 01 6000 - Product Requirements.

B. Description: Steel with 3/4 inch diameter color coded head.

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 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. Install plastic pipe markers in accordance with manufacturer's instructions.
D. 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.
E. Locate ceiling tacks to locate valves or dampers above lay-in panel ceilings. Locate in corner of
   panel closest to equipment.

END OF SECTION 23 0553