SECTION 15190

MECHANICAL IDENTIFICATION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Nameplates.

B. Tags.

C. Pipe Markers.

1.02 RELATED SECTIONS

A. Section 09900 - Painting: Identification painting.

1.03 REFERENCES

A. Section 01095 - References: Requirements for references and standards.

B. ASME A13.1 - Scheme for the Identification of Piping Systems.

1.04 SUBMITTALS

A. Section 01300 - Submittals: Procedures for submittals.

B. Submit list of wording, symbols, letter size, and color coding for mechanical identification.

C. 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.

1.05 PROJECT RECORD DOCUMENTS

A. Submit under provisions of Section 01700.

B. Record actual locations of tagged valves; include valve tag numbers.

1.06 OPERATION AND MAINTENANCE DATA

A. Submit under provisions of Section 01700.

B. Include valve tag chart.

PART 2 PRODUCTS

2.01 NAMEPLATES

A. Manufacturer: Seton Name Plate Company.

B. Description: Laminated three-layer plastic with engraved black letters on light contrasting background color.

2.02 TAGS

A. Plastic Tags:
   1. Manufacturer: Seton Name Plate Company.
   2. Laminated three-layer plastic with engraved black letters on light contrasting background color. Tag size minimum 1-1/2 inches (38 mm) diameter.

B. Metal Tags:
   1. Manufacturer: Seton Name Plate Company.
   2. Brass with stamped letters; tag size minimum 1-1/2 inches (38 mm) diameter with smooth edges.

C. Information Tags:
   1. Manufacturer: Seton Name Plate Company.
   2. Clear plastic with printed "Danger," "Caution," or "Warning" and message; size 3-1/4 x 5-5/8 inches (83 x 143 mm) with grommet and self-locking nylon ties.

D. Tag Chart: Typewritten letter size list in anodized aluminum frame with plexiglass cover.

2.03 PIPE MARKERS

A. Color and Lettering: Conform to ASME A13.1.

B. Plastic Pipe Markers:
   1. Manufacturer: Seton Name Plate Company.
   2. Factory fabricated, flexible, semi-rigid plastic, preformed to fit around pipe or pipe covering. Larger sizes may have maximum sheet size with spring fastener.

C. Plastic Underground Pipe Markers:
   1. Manufacturer: Seton Name Plate Company.
   2. 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.

2.04 CEILING TACKS

A. Manufacturer: Seton Name Plate Company.

B. Description: Steel with 3/4 inch (19 mm) diameter color coded head.

C. Color code as follows:
   1. HVAC Equipment: Yellow.
   2. Fire Dampers/Smoke Dampers: Red.
   3. Plumbing Valves: Green.
   4. Heating/Cooling Valves: Blue.

2.05 LABELS

A. Manufacturer: Seton Name Plate Company.

B. Description: Polyester, size 1.9 x 0.75 inches (48 x 19 mm), adhesive backed with printed identification.

2.06 LOCKOUT DEVICES

A. Lockout Hasps:
   1. Manufacturer: Seton Name Plate Company.

2. Anodized aluminum hasp with erasable label surface; size minimum 7-1/4 x 3 inches (184 x 76 mm).

B. Valve Lockout Devices:
1. Manufacturer: Seton Name Plate Company.
2. Nylon device preventing access to valve operator, accepting lock shackle.

PART 3 EXECUTION

3.01 PREPARATION

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

3.02 INSTALLATION

A. Section 01400 - Quality Control Manufacturer's instructions.

B. Install identifying devices after completion of coverings and painting.

C. Install plastic nameplates with corrosive-resistant mechanical fasteners, or adhesive.

D. Install labels with sufficient adhesive to ensure permanent adhesion and seal with clear lacquer. For unfinished canvas covering, apply paint primer before applying labels.

E. Install tags using corrosion resistant chain. Number tags consecutively by location.

F. Install underground plastic pipe markers 6 to 8 inches (150 to 200 mm) below finished grade, directly above buried pipe.

G. Identify items of mechanical equipment such as condensing units, fans, terminal units, air handling units, pumps, heat transfer equipment, tanks, and water treatment devices with plastic nameplates. Small devices, such as in-line pumps, may be identified with tags.

H. Identify control panels and major control components outside panels with plastic nameplates.

I. Identify valves in main and branch piping with metal tags.

J. Tag automatic controls, instruments, and relays. Key to control schematic.

K. Identify piping, concealed or exposed, with plastic pipe markers. Use tags on piping 3/4 inch (20 mm) diameter and smaller. Identify service, flow direction, and pressure. Install in clear view and align with axis of piping. Locate identification not to exceed 20 feet (6 m)on straight runs including risers and drops, at each branch and riser take-off, adjacent to each valve and tee, at each side of penetration of structure or enclosure, and at each obstruction.

L. Provide ceiling tacks to locate valves, dampers and equipment above T-bar type panel ceilings. Locate in corner of panel closest to equipment.

M. Secure valve tag chart on an easily accessible wall in the mechanical room or in a location as otherwise directed by the Architect

END OF SECTION