SECTION 230553

MECHANICAL IDENTIFICATION

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Nameplates.

B. Tags.

C. Stencils.

D. Pipe markers.

1.2 RELATED SECTIONS

A. Division 09 - Painting: Identification painting.

1.3 REFERENCES

A. ANSI A13.1 - Scheme for the Identification of Piping Systems.

B. NFPA 99 - Standard for Health Care Facilities.

1.4 SUBMITTALS AT PROJECT CLOSEOUT

A. Submit under the provisions of Division 01.

B. Record actual locations of tagged valves.

PART 2 PRODUCTS

2.1 NAMEPLATES

A. Manufacturers:
   1. Seton Name Plate Company.
   2. Other acceptable manufacturers offering equivalent products.
      a) Brady U.S.A., Inc.
      b) EMED Company, Inc.

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

2.2 TAGS

A. Manufacturers:
   1. Seton Name Plate Company Model M45.
   2. Other acceptable manufacturers offering equivalent products.
      a) Brady U.S.A., Inc.
      b) EMED Company, Inc.

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. Chart: Typewritten letter size list in anodized aluminum frame.

2.3 STENCILS

A. Manufacturers:
1. Seton Name Plate Company Model 44.
2. Other acceptable manufacturers offering equivalent products.
a) Brady U.S.A., Inc.
b) EMED Company, Inc.

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.

C. Stencil Paint: As specified in Division 09, semi-gloss enamel colors conform to ANSI A13.1.

2.4 PIPE MARKERS

A. Manufacturers:
1. Seton Name Plate Company Model M39 and M40.
2. Other acceptable manufacturers offering equivalent products.
a) Brady U.S.A., Inc.
b) EMED Company, Inc.

B. Color: Conform to ANSI 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. Plastic Underground Pipe Markers: Bright colored continuously printed plastic ribbon tape, minimum 6 inches wide by 4 mil thick, manufactured for direct burial service.

2.5 CEILING TACKS

A. Manufacturers:
1. Seton Name Plate Company Model BCM.
2. Other acceptable manufacturers offering equivalent products.
a) Brady U.S.A., Inc.
b) EMED Company, Inc.

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

C. Color code as follows:
   1. Yellow - HVAC equipment
   2. Red - Fire dampers/smoke dampers
   3. Green - Plumbing valves
   4. Blue - Heating/cooling valves
   5. Orange - Medical gas valves

PART 3 EXECUTION

3.1 PREPARATION

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

B. Prepare surfaces in accordance with Division 09 for stencil painting.

3.2 INSTALLATION

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

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

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

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

E. Apply stencil painting in accordance with Division 09.

F. Install underground plastic pipe markers 6 to 8 inches below finished grade, directly above buried pipe.

G. Identify 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 tags.

J. Identify air terminal units and radiator valves with numbered tags.

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

L. Identify piping, concealed or exposed, with plastic tape pipe markers. Use tags on piping 3/4-inch diameter and smaller. Identify service, flow direction, and pressure. Install it in clear view and align with axis of piping. 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.

M. Identify ductwork with stenciled painting. 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.

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

END OF SECTION