

SECTION 220553- IDENTIFICATION FOR PIPING AND EQUIPMENT

PART 1-GENERAL

1.1 SECTION INCLUDES

- A. Mechanical identification methods, materials and devices.

1.2 SUBMITTALS

- A. Submit shop drawings and product data per applicable Division I Specification.
- B. Shop drawings shall include product data noting materials, sizes, and dimensions for identification systems.
- C. Submittals are required of valve schedules.

1.3 QUALITY ASSURANCE

- A. Identification requirements shall meet ASME A13.1.

1.4 WARRANTY

- A. Contractor shall warranty entire systems and equipment for a period of one (1) year.

PART 2-PRODUCTS

2.1 COMPONENTS

- A. Equipment Nameplates: Aluminum, permanently fastened to equipment, engraved or stamped.
- B. Stencils: Standard stencils shall be black enamel on a white background or white enamel on a dark background.
- C. Snap-on Plastic Pipe Markers: Preprinted, semi-rigid type, color-coded.
- D. Pressure-Sensitive Pipe Markers: Preprinted, color-coded, vinyl type with permanent adhesive.

PIPE	CODE	COLOR
Gas	G	YELLOW/BLACK LETTERS
Domestic Cold Water	DCW	WHITE/GREEN LETTERS
Domestic Hot Water	DHW	WHITE/GREEN LETTERS
Domestic Hot Water Return	DHWR	WHITE/GREEN LETTERS
Plumbing Vent	PV	YELLOW
Sanitary Drain	SAN	BLACK
Storm Drain	ST	BLACK
Make Up Water	MUW	YELLOW
Compressed Air	AIR	BLUE WHITE LETTERS
Fire Protection	F	WHITE/RED LETTERS

- E. Pipe Markers: Full band type.
- F. Plastic Duct Markers: Laminated plastic, color coded, and engraved with the service.
- G. Plastic Tape: Color-coded, pressure-sensitive, self-adhesive vinyl.
- H. Valve Tags: Polished tags with numbers and letters.
 - 1. Plumbing Systems:
 - a. CW – 01 Potable Cold Water
 - b. HW – 01 Potable Hot Water
 - c. RHW – 01 Recirculated Hot Water
 - d. GAS – 01 Natural Gas
 - 2. Fire Protection System
 - a. Zone – 01 Fire Suppression Valve
- I. Access Panel Markers: Engraved plastic laminate.
- J. Engraved Plastic-Laminate Signs: Sizes required to contain message.
- K. Plastic Equipment Markers: Standard color-coded, laminated plastic.
- L. Plasticize Tags: Preprinted, accident prevention.
- M. Valve Location Tags: All labels to be ½"x 3" or larger plastic laminate with engraved letters 3/16" high attached to the ceiling grid. The labels should have the mark number or valve tag number. The CMSD standard colors are as follows:

1.	Domestic Cold Water Valves	White/Green letters	(CW-01)
2.	Domestic Hot Water Valves	White/Green letters	(HW-01)
3.	Gas Valves	Yellow/Black letters	(Gas-01)
4.	Compressed Air	Blue/White letters	(Air-01)
5.	Fire Suppression Valves	White/ Red letters	(Zone-A)

2.2 VALVE CHARTS

- A. Valve charts shall be furnished by each respective Contractor and shall include the following items:
 - 1. Valve identification
 - 2. Location
 - 3. Purpose
- B. Valve charts shall be included in the Maintenance and Operating Manuals.

PART 3-EXECUTION

3.1 PREPARATION

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

3.2 INSTALLATION

- A. Piping, equipment and valve identification shall be completed prior to issuance of substantial completion.
- B. Plastic Nameplates: Install with corrosive-resistant mechanical fasteners, or adhesive.
- C. Equipment: Identify water heaters with plastic nameplates. Pumps must be identified with metal tags.
- D. Controls: Identify control panels and major control components outside panels with plastic nameplates.
- E. Install plastic pipe markers in accordance with manufacturer's instructions.
- F. Install plastic tape pipe markers complete around pipe in accordance with manufacturer's instructions.
- G. Install underground plastic pipe markers 6 to 8 inches below finished grade, directly above buried pipe.
- H. Identify all disconnects and starters related to Plumbing and Fire Protection equipment.
- I. Identify piping, concealed or exposed with plastic tape pipe markers. Use tags on piping 3/4 inch diameter and smaller. Identify service and flow direction. Install 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. Identify pressure of high temperature hot water in addition to service, flow direction and temperature.
- J. Provide ceiling labels to locate items specified above T-bar type panel ceilings. Locate in corner of panel closest to equipment.

END OF SECTION 220553

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