Design Standard
Identification for Plumbing Piping and Equipment

Purpose:

Identification of plumbing piping equipment is an essential element of plumbing systems. This design standard has the purpose of creating a consistent application of systems identification requirements throughout the East Side Union High School District. The intent is to create a standard of identification for ease of maintenance and improved reliability throughout all renovation and new building projects.

Design Standard:

Design and specify work to include materials and installation of mechanical systems identification for complete and operable systems.

- General: Adhere to ANSI A-13.1
- Piping
  - Wrap around plastic identification. Include arrows to show normal direction of flow. For hot non-insulated pipes, install a segment of pipe insulation with appropriate piping identification.
  - Locate identification as follows wherever piping is exposed to view in occupied spaces, machine rooms, accessible maintenance spaces (above removable ceilings and the like) and exterior non-concealed locations.
    - Near each valve and control device.
    - Near each branch, excluding short take-offs for fixtures and terminal units; mark each pipe at branch, where there could be question of flow pattern.
    - At locations where pipes pass through walls, floors, ceilings, or enter non-accessible enclosures.
    - At access doors, manholes and similar access points that permit view of concealed piping.
    - At major equipment items and other points of origination and termination.
    - Spaced intermediately at maximum spacing of 20’ in spaces with removable ceilings and at each access door in spaces with hard ceilings.
    - Identify non-potable piping and outlets.
  - Color code piping: Fire protection – red; Gas – yellow; Reclaimed – dark purple; Fuel Oil or Diesel – light purple; All others – white with appropriate identification.

- Valve Identification
  - Provide for brass valve tags on every valve, cock and control device in each piping system; exclude check valves, valves within factory-fabricated equipment units, plumbing fixture faucets, convenience and lawn-watering hose bibs, and shut-off valves at plumbing fixtures. Rough-in connections of end-use fixtures and units. List each tagged valve in a valve schedule for each piping system. A copy of the valve schedule for that building should be posted in the primary maintenance service room in the building, which shall be determined by the mechanical engineer and approved by the Facilities Director during the design development phase.

- Plumbing Equipment Identification
  - Provide for engraved plastic laminate sign on or near each major item of plumbing equipment and each operational device. Provide signs for the following general categories of equipment and operational devices:
    - Main control and operating valves, including safety devices.
    - Meters, gauges, thermometers and similar units.
    - Pumps, compressors, chillers, condensers and similar motor-driven units.
    - Heat exchangers, coils, evaporators, cooling towers, heat recovery units and similar equipment.
    - Tanks and pressure vessels.
    - AFD's and transmitters and Control Boxes.
- Piping valves and equipment located above suspended ceiling panels must be clearly identified by marked labels attached to the t-bar supports. The intent is to minimize the impact to the finished, habitable spaces below, yet provide simple and clear identification of areas where 'hidden' equipment and valves reside above the finished ceiling panels.

Approved Manufacturers:

- Seton
- Brady

Substitutes Allowed:

Yes, if performance and quality equivalency can be evidenced.

Associated Design Standards and Construction Specifications

- Division 22 Plumbing Design Standards and Construction Specifications

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