# GENERAL

## SECTION INCLUDES

### Nameplates.

### Tags.

### Pipe Markers.

### Ceiling Tacks/Stickers.

### Duct Markers.

## REFERENCE SECTION 23 05 00 FOR THE FOLLOWING:

### Quality assurance.

### References.

### Submittals.

### LEED Submittal:

### [Note to A/E: Add additional submittal requirements if LEED certification is part of project]

### Operation and maintenance manuals.

### Project record documents

#### Record actual locations of tagged valves.

### Delivery, storage, and handling.

# PRODUCTS

## NAMEPLATES

### Equipment Mark Nameplates: Laminated three‑layer plastic with engraved black letters (matching equipment mark indicated on drawings) on light contrasting background color, with minimum 3/4 inch high letters.

### Equipment Nameplates: Factory-applied permanent nameplate indicating the manufacturer’s name, model, serial number, temperature and pressure design, and any other data necessary to conform with specified requirements. On equipment installed outdoors, nameplate shall be stamped steel or engrave plastic.

## TAGS

### Plastic Tags: Laminated three‑layer plastic with engraved black letters on light contrasting background color. Tag size minimum 1‑1/2 inch diameter or square.

### Chart: Provide valve list in electronic spreadsheet format. Valve list to be submitted with O&M materials. Valve list shall correspond to any mechanical piping schematics on plans.

### Pipe Schematics: Valve numbers are to be labeled on electronic copies of Engineer’s schematic drawings. Final schematic to be submitted with O&M materials.

## PIPE MARKERS

### Color: Conform to ASME A13.1, latest revision

### Plastic Tape Pipe Markers: Minimum 1-1/2” letter size and 2-mil thickness, flexible, vinyl film tape with pressure sensitive adhesive backing and printed markings; minimum information indicating flow direction arrow and identification of fluid being conveyed.

### Underground Plastic Pipe Markers: Bright colored continuously printed plastic ribbon tape, minimum 6 inches wide by 4-mil thick, manufactured for direct burial service. Provide tape with printing which most accurately indicates the type of service of buried pipe.

## DUCT MARKERS

### Plastic Tape Duct Markers: Minimum 1-1/2” letter size and 2-mil thickness, flexible, vinyl film tape with pressure sensitive adhesive backing and printed marking; minimum information indicating flow direction arrow and identification of air system being conveyed.

# EXECUTION

## PREPARATION

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

## INSTALLATION

### Install plastic nameplates with corrosive‑resistant mechanical fasteners, or adhesive. Apply with sufficient adhesive to ensure permanent adhesion and seal with clear lacquer.

### Install tags with corrosion resistant chain.

### Install plastic tape pipe and duct markers in accordance with manufacturer's instructions. Directional arrow tape shall be overlapped to ensure proper adhesion and no peeling of tape in future.

### Identify air handling units, exhaust fans, chillers, pumps, heat generating, heat rejecting, heat transfer equipment, tanks, and water treatment devices with plastic nameplates. Small devices, such as in‑line pumps, may be identified with tags.

### Identify pressure reducing valves, backflow preventers, valves, and meters with tags.

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

### Identify valves in main and branch piping with tags.

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

### Identify piping, concealed or exposed, with plastic tape pipe markers. Identify service, flow direction, and pressure when applicable, i.e. low pressure steam, high pressure steam. Install in clear view from floor and align with axis of piping. Locations of identification not to exceed 15 feet on straight runs including risers and drops, more often in congested areas, adjacent to each valve and tee, at each side of penetration of structure or enclosure, and at each obstruction. Provide a minimum one label per pipe per room. Where pipes are racked, install pipe markers on each pipe in the same location to aid in differentiating each pipe in the rack.

### Identify ductwork with plastic tape duct markers. Identify service, flow direction and pressure when applicable, i.e. low pressure supply air, high pressure supply air. Install in clear view from floor and align with centerline of duct. Locations of identification not to exceed 15 feet from straight runs including risers and drops, more often in congested areas, at each side of penetration of structure or wall, and at each obstruction. When several ducts from different units are located in concealed congested areas, locate identification at air handling unit, at each side of penetration of structure or enclosure, and at each obstruction.

END OF SECTION 23 05 53