

# NC State University Design and Construction Guidelines

## Division 23 Mechanical/Electrical ID

### 1.0 Purpose

- A. The following guidelines apply to the tagging and identification of piping, equipment and ductwork.

### 2.0 General Requirements

- A. Paint all equipment and piping exposed to view in finished areas including hangers and attachments.
- B. Electrical breaker panels shall be clearly labeled with panel name, voltage and source feed information. Typed circuit directories shall be provided within each panel indicating the location and load name for each circuit.
- C. Color code piping in mechanical rooms by covering surface with paint; and corresponding labels or stencils indicating service type, i.e. chilled water supply, chilled water return, etc.
- D. Directional flow arrows with corresponding labels or stencils on all pipes or pipe covering shall be displayed at 10 ft. intervals to signify the direction of flow and indication of service type, whether the piping is exposed or concealed above ceilings
- E. Steam lines shall indicate pressure, i.e. low pressure, high pressure, etc.
- F. Provide brass valve tags on all valves and a schedule under rigid plastic cover and frame in the mechanical room.
- G. Utilize the following color coding for various pipes, pipe banding, and pipe insulation.

Fire Protection	Red
Steam Supply	Orange
Condensate Return	Aluminum
Potable Cold Water	Dark Green
Potable Hot Water	Dark Yellow (Gold)
Non-Potable Water	Bright Yellow
Deionized Water	Light Green
Chilled Water	Dark Blue
Condenser Water	Light Gray
Natural Gas	Light Yellow
Compressed Air	Dark Brown
Vacuum	Beige
Process Water	Light Blue

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Drain, Waste, and Vent	Same as surrounding area
Heating Hot Water	Light Brown
Reclaimed Water	Purple

- H. Mark location of valves above ceilings with identifying “adhesive buttons”; colors corresponding to the above color chart. Mark locations of VAV boxes, terminal units, etc. with labels, black lettering on clear tape. Labels on ceilings/grids to correspond to labels on thermostats or room temperature controllers.