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SECTION 23 05 53_IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT

PART 1 GENERAL

1.1 SUMMARY.

This standard includes labeling requirements of HVAC piping and equipment in the field.

The intent of these standards are to provide input to the design team on the University's preference of manufacturers, design, equipment options and quality assurance to maintain the longevity of its assets.

1.2 REFERENCES:

- A. Common Work for HVAC Systems 23 05 00
- B. Common Requirements for HVAC Systems 23 05 01
- C. Steam and Condensate Piping Systems Above Grade 23 22 13
- D. Steam and Condensate Piping Systems Below Grade 23 22 13.1
- E. Hydronic Piping Systems Above Grade 23 22 23
- F. Hydronic Piping Systems Below Grade 23 22 23.2
- G. Refrigeration Piping & Specialties 23 23 00
- H. Air Distribution Systems 23 30 00

1.3 DESIGN REQUIREMENTS

All piping, valves, ductwork, pumps, fans, terminal units, equipment shall be shown on drawings and correlate to labeling in field.

1.4 SUBMITTALS

1.4.1 Equipment label schedule to include system, function and location. Once approved, schedule shall be retained in Owners final project turnover documentation.

1.4.2 Valve label schedule to include system, function and location. Once approved, schedule shall be retained in Owners final project turnover documentation

1.5 CLOSE-OUT SUBMITTALS

PART 2 PRODUCTS

2.1 EQUIPMENT LABELS

Self-Adhesive, Vinyl w/ preprinted lettering /numbering.

2.2 EQUIPMENT AND VALVE TAGS

Tags: Plastic, round w/ stamped black lettering/numbering on white background

2.3 STENCILS

Stencils: With clean cut 1 inch high lettering/numbering.

2.4 PIPE MARKERS

2.4.1 Plastic Tape Pipe Markers: Flexible, vinyl film tape with pressure sensitive adhesive backing and printed markings w/ flow arrows.

2.4.2 Aluminum Face detectable warning tape, detected by induction means for underground piping.

PART 3 EXECUTION

3.1 Identify piping, concealed or exposed, by color code listed in Attachment 1 and with plastic pipe markers. Insulated systems may select jacketing to coincide w/ color code. Identify service, and flow direction. Install in clear view and align with axis of piping.

3.2 Identify ductwork, (Supply Fan/Return Fan/ Exhaust Fan) and direction of air flow with equipment labels or

stenciled painting. Identify with air handling unit identification number and area served.

- 3.3** Install valve tags on all valves listed on approved valve label schedule.
- 3.4** Install equipment labels or stencil paint all equipment listed on approved equipment label schedule.
- 3.5** Attached equipment tag to corner of removal ceiling tile grid facing into room for the following components :
- Fire dampers/smoke dampers:
 - Critical hydronic isolation and vent valves:
 - VAV
 - Terminal Reheat.
 - Duct Static Pressure Transmitter
 - Differential Pressure Transmitter for hydronic pump control
- 3.6** Identify air handling units, pumps, fans, heat transfer equipment, tanks, air compressors and water treatment devices with equipment labels or stencil painting.

PART 4 – ATTACHMENTS

Attachment 1- Color Codes For Piping Systems

Attachment 1

Color Codes For Piping Systems

230553 REVISION A

Service	Color Name	Color
High Pressure Steam 125 PSIG and >	Dark Red	
Medium Pressure Steam <125 psig and > 15 psig	Dark Brown	
Low Pressure Steam 5 psig and <	Light Brown	
Condensate Return	Black	
Chilled & Process Chilled Water Supply	Green	
Chilled & Process Chilled Water Return	Light Green	
Condenser Water Supply	Blue	
Condenser Water Return	Light Blue	
Domestic Water	Dark Green	
Fuel Oil	Gray	
Natural Gas	Yellow	
Fire Suppression	Red	
Heating Hot Water Supply	Orange	
Heating Hot Water Return	Tan	

END OF SECTION