

220553-H: SUPPLEMENTAL MECHANICAL IDENTIFICATION AND PAINTING (15190-H)

Related Sections

Basis Guideline: [220553](#) - "Mechanical Identification and Painting"

For an explanation of the use of these guidelines, see "[Design Guidelines for UMHHC Facilities](#)"

Included as part of this UMHHC guideline section are the details described within the following UM Master Specification sections:

[MS220553](#) – "Mechanical Identification"

General

Coordinate with UMH Mechanical Engineer for next available equipment designation.

The AE shall clearly utilize the labeling convention noted under this standard in their construction documents. Conformance with this labeling convention shall NOT be left up to the contractor/ construction process.

For all new UMHHC facilities, pipe labeling & color coding shall conform to the labeling standards identified under AEC MS220553 - "Mechanical Identification"

Equipment Identification

Major equipment identification (i.e. AC-1, RM-3, etc.) shall follow the existing labeling convention within each facility. All terminal box and unitary equipment designations shall follow standards outlined below, regardless of what is in use in each facility. Final identification convention needs to be reviewed by UMH Mechanical Engineer prior to use.

All terminal boxes (i.e. VAV/ CAV, etc.) and unitary equipment (UH, CUH, FCU, etc.) shall be individually labeled on the drawings and in the field with a unique identifier per this guideline (i.e. VAV-A for type "A" VAV box shall not be allowed).

All equipment labeling shall consist of field labels that follow equipment designations provided on the contract documents. A/E shall not rely on the contractor to determine equipment labeling.

When identifying equipment in new facilities or major facility-wide renovations, use the following naming convention:

Major Equipment

Use UMH Building Number prefix, followed by the equipment designator (i.e. AHU, EF, etc.) and a four-digit number. Four-digit number shall start with the floor the equipment is located on, followed by a sequential equipment number. For example:

- 0316-AHU-0202 (Air handling unit located on the second floor of building 0316, second AHU)
- 0316-AHU-0203 (Air handling unit located on the second floor of building 0316, third AHU)
- 0312-EF-B104 (Exhaust fan located on the B1 floor of building 0312, fourth EF)
- 5102-CHWP-0811 (Chilled water pump located on the eighth floor of building 5102, eleventh CHWP)

Numbering of equipment shall progress sequentially from one side of the building to the other (i.e. west to east).

Air moving equipment shall either be designated as an AHU, CRAC or FCU. Do not use the designation BCU for blower coil unit, instead utilize FCU. In facilities with a mix of air handling units and rooftop units, do not use the designation RTU for rooftop units, instead utilize AHU.

A listing of UMH buildings and corresponding building numbers can be found [here](#).

Terminal Box Identification

Utilize a labeling convention that incorporates the AHU system serving the terminal box followed by the room number served. Where VAV box serves multiple rooms, use the room number where the space thermostat is located. Systems with tracking return VAV boxes shall be designated VAVR and use the same room number as the associated supply VAV box. A building number prefix is not required. For example:

- 02-VAV-B1F256 (supply VAV box served by AHU-02, controlling thermostat located in room B1F256)
- 02-VAVR-B1F256 (tracking return VAV box served by AHU-02, controlling thermostat located in room B1F256)

Unitary Equipment

Unitary equipment (i.e. fan coil units, blower coil units, unit heaters, cabinet unit heaters, etc.) shall utilize the equipment designator followed by the room number served by that piece of equipment. For example:

- FCU-B1F256 (Fan coil unit serves room B1F256)
- CUH-017X (Cabinet unit heater serves stairwell 017X)

Where unitary equipment serves multiple rooms, unit shall be labeled with the room number where the thermostat is located. Where multiple units serve a common space, utilize letter suffixes for each unit (i.e. UH-2115a, UH-2115b, etc.)