



NOTES:

1. The Mechanical Systems Control Contractor (MSCC) shall be responsible for the selection of, providing & installing all DDC controllers & control devices to accomplish the sequence of operation specified herein. All products, manufacturers & installation requirements shall conform to Masterspec 230905 - "Mechanical Systems Controls".
2. The MSCC shall provide & install all DDC & related wiring, conduit & j-hook hanging systems. See Masterspec 230905 - "Mechanical Systems Controls" for raceway/conduit, cabling and labeling requirements.
3. MSCC shall integrate unit controls back to the UMH unified front end (i.e. Desigo) per standards outlined in Masterspec 230905 - "Mechanical Systems Controls"
4. The Systems Integrator (SI) shall be responsible for the integration of all DDC devices and points, point instantiation and the creation of all graphics on the UMH Desigo front-end. See Masterspec 230924 - "Systems Integration"

SEQUENCE OF OPERATION:

- A. On a call for cooling, the thermostat signals for the heating control valve to modulate toward the closed position. On a further call for cooling, the thermostat signals for the volume damper to modulate from its minimum setting to its maximum setting.
- B. On a call for heating, the thermostat signals the volume damper to modulate towards its minimum position. On a further call for heating, the thermostat signals the heating coil valve to modulate toward the full open position.

Note to Editor: Delete the following paragraph and associated occupancy sensor in above diagram if occupancy sensors are not used:

- C. When VAV box senses that the space is unoccupied, minimum airflow reduces to 0 CFM and the VAV box modulates to maintain temperature range of 70°F - 74°F.

**TYPICAL DDC VAV UNIT W/ REHEAT CONTROL
 DIAGRAM - RETROFIT IN EXISTING UMH FACILITIES**
 SCALE: NONE



2101 Commonwealth, Suite B
 Ann Arbor, MI 48105
 FAX: (734) 763-0417
www.med.umich.edu/facilities/plan
 FILE: D230905H-7.dwg
 ISSUE: August 2015

**TYPICAL DDC VAV UNIT W/ REHEAT
 COIL CONTROL DIAGRAM - RETROFIT
 IN EXISTING UMH FACILITIES**