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 UMHHHC unified front end (i.e. Desigo) per standards outlined in Masterspec 230905 - "Mechanical Systems Controls" All front end graphics, point mapping, alarm & trend management shall be the responsibility of the systems integrator contracted by Systems Monitoring.

**SEQUENCE OF OPERATION:**

A. On a call for cooling, the room sensor modulates the supply and tracking return box’s associated volume dampers open to increase airflow to the room, towards their maximum settings.

B. On a call for heating, the thermostat signals the supply and tracking return box’s associated volume dampers to their minimum positions. A further call for heating causes the supply VAV box’s associated control valve to modulate open.

*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.