

## **2.9 DDC SYSTEM**

**2.9.1** All controls shall be provided and installed in the field by the EMCS contractor.

## **PART 3 - EXECUTION**

### **3.1 INSTALLATION**

**3.1.1** General: Install units in locations shown on plans and in accordance with manufacturer's instructions.

**3.1.2** Piping: Provide condensate.

**3.1.3** Unit Protection: Units shall be protected during construction to prevent debris from depositing on the unit.

**3.1.4** Horizontal Units:

**3.1.4.1** Pitch units towards condensate drain outlet to facilitate condensate drainage.

**3.1.4.2** Hung Units: Support units with hangers, rods, and manufacturer furnished clips and vibration isolators.

**3.1.4.3** Drain Pan: Provide drain pans below each unit; pipe drain pan to nearest point of drainage.

### **3.2 START-UP**

**3.2.1** Initial Checks: Prior to operating units, checks shall be made to insure that adequate voltage, duct connections, electrical connections, control connections, and other items as listed by the manufacturer are properly provided/connected and operating to insure safe and proper unit operation.

**3.2.2** Testing and Adjustment: Operate unit in various modes of operation to test for proper operation, including fan rotation, proper damper travel (where applicable), correct interface to other controls.

**3.2.3** Final Check: When testing and adjustment is complete, a final check of each unit shall be done by the manufacturer's authorized service representative to verify proper unit operation.

### **3.3 APPROVED MANUFACTURERS**

**3.3.1** Innovent

**3.3.2** Energy Labs

**3.3.3** Trane Custom

3.3.4 MAFNA

END OF SECTION