SECTION 23 09 00 – BUILDING AUTOMATION SYSTEM

This is supplemental language for an AHU spec. This is not an all inclusive spec. This is language that is meant to be copied and pasted into an existing AHU spec.

PART 1 - GENERAL

1.1 SUBMITTALS

A. Wireless Communication: If wireless sensors and / or network are used, submit a radio signal layout showing the signal reach of every wireless mesh device. Show where repeaters are needed so that a wireless signals overlap

PART 2 - PRODUCTS

2.1 BAS NETWORK

A. The Building Level Controllers shall be able to support subnetwork protocols that may be needed depending on the type of equipment or application. Subnetworks shall be limited to :
   1. BACnet MS/TP
   2. Apogee FLN
   3. Modbus
   4. Wireless Mesh network compatible with Apogee FLN

2.2 BUILDING CONTROLLERS (B-BC)

A. Onboard or Modular hardware and connections:
   1. Wireless Mesh Network Floor Level communication ability

2.3 APPLICATION SPECIFIC CONTROLLERS

A. Each Application Specific Controller shall, at a minimum, be provided with:
   1.
   2. Wireless Mesh Network Floor Level communications ability

2.4 SENSORS

A. Terminal Unit Space Thermostats
   1. Each controller performing space temperature control shall be provided with a matching room temperature sensor. The space temperature sensor shall be available in wired and wireless versions.
      a. Plain Space Temperature Sensors – Wired: Where called for in the sequences or on the drawings, provide sensors with plain covers.

b. The sensing element for the space temperature sensor shall be thermistor type providing the following.
   1) Element Accuracy: + /- 1.0°F
   2) Operating Range: 55 to 95°F
   3) Set Point Adjustment Range: 55 to 95°F
   4) Calibration Adjustments: None required
   5) Installation: Up to 100 ft. from controller
   6) Auxiliary Communications Port: as required
   7) Local LCD Temperature Display: as required
   8) Setpoint Adjustment Dial as required
   9) Occupancy Override Switch as required

c. Auxiliary Communication Port. Each room temperature sensor shall include a terminal jack integral to the sensor assembly. The terminal jack shall be used to connect a portable operator's terminal to control and monitor all hardware and software points associated with the controller. RS-232 communications port shall allow the operator to query and modify operating parameters of the local room terminal unit from the portable operator’s terminal.

PART 3 - EXECUTION

END OF 23 09 00