



BULLETIN 6

1. INTRODUCTION

Bulletins are issued as supplemental directions as necessary between complete Design Guideline revisions. Revisions made by bulletin will be incorporated into the next revised issue of the Guidelines.

2. DIRECTIONS

Bulletin 6 is issued to revise the Intercom requirements as outlined in Section 23 of the Design Guidelines. This revision takes effect immediately for all projects.

Items deleted by this revision are struck through, ~~ITEM~~ and new items will be underlined, ITEM. A new Guideline issue will remove struck through items and remove underlines from the previous issue. The new issue will then follow the strike through, underline process listed above.

3. ATTACHMENT(S)

Section 23 81 00



BUILDING EXCELLENCE

SECTION 23 81 00

DECENTRALIZED UNITARY HVAC EQUIPMENT

GENERAL

1.1 GENERAL REQUIREMENTS

- A. Provide self contained, through the wall room air conditioners factory wired and piped.
- B. Units shall be U.L. listed and AHAM certified.
- C. Units shall be ETL certified for performance.
- D. Provide equipment with electrical characteristics as shown on the Electrical Drawings.

- 1.2 Submit in form similar to the schedule on the Drawings. Show all data listed in schedule, electrical characteristics and accessories being provided.

PRODUCTS

2.1 DX HEAT PUMPS

- A. Acceptable Manufacturers: Carrier, Trane, York.
- B. Economic justification required for implementation of heat pumps.
- C. All control end devices necessary to accomplish the specified sequence of operations shall be provided and installed by manufacture.
- D. BACnet Interface cards shall be installed and started up by equipment manufacturer's representative. BACnet cards shall be 76.8 KBPS baud rate. They shall be compatible with Alerton, Andover, Automated Logic and Carrier I-Vu controls. They shall be connected as read only. The engineer shall specify that the contractor coordinate the work associated with the BACnet cards so the manufacturer and HVAC controls sub-contractor are present at the same time during programming of the cards. No start/stop of the equipment is allowed utilizing the BACnet interface. Start/stop shall be hard-wired binary points in all cases.

2.2 VARIABLE REFRIGERANT ~~VOLUME FLOW (VRV)~~ (VRF)

- A. Acceptable Manufacturers: Daiken, Toshiba, LG & Mitsubishi.

2.3 PACKAGED AIR CONDITIONING UNITS

- A. Computer Room Air Conditioning Units.
- B. DX split systems may be used.
- C. Acceptable Manufacturers: Carrier, Trane, York.
- D. All control end devices necessary to accomplish the specified sequence of operations shall be provided and installed by manufacture.
- E. BACnet Interface cards shall be installed and started up by equipment manufacturer's representative. BACnet cards shall be 76.8 KBPS baud rate. They shall be compatible with Alerton, Andover, Automated Logic and Carrier I-Vu controls. They shall be connected as read only. The engineer shall specify that the contractor coordinate the work associated with the BACnet cards so the manufacturer and HVAC controls sub-contractor are present at the same time during programming of the cards. No start/stop of the equipment is allowed utilizing the BACnet interface. Start/stop shall be hard-wired binary points in all cases.

2.4 PACKAGED ROOFTOP AIR CONDITIONING UNITS

- A. Acceptable Manufacturers: Carrier, Trane, York, Aeon, ~~Valent, Energy Labs~~, Concepts and Designs Incorporated (CDI)
- B. Curb mounted.
- C. Multiple compressors for units 10 tons and larger.



B U I L D I N G E X C E L L E N C E

- D. Integral exhaust with energy recovery system.
- E. DX Unit with hot refrigerant gas re-heat and total energy heat wheel. The unit shall be provided with gas or electric heat.
- F. Total energy heat recovery wheel exhausting spare air, with desiccant unit with DX cooling of the dry air and heat rejection to the regeneration air.
- G. The system shall include:
 - 1. Minimum 2" filter rack
 - 2. Bird screen on intake.
 - 3. For DX unit, hail-guards for condenser section.
 - 4. For DX unit, thermostat and space/supply air cooling/heating temperature controller. Interface to CS shall include enable/disable, status and general alarm.
- H. All control end devices necessary to accomplish the specified sequence of operations shall be provided and installed by manufacture.
- I. BACnet Interface cards shall be installed and started up by equipment manufacturer's representative. BACnet cards shall be 76.8 KBPS baud rate. They shall be compatible with Alerton, Andover, Automated Logic and Carrier I-Vu controls. They shall be connected as read only. The engineer shall specify that the contractor coordinate the work associated with the BACnet cards so the manufacturer and HVAC controls sub-contractor are present at the same time during programming of the cards. No start/stop of the equipment is allowed utilizing the BACnet interface. Start/stop shall be hard-wired binary points in all cases.
- J. Interface to CS shall include enable/disable and general alarm.

2.5 PACKAGED ROOFTOP AIR CONDITIONING UNITS – 100% OUTSIDE AIR

- A. Acceptable Manufacturers: Aaon, Addison, Engineered Air, Munters, ATS, Drykor, Daiken, Desertaire, Valent, Petra, Trane
- B. DX or chilled water.
- C. Integral exhaust with energy recovery system.
- D. DX Unit with "modulating" hot refrigerant gas re-heat and total energy heat wheel. The unit shall be provided with gas or electric heat.
- E. Total energy heat recovery wheel exhausting spare air to the outside, with desiccant unit with DX cooling of the dry air and heat rejection to the regeneration air.
 - 1. All-control end devices necessary to accomplish the specified sequence of operations shall be provided & installed by manufacture-
 - 2. Bacnet Interface cards shall be used & they shall be installed & started up by equipment manufacturer's representative. BACnet cards shall be 76.8 KBPS baud rate. They shall be compatible with Alerton, Andover, Automated Logic & Carrier I-Vu controls. They shall be connected as read only.
- F. The system shall include:
 - 1. Minimum 2" filter rack
 - 2. Bird screen on intake.
 - 3. For DX unit, hail-guards for condenser section.
 - 4. Each unit shall have a preheat coil for freeze protection if chilled water.
 - 5. For DX unit, thermostat and space/supply air cooling/heating temperature controller.
- G. Interface to CS shall include enable/disable, status and general alarm.

EXECUTION

3.1 INSTALLATION

- A. Provide gravity flow condensate system.
- B. Provide local disconnect.
- C. Provide connection to CS.

END OF SECTION