**SECTION 11 40 00 FOODSERVICE EQUIPMENT**

**FOODSERVICE ADDENDA**

**Replace the specification for Item 42 with the following:**

**ITEM 42 EXTERIOR REFRIGERATION SYSTEM**
One required
Cold Zone or approved equal Kairak, Keeprite, RDT or Zero Zone model

One Model ET-4H ***UL listed exterior air cooled refrigeration rack system*** as further described and with the following accessories:

Refrigeration rack shall consist of ***six semi-hermetic condensing units mounted on a painted common steel frame with common, single point utility connection with a single stainless steel enclosure***. The system shall provide complete assembly and prewiring of all electrical components configured for a single point of electrical connection. Coordinate with GC for early installation. System shall include a 208/3 pre-wired electrical panel with separate compressor and fan motor circuit breakers, contactors and defrost clock for low temp system/s. A main fused disconnect shall be provided on the assembly. Refrigerant is R-404A.

Compressor schedule:

| | | | |
|---|---|---|---|
| Item | 40 | Walk-in Cooler | 4.0 HP – Copeland Model CS27K3E |
| Item | 41 | Walk-in Freezer | 7.5 HP – Copeland Model ZF24K4E |
| Item | 94 | Walk-in Cooler | 4 HP - Copeland Model CS27K3E |
| Item | 118 | Walk-in Cooler | 2 HP - Copeland Model CS18K6E |
| Items | 99 | Blast Chillers, | **two required, 2 @ 7.5 HP – Copeland Model ZS56K4E** |

Other system components common to this system are:

A. Liquid line kit with filter/drier and sight glass with moisture indicator.
***B. Cold weather package for operation in -25 degree temperatures including but not limited to crankcase heater, flooded head pressure control valve, heated and insulated receiver section.***
C. High / low pressure safety controls with “superhose” type flexible lines.
D. Sectional removable condenser sized to operate at 100 degree ambient.
E. Freezer shall include suction line accumulator, factory installed.
F. Factory installed thermostats, liquid line solenoid valves and thermostatic expansion valves.
G. UL and ETL labels package.
H. Evaporator fan and defrost contactors per coil mounted in panel (electrical defrost only).
I. All factory brazing done under a nitrogen flow and shipped with dry nitrogen charge.
J. Control panel with switches / disconnects and lights for each compressor and refrigerant circuit.
K. Low voltage / loss phase monitor.

L. Single point of electrical connection with code compliant disconnects. Provide emergency back-up power for refrigeration controller to maintain computer operation during power outage.
M. One Johnson A419ABC-1 digital T stat per walk-in storage location.
N. Installation by factory authorized and supervised refrigeration contractor.

Refrigeration control systems shall include a CPC RX-100 controller to control the following and include:

A. Include modem & software.
B. Input / Output boards as required to for temp monitoring, temp termination & control.
C. Temperature sensors for each “walk-in” for temp control & monitoring (ship loose).
D. Temperature sensors for each electric defrost coil for defrost termination.
E. Control of each condenser fan motor individually.
F. Control of temp sensor for condenser splitting control.
G. High and low temperature alarms for all refrigerated rooms.
H. Ultra site software installed on Owner supplied dedicated PC with 18 hour day of training.

EVAPORATOR COILS

Evaporator coils as manufactured by Cold Zone Refrigeration shall be mounted tight to the ceiling of the walk-in box per manufactures directions. Air throws to be parallel to the ceiling and down the aisles in boxes where pallet racking is used. All coils shall have full flow isolation ball valves on the liquid line and suction line of each coil. In addition, all coils shall have insulated drain pans, factory mounted sweat fit balanced port expansion valves. Freezer coils shall be a maximum of 4 fins per inch. Cooler coils shall be a maximum of 6 fins per inch. Provide the evaporator coils as listed below:

A. Provide the Cold Zone evaporator coils or equal Bohn or Russell model complete with factory installed thermostats, solenoids and TX valves as follows:
    1. Item 40, Walk-in Cooler – Two Model AA38-160B with off-cycle defrost.
    2. Item 41, Walk-in Freezer – Two Model AE36-140B with electric defrost.
    3. Item 94, Walk-in Cooler – Two Model AA38-160B with off-cycle defrost.
    4. Item 99, Blast Chillers, Quantity of two – Provided as part of Item 99
    5. Item 118, Walk-in Cooler – Two Model AA28-106B with off-cycle defrost.
B. **FSEC shall provide all non-line voltage wiring for control and sensor wiring per manufacturers requirements and recommendations for a complete and operating system.**
C. 1" copper condensate lines by PC. Walk-In Freezer shall have heat tape and insulation provided by the FSEC.
D. Condenser coil engineered for 100 degree outside ambient temperature.

E. ***208/3, 175 amp electrical connection in a single point fused connection. Single point of electrical connection – 175 AMP fused with minimum ampacity of 159.8 amps.***

F. System dimensions of 176″ L x 61.5″ W x 72″ in height at a maximum weight of 3900 pounds.

Procedure for completing the system shall follow the requirements of the Section 11 40 00 specifications including Article 2.9 with all requirements for shop drawings illustrating the line runs, details, materials and accessories. The FSEC shall provide all control, sensor and other interwiring other than line voltage power for the system. The FSEC is responsible to ensure the systems including all features of the systems are operational.

***The FSEC shall provide in coordination with the GC an elevated painted steel support rack of adequate size, rack structure and foundation support capacity to suit the size and weight of the new refrigeration system.***

Warranty shall follow Section 11 40 00 Specifications.

**ITEM 50 MOBILE HOT FOOD TRANSPORT CABINETS**

***Add Win Holt to the list of approved manufacturers***