

SECTION 23 74 13 - AIR CONDITIONING/AIR-HANDLING UNITS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes

1. **KROGER DIRECT BUY PROGRAM:** Owner supplied/Contractor installed.
 - a. The Kroger Company will supply the following equipment:
 - 1) Split system cooling and heat pump units.
 - b. Comply with requirements in Division 00 Section "General Conditions."
2. Contractor supplied items:
 - a. Fasteners and other items not provided by Owner necessary for a complete installation.
3. Contractor installed items:
 - a. Split system cooling and heat pump units.

1.2 SUBMITTALS

- A. The Owner will provide the following submittals for the Contractor's review. The Contractor shall review and return submittals as specified in Division 00 Section "General Conditions."
1. Product Data: Manufacturer's technical data for each air conditioning/air-handling unit, including rated capacities, dimensions, required clearances, characteristics, furnished specialties, and accessories.
 2. Shop Drawings: Equipment assemblies and dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - a. Wiring Diagrams: Power, signal, and control wiring.
 3. Installation Manual: Manufacturers complete manual for installation of unit.

1.3 QUALITY ASSURANCE

A. ARI Compliance:

1. ARI 210/240 and ARI 340/360 for testing and rating energy efficiencies for air conditioning/air-handling units.
2. ARI 270 for testing and rating sound performance for air conditioning/air-handling units.

B. ASHRAE Compliance:

1. ASHRAE 15 for refrigerant system safety.
2. ASHRAE 33 for methods of testing cooling and heating coils.
3. ASHRAE/IESNA 90.1 for minimum efficiency of heating and cooling.

C. NFPA Compliance: NFPA 90A and NFPA 90B.

D. UL Compliance: UL 1995.

E. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

1.4 WARRANTY

- A. Contractor shall be responsible for handling manufacturer warranty service during the 90 day warranty period. Contractor shall be responsible for following all warranty procedures and notifying Owner of all warranty repairs.

PART 2 - PRODUCTS

2.1 COOLING AND HEAT PUMP UNITS (Supplied by Owner)

- A. Refer to Division 01 Section "Vendor Contact List" for contact information on duct-free split system cooling and heat pump units.
1. See Drawings for schedule of equipment.

2.2 CONTROLS

- A. Control equipment and sequence of operation are indicated on Drawings.

2.3 ROOF CURBS

- A. Provide curbs for air conditioning/air-handling units as specified in Division 07 Section "Manufactured Curbs."

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install split system cooling and heat pump units in accordance with manufacturer's installation instructions.

B. Installation Includes:

1. Curbs, provision of crane for placement of equipment, making connections to HVAC controller and initial balancing, filters and racks at time of start up and all filter changes during construction.
2. Wiring including connections to HVAC controller(s), connections to smoke detectors; and testing and balancing.
3. Replacement of missing and/ or damaged materials after acceptance of equipment.
4. Final connection to EMS panel.

C. Roof Curb: Install on roof structure level and secure, according to NRCA's "Low-Slope Membrane Roofing Construction Details Manual," Illustration "Raised Curb Detail for Rooftop Air Handling Units and Ducts." Install air conditioning/air-handling units on curbs and coordinate roof penetrations and flashing with roof construction. Secure air conditioning/air-handling units to upper curb rail with restraint brackets, and secure curb base to roof framing or concrete base as indicated on Drawings.

D. Install condensate drain, minimum connection size, with trap and drain as required by authorities of local jurisdiction.

E. Control Wiring: Electrical installer shall provide control wiring. HVAC installer shall provide final connections.

3.2 CLEANING AND ADJUSTING

- A. Clean up work. Touch-up with matching paint all damaged factory finishes.
- B. Fully charge all rooftop equipment with refrigerant and ensure proper oil levels.
- C. Provide new filters on the day building is turned over to Owner for grand opening.

END OF SECTION 23 74 13

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