

SECTION 15510

AIR HANDLING UNITS WITH COILS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes Split-System Evaporative Blowers.
- B. Related Section
 - 1. Section 00700 "General Conditions."
 - 2. Section 00800 "Supplementary General Conditions."
 - 3. Section 07800 "Roof Penetration"
 - 4. Section 15100 "Mechanical Materials & Methods."
 - 5. Section 15520 "Split System Condensing Units."
 - 6. Section 15530 "Refrigerant Piping & Specialties."
 - 7. Section 16000 "Electrical"

1.02 REFERENCES

- A. Split System Evaporative Blowers shall comply with the following standards:
 - 1. ANSI/ARI 430-89, "Central Station Air-Handling Units."

1.03 SYSTEM DESCRIPTION

- A. Performance Requirements:
 - 1. Air-handling units shall conform to the performance requirements as scheduled on the contract documents.

1.04 SUBMITTALS

- A. Product Data:
 - 1. Split-system evaporative blower.
- B. Shop Drawings:
 - 1. Split-system evaporative blowers

1.05 DELIVERY, STORAGE AND HANDLING

- A. Packing and Shipping:
 - 1. Maintain the manufacturer's original packing and crating until the unit is on-site ready to be permanently installed.
- B. Acceptance at Site:

1. Inspect the unit for damage as a result of shipping. Do not accept the unit if damaged and report the damage to the equipment manufacturer immediately.

C. Storage and Protection:

1. If the units are not going to be installed for more than two weeks from the time of delivery, store the units indoors, in the original packing and crating in an area safe from potential damaging acts to the units. The contractor shall be responsible for any and all damage to the units from the time of delivery until the project is accepted as complete by the owner.

1.06 WARRANTY

- A. Provide manufacturer's one-year warranty on the complete unit.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. York International Corporation, National Account – Geoffrey Illian, 405-419-6766
- B. Carrier Corporation
- C. The Trane Company

2.02 EQUIPMENT

A. General Description:

1. Units shall be factory-assembled, completely tested and inspected, ready for installation.
2. Units shall include an insulated cabinet, DX cooling coil, expansion valve, distributor, throwaway filters, centrifugal blower, blower motor, adjustable belt drive, blower motor contactor and a holding charge of R-22.
3. Units shall be field-convertible for horizontal or vertical installation.

B. Unit Casing

1. Exterior panels shall be minimum 18-gauge steel with baked-enamel finish.
2. Unit shall have removable panels to provide easy access to all serviceable components of the unit.
3. Unit shall have filter rack with one-inch disposable filters.

C. Evaporator Coil

1. Evaporator coil shall consist of copper tubes arranged in staggered rows and mechanically expanded into aluminum fins.
 2. Evaporator coil shall have a factory-mounted distributor and expansion valve.
- D. Blower Motor
1. Blower motor shall have internal overload protection, permanently lubricated ball bearings and a minimum service factor of 1.15.
 2. Blower motor shall be factory mounted within the insulated cabinet.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. General:
1. Unit must be installed level to permit proper condensate pan drainage.
 2. Rig the unit into place and support only as recommended by the manufacturer.
 3. Locate the unit to maintain the minimum service and operational clearances as recommended by the manufacturer.
 4. Install flexible connectors, refrigerant piping, electrical connections, condensate drains and unit filters as instructed by the manufacturer.
 5. Follow the unit manufacturer's instructions to place the unit into service.

3.02 FIELD QUALITY CONTROL

- A. Tests
1. Cycle unit through all sequences of operation as recommended by the manufacturer. Check operation of all safety switches, lockouts, ect., and repair or replace any parts found to be defective.

3.03 DEMONSTRATION

- A. Train Owner's representatives on procedures and schedules related to start-up, shutdown, troubleshooting, servicing, and preventative maintenance of the system. Schedule training with Owner's representative through the Architect.

END OF SECTION