

SPECIAL SPECIFICATIONS

SECTION 15730S

UNIT AIR CONDITIONERS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Packaged room air conditioning units (TWU), including:
 - 1. Air conditioning unit (DX) with electric heat.
 - 2. Wall sleeve.
 - 3. Subbase.
 - 4. Unit shall be installed in Building 858L.

1.02 RELATED SECTIONS

- A. Section **15051S – Piping Systems**.

1.03 REFERENCES

- A. ARI 210 - Unitary Air Conditioning Equipment.
- B. ARI 270 - Sound Rating of Outdoor Unitary Equipment.

1.04 SUBMITTALS

- A. Include rated capacities, dimensions, weights, accessories, required clearances, electrical requirements, wiring diagrams and location and size of field connections.
- B. Include manufacturer's installation instructions.
- C. Provide operation and maintenance manual.

1.05 WARRANTY

- A. Provide a five year manufacturer's material replacement warranty on the compressor.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Carrier.
- B. Trane.

2.02 MANUFACTURED UNIT

- A. Provide packaged, self-contained, through-the-wall, air cooled air conditioning unit with wall sleeve, room cabinet, subbase (if required), electric refrigeration system, electric resistance heating, condensate pump, and built-in controls. Provide units with heating and cooling capacities as scheduled on the drawings.

2.03 CABINET

- A. Structural Frame: 18 gage phosphatized, galvanized steel with baked enamel finish. Removable front and top panels.

2.04 WALL SLEEVE

- A. 16 gage, galvanized steel with baked enamel finish.

2.05 CHASSIS

- A. Compressor: Hermetically sealed, internal and external vibration isolation, permanent split capacitor motor and overload protection.
- B. Accumulator.
- C. Condenser coil and fan.
- D. Capillary tube expansion device.
- E. Evaporator: Copper tubes with configured aluminum plate fins. Forward curved fan(s) with two speed motor.
- F. Positive pressure ventilation damper.
- G. Permanent, washable filter.
- H. Electric Heating Coil: Quick response, low mass type with high limit cutout.

Unit Air Conditioners

- I. Condensate Drain: Drain pan to direct condensate to condenser coil fan for re-evaporation.

2.06 CONDENSATE PUMP

- A. Where indicated on the drawing, provide a 1.5 U.S. quart capacity tank (minimum) mounted on the TWU to discharge condensate as shown on drawings. Provide pumps UL listed that operate at the same volts/phase as TWU.
- B. Provide a minimum of 10 foot head at 40 gallons per hour for the pump. Provide power cord and plug, if required.

2.07 CONTROLS

- A. Provide unit mounted controls, factory-wired and completely enclosed within unit. Controls shall include adjustable thermostat, OFF-HEAT-COOL selector switches and HIGH-LOW fan switch.

2.08 PERFORMANCE

- A. Minimum Energy Efficiency Ratio (EER): 8.50.
- B. Capacity – Unit shall provide 30,000 BTUH Cooling (2-1/2 Tons) and 3kW electric resistance heat.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Coordinate work with associated architectural and electrical work. Verify exact location of units with A/E.
- C. Units to be supplied fully charged with refrigerant and filled with oil.
- D. Field mount condensate pump and provide drain piping to floor drain or as indicated on the drawings.

END OF SECTION

Unit Air Conditioners