

SECTION 232300 - REFRIGERANT PIPING

PART 1-GENERAL

1.1 SECTION INCLUDES

- A. Refrigerant piping and accessories.

1.2 SUBMITTALS

- A. Submittals are required and shall include product data noting capacities at the specified conditions, materials, sizes, and dimensions.

1.3 QUALITY ASSURANCE

- A. ASME B31.5 Refrigeration Piping latest edition.
- B. UL 207 Refrigerant Containing Components and Accessories.

1.4 WARRANTY

- A. Contractor shall warranty entire systems and equipment for a period of one (1) year.

PART 2-PRODUCTS

2.1 COMPONENTS

- A. Piping: Type ACR hard copper tubing with wrought copper fittings and brazed joints.
- B. Seamless copper tube (annealed copper) in pre-insulated line-sets
 - 1. UL listed to 700 psi
 - 2. Meets ASTM B1003, ASTM C534, and ASTM E-84
- C. Valves
 - 1. Packed angle valve.
 - 2. Solenoid valve.
 - 3. Refrigerant check valve.
 - 4. Thermal expansion valve.
 - 5. Pressure relief valve.
 - 6. Pressure regulating valve.
 - 7. Hot gas bypass valve.
 - 8. Suction accumulator.

- D. Moisture indicators.
- E. Replaceable type filter/dryer assemblies with three valve by-pass.
- F. Flexible piping connectors.

PART 3-EXECUTION

3.1 INSTALLATION

- A. Provide filter/dryer assemblies, moisture indicators, thermal expansion valve and solenoid valves for each refrigeration circuit.
- B. Pressure test refrigerant piping system at 300 psi for high side and 150 psi for low side. Maintain pressure for a minimum of 24 hours.
- C. Leak test piping and joints with an electronic or halide leak detector.
- D. Evacuate entire system with an approved high vacuum pump system to 500 microns.
- E. Purge piping while brazing.

END OF SECTION 232300