SECTION 23 57 19

LIQUID-TO-LIQUID HEAT EXCHANGERS

1.0 GENERAL

1. DESCRIPTION
   1. All work specified in this Section is governed by the Common Work Results for HVAC Section 23 05 00.
   2. This Section 23 57 19 and the accompanying drawings cover the provision of all labor, equipment, appliances and materials, and performing all operations in connection with the construction and installation of the flat plate heat exchangers as specified herein and as shown.
2. INTENT
   1. It is the intent of this Section of the specifications to provide complete, operable, adjusted, heat exchangers as shown and specified which are free of leaks, sweating, vibration, and temperature fluctuations.
3. BASIS OF DESIGN
   1. The basis of design is as scheduled. Any proposed substitutions shall be proven equal in all aspects to the equipment specified as the basis of design. Particular attention is called to the requirements of Section 23 05 00.
4. ACCEPTABLE MANUFACTURERS
   1. Acceptable substitute manufacturers are Bell & Gossett, Mueller, Danfoss, Tranter, and Alfa-Laval.

2.0 PRODUCTS

1. GENERAL REQUIREMENTS
   1. Heat exchanger shall be constructed from stainless steel plates with nitrile gaskets, mounted on a carbon steel frame. The carrying bar shall be clad in stainless steel. The gaskets shall not be dependent on glue or sealants to maintain a watertight seal between the plates.
   2. The entire heat exchanger shall be ASME stamped for \*\*150/300\*\* psig working pressure and shall be designed and rated in accordance with AHRI 400.
2. SELECTION
   1. The chilled water system heat exchanger(s) shall be selected to match the scheduled chiller ratings proportionately (with 100% of scheduled water flows) as follows (unless otherwise scheduled):
      1. Approach - 3°F maintaining scheduled CHWR temperature
      2. Capacity - 70% of chilled water temperature differential
      3. Pressure drops - not to exceed corresponding chiller drops
   2. All other heat exchangers shall be selected as scheduled.

3.0 EXECUTION

1. INSTALLATION
   1. Heat exchangers shall be installed as indicated and in conformance with the manufacturer's recommendations. Coordinate the actual units to be provided with all trades.
2. ADJUSTMENT
   1. The heat exchangers shall be tested and adjusted after installation to provide the capacities indicated.

END OF SECTION