

5.23.50 – CENTRAL HEATING EQUIPMENT DESIGN AND CONSTRUCTION STANDARD

PART 1 - GENERAL

1.01 Purpose:

- A. This standard is intended to provide useful information to the Professional Service Provider (PSP) to establish a basis of design. The responsibility of the engineer is to apply the principles of this section such that the University may achieve a level of quality and consistency in the design and construction of their facilities. Deviations from these guidelines must be justified through LCC analysis and submitted to the University for approval.

1.02 References:

- A. ANSI/ASME - Boilers and Pressure Vessels Code.
- B. ARI Standard 400 for Liquid to Liquid Heat Exchangers.

1.03 Requirements:

- A. Provide shell and tube type heat exchangers with removable tube bundles.
- B. Provide dielectric fittings on heat exchanger water connections.

PART 2 - PRODUCTS

2.01 Steam to Heating Hot Water Converters:

- A. Provide converters of shell and U-tube type, steam in shell, 100 psi minimum steam working pressure, 150 psi water pressure, conforming to ASME Code and Unfired Pressure Vessels.
- B. Tubes material shall be copper or stainless steel.
- C. Provide two pass heat exchanger with water velocity approximately 4.0 fps.

2.02 Water to Water Heat Exchangers:

- A. Provide ARI 400 certified plate and frame type heat exchanger rated for working pressure of hydronic system.
- B. Provide with type 304 stainless steel plates and plate hangers. Frame shall be carbon steel with epoxy corrosion resistant finish.

END OF STANDARD