1. **GENERAL**

A. The section does not apply to boilers greater than 5 MMBTU No. 2 fuel oil input, 10 MMBTU natural gas input, or boilers requiring additional permitting by virtue of their emissions or alternative fuel input.

B. For natural gas burners, confirm operating gas pressure requirements of the boiler with the available minimum gas pressure available from the local utility.

C. Boilers shall be rated at less than, or equal to, 30 boiler horsepower (BHP) and 1 MMBTU input, each. For locations where boilers need to be of larger capacity, additional Building Automation System (BAS) monitoring shall be provided to meet the City of Providence Ordinance requirements.

D. Use modulating type burners.

E. Fuel oil burners shall not be used, unless natural gas is unavailable. Oil and gas trains must, as a minimum, meet the safety criteria of the University’s insurance underwriter, FM Global.

F. Install boilers with either a structural steel base or a concrete housekeeping pad, minimum 4” thick.

G. Product Data: Submit product literature detailing ratings, dimensions, materials of construction, applicable wiring diagrams, controls interfaces, BACNET communications address mapping and boiler accessories.

H. Warranty: Boiler pressure vessels containing water or steam, as well as boiler heat exchangers, shall be provided with a minimum 5-year extended warranty, parts and labor.

I. Electric:
   1. Limited to special applications, such as service for individual autoclaves or low-capacity heating or humidification where exhaust venting is not possible or desirable.
   2. Electric boilers shall be provided with high quality feed water systems to mitigate corrosion and minimize insulation of electrodes. All wetted parts in electric boilers shall be constructed from stainless steel.