

## **DIVISION 15 - MECHANICAL**

### **Section 15550 - Heat Generation**

#### **Introduction**

Heat generation equipment including:

BOILERS, FURNACES, FUEL FIRED HEATERS – Discuss all proposed installations with UA Planning, Design & Construction.

#### **Part 1 - General**

- Campus Buildings shall use steam as a source of heat – The need for heat generation equipment must be approved by the U of A.
- Boilers, furnaces and fuel fired heaters shall be natural gas.
- Provide equipment schedule and piping schematics for installation of boilers, furnaces, and fuel fired heaters.
- Provide access for service of equipment in accordance with code and manufacturer recommendations.
- Outside air reset shall be: 80°F water when outside air is 80°F, to 140°F water when outside air is 30°F.

#### **Part 2 - Products**

- Boilers
  - Preferred manufacturers are Parker and Weil McLain.
  - Boiler shall be a packaged unit with a minimum efficiency of 85%.
  - Boilers shall come with low water cutoff (manual reset), dual aquastat high limit control with manual reset, remote aquastat, outside air reset, gas cock, gas pressure regulator, 100% flame safeguard with manual reset, control panel.
- Furnace
  - Preferred manufacturers are Carrier, Rheem, and Trane.
  - Furnace shall be a packaged unit with an efficiency of more than 80%.
  - Furnace shall come with control relay for air conditioning.
  - Furnace shall come with high static pressure blower.
  - Heat exchangers shall have a minimum of 20 year warranty.

#### **Part 3 - Execution**

- Provide temperature and pressure gauges, and expansion tank for boilers.

#### **End of Section 15550**