2.16 FLUE GAS TEMPERATURES

Procedures:

1. Operate heater at normal inlet test pressure and input rate with the water flow adjusted to provide maximum outlet water temperature.

2. Secure a flue sample ahead of draft hood and analyze for %CO2. This sample shall be secured following the establishing of the maximum outlet water temperature condition

3. Block the draft hood relief opening and install a 2 ft flue pipe. The flue pipe and draft hood are to be covered in insulation. The flue pipe is to be equipped with a thermocouple grid at one ft into the pipe. The thermocouple grid shall consist of 9 thermocouples positioned as described in the standard. The flue gas temp shall be the average of these 9 readings.

4. Gradually restrict the outlet of the flue pipe to the point where %CO2 is equal to the value measured in No. 2 above.

5. Measure flue gas temperatures when they are at their maximum. The temperatures cannot exceed 480 F above room temperature.

2.17 TEMPERATURE OF MANUALLY OPERATED PARTS

Procedure:

1. Conduct this test in conjunction with Wall, Floor and Ceiling Temperature Test.

2. Secure thermocouples to handles and controls that are normally touched by the user during normal operation of the heater. Thermocouples are typically secured with tape, ensuring that the bead is in firm contact with the surface.

3. Operate heater for 1 hour at normal inlet pressures. Record temperatures of parts using thermocouples taped to handles.

4. The temperatures shall not exceed 60 F above room temp for metallic parts and 80 F above room for nonmetallic parts.