**TYPICAL SPECIFICATIONS FOR 8800 HEATING BOILERS**
**MODELS 2000-4000**

The Boiler shall be RBI **8800** Model HB_____ having an input rating of _____ MBH and _____ MBH output. The Boiler shall operate on _____ NATURAL _____ PROPANE. The efficiency shall be up to 82%.

The Boiler shall be designed certified and tested by International Approval Services. The Boiler shall meet the requirements of ANSI Standard Z21.13 and the Canadian Gas Association Standard CAN1-3.1. The Boiler shall operate on negative stack pressure and Category I according to ANSI Standards or Class I according to CGA Standards. All models include an integral draft hood. All models available with single exhaust (standard) or dual exhaust.

## COMBUSTION CHAMBER:

The Boiler shall have a burner drawer guide rail so that the burner tray can slide out of the Boiler for ease of service and maintenance of burner tray. The Boiler shall have a combustion chamber enclosed by high temperature ceramic fiberboard insulation. An access panel shall be provided for ease of service and inspection of the heat exchanger, refractory and entire burner assembly.

## HEAT EXCHANGER:

The heat exchanger shall be inspected and bear the A.S.M.E. Section IV seal of approval. The A.S.M.E. Section IV seal of approval will not be provided as standard for jurisdictions not requiring the A.S.M.E. Section IV seal of approval. The heat exchanger shall be a two pass heat exchanger with maximum working pressure of 160 psi. The water tube shall be of straight 7/8" I.D., 0.64" minimum wall thickness, integral finned copper tube, 7 fins per inch, with a fin height of 3/8". The water tubes shall be set horizontally with heavy galvanized steel "V" baffles tightly secured above the tubes throughout the length of the water tubes. Each end of the water tubes shall be strength rolled onto a steel tube sheet. The headers shall be secured to the tube sheet by properly spaced stud bolts, flange nuts and with the use of o'rings. O'rings must be constructed of EPDM and Silicone, capable of withstanding temperature of 540˚ F, 282˚ C. The use of o'rings constructed of Neoprene and Silicone with temperature ratings of 250˚ F, 121˚ C will not be allowed. A pressure relief valve of _____ lb/sq. in. shall be equipped with the Boiler. The headers shall be of bronze construction only.

## CONTROLS:

Standard controls include factory mounted: thermometers for sensing inlet and outlet temperatures, high limit control, on/off switch, and 24 VAC Class 2 transformers, aquastat and a flow switch. Optional: Honeywell RM7890A series flame safeguard control.

## FIRING MODE:

The firing mode shall be one of the following:

1. **STANDARD ON/OFF** - FULL FIRE
2. **2-STAGE** - HIGH FIRE (100%); LOW FIRE (50%)
3. **4-STAGE**
3. **MODULATION** - CONTROLS CONTINUOUSLY MONITOR WATER TEMPERATURE AND MODULATE GAS INPUT TO THE BURNER FOR CONTINUOUS EFFICIENCIES THROUGHOUT THE FIRING CYCLE.

## GAS TRAIN:

The gas train shall include lubricated manual gas valve, redundant main gas valves, firing valve, 'B' valve, pilot gas pressure regulator, and automatic pilot gas valve.

## IGNITION MODULE:

The ignition module shall be 100% shutoff and safety lockout. Ignition safeguard system shall be an intermittent electronic supervision.

## INDUSTRY STANDARDS OPTIONS:

Industry standard options include:

1. Factory Mutual (FM)
2. Industrial Risk Insurers (IRI)
3. CSD-1

## PAINT FINISH:

The paint finish shall be RBI Gray Hammer Toned Finish.