



## Typical Specifications for Spectrum Heating Boilers Models 100-400

The Boiler shall be RBI **SPECTRUM** Model SB \_\_\_\_\_ 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 both ANSI and CGA Standards. 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 a built-in draft hood contained within the exterior jacket of the unit. An induced draft fan can be installed for induced draft models. The induced draft model shall have a maximum equivalent vent length of 100 ft.

### **COMBUSTION CHAMBER:**

The burners shall be stainless steel atmospheric burners. 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.

### **HEAT EXCHANGER:**

The heat exchanger shall be inspected and bear the A.S.M.E. Section IV seal of approval for only jurisdictions requiring the A.S.M.E. approval. The heat exchanger shall be a two pass heat exchanger with a maximum working pressure of 160 psi. The water tubes shall be of straight 7/8" I.D., 0.064" 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. The headers shall be of cast iron construction only. A pressure relief valve of \_\_\_\_\_ lb/sq. in. shall be equipped with the Boiler.

### **CONTROLS:**

Standard controls include factory mounted: thermometers for sensing inlet and outlet temperatures, manual reset, high limit control (250-400 only), operator, flow switch, relief valve, on/off switch, and 24 VAC Class 2 transformer and self diagnostic light package.

### **FIRING MODE:**

The firing mode shall be one of the following:

1. **ON/OFF**
2. **2-STAGE (300-400 ONLY)**

**GALVALUME METAL:** The jacket panels shall be coated with a Galvalume finish to protect the primary steel from oxidation.