



TYPICAL SPECIFICATIONS FOR FUTERA II HEATING BOILERS MODELS 500-1950

The Boiler shall be RBI **FUTERA II** Model FB _____ having an input rating of _____ MBH and _____ MBH output. The Boiler shall operate on _____ NATURAL _____ PROPANE. The efficiency shall be up to 85%.

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. SCAQMD certified (sub 10 ppm NOx). The Boiler will operate on negative stack pressure and Category I according to ANSI Standards (AGA) and CGA standards. For horizontal thru-wall installations, the Boiler will operate on positive stack pressure and Category III vent material. A listed stainless steel vent must be used.

COMBUSTION CHAMBER:

The combustion chamber shall be constructed of stainless steel. An access door shall be provided for ease of service and inspection of the heat exchanger. Chamber shall be air-cooled and not require additional insulation.

BURNER:

The burner shall be constructed of low alloy steel and nickel-plated. The burner flame shall burn vertically to provide equal distribution of heat throughout the entire heat exchanger. The burner shall be easily removed for maintenance without the disruption of any other major component of the Boiler. A window view port shall be provided for visual inspection of the flame during firing.

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 four pass heat exchanger with maximum working pressure of 160 psi. The heat exchanger's vertical design shall provide equal amounts of heat transfer throughout the entire heating surface. Each heat exchanger shall have copper tubes, with an integral copper finned tube of 7/8" I.D., .064" minimum wall thickness, 7 fins per inch, with a fin height of 3/8". Each end of the water tubes shall be strength rolled into the header. The heat exchanger shall be gasketless. Heat exchangers utilizing gaskets or o'rings will not be excepted. Each individual tube can be retubed without the disturbance of the surrounding tubes. A pressure relief valve of _____ lb/sq. in. shall be equipped with the boiler. The headers shall be of bronze construction only, cast iron shall not be acceptable.

CONTROLS:

Standard controls include factory mounted: thermometers for sensing inlet and outlet temperatures, high limit control with manual reset, aquastat, blocked flue vacuum switch, flow switch, relief valve, on/off switch, and 120 volt transformer with RM7896C control. The Boiler shall also be pre-wired for EMS or Remote Sensors.

FIRING MODE:

The firing mode shall be one of the following:

1. **ON/OFF - FULL FIRE**
2. **2-STAGE - HIGH FIRE (100%); LOW FIRE (70%)**
(MODELS 750 - 1950)

VENTING OPTIONS:

1. Standard Venting
2. Horizontal & Vertical Outside Air Venting
3. Thru-Wall Venting
4. Outdoor Venting

GAS TRAIN:

The gas train shall include manual gas valves (2), redundant main gas valves (solenoid/diaphragm, motorized), 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 Honeywell RM7896C capable of prepurge cycles. Ignition safeguard system shall be an intermittent electronic supervision.

INDUSTRY STANDARDS OPTIONS:

- Industry standard options include:
1. Factory Mutual (FM)
 2. CSD-1

PAINT FINISH:

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