

Cast Iron Boilers

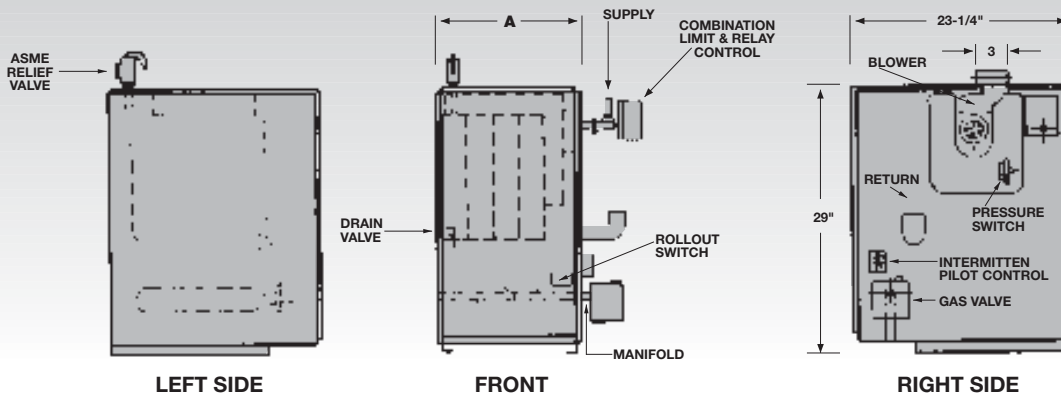
FSB SERIES

Gas Fired Water Boilers Chimney or Side-Wall Vent

SYSTEM FEATURES

- **High Efficiency** – The FSB boiler operates at up to 84.4% Annual Fuel Utilization Efficiency as certified by US Department of Energy testing standards.
- **Induced Draft Combustion** – Induced draft optimizes flue gas velocity through the boiler for greater heat transfer and higher efficiency.
- **Side Wall or Chimney Vent** – The FSB can be vented through a sidewall using stainless steel vent pipe eliminating the need for the use of a chimney.
- **Electronic Ignition** – The FSB comes standard with electronic ignition that reduces gas consumption since the fuel is burned only when heat is required.
- **Cast Iron Sections and Push Nipples** – The FSB heat exchanger is constructed of heavy-duty cast iron sections and sealed with cast iron push nipples.
- **Test Fired** – Every FSB boiler is test fired at our factory prior to shipping to ensure safe, reliable operation.
- **Steel Jacket** – Finished in attractive gray enamel, the FSB steel jacket is insulated to eliminate heat loss during off cycles.
- **American Made** – Pennco boilers are made in the United States by American craftsmen.





FSB Series Water

DESIGN CERTIFIED FOR
NATURAL GAS AND
PROPANE GAS



NATURAL OR PROPANE GAS-FIRED HOT-WATER BOILERS

RATINGS & CAPACITIES

BOILER MODEL NUMBER	NUMBER OF SECTIONS	AGA INPUT (MBH) ††	DOE HEATING CAPACITY (MBH) †	I=B=R NET RATING (MBH) ††	WIDTH A	ANNUAL FUEL EFFICIENCY (AFUE)
FSB-2	2	42.5	36	31	11"	84.4
FSB-3	3	75	63	55	14-1/4"	83.4
FSB-4	4	112.5	94	82	17-1/2"	83.0
FSB-5	5	150	125	109	20-3/4"	82.7
FSB-6	6	187.5	155	135	24"	82.3
FSB-7	7	225	186	162	27-1/4"	82.0

†† MBH = 1,000 Btuh
Btuh = BRITISH THERMAL UNIT PER HOUR
† AFUE AND HEATING CAPACITY ARE BASED UPON D.O.E (DEPARTMENT OF ENERGY) TEST PROCEDURE.

* CONVENTIONAL VENTING THROUGH A LINED CHIMNEY USE 4" FLUE ADAPTER PROVIDED.
* THROUGH THE WALL VENTING - SIZES 2-3-4-5 USE 3" STAINLESS STEEL VENT PIPE.
SIZES 6-7 USE 4" STAINLESS STEEL VENT PIPE (NOT INCLUDED)

FSB SERIES STANDARD EQUIPMENT

- Assembled boiler with insulated jacket
- 3" x 4" galvanized increaser fitting and silicone sealant to adapt 3" fan outlet to 4" vent pipe for chimney venting
- Combination high limit control and circulator relay
- 24 volt transformer to power gas control system
- Flame rollout safety shut-off fuse link (rollout switch)
- Pressure switch for proving air flow
- Combination pressure/temperature gauge (packed separately)
- 1 1/4" Grundfos circulator pump
- 3/4" boiler drain valve
- 30 lb. ASME relief valve
- Completely installed and wired gas control system with burners and manifold, consisting of:
 - Titanium burners
 - Automatic redundant combination gas valve, 24 volt, with pilot filter
 - Pressure regulator
 - Intermittent Pilot Control, continuous re-try, 100% shut-off for natural & propane gas
 - Combination pilot/burner/ electrode/flame sensor
 - Complete installation instructions

OPTIONAL EQUIPMENT

- Combustible floor plate - 24" x 30" for 2-5 section; 30" x 30" for 6 & 7 section
- Tjernlund VH-1-3" side wall vent hood
- Tjernlund VH-1-4" side wall vent hood
- Propane gas to natural gas conversion kits
- Natural gas to propane gas conversion kits

- The ratings marked Net I=B=R Ratings represent the portion of the heat output that can be applied to heat the radiation or terminal units. The Net I=B=R Ratings shown are based on an allowance of 1.15 in accordance with the factors shown in the I=B=R Code as published by The Hydronics Institute.
- Selection of boiler size should be based upon Net I=B=R Rating being equal to or greater than the calculated heat loss of the building.

- Consult manufacturer before selecting a boiler for installations having unusual piping and pick-up requirements.
- These gas-fired boilers are sectional cast iron boilers design certified by I.A.S. in the U.S. and Canada for use with natural gas and propane gas. They are constructed and hydrostatically tested for a maximum working pressure of 50 psi in accordance with A.S.M.E. (American Society of Mechanical Engineers) Boiler And Pressure Vessel Code Section IV standards for cast iron heating boilers. They are capacity rated in accordance with the code of The Hydronics Institute.

PENNCO

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