



PFG SERIES BOILER

SUGGESTED SPECIFICATIONS

I. General Requirements

- A. Furnish and install _____ (qty) packaged atmospheric gas cast iron sectional boiler(s).
- B. Install packaged boiler unit(s) according to manufacturer's installation instructions. All work to be done in a neat and workmanlike manner.
- C. Weil-McLain _____ (qty) PFG-_____ (size) -PIDN, -PIN, -SPN, packaged water boiler(s) capable of burning natural gas (propane available as product option).
- D. The inlet natural gas pressure to the boiler gas valve(s) should be a minimum of 5" w.c. and a maximum of 13" w.c. If inlet natural gas pressure exceeds 13" w.c., a 100% lock-up type gas pressure regulator of adequate size must be installed in gas supply piping and adjusted to prevent pressure in excess of 13" w.c.
- E. Boiler(s) shall have I=B=R Hydronics Institute gross output(s) at 100% firing rate _____ MBH per boiler.
- F. Boiler(s) shall be 80% minimum DOE efficient as required by National Appliance Energy Conservation Act or ASHRAE 90.1.
- G. Boiler(s) shall be manufactured by ISO 9001 registered company to conform to Section IV of the ASME Boiler and Pressure Vessel Code.
 - 1. Individual sections (and section assembly) to be hydrostatically pressure tested at factory in accordance with ASME requirements.
 - 2. Maximum allowable working pressure 50 PSIG water cast as part of section with ASME symbol.
- H. Regulatory Requirements
 - 1. Boiler(s) and controls to comply with applicable regulations.
 - 2. Add option for local codes, i.e. Mass. Code, BAR.
- I. Boilers shall have a 10-year non-prorated warranty as outlined in written warranty.

II. Product

- I. Acceptable boiler manufacturer(s) include(s);
 1. Weil-McLain only, as specified in Part I, Paragraph C.
 2. Other manufacturer or other Weil-McLain boiler(s) must comply with specifying engineer's requirements, including:
 - a) Full intent of these specifications, and
 - b) Provide complete submittal including literature, manuals, wiring diagrams, fuel piping diagrams, and list of similar installations. The alternate must be of similar size and footprint, piping configuration, clearance requirements and heating surface area.
 - c) Submittal presented to engineer at least seven working days before bid opening for approval. Substitutions are not permitted after contract is awarded.
 3. Energy Management Control System(s) must be tested and approved for installation with specified boiler by boiler manufacturer.

- J. Boiler Construction
 1. Boiler sections
 - a) Assembled with draw rods.
 - b) Made with sealing grooves for high temperature cope seal and silicone sealant to assure permanent gas-tight seal.
 - c) Provided with sufficient tappings to install required controls.
 2. Boiler(s)
 - a) Provided with cast-in air elimination to separate air from circulating water.
 - b) Provided with expansion tank tapping to divert separated air to expansion tank.
 - c) Constructed to provide balanced water flow through entire section assembly using single supply and return connections. No external headers are necessary.

- K. Boiler Foundation(s)
 1. Installer to construct needed support and level concrete boiler foundation(s) where boiler room floor is uneven or will not support weight of boiler(s).
 2. Boiler(s) installed in a residential garage shall be installed so the burners are at least 18" above the floor.

- L. Boiler Trim
 1. All electrical components to be high quality manufacture and bear UL label.
 2. Water boiler(s) controls furnished:
 - a) High limit temperature control (240° F maximum allowable boiler water temperature.
 - b) Combination pressure-temperature gauge. Gauge dial clearly marked and easy to read.

- c) ASME certified pressure relief valve, set to relieve at 30 PSIG. Optional relief valves available up to and including maximum allowable working pressure. Side outlet discharge type; contractor to pipe outlet to floor drain or near floor, not to any area where freezing could occur.

M. Boiler Manuals

- 1. The boiler(s) shall be provided with complete instruction manuals, including:
 - a) Installation Manual
 - b) User's Manual
 - c) Gas Control Supplements



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