EG SERIES BOILER
SUGGESTED SPECIFICATIONS

I. **General Requirements**

A. Furnish and install _____ (qty) low pressure, natural draft, cast iron sectional boiler(s).

B. Install boiler unit(s) in compliance with manufacturer's installation instructions. All work must be done in a neat and workmanlike manner.

C. Weil-McLain _____ (qty) EG - _____ (size) ( ) PIDN ( ) SPDN or ( ) SPDL (check one) boiler(s) capable of burning natural gas between 5" to 13" w.c. or propane gas between 11" to 13" w.c. inlet pressure.

D. Boiler(s) to consist of factory assembled sections, with remainder of the boiler(s) assembled at job site.

E. Boiler(s) to be either water or steam.

F. Boiler(s) shall be 79% (steam) or 80% (water) minimum efficient as rated by D.O.E. seasonal efficiency (AFUE) and listed in the current GAMA Directory of Certified Ratings.

G. Boiler(s) shall have I=B=R Hydronics Institute gross output(s) at 100% firing rate _____ MBH per boiler.

H. Boiler(s) shall be manufactured by an ISO 9001 registered company to conform to Section IV of the ASME Boiler and Pressure Vessel Code.

1. Individual sections and section assembly shall undergo hydrostatic pressure test at factory in accordance with ASME requirements.

2. Maximum allowable working pressure 50 PSIG water and cast as part of section with ASME symbol.

I. Regulatory requirements:

1. Boiler(s) and controls shall comply with applicable regulations.

J. Submittals

1. Submit shop drawings and product data.

2. Submittal packet to include boiler descriptive literature, installation instructions, operating instructions, and maintenance instructions.

II. Product

A. Acceptable boiler manufacturer(s) include(s):

1. Weil-McLain only, as specified in Part 1, Paragraph C.
2. Other manufacturer or other Weil-McLain boiler(s) must comply with specifying engineer's requirements, including:
    - Full intent of these specifications, and
    - Provide complete submittal including literature, wiring diagrams, fuel piping diagrams, and a list of similar installations.
    - Submittals to be presented to specifying engineer at least seven working days for approval before bid opening. Substitutions are **not** permitted after contract is awarded.

B. Boiler construction

1. Boiler sections
    - Factory assembled in one block with tie rods and sealed with high temperature sealant to assure a permanent gas-tight seal.
    - Sealed watertight by elastomer sealing rings, not cast iron nipples. Each port opening shall be machined to completely capture sealing ring between sections in order to assure uniform compression of the sealing rings and to protect the sealing rings from contaminants.
    - Provided with sufficient tappings to install required controls.
2. Boiler(s)
    - Provided with cast-in air elimination to separate air from circulating water.
    - Designed with a low silhouette and horizontal draft hood to provide maximum headroom.
    - Provided with an automatic vent damper to prevent heat from escaping up the chimney during off-cycle. The automatic vent damper shall be optional for any boiler with input 300 MBH and greater, and shall be required for any boiler with input less than 300 MBH.
    - Shipped with insulated heavy gauge steel jacket(s) with durable powdered paint enamel finish. Jacket designed to be installed after connecting supply and return piping.

C. Boiler foundation(s)

1. Installer shall construct required level concrete foundation(s) and support(s) where boiler room floor is uneven or will not support the weight of the boiler(s).

D. Boiler trim

1. All electrical components to be of high quality and bear the UL label.
2. Electrical wiring to utilize a labeled and color-coded wiring harness to help assure correct wiring.
3. Water boiler(s) standard controls furnished:
    - High temperature limit control. (240 degrees F maximum allowable water temperature)
    - Combination pressure-temperature gauge. Dial clearly marked and easy to read.
    - A.S.M.E. certified pressure relief valve, set to relieve at 30 PSIG. Side outlet discharge type; installer to pipe outlet to floor drain or near floor.
    - Transformer with relay receptacle and plug-in circulator relay. Transformer shall be rated for 40VA.
4. Steam boiler(s) standard controls furnished:
    - High pressure limit control. (15 PSI maximum allowable steam pressure)
    - Steam pressure gauge. Dial clearly marked and easy to read.
    - A.S.M.E. certified pressure relief valve, set to relieve at 15 PSIG. Side outlet discharge type; installer to pipe outlet to floor drain or near floor.
    - Low water cut-off (LWCO). LWCO shall be ( ) electrode or ( ) float-mechanism (check one) type capable of shutting down the boiler in event of a low water situation.
    - Transformer rated for 40VA.

E. Optional Components

1. *Water Boiler(s) only:* The boiler(s) shall be able to be provided with an optional relief valve set to relieve at 50 PSIG.
2. The boiler shall be able to be installed with an optional tankless heater.
    - Tankless heater must be specified when order is placed.
    - Tankless heater shall have ½" inlet and outlet openings for a water boiler and ¾" inlet and outlet openings for a stream boiler.
    - If installed with a tankless heater, water boilers shall be furnished with a combination temperature limit control; steam boilers shall be furnished with an additional temperature limit control.

F. Boiler Manuals

1. The boiler(s) shall be provided with complete instruction manuals, including:
    - Boiler Installation Manual
    - Gas Control Supplement
    - User's Information Manual