



# GO SERIES BOILER SUGGESTED SPECIFICATIONS

A.

## 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 skillful manner.
- C. Weil-McLain \_\_\_\_\_ (qty) P/SP/KD (circle one) W/WT/S (circle one) GO - \_\_\_\_\_ (size) boiler(s) capable of burning No. 2 fuel oil.
- D. Boiler assembly:
1. (P) "Packaged" boiler(s) (*not available for sizes 7-9*) to be factory assembled, wired, and tested with jacket, circulator (water only), burner, and controls. Boiler(s) shall be shipped ready for field installation.
  2. (SP) "Semi-packaged" boiler(s) cast iron sections to be factory assembled with attached jacket. Circulator (water only), burner, and controls to be packed separately and assembled at job site. *Jacket not installed on sizes 7-9.*
  3. (KD) "Knocked-down" boiler(s) cast iron sections to be factory assembled. Jacket, circulator (water only) and controls to be packed separately and assembled at job site.
- E. Boiler(s) to be either water (WGO or WTGO) or steam (SGO).
- F. Boiler(s) shall be 86% (water boilers) or 85% (steam boilers) minimum efficient as rated by D.O.E. seasonal efficiency (AFUE) and listed in the current AHRI Directory of Certified Ratings.
1. "Levittown" boiler(s) (Packaged WTGO-3L only) shall be 86% minimum efficient as rated by D.O.E. seasonal efficiency (AFUE) and listed in the current AHRI Directory of Certified Ratings.
- G. Water boiler(s) shall meet U.S. Environmental Protection Agency and Department of Energy guidelines for "ENERGY STAR" energy efficiency when installed with the additional ES Vent Damper kit. (*Does not apply to "Levittown" boiler(s) (P-WTGO-3L only)*).
- H. Boiler(s) shall have an AHRI gross output(s) at 100% firing rate \_\_\_\_\_ MBH per boiler.
- I. Boiler(s) shall be manufactured 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 for 50 PSIG working pressure and cast as part of section with ASME symbol.

2. Water boiler(s) maximum allowable working pressure will be 50 PSIG. Steam boiler(s) maximum allowable working pressure will be 15 PSIG.
- J. Regulatory requirements:
1. Boiler(s) and controls shall comply with applicable regulations.
- K. 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.
    - Rear section shall encompass a recessed target wall to protect the combustion chamber from flue brush damage.
    - 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.
    - Boiler(s)-
    - Provided with cast-in air elimination to separate air from circulating water.

- Provided with a swing-away burner mounting door to allow greater ease of service.
- Provided with the means to vent out the top or out the rear of the boiler.
- 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 third (3<sup>rd</sup>) party recognized.
2. Electrical wiring to utilize a labeled and color-coded wiring harness to help assure correct wiring.
3. Water boiler(s) standard controls furnished:
  - Temperature limit control with circulator relay, integrated low water cut-off and power switch. (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.
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), shall be ( ) electrode or ( ) float-mechanism (check one) type capable of shutting down the boiler in event of a low water situation.

E. Additional Components

1. *Packaged WTGO Boiler(s) only:* The boiler(s) shall be installed with a tankless heater with 1/2" inlet and outlet openings. The tankless heater opening shall be machined to completely capture sealing ring between the heater and the section.
2. *Semi-packaged and Knock-down WTGO Boiler(s) and all SGO Boiler(s) only:* The boiler(s) shall be provided with an opening for an optional tankless heater. A cover plate shall be installed over the opening.

## F. Optional Components

1. *WGO or WTGO 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(s) shall be able to be installed with an optional tankless heater (*Not available for Packaged WGO Boiler(s); standard on Packaged WTGO Boiler(s)*).
  - Tankless heater must be specified when order is placed.
  - Tankless heater shall have ½" inlet and outlet openings for Semi-packaged or Knocked-down WTGO Boiler(s) and ¾" inlet and outlet openings for a SGO Boiler(s).
  - If installed with a tankless heater, water boilers shall be furnished with a combination hi-low temperature limit control in lieu of standard hi limit control; steam boilers shall be furnished with an additional temperature limit control.
3. *Packaged or Knock-down SGO Boiler(s) only:* The boiler(s) shall be able to be provided with an optional low water cut-off (LWCO).
  - LWCO must be specified when order is placed.
  - LWCO shall be ( ) electrode or ( ) float-mechanism (check one) type capable of shutting down the boiler in event of a low water situation.

## G. Boiler Manuals

1. The boiler(s) shall be provided with complete instruction manuals, including:
  - Boiler Installation Manual
  - Maintenance and Service Guide