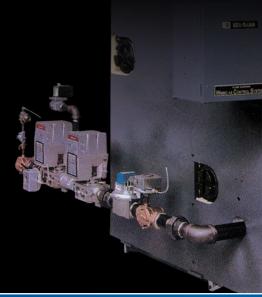


## **LGB**<sup>™</sup> COMMERCIAL GAS BOILER

Series 2 | Gas | Water or Steam | MBH: 400-2,860 | Efficiency 85.1% Net Load Range: Hot Water 280-2,111 MBH / Steam 975-7,402 Sq. Ft.





- Versatile combustion control systems
- Made with Weil-McLain quality

## **COMMERCIAL GAS BOILER**

# LGB





## APPLICATIONS INCLUDE:

Apartment Buildings
Commercial Buildings
Schools and Other
Institutions
Multiple Boilers
Indirect-Fired Water Heating
...And Much More





## **LGB**<sup>™</sup> **DESIGN ADVANTAGES**

#### **Cast Iron Sections**

LGB™ sections are made of durable cast iron for long life. It's not uncommon for Weil-McLain® cast iron boilers to last 35 years or more.

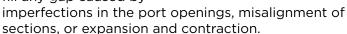
Sections are not face ground; the tough outer skin is retained to protect against corrosion.



The sections are studded with heat pins that cause the hot gases to swirl about. scrubbing the entire surface for greater heat transfer and maximum operating efficiency.

### **Section Seal**

Modern elastomer sealing rings in the port openings assure a watertight seal. Because of the elasticity of the seals (unlike metal push nipples), they fill any gap caused by



Combined with short draw rods, sealing rings also permit faster section assembly. Lugs and sockets assure proper section alignment during assembly; the machined surfaces of the port openings control the compression ratio of the rings.



## **Sealing Rope**

Sealing rope between the sections assures a permanent, gastight seal. When installed, the rope is visible between sections so the boiler can be checked for tightness. Sealing rope — a standard feature of Weil-McLain® commercial boilers — allows for expansion and contraction of the sections, is impervious to heat and moisture, will not crack and will last the life of the boiler.



## **Rear Cleaning**

Removing the rear jacket panel and steel cleanout plates expose the flue passages for inspection and cleaning.

ALIGNING LUG MACHINED

SEALING

MACHINED



## **Factory-Assembled Base and Burners**

The insulated, galvanized steel base houses the gas manifold and one-piece, high tempurature aluminized steel burners. These burners feature efficient performance, excellent flame characteristics, and quiet ignition and extinction. Burners provide fixed primary air — no adjustment required for approved gases.

One burner/base assembly and one gas train are furnished for the LGB™-4 through 12, and two each for the LGB™-13 through 23.





- 85.1% combustion efficiency saves energy. The LGB™ is the highest efficiency cast iron atmospheric gas boiler available. Exceeds efficiency requirements of ASHRAE 90.1.
- Cast iron sections for corrosion resistance and long life.
- Compact design saves valuable space...only 50<sup>3</sup>/<sub>8</sub>" high, allowing more headroom for piping and venting.
- Patented section sealing method, short draw rods and sealing rope section speed assembly to reduce installation time.
- Extra-large 9" top port opening forms an internal header for better water circulation. Large steaming area assures rapid generation of dry steam.
- AGA design certified for natural and propoane gas.
   Ratings certified by Air-Conditioning, Heating and
   Refrigeration Institute (AHRI) for natural and propane gas.
- Factory-assembled gas train located within the boiler jacket. (Except for all IRI boilers and LGB™-21 through 23 boilers with CSD-1/FM.) All LGB™-6 through 23 boilers (except for all IRI and LGB-21) are capable of low-high-low or staged firing with an additional operating limit control.

# FEATURES... ADVANTAGES... BENEFITS

- Factory-assembled base and burners reduce installation time.
- Simplified piping. The largest LGB<sup>™</sup> steam boiler requires only two risers.
- Built-in air separator in water boilers. Air is diverted to the expansion tank through a 1" tapping next to supply outlet.
- Steel jackets with durable powdercoat finish in Weil-McLain® blue...completely insulated...designed for fast installation.
- 10 Year Limited Heat Exchanger Warranty. Covers cast iron sections.



## LGB<sup>™</sup> COMBUSTION CONTROL SYSTEM OPTIONS

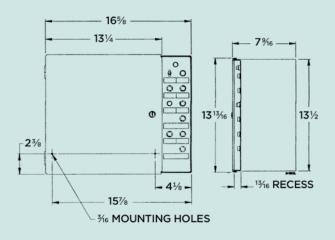
Description of Majorion Components	4.08", 408", 40.8",5	4G8" 6-12 4G8" 6-12	4GB" 13.20	(GB)" 21.23	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4GB", 6-12	(SD., 13.20	468",21.23 CSD.1,21.23	LGB", 5.72	<sup>'</sup>
Manual Main Shutoff Valve	-	1	2	2	_	1	2	1	1	1
Diaphragm Gas Valve w/Reg. & Pilot Takeoff	1	_	_	_	1	_	_	_	_	_
Diaphragm Gas Valve	_	1	2	2	_	1	2	_	_	_
Diaphragm Gas Valve—2 Stage w/Regulator	-	1	2	2	_	1	2	1	1	1
Motorized Gas Valve w/Actuator (On/Off)	_	_	_	_	_	_	_	2	2	2
Low Gas Pressure Switch	_	_	_	_	_	-	_	1	1	1
High Gas Pressure Switch	_	_	_	2	_	_	_	1	1	1
Normally Open Solenoid Vent Valve	_	_	_	_	_	_	_	_	1	1
Manual Leak Checking Gas Valve	_	_	_	_	1	1	1	1	1	1
Leak Test Cock	_	_	_	_	2	2	4	3	1	1
Pilot Shutoff Cock	_	1	2	2	1	1	2	2	1	2
Pilot Solenoid Valve	_	1	2	2	1	1	2	2	1	2
Pilot Regulator	_	_	_	_	1	1	2	2	1	2
UCS Control Module	1	_	_	_	_	_	_	_	_	_
Flame Guardian® Control System	_	1	2	2	_	-	_	_	_	_
CSD—1 Control Panel	_	_	_	_	1	1	2	_	_	_
WMBC™—1A Control Panel	_	_	_	_	_	-	_	_	1	_
WMBC™—2A Control Panel	_	_	_	_	_	_	_	1	_	1
For detailed information:		Pag	je 5			Page 6			Page 7	

## OPTIONAL WFFP™ CONTROL PANEL FOR STANDARD (AGA) AND CSD-1 SYSTEMS FOR LGB™ 6-23



### **PANEL FEATURES**

- Main flame failure lockout.
- 4 indicator lamps: call for heat, pilot proven, main flame proven, and flame failure (8 lamps on WFFP™-2 panel).
- Isolated alarm contact to indicate flame failure.
- Power-on switch, fuse(s), and terminal strip.
- Optional flame failure alarm bell.



## STANDARD COMBUSTION CONTROL SYSTEMS

## STANDARD (AGA) AND FM CONTROL SYSTEMS FOR LGB™ 4-5

### **UNIVERSAL CONTROL SYSTEM FEATURES:**

One Weil-McClain® UCS ignition control module and wire harness are furnished as standard equipment with each base assembly.

On a call for heat, the UCS produces a spark to ignite the pilot. When the pilot flame is proven, the main gas valve opens with a built-in, slow opening soft ignition.

In the event the pilot is not proven during a timed trial for ignition, the UCS control system will provide 100% shutoff. After a timed 5-minute delay, another ignition sequence will automatically be initiated.

The control system has been certified by AGA and all components are UL Listed.





#### **FACTORY-ASSEMBLED GAS TRAIN:**

The gas train allows for fast and easy installation. A slow-opening, soft ignition, high capacity, combination gas valve is used on the LGB $^{\text{\tiny{TM}}}$  4-5 boilers.

## STANDARD (AGA) CONTROL SYSTEMS FOR LGB™ 6-23 AND FM CONTROL SYSTEMS FOR LGB™ 6-20

### WFG FLAME GUARDIAN® CONTROL SYSTEM FEATURES:

A pre-wired WFG® control system consisting of a mounting plate, two Weil-McLain® UCS control modules and terminal block are furnished as standard equipment with each base assembly.

On a call for heat, the pilot proving control module provides a spark to ignite the pilot. When the pilot flame is proven, the first stage of the two-stage gas valve opens and all burners light on low fire. When the main flame sensor proves carryover, the second stage of the gas valve opens and the burners go to high fire.

In the event the pilot or main flame is not proven during a timed trial for ignition, the WFG® control system will provide 100% shutoff. After a timed 5-minute delay, another ignition sequence will automatically be initiated. The control system provides multiple ignition trials.

The control system design has been certified by AGA and all components are UL Listed.

#### **LOW-HIGH-LOW FIRING:**

LGB 6-23 boilers can provide low-high-low firing with the addition of a water temperature or steam pressure control.

### **FACTORY-ASSEMBLED GAS TRAIN:**

The gas train allows for fast and easy installation. A dual gas valve train has an on/off diaphram valve and a low-high-low regulated gas valve.



## ADDITIONAL COMBUSTION CONTROL SYSTEMS



## CSD-1 SYSTEMS FOR LGB™ 5

### **CONTROL SYSTEM FEATURES:**

A pre-wired control panel with one ignition control module, a manual reset relay with indicator light and a terminal block are furnished as standard equipment with each base assembly.

On a call for heat, the control module produces a spark to ignite the pilot. When the pilot flame is proven, the combination gas valve opens with a built-in, slow opening soft ignition.

Upon two consecutive pilot flame failures, the control module will trip the manual reset relay and illuminate the red lockout light. The lockout condition(s) should be corrected before pressing the red reset button to reset the boiler. The control system has been certified by AGA and all components are UL Listed.



## CSD-1 SYSTEMS FOR LGB™ 6-20

#### **CONTROL SYSTEM FEATURES:**

A pre-wired control panel with one pilot-proving module, one main flame proving module, a manual reset relay with indicator light and a terminal block are furnished as standard equipment with each LGB™ 6-12 boiler. For LGB™ 13-20, two pre-wired control panels are provided, one for each base.

On a call for heat, the pilot-proving module, one main flame proving module, a manual reset relay with indicator light and a terminal block are furnished as standard equipment with each  $LGB^{\text{\tiny TM}}$  6-12 boilers. For  $LGB^{\text{\tiny TM}}$  13-20, two prewired control panels are provided, one for each base.

Upon two consecutive pilot flame failures or on failure to sense main flame, the control module will trip the manual reset relay and illuminate the red lockout light. The lockout condition(s) should be corrected before pressing the red reset button to reset the boiler.

For LGB $^{\text{\tiny{M}}}$  13-20, the control systems for each base will operate independently of each other.

The control system has been certified by AGA and all components are UL Listed.

## CSD-1 AND FM CONTROL SYSTEMS FOR LGB™ 21-23 AND IRI CONTROL SYSTEMS FOR LGB™ 5-23

## **CONTROL SYSTEM FEATURES:**

A pre-wired WMBC™ control panel is furnished as standard equipment. The gas train is located outside the boiler jacket.

On a call for heat, the pilot control circuit produces a spark and opens the pilot solenoid allowing the pilot to ignite. For LGB™ 13-23, the universal ignition control then produces a spark to ignite the pilot on the second base. After the pilot(s) has been proven, the flame safeguard control energizes the main flame circuit allowing the main burners to ignite at low fire. The main pilot is then de-energized and the main flame sensor proves the main burner operation at low fire. For LGB™ 13-23, the pilot on the second base continues to burn during the boiler "on" cycle. The flame safeguard control then energizes the downstream gas valve allowing the boiler to fire at high fire.

If the pilot or main flame are not proven during the start-up sequence, then the flame safeguard control will lock out on safety. A red indicator light and alarm bell will energize. The lockout condition should be corrected and then the red reset button should be pressed to restart the boiler. The control system will permit a normal start up after an automatic 5-minute delay.

The control system has been certified by AGA and all components are UL Listed.



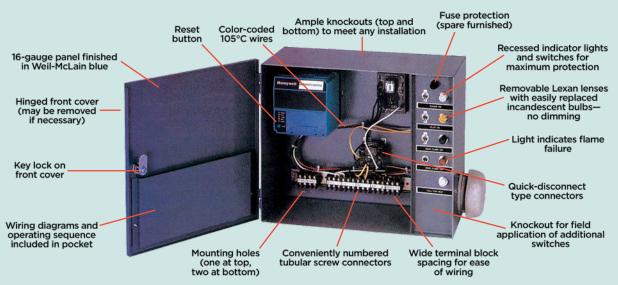
#### WMBC™ CONTROL PANEL FEATURES:

- Proven main flame with interrupted pilot for main base; pilot is extinguished after 10-second trial for ignition. For two-base boilers, the second base has an intermittent pilot; the pilot on second base continues to burn during boiler "on" cycle.
- Pre-purge timer to provide
   5-minute enforced wait after flame failure.
- Flame failure alarm bell.

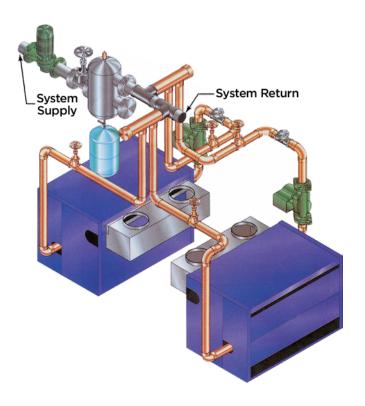
 Five indicator lamps: power on, call for heat, pilot on, main flame on, and flame failure.

Wine of Control S

- High-low fire control terminals. Low-high-low fire may be provided with a water temperature or steam pressure control.
- Flame safeguard primary control.
- Power-on switch, pilot-on switch, main-flame-on switch, alarm silencer switch, fuse and terminal strip.



## PIPING CONNECTIONS



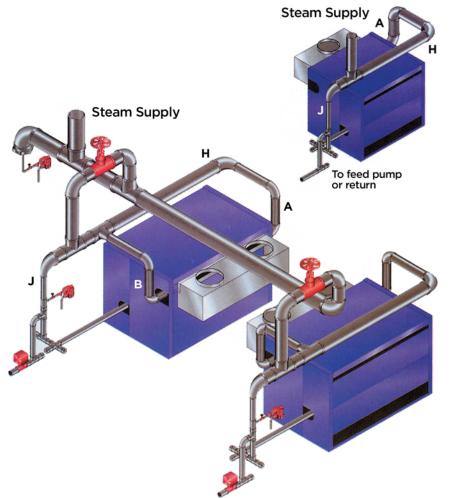
## **WATER BOILERS**

#### **PIPING NOTES:**

Alternative Piping-for LGB $^{\text{\tiny{M}}}$ -4 through 12 only: If desired, all three piping connections (supply, return and expansion tank) can be taken off same end of boiler.

Supply and return sizes in table below for water boilers refer to minimum size of pipe connected to boiler for 20° or higher temperature drop between supply and return.

Recommended Minimum Pipe Sizes (20° Rise Through Boiler)							
Boiler Model	Pipe Size Supply and Return						
LGB™-4	2"						
LGB™-5	2½"						
LGB™-6 through 8	3"						
LGB™-9 through 16	4"						
LGB™-17 through 23	5"						



## **STEAM BOILERS**

Recommended Minimum Pipe Sizes For Single Risers									
Boiler Model	Header H	Equalizer J							
LGB™-4 through 8	4"	4"	2"						
LGB™-9 through 11	5"	5"	2½"						
LGB™-12	6"	6"	2½"						

Recommended Minimum Pipe Sizes For Dual Risers									
Boiler Model	Riser A B	Header H	Equalizer J						
LGB™-13 through 15	4" 4"	6"	4"						
LGB™-16 through 19	5" 5"	6"	4"						
LGB™-20 through 23	6" 6"	8"	4"						

## STANDARD, ADDITIONAL AND OPTIONAL EQUIPMENT

## STANDARD EQUIPMENT, ALL UNITS:

- Cast iron sections
- Insulated extended jacket
- Aluminized steel collector hood(s) and draft hood(s)
- Control transformer (120/24v)
- Factory-assembled burner and base unit(s):
  - One-piece aluminized steel burners
  - Gas manifold
  - Aluminized steel base panels
  - Hi-temp insulated board
- Wiring harness: junction box and pre-wired flexible conduit

### STANDARD EQUIPMENT, LGB™-4 and 5:

- Intermittent electronic ignition systems (UCS):
  - Intermittent ignition control module
  - Electronically supervised pilot burner with ignition electrode and flame rod
  - Wire Harness

### STANDARD EQUIPMENT, LGB™-6 thru 23:

- Flame guardian® panel with flame rectification electronic control system for each base assembly:
  - Pre-wired control panel
    - Terminal block
    - Two ignition control modules having integral spark generators
    - Intermittent electronic ignition pilot system
    - Electronically supervised pilot burner with ignition electrode and flame rod
    - Main flame sensor rod

## STANDARD EQUIPMENT, WATER BOILERS:

- Combination operating and high limit temperature control (LGB™-4 thu 20 only)
- Operating temperature control (LGB™-21 thru 23 only)
- High limit temperature control (LGB™-21 thru 23 only)
- Combination pressure temperature gauge
- 30 PSI ASME relief valve-side outlet
- Built-in air eliminator in end sections
- Probe-type low water cutoff, PS-851-120 (packaged only)

## STANDARD EQUIPMENT, STEAM BOILERS:

- Operating pressure control
- High limit pressure control
- Compound presure-vacuum gauge
- Gauge cocks, glass and guards
- 15 PSI ASME relief valve-side outlet
- Float-type low water cutoff, MM no. 61 LWCO

#### ADDITIONAL EQUIPMENT

- WFFP<sup>™</sup> control panels (LGB<sup>™</sup>-6 thru 23)
- WMBC<sup>TM</sup> control panels (LGB<sup>TM</sup>-5 thru 23)
- Probe-type low water cutoff, ps-851-120 (non-packaged water only)
- Factory-assembled sections (LGB<sup>™</sup>-4 thru 14 only)
- Fire-tested packaged unit (LGB™-4 thru 14 only)
- 1½" Inspection tappings with brass plugs two for each section
- 80 PSI working pressure test of sections
- Water level controls and low water cutoffs
- Low-high-low firing (LGB<sup>™</sup>-6 thru 12 only)
- Stage firing (LGB™-13 thru 23 only)
- Energy management control systems (BCP panels)
- IRI, FM and CSD-1 control systems
- Natural gas to propane gas conversion kit
- W-M and PLUS indirect-fired water heaters
- W-M Maxiflo® pool heaters
- W-M brazed plate heat exchangers

## WFFP CONTROL PANEL EQUIPMENT STANDARD:

- WFFP<sup>™</sup>-1 Panel (LGB<sup>™</sup>-6 Thru 12)
- WFFP™-2 Panel (LGB™-13 Thru 23)
  - 30-second time delay relay (two on WFFP™-2)
  - Two 24-volt DPDT relays (four on WFFP™-2)
  - Terminal block
  - Fuse (two on WFFP™-2)
  - Toggle switch
  - Four Indicator lamps (eight on WFFP™-2)

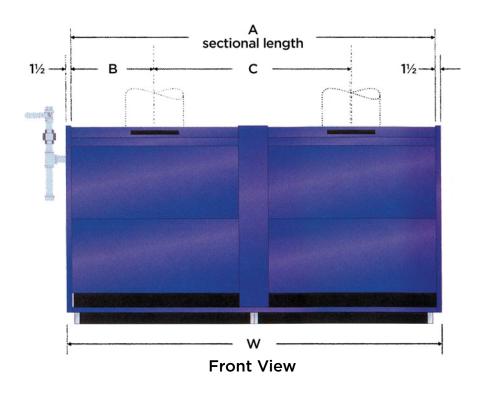
#### **ADDITIONAL:**

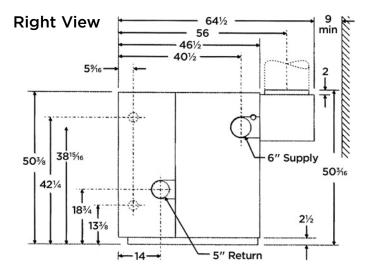
- Alarm bell and transformer for remote indication of flame failure
- Alarm bell panel mounted

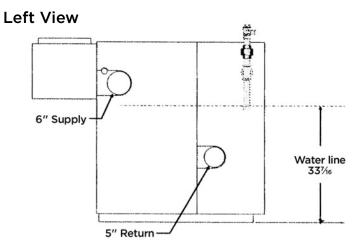
## WMBC™ CONTROL PANEL EQUIPMENT STANDARD:

- WMBC<sup>TM</sup>-1A panel (LGB<sup>TM</sup>-5 thru 12)
- WMBC<sup>TM</sup>-2A panel (LGB<sup>TM</sup>-13 thru 23)
  - Motorized gas train
  - Interruptible pilot (intermittent pilot for adjacent base and additional control module)
  - Pre-wired control panel:
  - Flame sefeguard primary control
  - Pre-purge control timer
  - Relay(s)
  - Terminal block
  - Fuse (two on WMBC™-2A)
  - Four toggle switches
  - Five indicator lamps
  - Alarm bell

## **LGB™ DIMENSIONS**







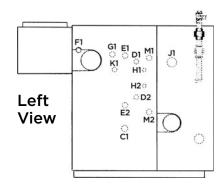
	I	Draft Hood Outlet(s)			
Model	Α	В	С	w	Number & Size
LGB™-4	18	9	_	21	1-10"
LGB™-5	23	11½	_	26	1-12"
LGB™-6	28	14	_	31	1-12"
LGB™-7	33	16½	_	36	1-12"
LGB™-8	38	19	_	41	1-14"
LGB™-9	43	21½	_	46	1-14"
LGB™-10	48	24	_	51	1-16"
LGB™-11	53	26½	_	56	1-16"
LGB™-12	58	29	_	61	1-16"
LGB™-13	63	16½	30	66	2-12"
LGB™-14	68	19	32½	71	1-12"/ 1-14"
LGB™-15	73	19	35	76	2-14"
LGB™-16	78	21½	37½	81	2-14"
LGB™-17	83	21½	40	86	2-14"
LGB™-18	88	24	42	91	1-14"/ 1-16"
LGB™-19	93	24	45	96	2-16"
LGB™-20	98	26½	47½	101	2-16"
LGB™-21	103	26½	60	106	2-16"
LGB™-22	108	29	52½	111	2-16"
LGB™-23	113	29	55	116	2-16"

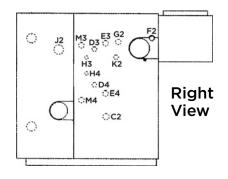
#### **Notes:**

- (1) For LGB™ 4-23-return tapping size is 5" (qty. 2) and supply tapping size is 6" (qty. 2).
- (2) Gas trains on all IRI boilers and LGB™ 21-23 for CSD-1 & FM are located outside the boiler jacket. Allow additional clearances as required.

## **CONTROL TAPPING TABLE**

Loca	ation			
Left End	Right End	Size	Steam	Water (4)
C1	C2	11⁄4″	Boiler Drain	Boiler Drain
D1 & D2	D3 & D4	1/2"	Gauge Glass (3)	-
E1 & E2	E3 & E4	1″	Low Water Cutoff (3)	Optional Low Water Cutoff
E1	E3	1"	Pressure Operating & Limit Controls & Pressure Gauge	Limit Control (2)
F1	F2	1"	_	To Expansion Tank or Automatic Air Vent (2)
G1	G2	3/4"	-	Operating Control (2)
H1 & H2 (1)	H3 & H4 (1)	3/8"	Tri-cock	_
J1	J2	2"	Steam Relief Valve & Skim Tapping	Water Relief Valve and Skim Tapping
K1	K2	1/2"		Combination Pressure & Temperature Gauge (2)
M1 & M2	M3 & M4	1"	Optional Low Water Cutoff (3)	Optional Low Water Cutoff
M1	M3	1"	Firing Rate Control (when used)	Firing Rate Control (when used) or Probe Low Water Cutoff





#### **Notes:**

- (1) Available on special request only.
- (3) Must be on same side as steam equalizer piping.
- (2) Must be on same side as supply to system.
- (4) Additional controls for water boilers may be placed in supply piping.

	No. of Con-	Standard AGA		No. of Co.	CSD-1	& FM	N	IRI		
Boiler Model	No. of Gas Trains	5" W.C.	7" W.C	No. of Gas Trains	5" W.C.	7" W.C	No. of Gas Trains	5.5" W.C.	7" W.C.	
LGB™-4	1	1"	_	-	_	_	-	-	-	
LGB™-5	1	1"	1"	1	1"	1"	1	11/4"	1"	
LGB™-6	1	1¼"	1"	1	11⁄4″	1"	1	11/4"	1"	
LGB™-7	1	11⁄4″	1"	1	11⁄4″	1"	1	11/4"	1"	
LGB™-8	1	11⁄4″	1"	1	11⁄4″	1"	1	1½"	11⁄4″	
LGB™-9	1	1¼"	1"	1	11⁄4″	1"	1	2"	11⁄4″	
LGB™-10	1	1½"	1¼"	1	1½"	11⁄4″	1	2"	11⁄4″	
LGB™-11	1	2"	1¼"	1	2"	11⁄4″	1	2"	1½"	
LGB™-12	1	2"	1¼"	1	2"	11⁄4″	1	2"	1½"	
LGB™-13	2	11⁄4″	1"	2	11⁄4″	1"	1	2"	1½"	
LGB™-14	2	1¼"	1"	2	11⁄4″	1"	1	2"	1½"	
LGB™-15	2	11⁄4″	1"	2	11⁄4″	1"	1	2"	1½"	
LGB™-16	2	11⁄4″	1"	2	11/4"	1"	1	2"	1½"	
LGB™-17	2	11⁄4″	1"	2	11/4"	1"	1	2"	1½"	
LGB™-18	2	1½"/ 1¼"	11/4"/1"	2	1½"/ 1¼"	1¼"/ 1"	1	2½"	1½"	
LGB™-19	2	1½"	1¼"	2	1½"	11⁄4″	1	2½"	2"	
LGB™-20	2	1½"/ 2"	1¼"	2	1½"/ 2"	2"	1	2½"	2"	
LGB™-21	2	2"	1¼"	1	3"	2"	1	3"	2"	
LGB™-22	2	2"	1¼"	1	3"	2"	1	3"	2"	
LGB™-23	2	2"	1¼"	1	3"	2"	1	3"	2"	

#### **Notes:**

(1) Rated pressure for LGB $^{\text{\tiny M}}$  21-23 CSD-1 & FM is 5.5" W.C.

	RATINGS — STEAM												
Boiler				Certified ngs (3)			Boiler Water Gallor		Approx.	Assembled Block Weight	Complete Packaged Boiler Weight	Chimney	
Model Number	Heating Medium	Input MBH (2)	Gross Output MBH (2)	Net Rating Steam MBH	Boiler N.P.	Sq. Ft. Steam	Steam (to waterline)	Water (gallons)	Shipping Weight Lbs.	Model	ls PLGB (4)	Breeching Size (I.D) (inches) (5)	
LGB-4-S	Steam	400	312	234	9.7	975	23.2	36.5	1185	975	1600	10	
LGB-5-S	Steam	520	409	307	12.6	1279	28.9	45.6	1455	1200	1800	12	
LGB-6-S	Steam	650	514	386	15.7	1607	34.6	54.7	1725	1425	2000	12	
LGB-7-S	Steam	780	619	464	18.9	1936	40.3	63.9	2005	1650	2300	12	
LGB-8-S	Steam	910	724	543	22.0	2264	46.0	73.0	2290	1900	2500	14	
LGB-9-S	Steam	1040	829	622	25.2	2591	51.9	82.1	2560	2125	2800	14	
LGB-10-S	Steam	1170	934	701	28.3	2918	57.6	91.2	2800	2375	3100	16	
LGB-11-S	Steam	1300	1039	779	31.5	3246	63.4	100.4	3105	2600	3300	16	
LGB-12-S	Steam	1430	1144	858	34.6	3576	69.1	109.5	3365	2850	3500	16	
LGB-13-S	Steam	1560	1239	929	37.8	3868	74.9	118.6	3785	3100	4100	16	
LGB-14-S	Steam	1690	1344	1015	40.9	4228	80.7	127.7	4085	3330	4300	16	
LGB-15-S	Steam	1820	1449	1102	44.0	4592	86.4	136.9	4355	_	_	16	
LGB-16-S	Steam	1950	1552	1188	47.2	4950	92.2	146.0	4725	_	_	17	
LGB-17-S	Steam	2080	1658	1276	50.3	5316	98.0	155.1	4975	_	_	17	
LGB-18-S	Steam	2210	1764	1364	53.5	5682	103.6	164.2	5270	_	_	18	
LGB-19-S	Steam	2340	1867	1448	56.6	6034	109.5	173.4	5540	_	_	18	
LGB-20-S	Steam	2470	1974	1533	59.8	6384	115.3	182.5	5820	_	_	19	
LGB-21-S	Steam	2600	2077	1613	62.9	6720	121.0	191.6	6080	_	_	19	
LGB-22-S	Steam	2730	2184	1696	66.1	7065	126.8	201.2	6365	_	_	19	
LGB-23-S	Steam	2860	2288	1776	69.2	7402	132.5	209.8	6625	_	_	20	

	RATINGS — WATER												
Boiler				ertified gs (3)		Boiler Water	Approx.	Assembled Block Weight	Complete Packaged Boiler Weight	Chimney Breeching			
Model Number (1)	Heating Medium	Input MBH	Gross Output MBH (2)	Net Rating Water MBH (2)	Boiler H.P.	Content Gallons	Weight Lbs.	Models	s PLGB (4)	Size (I.D.) Inches (5)			
LGB-4-W	Water	400	322	280	9.7	36.5	1185	975	1600	10			
LGB-5-W	Water	520	419	364	12.6	45.6	1455	1200	1800	12			
LGB-6-W	Water	650	523	455	15.7	54.7	1725	1425	2000	12			
LGB-7-W	Water	780	628	546	18.9	63.9	2005	1650	2300	12			
LGB-8-W	Water	910	737	641	22.0	73.0	2290	1900	2500	14			
LGB-9-W	Water	1040	843	733	25.2	82.1	2560	2125	2800	14			
LGB-10-W	Water	1170	950	826	28.3	91.2	2800	2375	3100	16			
LGB-11-W	Water	1300	1057	919	31.5	100.4	3105	2600	3300	16			
LGB-12-W	Water	1430	1165	1013	34.6	109.5	3365	2850	3500	16			
LGB-13-W	Water	1560	1273	1107	37.8	118.6	3785	3100	4100	16			
LGB-14-W	Water	1690	1381	1201	40.9	127.7	4085	3330	4300	16			
LGB-15-W	Water	1820	1489	1295	44.0	136.9	4355	_	_	16			
LGB-16-W	Water	1950	1597	1389	47.2	146.0	4725	_	_	17			
LGB-17-W	Water	2080	1708	1485	50.3	155.1	4975	_	_	17			
LGB-18-W	Water	2210	1817	1580	53.5	164.2	5270	_	_	18			
LGB-19-W	Water	2340	1926	1675	56.6	173.4	5540	_	_	18			
LGB-20-W	Water	2470	2035	1770	59.8	182.5	5820	_	_	19			
LGB-21-W	Water	2600	2207	1919	62.9	191.6	6080	_	_	19			
LGB-22-W	Water	2730	2318	2016	66.1	201.2	6365	_	_	19			
LGB-23-W	Water	2860	2428	2111	69.2	209.8	6625	_	_	20			

#### **Notes:**

- (1) Add to boiler number "S" for Steam, "W" for Water.
- (2) MBH = thousands of BTU/hour.
- (3) Net AHRI ratings are based on net installed radiation of sufficient quantity for building requirements. Do not add on for normal piping and pickup. Water boilers are rated at 80 psig maximum working pressure. Water ratings are based on piping and pickup allowance of 1.15. Additional allowance should be made for gravity hot water systems or unusual piping and pickup loads. Ratings shown are for elevations up to 2,000 feet. For ratings above 2,000 feet, reduce at rate of 4 percent per 1000 feet above sea level.
- (4) Sling length is 5 feet; 2 per boiler.
- (5) A twenty-foot (20') chimney height may be used in most cases, based on using a six-foot (6') length of connector for breeching of the size shown from the nearest draft hood outlet to the chimney or vent with not more than one (1) standard sloping-type 90° elbow. Consult the National Fuel Gas Code, ANSI Z223.1, for actual sizing. If individual vertical vents are to be used, each vent diameter should be the same size as the respective draft hood outlet and the height may be reduced to five feet (5') measured above the draft hood outlet.











