SUBMITTAL SHEET

Edifice, LLC
NC4205 . - CMS Grier Elementary School

Project: NC4205 .
CMS Grier Elementary School
7515 The Plaza
Charlotte, NC
28215

Spec Section Num: 235223
Submittal: 235223.001
Revision: 0
Package:
Date: 4/21/2022 EDT

Submittal Title: Cast-Iron Boilers Product Data
Submittal Detail:
Response Due By:

Contractor:
Malachi Alexander
Edifice, Inc.

Contractor's Stamp

THIS REVIEW IS FOR GENERAL COMPLIANCE WITH THE DESIGN CONCEPT THE SUBCONTRACTOR / VENDOR IS RESPONSIBLE FOR DIMENSIONS TO BE CONFIRMED AND COORDINATED IN THE FIELD AND REMAINS RESPONSIBLE FOR VERIFICATION OF ALL QUANTITIES. EDIFICE IS NOT RESPONSIBLE FOR ANY DEVIATION FROM THE CONTRACT DOCUMENTS. DEVIATIONS AND / OR SUBSTITUTIONS MUST BE CLEARLY IDENTIFIED. APPROVAL OF ANY DEVIATIONS / SUBSTITUTIONS MUST BE MADE BY OWNER OR DESIGN TEAM.

Architect:

Architect's Stamp

SHOP DRAWING REVIEW

optima engineering

- ☐ NO EXCEPTION TAKEN
- ☑ APPROVED AS NOTED
- ☐ REVISE AND RESUBMIT
- ☐ REJECTED

REVIEW IS FOR GENERAL COMPLIANCE WITH THE INTENT OF THE CONTRACT DOCUMENTS. MECHANICAL CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR CORRECTNESS, DIMENSIONS, DETAILS, QUANTITIES AND ALL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT, INCLUDING MAINTENANCE ACCESS, CLEARANCES, BUILDING ALTERATIONS, REPLACEMENT OF OTHER SYSTEM COMPONENTS, ETC.

BY Bill Nord **DATE** 04/28/2022

Response:
Comment:

1.) Gas input higher than scheduled value. Coordinate with gas installer.

2.) Net Water MBH slightly lower than scheduled value. OK

3.)Verify minimum 2 Year warranty on Boiler Controls provided.

-Bill Nord Optima Engineering

WEEKS-WILLIAMS-DeVORE, INC. / *Manufacturers Representatives*

(704) 882-4900
Fax (704) 882-4111

SUBMITTAL DATA

[ ] For Record [XX] For Approval

PROJECT: CMS Hidden Valley Grier Relief
Charlotte, NC

ENGINEER: Optima Engineering
Charlotte, NC

CONTRACTOR: Superior Mechanical Systems, Inc
Charlotte, NC

PEERLESS HEATER COMPANY **LC Series** **50 PSI water**

Cast Iron Sectional

SECTION 23.52.00

Tag: B-1 & 2
Quantity: 2
Model: LC-11-W

Gross Output, MBH:	1,672
Boiler HP:	50
Gas Input MBH:	2,056 Nat Gas
Net I=B=R Water MBH :	1,454
ASME Code Design PSI:	50
Operating PSI:	50
BURNER MFG	**Webster**
Burner Model:	JB1G-07
Blower Motor HP:	3/4
Blower Motor, Voltage:	120 / 1 / 60
Blower Motor, RPM:	3450
Control Voltage:	120 / 1 / 60
Firing Mode:	Full Modulation
Agency Approval:	UL / FM / CSD-1

(704) 882-4900
Fax (704) 882-4111

BOILER

Heavy duty cast iron sectional, forced draft fired, 50 PSI Water boiler having a full wet base design to completely surround the combustion chamber, integral cast legs, individual draw rods and unique flexible seals between each section. Standard boiler sections are built in accordance with ASME requirements for 50 PSI maximum working pressure. Boiler assembly includes forced draft burner, “hammer tone” insulated enamel steel jacket, combustion chamber cover plate, observation ports (front & rear), burner mounting plate, integral cast iron flue collector with rear outlet for easy installation, standard trim and controls, as shown below. Shipped Knocked Down for field assembly.

Standard Trim and Controls

Water backed combustion area
50 PSI ASME Code pressure relief valve
Temperature and Pressure gauge
Modulation Fire Rate Controller
Burner mounting plate for Webster burner
High temperature fiberglass rope between hood and section
Cleanout plates—heavy gauge
Refractory in front and rear sections
Heavy gauge steel jacket
UL labeled forced draft burner with adjustable combustion air supply
Spark Ignition, flame Sensor and 100% Shut off
Bacnet Gateway and ProtoNode
10 year workmanship and defect warranty

Field Assembled Sections
Pre and Post Purge
(4) Indicating Lights (power on, flame fail, Call For Heat, ignition on)
UL/FM/CSD-1 approved gas train and controls
Main & Pilot Gas Regulators (14" w.c. max)
(3) Relays for BAS Communication (Status, Alarm, Start/Stop)
Alarm Horn with silence switch
Full modulation firing
Potentiometer for full range firing
RM7800 Flame Safety Control
Probe LWCO with Manual Reset
Factory Approved Startup

PeerlessBoilers.com

Series LC/LCE™

Large Commercial Boilers

Standard Equipment

> Manual Reset High Limit Control

> Honeywell Operating Control

> LWCO on Packaged Boilers

> Safety Relief Valve (30 psi – Water; 15 psi – Steam)

> Combination Temperature-Pressure Gauge (Water)

> Operating Pressuretrol (Steam)

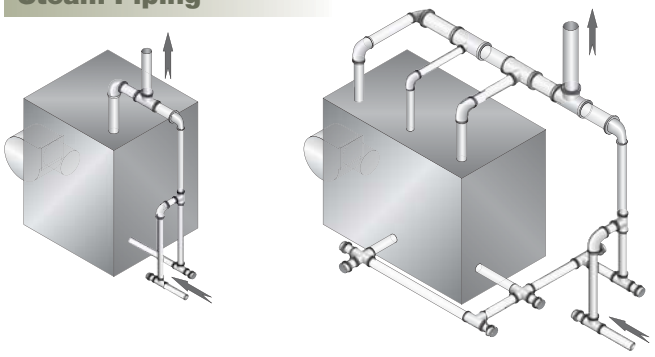
> Gauge Glass with Fittings (Steam)

Series LC/LCE™ Boiler Features

- Oil, Gas or Combination Gas/Oil-Fired Boilers for Hot Water or Steam Systems
- 22 sizes, 4–24 sections; Available as Knockdown, Factory Assembled Sections or Factory Packaged
- Up to 84.2% Combustion Efficiency—Boiler Efficiencies Compliant with Federal and ASHRAE 90.1 Requirements
- Forced Draft Venting—Requires Only a Three Foot Vent Above the Roof
- Advanced Boiler Design that Includes Integral Cast Iron Flue Collector, Unique Flex-Seal Gaskets and Individual Draw Rods
- Cast Iron Rear Outlet with Integral Damper (LC™)—can be Adjusted and Locked in Position
- Cast Iron Top Outlet with Butterfly Flue Damper (LCE™)—can be Mounted Horizontally or Vertically
- Optional Tankless Domestic Hot Water Coils Available for all Models

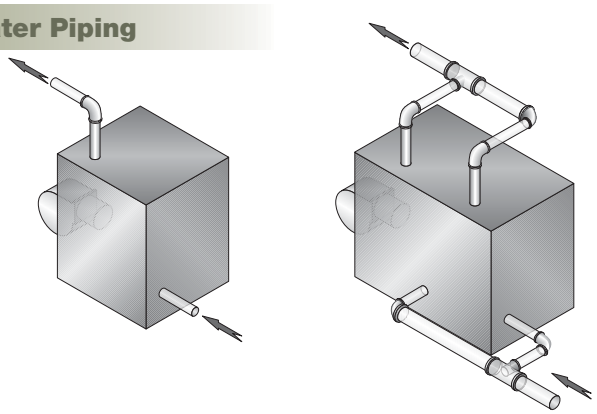
All commercial cast iron boilers include a full one-year warranty. A limited, ten-year warranty is provided for the cast iron sections of commercial hot water and steam boilers. Visit PeerlessBoilers.com for complete details.

Steam Piping



Pipe the return line to a Hartford Loop, with the return nipple located from 2 to 4 inches below the normal water line.

Water Piping



Size the supply and return headers to meet the system flow requirement.

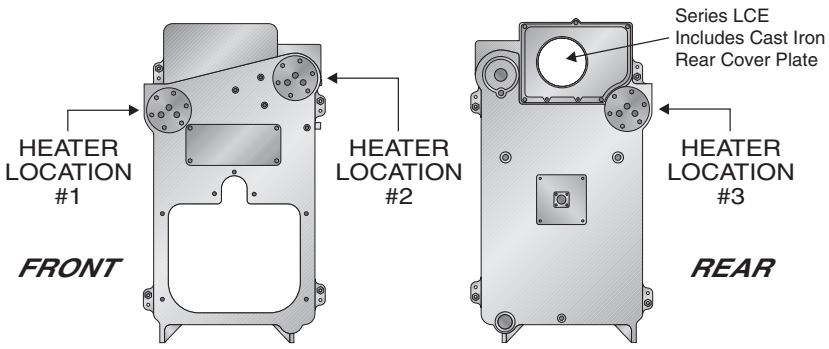
Boiler Piping (Steam)

Boiler Model Number	Risers	Minimum Header Size	Equalizer
LC-04	1–4"	4"	2"
LC-05R	2–3"	5"	2"
LC-05	2–3"	5"	2"
LC-06	2–4"	5"	2"
LC-07	2–4"	5"	2-1/2"
LC-08	2–4"	6"	2-1/2"
LC-09	2–4"	6"	2-1/2"
LC-10	2–4"	6"	2-1/2"
LC-11	2–4", 1–3"	6"	3"
LC-12	2–4", 1–3"	6"	3"
LCE-13	2–4", 1–3"	6"	3"
LCE-14	2–4", 2–3"	8"	3"
LCE-15	2–4", 2–3"	8"	3"
LCE-16	2–4", 2–3"	8"	3"
LCE-17	2–4", 3–3"	8"	4"
LCE-18	2–4", 3–3"	8"	4"
LCE-19	2–4", 3–3"	8"	4"
LCE-20	2–4", 3–3"	8"	4"
LCE-21	2–4", 4–3"	8"	4"
LCE-22	2–4", 4–3"	8"	4"
LCE-23	2–4", 4–3"	8"	4"
LCE-24	2–4", 4–3"	8"	4"

Boiler Piping (Water)

Boiler Model Number	Supply	Return	Minimum Header Size
LC-04, 05R, 05	1–2-1/2"	1–2-1/2"	2-1/2"
LC-06 and LC-07	1–3"	1–3"	3"
LC-08 and LC-09	2–3"	2–3"	3"
LC-10 thru LC-12	2–4"	2–3"	4"

Tankless Domestic Hot Water Heater Locations

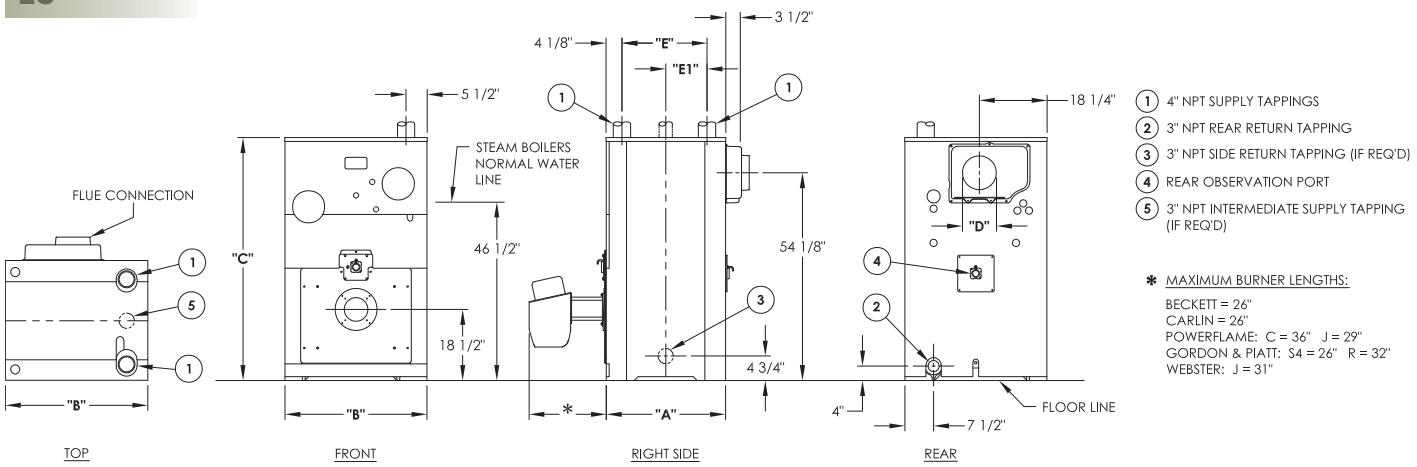


Tankless Domestic Hot Water Heater Ratings*

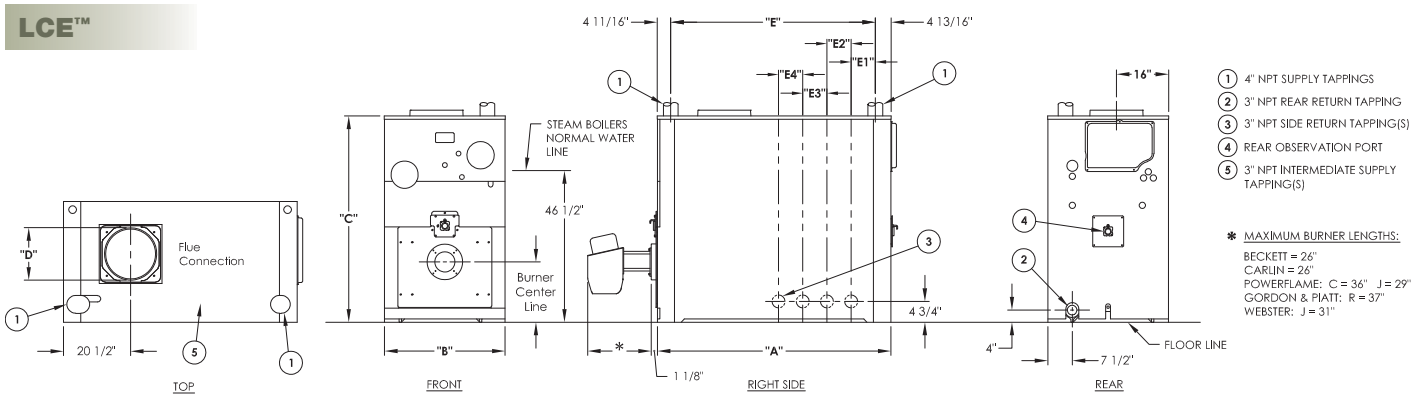
Boiler Model Number	Heater No. X-1020			Heater No. X-1021			Heater No. X-1022			Two Heater No. X-1020			Two Heater No. X-1021			Two Heater No. X-1022		
	GPM	Location**		GPM	Location**		GPM	Location**		GPM	Location**		GPM	Location**		GPM	Location**	
		Steam	Water		Steam	Water		Steam	Water		Steam	Water		Steam	Water		Steam	Water
LC-04	5.5	1	2	—	—	—	—	—	—	8.0	—	1 & 2	—	—	—	—	—	—
LC-05R	5.62	1	2	6.5	1	2	—	—	—	9.0	—	1 & 2	9.5	—	1 & 2	—	—	—
LC-05	5.75	1	2	7.0	1	2	—	—	—	10.0	—	1 & 2	10.5	—	1 & 2	—	—	—
LC-06	6.25	1	2	7.75	1	2	—	—	—	12.0	—	1 & 2	13.0	—	1 & 2	—	—	—
LC-07	6.5	1	2	8.5	1	2	13.0	1	2	13.0	—	1 & 2	15.5	—	1 & 2	15.5	—	1 & 2
LC-08	7.0	1	2	9.25	1	2	13.75	1	2	14.0	—	1 & 2	17.5	—	1 & 2	18.0	—	1 & 2
LC-09	7.25	1	2	10.0	1	2	14.5	1	2	14.5	1 & 3	1 & 2	20.0	—	1 & 2	20.0	—	1 & 2
LC-10	7.5	1	2	10.75	1	2	15.5	1	2	15.0	1 & 3	1 & 2	21.5	1 & 3	1 & 2	22.5	—	1 & 2
LC-11	8.0	1	2	11.50	1	2	16.5	1	2	16.0	1 & 3	1 & 2	23.5	1 & 3	1 & 2	24.5	—	1 & 2
LC-12	—	—	—	12.25	1	2	17.5	1	2	—	—	—	24.5	1 & 3	1 & 2	27.0	—	1 & 2
LCE-13	—	—	—	13.00	1	—	18.0	1	—	—	—	—	26.0	1 & 3	—	29.0	—	—
LCE-14	—	—	—	13.00	1	—	18.75	1	—	—	—	—	26.0	1 & 3	—	31.5	—	—
LCE-15	—	—	—	13.00	1	—	19.5	1	—	—	—	—	26.0	1 & 3	—	33.5	1 & 3	—
LCE-16	—	—	—	13.00	1	—	20.0	1	—	—	—	—	26.0	1 & 3	—	35.5	1 & 3	—
LCE-17	—	—	—	13.00	1	—	20.0	1	—	—	—	—	26.0	1 & 3	—	37.5	1 & 3	—
LCE-18	—	—	—	13.00	1	—	20.0	1	—	—	—	—	26.0	1 & 3	—	39.5	1 & 3	—
LCE-19	—	—	—	13.00	1	—	20.0	1	—	—	—	—	26.0	1 & 3	—	40.0	1 & 3	—
LCE-20	—	—	—	13.00	1	—	20.0	1	—	—	—	—	26.0	1 & 3	—	40.0	1 & 3	—
LCE-21	—	—	—	13.00	1	—	20.0	1	—	—	—	—	26.0	1 & 3	—	40.0	1 & 3	—
LCE-22	—	—	—	13.00	1	—	20.0	1	—	—	—	—	26.0	1 & 3	—	40.0	1 & 3	—
LCE-23	—	—	—	13.00	1	—	20.0	1	—	—	—	—	26.0	1 & 3	—	40.0	1 & 3	—
LCE-24	—	—	—	13.00	1	—	20.0	1	—	—	—	—	26.0	1 & 3	—	40.0	1 & 3	—

* Water heater ratings are based on intermittent demand—40° F to 140° F Rise with 200° F boiler water.
** Water heater locations may be found on the drawing above.
When two (2) tankless water heaters are used in a steam boiler, a special rear section is furnished at no extra charge—when ordered with boiler.
Caution: Water mixing valve should always be installed in the hot water supply to prevent injury.

LC™



LCE™



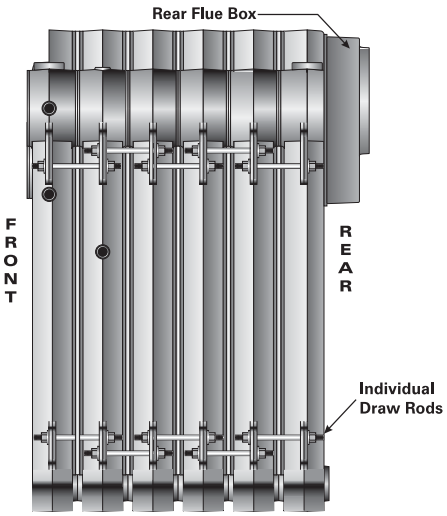
Boiler Dimensions and Tapping Locations

Boiler Model Number	Jacket Depth "A"	Jacket Width "B"	Jacket Height "C"	Flue Size "D"	Distance Between Tappings*					
						Water	Steam			
					"E"	"E1"	"E1"	"E2"	"E3"	"E4"
LC-04	25-15/16"	37"	63"	9"	16-1/2"	—	—	—	—	—
LC-05R	31"	37"	63"	9"	21-9/16"	—	—	—	—	—
LC-05	31"	37"	63"	9"	21-9/16"	—	—	—	—	—
LC-06	36-1/16"	37"	63"	10"	26-5/8"	—	—	—	—	—
LC-07	41-1/8"	37"	63"	10"	31-11/16"	—	—	—	—	—
LC-08	46-5/16"	37"	63"	10"	36-13/16"	15-13/16"	—	—	—	—
LC-09	51-3/8"	37"	63"	12"	41-7/8"	20-15/16"	—	—	—	—
LC-10	56-7/16"	37"	63"	12"	46-15/16"	20-15/16"	—	—	—	—
LC-11	61-1/2"	37"	63"	12"	52"	26"	26"	—	—	—
LC-12	66-9/16"	37"	63"	12"	57-1/8"	26"	26"	—	—	—
LCE-13	71-3/4"	37"	63"	14"	62-3/16"	—	36-3/16"	—	—	—
LCE-14	76-13/16"	37"	63"	14"	67-1/4"	—	20-5/16"	20-5/16"	—	—
LCE-15	81-7/8"	37"	63"	14"	72-5/16"	—	26"	20-5/16"	—	—
LCE-16	86-15/16"	37"	63"	14"	77-7/16"	—	26"	25-7/16"	—	—
LCE-17	92-1/8"	37"	63"	14"	82-1/2"	—	20-5/16"	20-5/16"	15-1/4"	—
LCE-18	97-3/16"	37"	63"	16"	87-9/16"	—	20-5/16"	20-5/16"	20-5/16"	—
LCE-19	102-1/4"	37"	63"	16"	92-5/8"	—	20-5/16"	20-5/16"	25-7/16"	—
LCE-20	107-7/16"	37"	63"	16"	97-3/4"	—	20-5/16"	20-5/16"	15-1/4"	15-1/4"
LCE-21	112-1/2"	37"	63"	16"	102-13/16"	—	20-5/16"	20-5/16"	20-5/16"	15-1/4"
LCE-22	117-9/16"	37"	63"	16"	107-7/8"	—	20-5/16"	20-5/16"	20-5/16"	20-5/16"
LCE-23	122-5/8"	37"	63"	16"	112-15/16"	—	26"	20-5/16"	20-5/16"	20-5/16"
LCE-24	127-11/16"	37"	63"	16"	118-1/16"	—	26"	20-5/16"	20-5/16"	25-7/16"

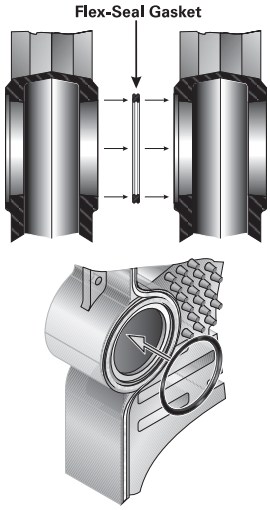
Apply Prefix "O" for oil—"G" for gas —"GO" for gas-oil.

* Dimensions are approximate.

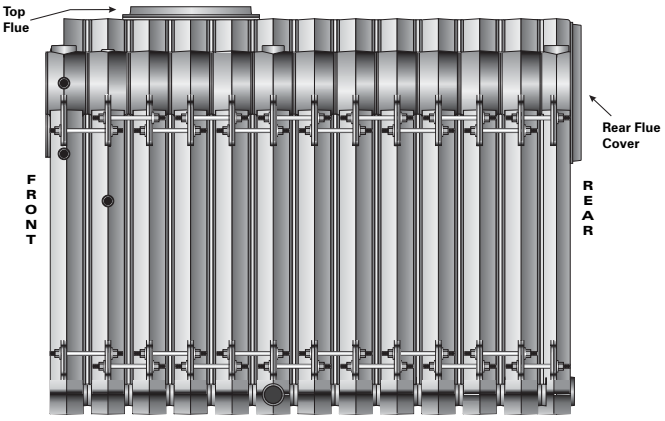
The manufacturer should be consulted before selecting a boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping, etc. For forced hot water heating systems where the boiler and all the piping are within the area to be heated, the boiler may be selected on the basis of its Gross Output.



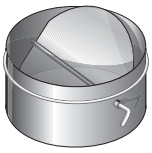
Cast Iron Block Assembly–Rear Flue Outlet



Flex-Seal Gaskets
(Series LC/LCE™)



Cast Iron Block Assembly–Top Flue Outlet



Butterfly Flue Damper (Series LCE™)
Mounted Horizontally or Vertically

Boiler Ratings

Series LC/LCE™ — AHRI CERTIFIED® www.ahridirectory.org

Boiler Model Number	Oil Input[1] GPH	Oil Input[1] MBH	Gas Input, MBH	Gross Output, MBH	Net Ratings[4] Steam, sqft	Net Ratings[4] Water[2], MBH	Net Ratings[4] Steam[3], MBH	Oil Combustion Efficiency[5], %	Oil Thermal Efficiency[5], %	Gas Combustion Efficiency[5], %	Gas Thermal Efficiency[5], %	Boiler H.P.	Water Content, gal Water	Water Content, gal Steam
LC-04-S	4.75	665	686	547	1,708	—	410	83.7	82.2	81.2	79.8	16.3	—	40.57
LC-04-W	4.75	665	686	547	—	476	—	84.2	82.9	81.6	80.4	16.3	50.65	—
LC-05R	5.60	784	808	649	2,029	564	487	83.7	82.8	81.2	80.3	19.4	59.05	47.29
LC-05	6.10	854	881	707	2,208	615	530	83.7	82.8	81.2	80.3	21.1	59.05	47.29
LC-06	7.50	1,050	1,077	868	2,713	755	651	83.7	83.1	81.1	80.6	25.9	67.45	54.01
LC-07	8.80	1,232	1,273	1,029	3,217	895	772	83.6	83.3	81.1	80.8	30.7	75.85	60.73
LC-08	10.20	1,428	1,469	1,189	3,717	1,034	892	83.6	83.5	81.1	81	35.5	84.25	67.45
LC-09	11.60	1,624	1,664	1,350	4,250	1,174	1,020	83.6	83.6	81.1	81.1	40.3	91.65	74.17
LC-10	12.80	1,792	1,860	1,511	4,804	1,314	1,153	83.6	83.7	81.1	81.2	45.1	101.05	80.89
LC-11	14.20	1,988	2,056	1,672	5,367	1,454	1,288	83.6	83.8	81.1	81.3	49.9	109.45	87.61
LC-12	15.60	2,184	2,252	1,832	5,917	1,593	1,420	83.6	83.9	81.1	81.4	54.7	117.85	94.33
LCE-13	17.00	2,380	2,464	1,966	6,358	N/A	1,526	83.5	82.2	81	79.8	58.7	—	101.05
LCE-14	18.40	2,576	2,657	2,125	6,875	N/A	1,650	83.5	82.5	81	80	63.5	—	107.77
LCE-15	19.80	2,772	2,850	2,284	7,388	N/A	1,773	83.5	82.6	81	80.2	68.2	—	114.49
LCE-16	21.00	2,940	3,043	2,444	7,908	N/A	1,898	83.5	82.8	81	80.3	73	—	121.21
LCE-17	22.50	3,150	3,236	2,603	8,421	N/A	2,021	83.5	82.9	81	80.4	77.8	—	127.93
LCE-18	24.00	3,360	3,429	2,763	8,938	N/A	2,145	83.5	83.1	81	80.6	82.5	—	134.65
LCE-19	25.00	3,500	3,622	2,922	9,454	N/A	2,269	83.5	83.2	81	80.7	87.3	—	141.37
LCE-20	26.50	3,710	3,815	3,082	9,971	N/A	2,393	83.5	83.3	81	80.8	92.1	—	148.09
LCE-21	28.00	3,920	4,027	3,256	10,533	N/A	2,528	83.6	83.3	81.1	80.8	97.3	—	154.81
LCE-22	29.50	4,130	4,239	3,430	11,096	N/A	2,663	83.6	83.4	81.1	80.9	102.5	—	161.53
LCE-23	31.00	4,340	4,451	3,604	11,658	N/A	2,798	83.7	83.5	81.2	81	107.7	—	168.25
LCE-24	32.50	4,550	4,663	3,777	12,217	N/A	2,932	83.7	83.5	81.2	81	112.8	—	174.97

1 Burner input based on No. 2 fuel oil with a heating value of 140,000 Btu per gallon.
2 Net water ratings based on allowance of 1.15.
3 Net steam ratings based on an allowance for LC-04 to LC-08=1.333, LC-09=1.323, LC-10=1.310, LC-11=1.298, LC-12=1.290, LCE-13 to LCE-24=1.288.
4 Consult factory before selecting a boiler for installation having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.
5 Combustion and thermal efficiencies are determined in accordance with BTS 2000 Testing Standard.

PeerlessBoilers.com

Model JB1 Forced Draft Burners

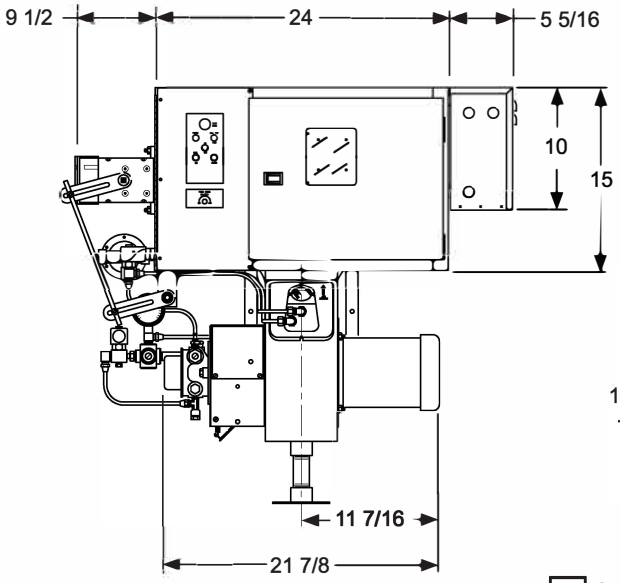
Specification & Dimentional Data

(400 - 2500 MBH Input)

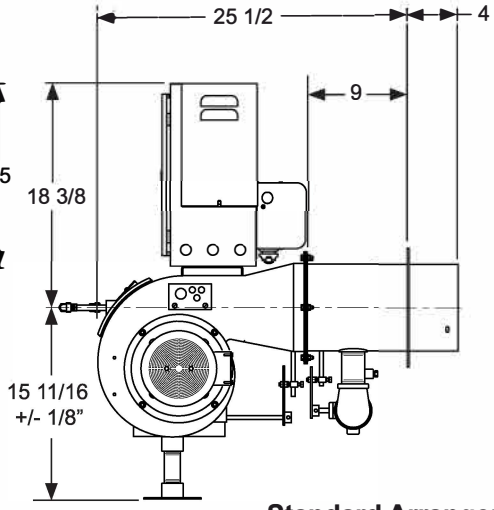
Fuels Burned and Control Systems

- **Natural Gas, Propane, Digester or Mixed Gases**
- **Light #2 Oil, Mechanical Pressure**
- **On-Off, Low Fire Start, Low-High-Low, Modulating or Micro Modulation**
- **Control Circuit Requires 120 vac, 60 Hz, Single Phase Voltage Supply**

Check appropriate box to indicated selected version.

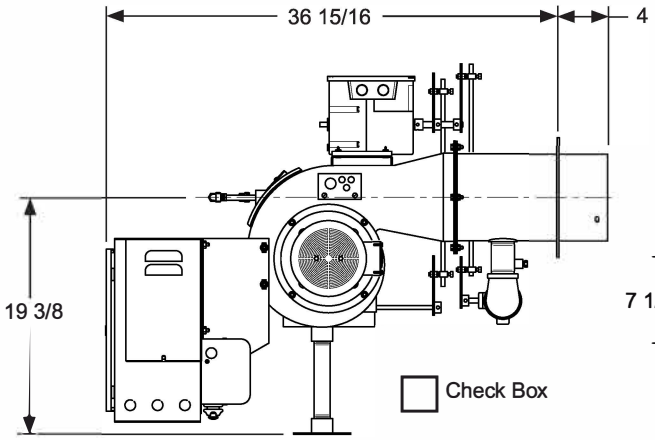


Standard Arrangement
End View



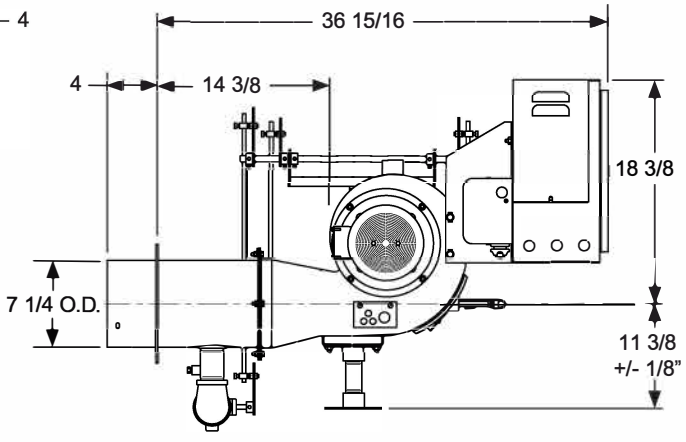
Standard Arrangement
Elevation
Side View

Check Box



Check Box

Standard Burner Arrangement
Elevation
W/ Optional Back Mount Control Cabinet
Side View



Check Box

Inverted Burner Arrangement
Elevation
Side View

Model JB1 burners are listed by Underwriters Laboratories, Inc. (UL). Also by the State of Massachusetts Fire Marchal, City of New York Board of Standards and Appeals, State of Minnesota and can be packaged to meet specific requirements of IRI, FM, GE GAP, NFPA, MIL spec. or other special insurance or local code requirements.

Model JB1 - Specification Data (400 - 2500 MBH Input)

	1. STANDARD UL EQUIPMENT AND IMPORTANT OPTIONS	Fuel Burned: Gas	Fuel Burned: No. 2 Oil pressure atomized
General	Motor, Fan and Air Inlet Control	X	X
	Air Flow Switch (also with oil systems using remote pump)	X	
	2. Burner Mounted Control Panel, Switch and Four Indicator Lights	X	X
	Flame Safety Control	X	X
	Ultra Violet Scanner	X	X
	Motor Controller (single phase voltage)	X	X
	Fuel Selector Switch	Duel Fuel Burners Only	
Ignition	Proven Gas Pilot Ignition	X	
	Pilot Solenoid Gas Valve	X	
	Pilot Gas Regulator & Manual Valve	X	
	Pilot Gas Ignition Transformer	X	
	Direct Spark Oil Ignirtion		X
	Direct Spark Oil Ignition Transformer		X
Optional	Inverted Housing	X	X
	Alternate Control Cabinet Positioning	X	X
	Remote Control Panel	X	X
	Fuel Metering CAM-NETIC II	X	X

	STANDARD UL EQUIPMENT AND IMPORTANT OPTIONS	Fuel Burned: Gas	Fuel Burned: No. 2 Oil pressure atomized
Gas Fuel	Main Manual Shutoff Valve	X	
	Main Safety Shutoff Valve	X	
	Second Safety Shutoff Valve	X	
	Main Gas Regulator	X	
	Gas Checking Valve	X	
	High and Low Gas Pressure Switches (st'd over 2500 MBH)	Opt.	
	Metering Valve (modulation only)	X	
Oil Fuel	Oil Drawer Assembly with Diffuser		X
	Oil Nozzle(s)		X
	Integral Oil Pump		X
	Main Safety Shutoff Valve		X
	Second Safety Shutoff Valve		X
	Low Oil Pressure Switch STD (when using remote oil pump)		Opt.
	Oil Pressure Gauge		X
	Oil Metering Valve (modulating systems)		X
	Future Gas Combustion Head-OPT		Opt.

1. The configuration of each unit will vary with specific job requirements such as input rating, electrical specification and special agency approval codes. The above chart shows those items standard to a basic burner plus a few options that may be added.

2. Indicator lights are "Power On", "Call for Heat", "Fuel On" and "Flame Fail".

Model JB1 - Sizing and Application Data (contact Webster for complete information)

Model Number	Maximum Furnace Pressure	Burner Firing Capability Range		Burner Motor HP		Gas Train			Oil Pump Motor HP
				Gas Only HP	1. Oil or Combination	Pipe Size	2. Inlet Pressure		
		Gas scfh	#2 Oil gph				On-Off, LFS	Modulation	
JB1-02	1.25	400 / 1000	3.0 / 7.1	1/4	1/3	1"	6 / 14"	7 /14"	Integral
JB1-03	1.25	600 / 1500	4.0 / 10.7	1/3	1/2	1 1/4"	8 / 14"	9 / 14"	Integral
JB1-05	1.25	800 / 2100	6.0 / 14.8	1/2	1/2	1 1/2"	7 / 14"	8 / 14"	Integral
JB1-07	1.25	900 / 2500	7.0 / 17.8	3/4	3/4	1 1/2"	9 / 14"	11 / 14"	Integral

1. Larger motors may be required for single phase or 208 volts

2. Contact Webster for more complete details

The above maximum ratings are based on 0 furnace pressure, an altitude of 1000 feet, 90°F air temperature and 60 HZ electrical supply. Use the following corrections for higher temperatures and altitude. Capacity decreases by 17% for 50 Hertz.

Capacity decreases by 4% for each 1000 feet above 1000 foot altitude.
Capacity decreases by 6% for each 1 inch of furnace pressure.
Capacity decreases by 2% for each 10°F increase in air temperature over 90°F.

Gas input ratings based on 1000 BTU/cu ft. and 0.64 specific gravity. Sizes and pressure will vary with gas.
Oil input ratings are based on 140,000 BTU/gal for ASTM #2 fuel oil.

Essential Ordering Information and Data:

Power Supply - Confirm 120-60-1 for control circuit and electrical supply for burner motor(s) (voltage, frequency and phase).
Describe Boiler or Heater to be Fired - Including the manufacturer, model number, furnace pressure and furnace size.
Firing Rate - Define firing rates in MBH for gas and GPH for oil.
Fuel to be Burned - Type of gas and/or oil, including the BTU value.
Approval Agency - UL, FM, IRI (GE GAP), CSD-1, NFPA, Mil spec and local codes, if applicable.
Flame Safety Control Preferred - Honeywell or Fireye controls.
Gas Train Components Preferred - ASCO/ITT, Honeywell or Landis
Control System - ON-OFF, Low Fire Start, Low-High-Low, Modulation, Posi-Control
Required Options - Mounting plate, limit controls, etc.