

City of Portland, Maine - Building or Use Permit Application
 389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 10-1291	Issue Date:	CBL: 048 A005006
-----------------------	-------------	---------------------

Location of Construction: 138 PARK AVE	Owner Name: MILLER CHELSEA A	Owner Address: 138 PARK AVE # 6	Phone:
Business Name:	Contractor Name: The Steinert Co., Inc.	Contractor Address: PO Box 1912 Windham	Phone: 2078925683
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	Zone: R-2

Past Use: Condominium Units	Proposed Use: Condominium Units / Unit #6: Install a Smith gas boiler in the basement.	Permit Fee: \$90.00	Cost of Work: \$6,837.00	CEO District: 2
Proposed Project Description: Install a Smith gas boiler in the basement.		FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: R-2 Type: HVAC	
		Signature: <i>KG</i>		Signature: <i>[Signature]</i>
PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.) Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Signature: _____ Date: _____				

Permit Taken By: gg	Date Applied For: 10/08/2010	Zoning Approval		
------------------------	---------------------------------	------------------------	--	--

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules. 2. Building permits do not include plumbing, septic or electrical work. 3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/>	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied	Historic Preservation <input checked="" type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied
	Date: <i>10/18/10</i>	Date: <i>10/18/10</i>	Date: <i>[Signature]</i>

PERMIT ISSUED

NOV - 2 2010

City of Portland

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

City of Portland, Maine - Building or Use Permit

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 10-1291	Date Applied For: 10/08/2010	CBL: 048 A005006
-----------------------	---------------------------------	---------------------

Location of Construction: 138 PARK AVE	Owner Name: MILLER CHELSEA A	Owner Address: 138 PARK AVE # 6	Phone:
Business Name:	Contractor Name: The Steinert Co., Inc.	Contractor Address: PO Box 1912 Windham	Phone: (207) 892-5683
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	

Proposed Use: Condominium Units / Unit #6: Install a Smith gas boiler in the basement.	Proposed Project Description: Install a Smith gas boiler in the basement.
---	--

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 10/18/2010**Note:** Ok to Issue: ✓

- 1) Separate permits shall be required for future decks, sheds, pools, and/or garages.
- 2) This is NOT an approval for an additional dwelling unit. You SHALL NOT add any additional kitchen equipment including, but not limited to items such as stoves, microwaves, refrigerators, or kitchen sinks, etc. Without special approvals.
- 3) This property shall remain six residential condominiums of which this unit is one. Any change of use shall require a separate permit application for review and approval.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tammy Munson **Approval Date:** 11/02/2010**Note:** Ok to Issue: ✓

- 1) All penetrations through rated assemblies must be protected by an approved firestop system installed in accordance with ASTM 814 or UL 1479, per IBC 2003 Section 712.
- 2) The installation must comply with the State of Maine Gas Regulations.

Dept: Fire **Status:** Approved with Conditions **Reviewer:** Capt Keith Gautreau **Approval Date:** 10/21/2010**Note:** Ok to Issue: ✓

- 1) Install shall comply with all manufacture's specifications.
- 2) Install shall comply with NFPA 54.
A compliance letter is required
- 3) Install shall comply with NFPA 58
A compliance letter is required.

PERMIT ISSUED

NOV - 2 2010

City of Portland



CITY OF PORTLAND, MAINE

Department of Building Inspections

Original Receipt

_____ 10/08 _____ 2010 _____

Received from The Street & Inc

Location of Work 138 Park Ave # 6

Cost of Construction \$ 6,837 Building Fee: _____

Permit Fee \$ 80.00 Site Fee: _____

Certificate of Occupancy Fee: _____

HVAC Total: 80.00

Building (IL) _____ Plumbing (I5) _____ Electrical (I2) _____ Site Plan (U2) _____

Other _____

CBL: 040 1005006

Check #: 15172 Total Collected \$ 80.00

**No work is to be started until permit issued.
Please keep original receipt for your records.**

Taken by: [Signature] **RECEIVED**

WHITE - Applicant's Copy
YELLOW - Office Copy
PINK - Permit Copy

OCT - 8 2010

Dept. of Building Inspections
City of Portland Maine



10 1291

FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

PERMIT ISSUED

NOV 2 2010

CBL 048 A005006
City of Portland

To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

The undersigned hereby applies for a permit to install the following heating, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

Location / CBL _____ Use of Building Dwelling Date 10/8/10
 Name and address of owner of appliance 138 Park Ave #6 Portland Me
Chelsea Miller
 Installer's name and address The Steinert Co Inc
PO Box 1912 Windham Me. 04092 Telephone 892-5483

Location of appliance:
 Basement Floor
 Attic Roof

Type of Fuel:
 Gas Oil Solid

Appliance Name: H.B. Smith Boiler
 U.L. Approved Yes No

Will appliance be installed in accordance with the manufacture's installation instructions? Yes No

IF NO Explain: _____

The Type of License of Installer:

Master Plumber # _____
 Solid Fuel # _____
 Oil # MS10007823
 Gas # PNT 1173
 Other _____

Type of Chimney:
 Masonry Lined
 Factory built _____
 Metal
 Factory Built U.L. Listing # _____
 Direct Vent
 Type _____ UL# _____

Type of Fuel Tank
 Oil
 Gas

Size of Tank _____

Number of Tanks 1

Distance from Tank to Center of Flame _____ feet.

Cost of Work: \$ 6837.-
Permit Fee: \$ 80.00

RECEIVED
 OCT - 8 2010
 Dept. of Building Inspections
 City of Portland Maine

Approved

Fire: _____
 Ele.: _____
 Bldg.: _____

Signature of Installer _____

Approved with Conditions

See attached letter or requirement

Inspector's Signature _____ Date Approved _____

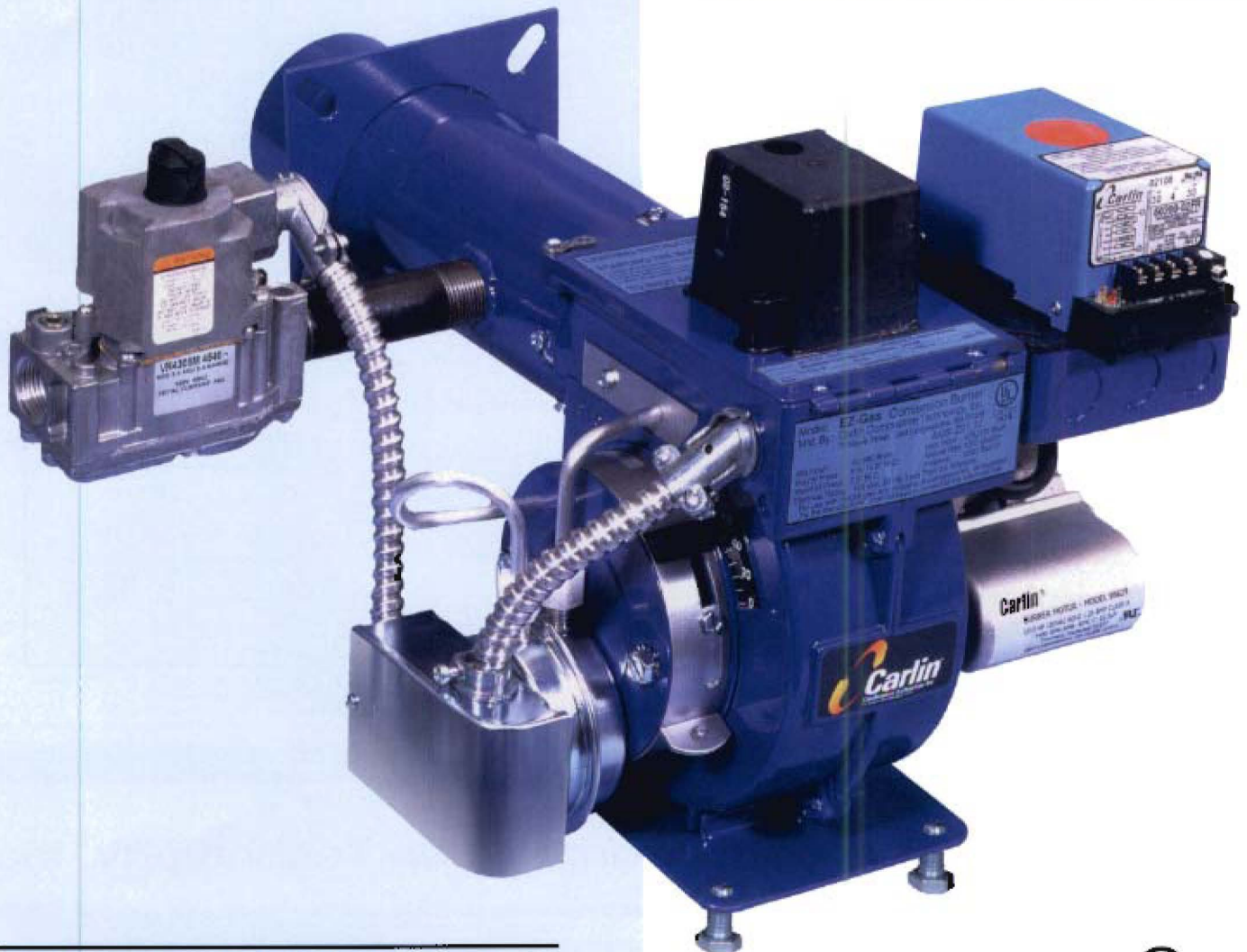


MODEL **EZ-Gas™**

Power Gas Burner

50,000 TO 275,000 BTUH

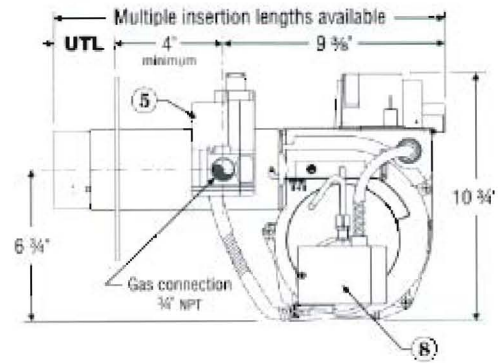
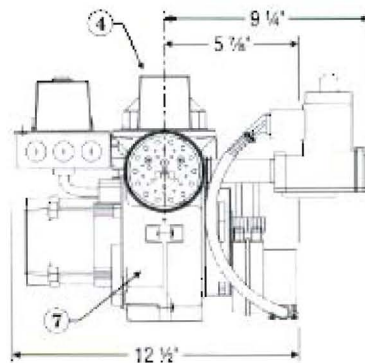
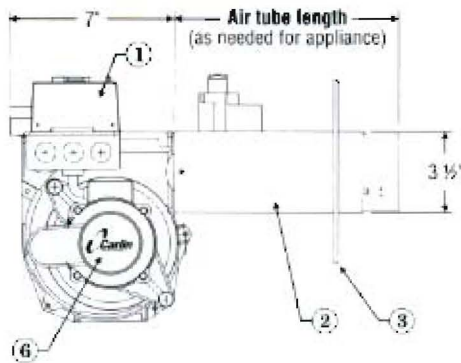
**The IDEAL
burner
for even the
toughest
applications**



CARLIN. THE TECHNOLOGY LEADER.



Carlin EZ-Gas Power Gas Burner



- ① Carlin 60200FR microprocessor control
⑤ Combination gas valve

- ② Air tube
⑥ Carlin PSC motor

- ③ Flange (selected to meet appliance requirements)
⑦ Cast aluminum blower housing

- ④ Carlin 41800 solid state ignitor
⑧ Air flow proving switch

Features

- Converts from propane to natural gas with just an orifice change — no conversion kit needed
- Fires negative or positive chambers from 50,000 to 275,000 Btuh input
- Provides dependable, direct-spark ignition of main flame — for quick, clean light-offs
- Comes standard with time-tested solid state ignition and state-of-the-art microprocessor control technology
- Factory-packaged with combustion control and gas fuel train
- Shipped completely assembled and wired — for "EZ" installation and start-up
- Diagnostic LED lights annunciate operating mode: Self-check, Flame-on, Recycle, Lockout and Latch-up
- High-efficiency, compact flame pattern design ensures clean, quiet operation
- Does not require a refractory liner — fires with or without a combustion chamber
- Available with custom welded air tube flange (and/or optional pedestal) to accommodate most appliance mounting requirements
- Includes 1-year warranty

Specifications

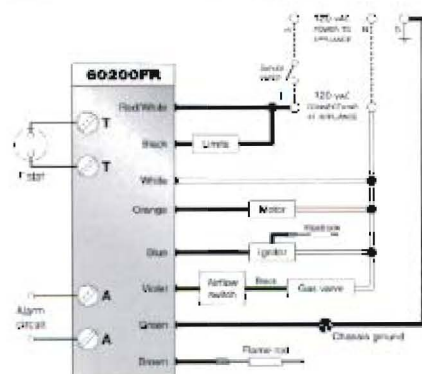
- Input**
..... 50,000 to 275,000 Btuh
- Fuels**
..... Natural gas or propane gas
Maximum supply pressure 14 inches w.c.
Minimum supply pressure 5.0 inches w.c.
Manifold pressure 3.5 inches w.c.
- Electrical**
Power 120 v ac/60 Hz/1-PHASE
Limit circuit input 120 v ac/60 Hz
Motor 1/15 HP, 3450 RPM
Current Approximately 2.0 AMPS
Fuel valve power 120 v ac/60 Hz
- Ignition**
Carlin Model 41800 solid state electronic ignitor
Ignition voltage 9,000 volts
- Control**
..... Carlin Model 60200FR microprocessor control
 - 4-sec. Trial for ignition (TFI)
 - 1.3-sec. FFRT
 - Pre-purge and post-purge
 - Serviceman reset protection (Latch-up after three consecutive lockouts)
 - Interrupted duty ignition
 - Recycle on flame failure
- Agencies**
UL Listed (United States) per ANSI Z21.17
MEA approval #137-05-E

Orifice selection

Input Btuh	Orifice drill size		Air band	
	Natural gas	Propane gas	Slots	Approximate Setting (note)
50,000	#19 (.166)	#32 (.116)	1	0 %
75,000	#11 (.191)	#26 (.147)	1	5 %
100,000	#1 (.228)	#16 (.177)	1	20 %
125,000	D (.246)	#9 (.196)	1	30 %
150,000	J (.277)	7/32 (.219)	2	20 %
175,000	N (.302)	C (.242)	2	30 %
200,000	2 1/16 (.328)	7/16 (.266)	2	35 %
225,000	T (.358)	9/16 (.281)	2	45 %
250,000	X (.397)	5/8 (.312)	2	55 %
275,000	7/8 (.437)	R (.339)	2	75 %

Note: Air band setting is approximate only. Follow burner manual and appliance manual instructions to adjust burner using combustion test instruments.

Wiring



TECH SUPPORT HOTLINE 800-989-2275



Carlin Combustion Technology, Inc.

70 Maple Street East Longmeadow, MA 01028 Phone 413-525-7700 Fax 413-525-8306
e-mail us at: info@carlincombustion.com visit our website: www.carlincombustion.com



series 8



More Cast Iron Means Better Performance

The 8 Series, with its rugged cast iron construction, offers commercial quality in a residential boiler. With cast iron sections, thicker and deeper than in other leading boilers, the 8 Series offers a multitude of performance advantages including higher heat retention, better combustion, quiet operation and superior steam performance. These high efficiency boilers offer exceptional efficiencies of over 85%.



Extra-deep Sections

The cast iron sections of the Smith 8 Series are an extra-deep 4 3/4 inches. These sections offer larger water content and increased water surface area in the boiler. Corrosion and mineral build-up is minimized and maximum heat transfer is maintained. This larger water content also reduces unnecessary make-up water in steam applications and quicker start-up is facilitated by better steam generation.

Thicker Walls and Higher Mass

The thicker walls and higher mass of the 8 Series boiler maintains a high water temperature for a greater length of time after the burner has stopped firing. This higher heat retention reduces short cycling for maximum efficiency.

Longer Combustion Chamber for Clean Combustion

With more room for the combustion process to occur, the longer chamber provides better, cleaner combustion. Decreased chance of flame impingement minimizes incomplete combustion and sooting. This longer chamber also reduces noise levels for quieter operation.

Quiet Rear Outlet Design

The rear outlet design of the 8 Series allows quieter operation. Designed to provide a sound attenuating effect much like that of a car muffler, the flue gases are routed through two turns before venting into the chimney. This advanced design offers notably reduced noise levels.

Built and Backed for a Lifetime

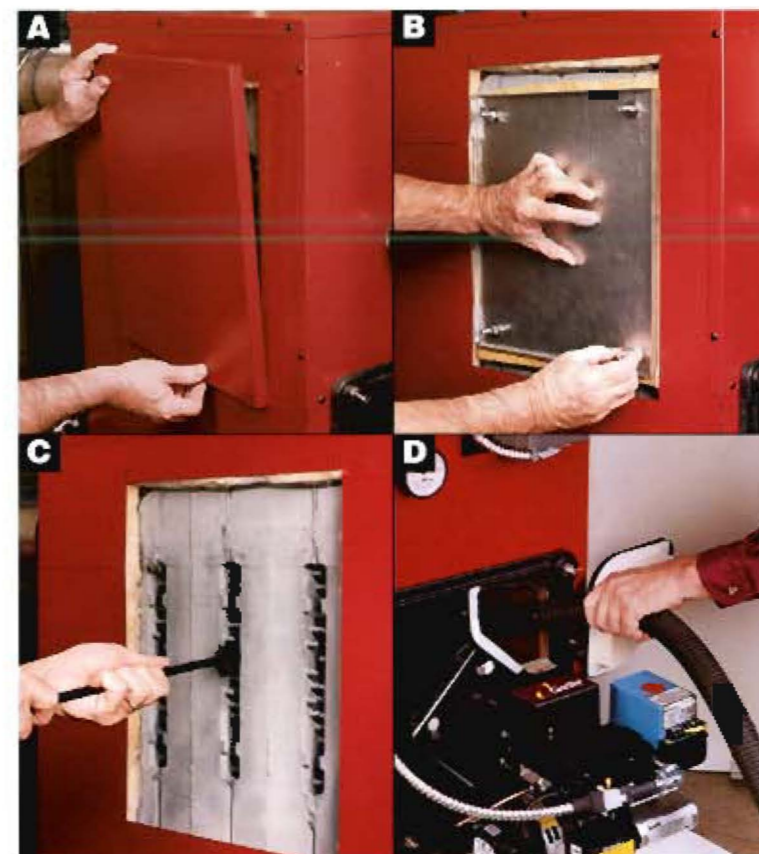
Without question, cast iron construction offers superior durability and longer life. Each 8 Series section is pressure tested and retested upon assembly. Your complete satisfaction on all 8 Series boilers is backed by a lifetime warranty* and our commitment to excellence.

**LIFETIME
WARRANTY**

*See warranty statement for complete details

Service Made Simple

Service the 8 Series is fast and easy with time-saving features such as the lift-off access panel, one piece ceramic cover plate and new swing out service hatch. Simply lift off the access panel (A), unscrew the wing nuts (B), use a standard flue brush to clean between the tapered section pins (C), and vacuum out the combustion chamber (D).



Domestic Hot Water

Enjoy ample low-cost domestic hot water without the expense of a separate water heater. Designed for installation in minutes and hassle-free removal for cleaning, the optional tankless heater is capable of producing up to 5 gallons of domestic hot water per minute.



STANDARD EQUIPMENT

Steam and Water

- Cast iron wet base sections
- Beckett AFG, Carlin EZ-Pro or Riello flame retention burner with nozzle
- Cast-iron smokehood
- Preformed target wall
- Cast-iron heater cover plate
- Wooden shipping crates

Steam Only

- Hi-limit pressure control
- A.S.M.E. safety relief valve (15 psi)
- Steam pressure gauge
- Gauge glass and fittings
- Low water cutoff HydroLevel CG-450 (CGT-450)

Water only

- Hydronic relay, hi-limit and circulator control
- A.S.M.E. relief valve (30 psi)
- Thermostat
- Taco circulator
- Brass drain cock

OPTIONAL EQUIPMENT

Steam and Water

- Two stage fuel unit

Steam Only

- Tankless heater (side mount). Includes operating temperature (low limit) control (L4007A)

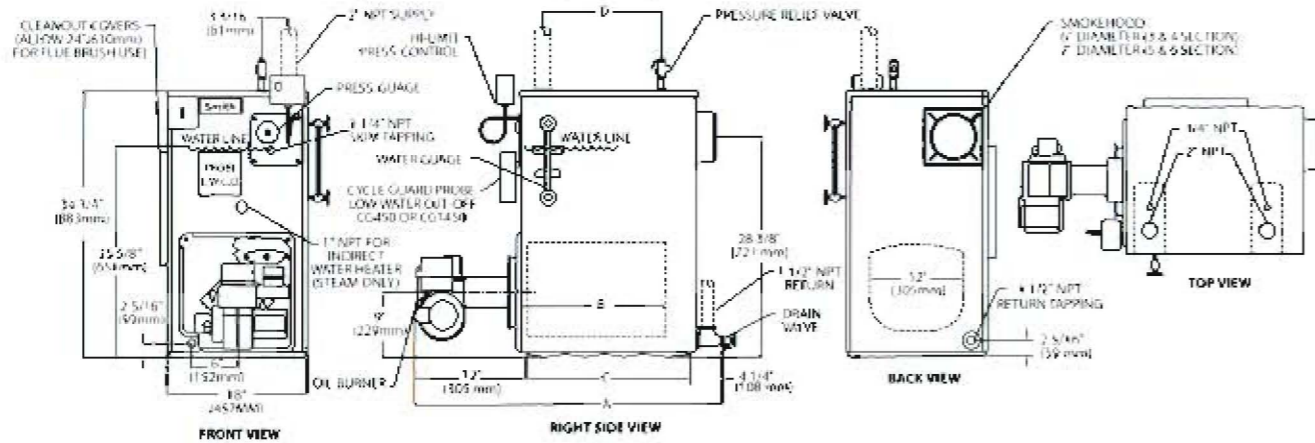
Water Only

- Tankless heater (front mount). Includes combination triple aquastat and circulator relay (L8124A)
- Less circulator

series 8

OIL FIRED RESIDENTIAL BOILER

Light Oil D.O.E. Heating capacity ratings 91,000 to 250,000 Btuh.



Ratings, Burner Capacities, Chimney Sizes, Dimensions

Boiler Model Number	D.O.E. Heating Capacity MBH	I=B=R Burner Capacity (Note 2) GPM			I=B=R Net Ratings (Note 1) MBH			Natural Draft Chimney (Note 3)	A.F.U.E. %		Overall Length (Inches) A	Chamber Length (Inches) B	Boiler Length (Inches) C	Distance Between Supply Pappings (Inches) D	Square Feet of Heating Surface	Chamber Volume (Cu. Ft.)	Water Content (Gal. for Steam)	Water Content (Gal. for Water)
		Water	Steam	St. Fl.	Water	Steam												
8"-3L	91	.75	105	79	68	283	8x8x18"	86.2	85.6	33"	13-3/8"	16-3/4"	10-3/4"	12.19	0.832	9.8	11.7	
8"-3H	113	.95	133	98	84	350	8x8x18"	84.1	83.4	33"	13-3/8"	16-3/4"	10-3/4"	12.19	0.832	9.8	11.7	
8"-4L	133	1.10	154	116	99	413	8x8x17"	86.2	85.5	37-3/4"	18-1/8"	21-1/2"	15-1/2"	17.55	1.128	12.3	15.1	
8"-4H	150	1.25	175	130	112	467	8x8x17"	85.4	84.7	37-3/4"	18-1/8"	21-1/2"	15-1/2"	17.55	1.128	12.3	15.1	
8"-5L	169	1.40	196	147	126	525	8x8x16"	86.2	85.3	42-1/2"	22-7/8"	26-1/4"	20-1/4"	22.91	1.423	14.9	18.5	
8"-5H	203	1.70	238	177	152	633	8x8x16"	85.1	84.5	42-1/2"	22-7/8"	26-1/4"	20-1/4"	22.91	1.423	14.9	18.5	
8"-6L	211	1.75	245	183	157	654	8x8x15"	86.2	85.1	47-1/4"	27-5/8"	31"	25"	28.29	1.719	17.4	21.9	
8"-6H	249	2.10	294	217	186	775	8x8x15"	84.8	84.3	47-1/4"	27-5/8"	31"	25"	28.29	1.719	17.4	21.9	

Standard Working Pressure 30 psi Water, 15 psi Steam. All Boilers Hydrostatically tested - A.S.M.E.

* Insert "s" for steam or "w" for water.
 (Note 1) Net ratings shown are based on an allowance of 1.333 for steam or 1.15 for water.
 (Note 2) Light oil having heat content of 140,000 BTU/Gal.
 (Note 3) Nominal clay tile liner dimensions.

In the interest of product improvement we reserve the right to make changes without notice.

Crated Outside Dimensions

Boiler Number	Length (Inches)	Width (Inches)	Height (Inches)
8"-3	33-1/2	22	37
8"-4	38-1/4	22	37
8"-5	43-1/4	22	37
8"-6	48	22	37



Tankless Water Heater Capacities

Boiler Sections	Firing Rate (GPM)	Intermittent Flow GPM (†)		Continuous Flow GPM (†)	
		Water	Steam	Water	Steam
8"-3L	.75	2.5	2.5	1.75	1.75
8"-3H	.95	2.5	2.5	2.0	2.0
8"-4L	1.00	3.3	3.3	2.5	2.5
8"-4H	1.25	3.3	3.5	2.9	2.9
8"-5L	1.35	3.8	3.5	3.3	3.0
8"-5H	1.65	4.5	3.5	3.9	3.0
8"-6L	1.75	4.6	3.5	4.0	3.0
8"-6H	2.00	5.0	3.5	4.9	3.0

†† Temperature (air 100°F, with boiler water at 180°F).

The manufacturer should be consulted before selecting a boiler for installations having unusual piping and pick-up requirements such as intermittent system operation, extensive piping systems, etc.

If draft over the fire exceeds .04" WC, or is required by local codes, barometric damper must be supplied by the installing heating contractor.

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 D.O.E. heating capacity. Before Purchasing this appliance, read important energy cost and efficiency information available from your retailer.

Smith

CAST IRON BOILERS



series 8

OIL FIRED RESIDENTIAL BOILER



Westcast, Inc., 260 North Elm Street, Westfield, MA 01085
 (413) 562-9631 • FAX: (413) 562-3799
 www.smithboiler.com

A MISTEK COMPANY