

City of Portland, Maine - Building or Use Permit Application

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

Permit No: 09-0254	Issue Date:	CBL: 373 A011001
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Location of Construction: 1667 WASHINGTON AVE	Owner Name: POWERS RALPH C	Owner Address: 1660 WASHINGTON AVE	Phone: 207-882-4043
Business Name:	Contractor Name: John Jicha	Contractor Address: PO Box 74 Edgcomb	Phone 2078824043
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	Zone: R5

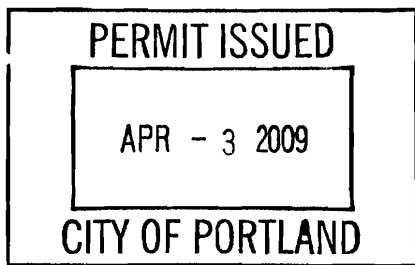
Past Use: Single Family Residence	Proposed Use: Single Family Residence - Install Burnham Oil Burner	Permit Fee: \$70.00	Cost of Work: \$5,000.00	CEO District: 5
		FIRE DEPT: <input type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: R3 Type: SB JRC 2003	

Proposed Project Description: Install Burnham Oil Burner	Signature:	Signature: Jm 4/2/09
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: lmd	Date Applied For: 03/31/2009	Zoning Approval
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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	Zoning Appeal	Historic Preservation
<input type="checkbox"/> Shoreland	<input type="checkbox"/> Variance	<input checked="" type="checkbox"/> Not in District or Landmark
<input type="checkbox"/> Wetland	<input type="checkbox"/> Miscellaneous	<input checked="" type="checkbox"/> Does Not Require Review
<input type="checkbox"/> Flood Zone <i>OK</i>	<input type="checkbox"/> Conditional Use	<input type="checkbox"/> Requires Review
<input type="checkbox"/> Subdivision	<input type="checkbox"/> Interpretation	<input type="checkbox"/> Approved
<input type="checkbox"/> Site Plan	<input type="checkbox"/> Approved	<input type="checkbox"/> Approved w/Conditions
Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/>	<input type="checkbox"/> Denied	<input type="checkbox"/> Denied
Date: Jm	Date:	Date: Jm



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.

SIGNATURE OF APPLICANT ADDRESS DATE PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE



FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

39-0254

373-A-011

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 1667 Washington Ave Use of Building private residence Date 3/27/09
 Name and address of owner of appliance John Ticha III PO Box 74
Edgcomb, ME 04556
 Installer's name and address John Ticha III PO Box 74
Edgcomb ME 04556 Telephone 882 4043

Location of appliance:
 Basement Floor
 Attic Roof

Type of Fuel: MAR 31 2009
 Gas Oil Solid

Appliance Name: Burnham 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 # MS 30005489
 Gas # _____
 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 275

Number of Tanks 1

Distance from Tank to Center of Flame 17' feet.

Cost of Work: \$ 5,000

Permit Fee: \$ _____

Approved

Approved with Conditions

Fire: _____
 Ele.: _____
 Bldg.: _____

See attached letter or requirement

Inspector's Signature

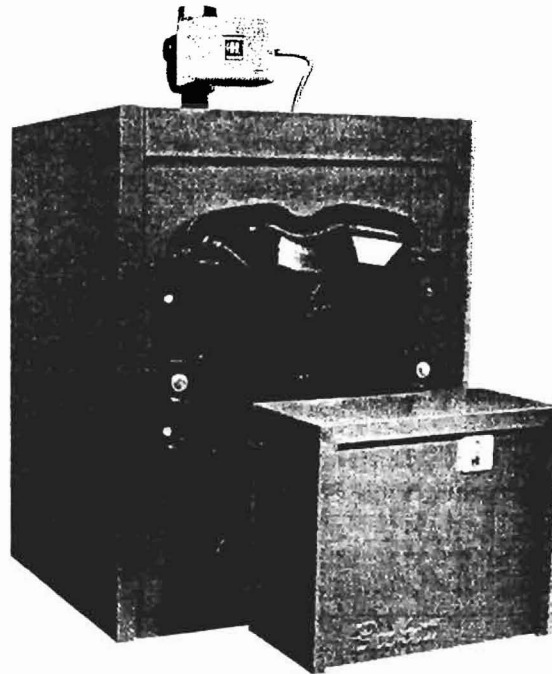
Date Approved

Signature of Installer

White - Inspection Yellow - File Pink - Applicant's Gold - Assessor's Copy

INSTALLATION, OPERATING AND SERVICE INSTRUCTIONS FOR

MPO[®] 3-PASS OIL BOILER



For service or repairs to boiler, call your heating contractor or oil supplier. When seeking information on boiler, provide Boiler Model Number and Serial Number as shown on Rating Label located on top of the boiler.

Boiler Model Number MPO	Boiler Serial Number	Installation Date
Heating Contractor		Phone Number
Address		



IMPORTANT INFORMATION - READ CAREFULLY

All boilers must be installed in accordance with National, State and Local Plumbing, Heating and Electrical Codes and the regulations of the serving utilities. These Codes and Regulations may differ from this instruction manual. Authorities having jurisdiction should be consulted before installations are made.

In all cases, reference should be made to the following Standards:

USA BOILERS

- A. Current Edition of American National Standard ANSI/NFPA 31, "Installation of Oil Burning Equipment", for recommended installation practices.
- B. Current Edition of American National Standard ANSI/NFPA 211, "Chimneys, Fireplaces, Vents, and Solid Fuel Burning Appliances", For Venting requirements.
- C. Current Edition of American Society of Mechanical Engineers ASME CSD-1, "Controls and Safety Devices for Automatically Fired Boilers", for assembly and operations of controls and safety devices.
- D. All wiring on boilers installed in the USA shall be made in accordance with the National Electrical Code and/or Local Regulations.

CANADIAN BOILERS

- A. Current Edition of Canadian Standards Association CSA B139, "Installation Code for Oil Burning Equipment", for recommended Installation Practices.
- B. All wiring on boilers installed in Canada shall be made in accordance with the Canadian Electrical Code and/or Local Regulations.

The following terms are used throughout this manual to bring attention to the presence of hazards of various risk levels, or to important information concerning product life.

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death, serious injury or substantial property damage.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury or property damage.

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death, serious injury or substantial property damage.

NOTICE

Indicates special instructions on installation, operation, or maintenance which are important but not related to personal injury hazards.

NOTICE

This boiler has a limited warranty, a copy of which is printed on the back of this manual. The warranty for this boiler is valid only if the boiler has been installed, maintained and operated in accordance with these instructions.

Surface rust on cast iron sections may be attributed to the manufacturing process as well as condensation during storage. Surface rust is normal and does not affect the performance or longevity of a boiler.

DANGER

DO NOT store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Failure to follow all instructions in the proper order can cause personal injury or death. Read and understand all instructions, including all those contained in component manufacturers manuals which are provided with the appliance before installing, starting-up, operating, maintaining or servicing this appliance. Keep this manual and literature in legible condition and posted near appliance for reference by owner and service technician.

This boiler requires regular maintenance and service to operate safely. Follow the instructions contained in this manual.

Installation, maintenance, and service must be performed only by an experienced, skilled and knowledgeable installer or service agency.

All heating systems should be designed by competent contractors and only persons knowledgeable in the layout and installation of hydronic heating systems should attempt installation of any boiler.

Installation is not complete unless a pressure relief valve is installed into the 3/4" tapping located on return manifold that was installed into boss on top of rear section - See "Packaged Boiler Assy - Trim & Controls", "Unit-Pak Boiler Assy - Trim & Controls" and "Water Boiler Piping" Sections of this manual for details.

It is the responsibility of the installing contractor to see that all controls are correctly installed and are operating properly when the installation is completed.

This boiler is suitable for installation on combustible flooring. Do not install boiler on carpeting.

Do not tamper with or alter the boiler or controls.

Inspect flueways at least once a year - preferably at the start of the heating season. The inside of the combustion chamber, the vent system and boiler flueways should be cleaned if soot or scale has accumulated.

When cleaning this boiler, take precaution to avoid damage to burner swing door insulation. If damaged, or if there is evidence of previous damage, burner swing door insulation must be replaced immediately.

Oil Burner and Controls must be checked at least once a year or as may be necessitated.

Do not operate unit with jumpered or absent controls or safety devices.

Do not operate unit if any control, switch, component, or device has been subject to water.

Appliance materials of construction, products of combustion and the fuel contain alumina, silica, heavy metals, carbon monoxide, nitrogen oxides, aldehydes and/or other toxic or harmful substances which can cause death or serious injury and which are known to the state of California to cause cancer, birth defects and other reproductive harm. Always use proper safety clothing, respirators and equipment when servicing or working nearby the appliance.

WARNING

This boiler contains very hot water under high pressure. Do not unscrew any pipe fittings nor attempt to disconnect any components of this boiler without positively assuring the water is cool and has no pressure. Always wear protective clothing and equipment when installing, starting up or servicing this boiler to prevent scald injuries. Do not rely on the pressure and temperature gauges to determine the temperature and pressure of the boiler. This boiler contains components which become very hot when the boiler is operating. Do not touch any components unless they are cool.

This boiler must be properly vented. The chimney must be inspected for any obstructions and cleaned prior to each heating season. A clean and unobstructed chimney flue is necessary to produce the minimum draft required to safely evacuate noxious fumes that could cause personal injury or loss of life. Evidence of loose debris and or condensate induced stains at the base of the chimney flue, connector or smokepipe joints may be signs of condensing flue gases. Flue gas condensate is corrosive, which requires special consideration and must be addressed immediately. Refer to Section VI, "Venting" or Section VII "Direct Venting / Air Intake Piping".

This boiler needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

This boiler is supplied with controls which may cause the boiler to shut down and not re-start without service. If damage due to frozen pipes is a possibility, the heating system should not be left unattended in cold weather; or appropriate safeguards and alarms should be installed on the heating system to prevent damage if the boiler is inoperative.

This boiler is designed to burn No. 2 fuel oil only. Do not use gasoline, crankcase drainings, or any oil containing gasoline. Never burn garbage or paper in this boiler. Do not convert to any solid fuel (i.e. wood, coal). Do not convert to any gaseous fuel (i.e. natural gas, LP). All flammable debris, rags, paper, wood scraps, etc., should be kept clear of the boiler at all times. Keep the boiler area clean and free of fire hazards.

All boilers equipped with burner swing door have a potential hazard which, if ignored, can cause severe property damage, personal injury or loss of life. Before opening swing door, unplug burner power cord from receptacle located in lower right corner of jacket front panel and turn off service switch to boiler to prevent accidental firing of burner outside the combustion chamber. Be sure to tighten swing door fasteners completely when service is completed.

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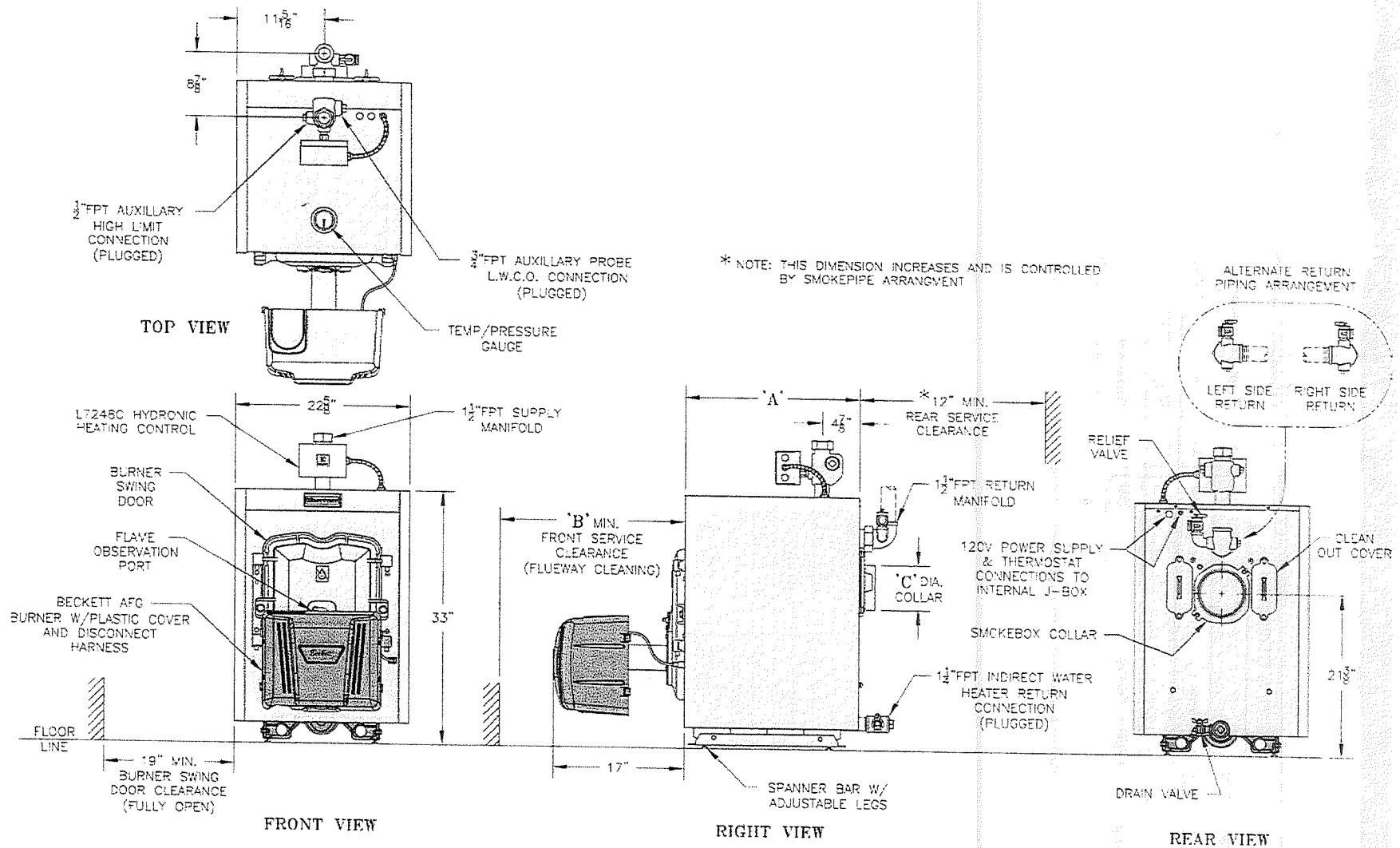


Figure 1: MPO 84 Thru MPO 231 Water Boiler

NOTICE

Clearance to venting is for single wall vent pipe. If Type L vent is used, clearance may be reduced to the minimum required by the vent pipe manufacturer.

C. PROVIDE COMBUSTION AND VENTILATION

AIR. Local and National Codes may apply and should be referenced.

WARNING

Adequate combustion and ventilation air must be provided to assure proper combustion and to maintain safe ambient air temperatures.

Do not install boiler where gasoline or other flammable vapors or liquids, or sources of hydrocarbons (i.e. bleaches, fabric softeners, etc.) are used or stored.

1. Determine volume of space (boiler room). Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the space.
Volume(ft³) = Length(ft) x Width(ft) x Height(ft)
2. Determine total input of all appliances in the space. Add inputs of all appliances in the space and round the result to the nearest 1000 BTU per hour.
3. Determine type of space. Divide Volume by total input of all appliances in space. If the result is greater than or equal to 50 ft³/1000 BTU per hour, then it is considered an *unconfined space*. If the result is less than 50 ft³/1000 BTU per hour then the space is considered a *confined space*.
4. For boiler located in an *unconfined space of a conventionally constructed building*, the fresh air infiltration through cracks around windows

and doors normally provides adequate air for combustion and ventilation.

5. For boiler located in a confined space or an unconfined space in a building of *unusually tight construction*, provide outdoor air.

- a. Outdoor air for combustion may be provided with an optional Burnham V8H™ Fresh Air Accessory Kit (**ONLY AVAILABLE WITH BECKETT BURNER**). Metal cover applications, P/N 611280031. Plastic cover applications, P/N 102119-01. Refer to Fresh Air Accessory Kit instructions for installation and air intake piping details. See Section VI for installation details.

or

- b. Outdoor air may be provided with the use of two permanent openings which communicate directly or by duct with the outdoors or spaces (crawl or attic) freely communicating with the outdoors. Locate one opening within 12 inches of top of space. Locate remaining opening within 12 inches of bottom of space. Minimum dimension of air opening is 3 inches. Size each opening per following:

- i. **Direct communication with outdoors.**

Minimum free area of 1 square inch per 4,000 BTU per hour input of all equipment in space.

- ii. **Vertical ducts.** Minimum free area of 1 square inch per 4,000 BTU per hour input of all equipment in space. Duct cross-sectional area shall be same as opening free area.

- iii. **Horizontal ducts.** Minimum free area of 1 square inch per 2,000 BTU per hour input of all equipment in space. Duct cross-sectional area shall be same as opening free area.

Alternate method for boiler located within confined space. Use indoor air if two permanent openings communicate directly

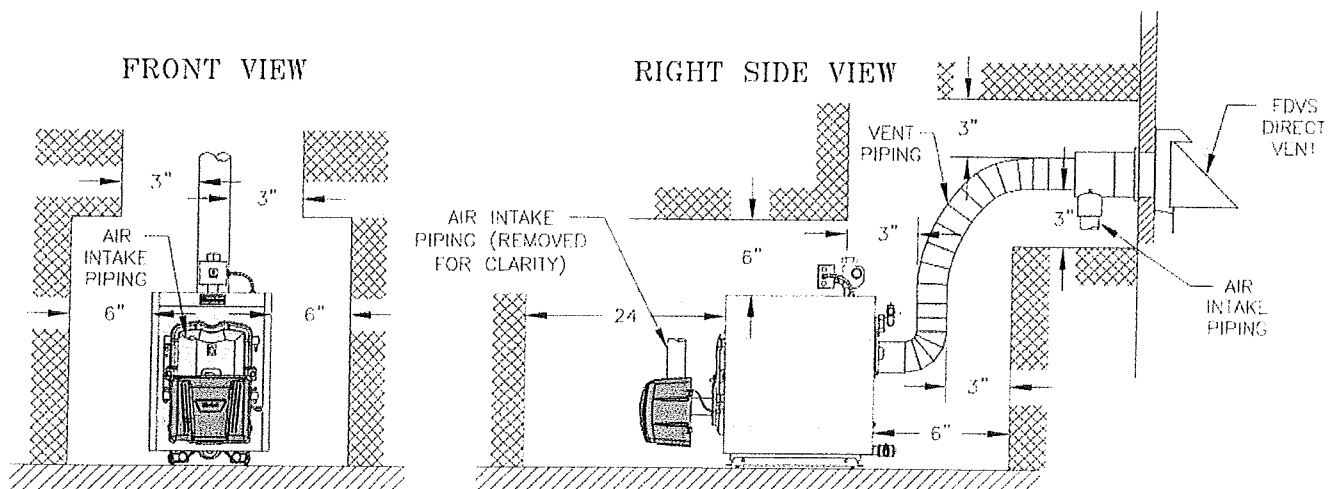


Figure 2B: Direct Vent Minimum Installation Clearances To Combustible Materials (Inches)

TABLE 1A: DIMENSIONAL DATA (SEE FIGURE 1)

Boiler Model No.	Dimensions See Figure 1			Water Content - Gallons	Heat Transfer Surface Area - Sq. Ft.	Actual Shipping Weight (LB.)
	"A"	"B"	"C"			
MPO84	16-5/8"	24"	5"	7.70	13.29	430
MPO115	16-5/8"	24"	5"	7.70	13.29	430
MPO147	22-5/8"	24"	6"	11.08	20.29	545
MPO189	28-5/8"	30"	6"	14.46	27.29	658
MPO231	34-5/8"	36"	7"	17.84	34.29	771

NOTE: 1. Maximum Working Pressure: Water: 30 PSI Shipped From Factory (Standard),
40 PSI Optional, 50 PSI Optional

TABLE 1B: RATING DATA

Boiler Model No.	Burner Capacity			I=B=R NET Ratings	Minimum Chimney Requirements			Direct Vent System		AFUE %
	GPH	MBH	DOE Heating Capacity MBH	Water MBH	Round In. Dia.	Rectangle In. x In.	Height Ft.	Model	Vent Connector Dia. Inch	Water Boiler
MPO84	0.60	84	74	64	6	8 x 8	15		N/A	87
MPO115	0.82	115	101	87	6	8 x 8	15		N/A	87
MPO147	1.05	147	129	112	6	8 x 8	15	FDVS-56	5	87
MPO189	1.35	189	167	145	7	8 x 8	15	FDVS-56	5	87
MPO231	1.65	231	203	177	7	8 x 8	15	FDVS-67	6	87

City of Portland, Maine - Building or Use Permit

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

Permit No: 09-0254	Date Applied For: 03/31/2009	CBL: 373 A011001
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Location of Construction: 1667 WASHINGTON AVE	Owner Name: POWERS RALPH C	Owner Address: 1660 WASHINGTON AVE	Phone: 207-882-4043
Business Name:	Contractor Name: John Jicha	Contractor Address: PO Box 74 Edgecomb	Phone (207) 882-4043
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	

Proposed Use: Single Family Residence - Install Burnham Oil Burner	Proposed Project Description: Install Burnham Oil Burner
--	--

Dept: Zoning **Status:** Approved **Reviewer:** Tom Markley **Approval Date:** 04/02/2009

Note: **Ok to Issue:**

- 1) 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.
- 2) This property shall remain a single family dwelling. Any change of use shall require a separate permit application for review and approval.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tom Markley **Approval Date:** 04/02/2009

Note: **Ok to Issue:**

- 1) Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approval prior to work.
- 2) Installation shall comply with 2003 International Mechanical Code and State of Maine Oil and Solid Fuel Board Laws and Rules

Comments:

4/2/2009-Ldobson: Prop owner number - 850-543-1350 devin