

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

Permit No: 09-0676	Issue Date:	CBL: 125 C005001
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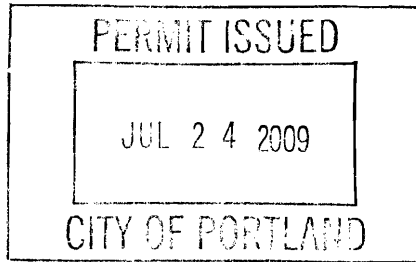
Location of Construction: 172 COYLE ST	Owner Name: STICKNEY PAUL F & KAREN J J	Owner Address: 2 BLOCKHOUSE RUN	Phone: 207-232-7525
Business Name:	Contractor Name: Heating Solutions	Contractor Address: PO Box 129 Buxton	Phone: 2072327525
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	Zone:

Past Use: Two Family Residential	Proposed Use: Two Family Residential - Install a Peerless Gas Boiler	Permit Fee: \$90.00	Cost of Work: \$6,582.00	CEO District: 3
Proposed Project Description: Install a Peerless Gas Boiler		FIRE DEPT: <input type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: <i>R3</i> Type: <i>HVAC</i> <i>IRC 2103</i> <i>ST ME GAS REGS</i> Signature: <i>Jm 7/10/09</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: lmd	Date Applied For: 06/30/2009	Zoning Approval
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- This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
- Building permits do not include plumbing, septic or electrical work.
- 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 <i>OK</i> <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/> Date: <i>Jm 7/1/09</i>	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 Date: _____	Historic Preservation <input checked="" type="checkbox"/> Not in District or Landmark <input checked="" 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>Jm</i>
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CERTIFICATION

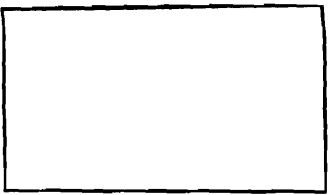
I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, 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



125.C.005

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 172 Coyle St Portland Use of Building Rental Date 6/26/09
Name and address of owner of appliance Karen Strickney 2 Blockhouse Run Gorham me 04038

Installer's name and address Heating Solutions Po Box 129 Buxton me 04093
232-7525 Telephone 529-5538-232-7525

Location of appliance:
 Basement Floor
 Attic Roof

Type of Fuel:
 Gas Oil Solid

Appliance Name: Peerless
 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 # _____
 Gas # PNT 808
 Other _____

Type of Chimney:
 Masonry Lined
 Factory built _____

Metal
 Factory Built U.L. Listing # _____

Direct Vent
 Type _____ UL# _____

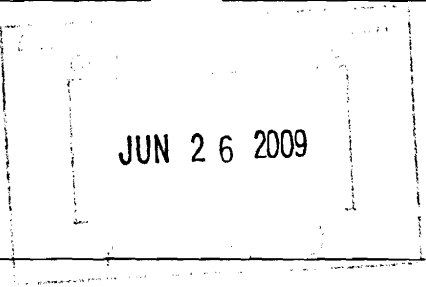
Type of Fuel Tank
 Oil
 Gas

Size of Tank _____

Number of Tanks _____

Distance from Tank to Center of Flame _____ feet.

Cost of Work: \$ 6,582
 Permit Fee: \$ _____



Approved

Fire: _____
 Ele.: _____
 Bldg.: _____

Approved with Conditions
 See attached letter or requirement

Inspector's Signature _____ Date Approved _____

Signature of Installer [Signature]

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

City of Portland, Maine - Building or Use Permit

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Permit No: 09-0676	Date Applied For: 06/30/2009	CBL: 125 C005001
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Business Name:	Contractor Name: Heating Solutions	Contractor Address: PO Box 129 Buxton	Phone: (207) 232-7525
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	

Proposed Use: Two Family Residential - Install a Peerless Gas Boiler	Proposed Project Description: Install a Peerless Gas Boiler
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Dept: Zoning	Status: Approved	Reviewer: Tom Markley	Approval Date: 07/01/2009
Note:			Ok to Issue: <input checked="" type="checkbox"/>
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.			
Dept: Building	Status: Approved with Conditions	Reviewer: Tom Markley	Approval Date: 07/01/2009
Note:			Ok to Issue: <input checked="" type="checkbox"/>
1) The installation must comply with the State of Maine Gas Regulations.			
2) Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approval prior to work.			

Fax

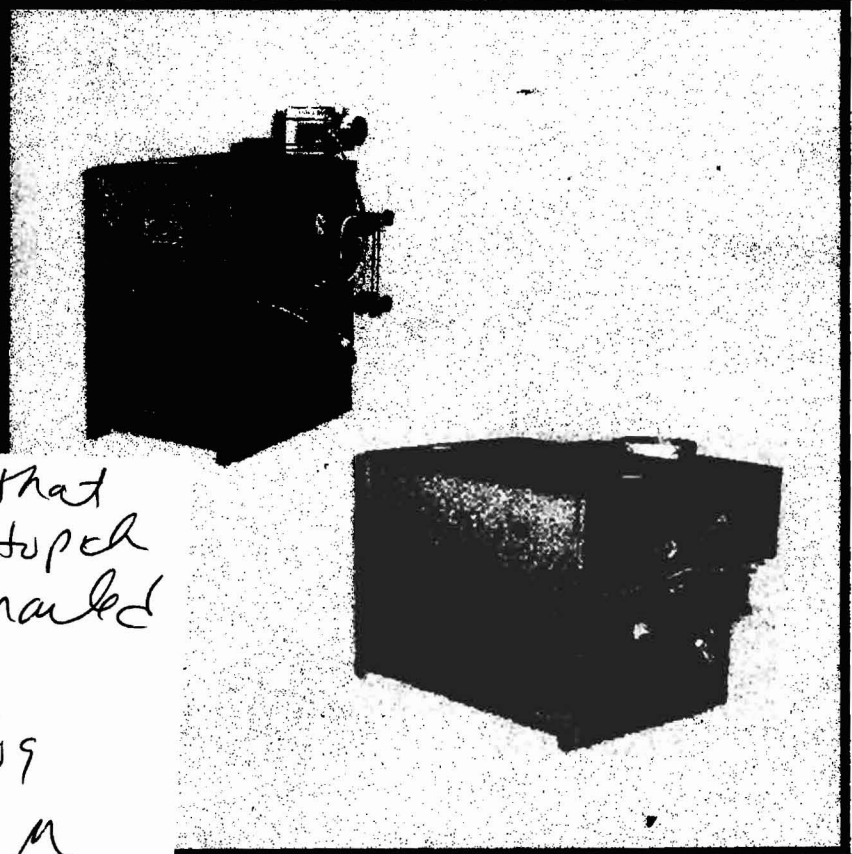
FROM: Heating Solutions LLC

TO: *Lisa Danforth*

*Instruction manual for Karen Stickney
172 Coyle St Heating Permit*

Series 63/64

Gas Boilers



Called + LM that
 permit ready to pick
 up or to be mailed
 to Contractor.

7/1/09

Tom M
 no permit

Installation, Operation & Maintenance Manual



PeerlessBoilers.com

VENTING

CHIMNEY OR VENT

1. Inspect the existing chimney or vent system. Make sure it is in good condition. Inspect chimney liner and repair or replace if necessary.
2. The vent system and installation must be in accordance with Venting of Equipment chapter of the current edition of the *National Fuel Gas Code*, ANSI Z223.1/NFPA 54, or applicable provisions of the local building codes.
3. **Chimney/Vent Operation:** The vent system must be sized and installed to provide the draft needed to remove all combustion products. If the vent system does not provide enough draft, combustion products will spill into the building from the draft hood relief opening. If spillage of combustion products occurs, check the vent system, the combustion and ventilation openings and make sure the boiler room is never under negative pressure.

WARNING

Use to provide adequate venting can result in personal injury or death.

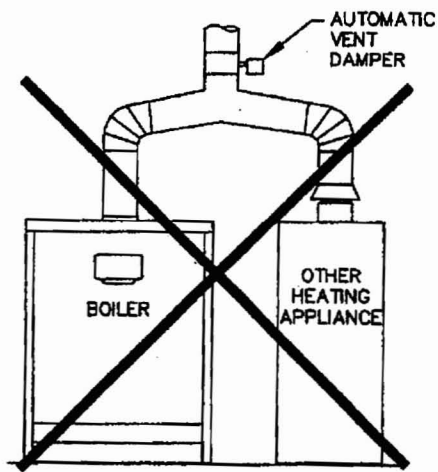
4. **Vent Connection to Boiler:**
 - a. Support the weight of the vent system independently of the boiler draft hood. The draft hood is not designed to carry structural loading.
 - b. Provide support of the vent connector (breaching) at maximum 12 foot intervals to prevent sagging and to provide a minimum upward slope of 1/4" per foot.

- c. Do not connect the vent for this boiler into any vent system which operates with positive pressure.
- d. The vent connector must be single wall steel or Type B double wall vent pipe. The vent connector must be Type B double wall if it is located in or passes through cold areas. The vent connector must extend into, but not beyond, the inside wall of the chimney.

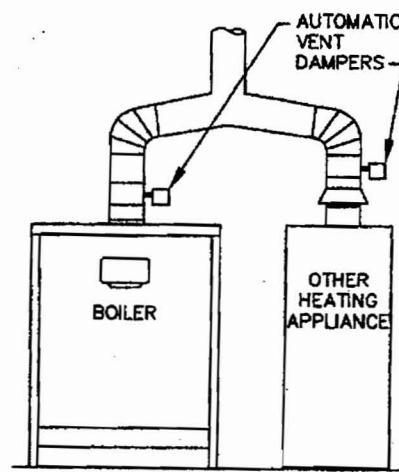
B. AUTOMATIC VENT DAMPER INSTALLATION - GENERAL

1. Do not use one vent damper to control two or more heating appliances. See Figure 3.1.
2. Follow these and the installation instructions included with the vent damper. Observe the cautions and warnings that accompany all instructions.
3. Provide minimum 6 inch (152 mm) clearance between automatic vent damper and combustible construction. Increase clearance if required by vent damper manufacturer's instructions. Provide adequate space for vent damper access and service.
4. The automatic vent damper can be mounted directly onto the draft hood outlet or in vent piping close to the boiler.

See Figure 3.2 for installation with vent damper mounted in vertical position. See Figure 3.3 for installation with vent damper mounted in horizontal position. Mount the unit to avoid excessive heat on the operator or condensation drips into the operator.



INCORRECT



CORRECT

Figure 3.1: Venting Multiple Appliances

PREINSTALLATION

4. **Outdoor Combustion Air:** Outdoor combustion air is to be provided through one or two permanent openings. The minimum dimension of these air openings is 3 inches (76 mm).

a. **Two Permanent Opening Method:** Provide two permanent openings. One opening is to begin within 12 inches (305 mm) of the top of the space and the other is to begin within 12 inches (305 mm) of the floor. The openings are to communicate directly or by ducts with the outdoors or with spaces that freely communicate with the outdoors. The size of the openings are to be determined as follows:

i. Where communicating directly or through vertical ducts with the outdoors each opening shall have a minimum free area of 1 in² per 4000 Btu/hr (22 cm² per 4000 W) of total input rating for all equipment in the space. See Figure 1.3 for openings directly communicating with the outdoors or Figure 1.4 for openings connected by ducts to the outdoors.

ii. Where communicating with the outdoors through horizontal ducts, each opening shall have a minimum free area of 1 in² per 2000 Btu/hr (22 cm² per 2000 W) of total rated input for all appliances in the space. See

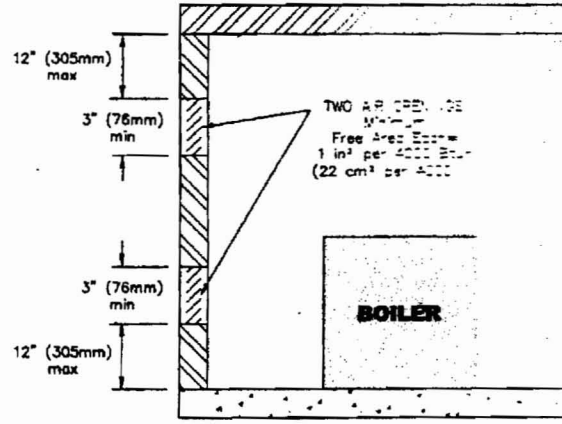


Figure 1.3: Air Openings - All Air Directly from Outdoors

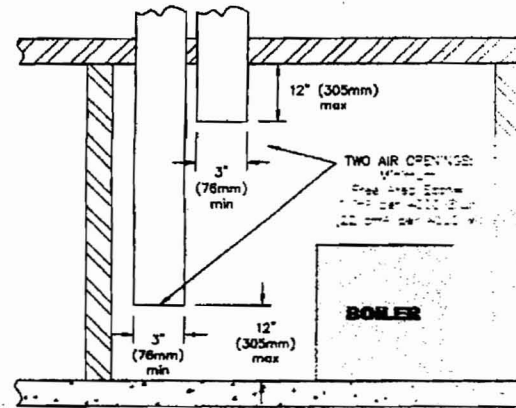


Figure 1.4: Air Openings - All Air from Outdoors through Vertical Ducts

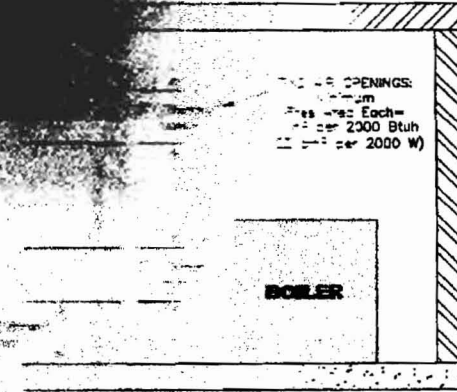


Figure 1.5: Air Openings - All Air from Outdoors through Horizontal Ducts

b. **One Permanent Opening Method:** Provide one permanent opening beginning within 12 inches (305 mm) of the top of the space. The opening shall communicate directly with the outdoors through a vertical or horizontal duct or communicate with a space that freely communicates with the outdoors. The opening shall have a minimum free area of 1 in² per 2000 Btu/hr of total rated input for all appliances in the space and not less than the sum of the cross-sectional areas of all vent components in the space. The gas-fired equipment shall have clearances of at least 1 inch (25 mm) from the sides and back and 6 inches (150 mm) from the front of the appliance. See Figure 1.6 for this arrangement.

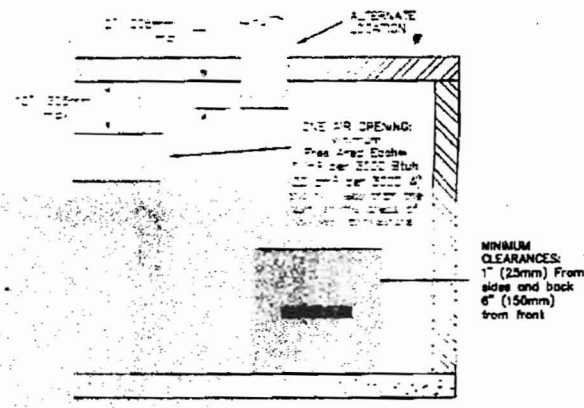


Figure 1.6: Air Openings - All Air from Outdoors through One Opening

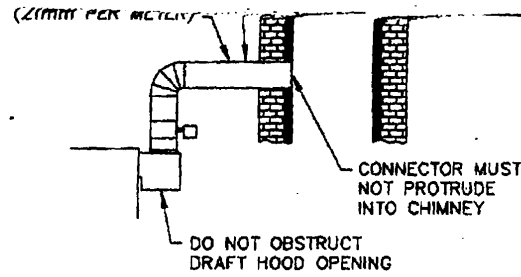


Figure 3.2: Venting with Vent Damper in Vertical Position

C. BOILER REMOVAL FROM COMMON VENTING SYSTEM

When an existing boiler is removed from a common venting system, the common venting system is likely to be too large for proper venting of the remaining appliances connected to it.

At the time of removal of an existing boiler, follow these steps with each appliance remaining connected to the common venting system placed in operation, while the other appliances remaining connected to the common venting system are not in operation:

- Follow the lighting instructions. Adjust thermostat so appliance will operate continuously.
- e. Test for spillage at the draft hood relief opening after 5 minutes of main burner operation. Use the flame of a match or candle, or smoke from a cigarette, cigar, or pipe.
- f. After it has been determined that each appliance remaining connected to the common venting system properly vents when tested as outlined above, return doors, windows, exhaust fans, fireplace dampers and any other gas-burning appliance to their previous conditions of use.
- g. Any improper operation of the common venting system should be corrected so that the installation conforms with the *National Fuel Gas Code*, ANSI Z223.1/NFPA 54 or CAN/CGA B149 Installation Codes. When resizing any portion of the common venting system, the common venting system should be resized to approach minimum size as determined using the appropriate tables located in the chapter: "Sizing of Category I Venting Systems," of the *National Fuel Gas Code*, ANSI Z223.1/NFPA 54 or CAN/CGA B149 Installation codes.

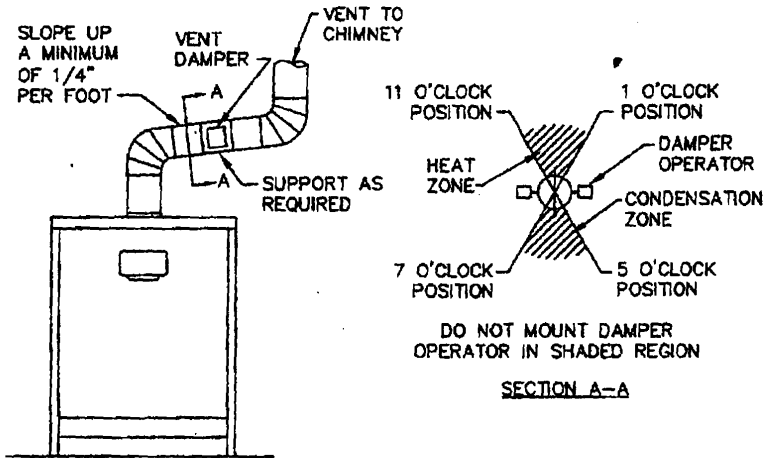


Figure 3.3: Venting with Vent Damper in Horizontal Position

BOILER PIPING

B. WATER BOILER PIPING - MULTIPLE BOILERS

Refer to the *PB Heat Water Installation Survey and Hydronics Institute Residential Hydronic Heating Installation Design Guide* for guidance on multiple boiler installations.

C. STEAM BOILER PIPING - SINGLE BOILERS

1. Refer to the *PB Heat Steam Installation Survey and Hydronics Institute Residential Hydronic Heating Installation Design Guide* for guidance.
2. Install steam supply pipes as shown in Figure 4.3 for Model 63-03 to 64-07 and Figure 4.4 for Model 64-08 to 64-12. The minimum quantity and size of supply pipes are indicated in Table 4.1.

Use Threaded Fittings for Manifold Piping

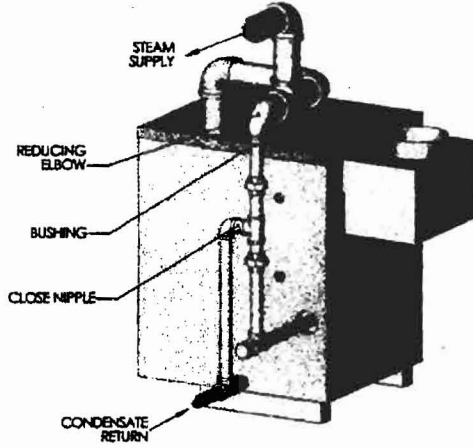


Figure 4.3: Steam Piping - Single Supply Connection

NOTICE
Use swing joints to attach to the header to avoid damage to the boiler due to thermal expansion and contraction of steam header pipe.

3. Pipe the steam header a minimum of 24" above the normal water line using swing joints to attach the risers into the steam header.

Use Threaded Fittings for Manifold Piping

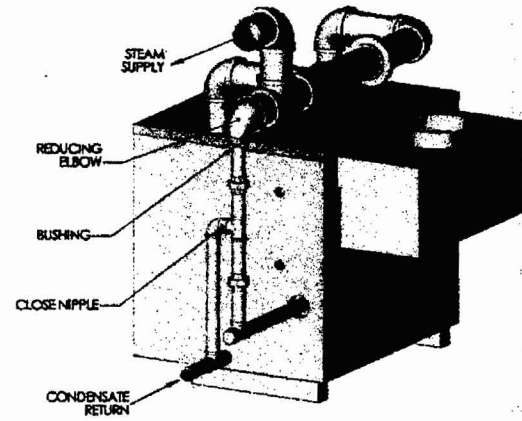


Figure 4.4: Steam Piping - Dual Supply Connections

NOTICE

- Do not use bushings or concentric reducers in the horizontal header piping. This will prevent water from dropping into the equalizer and cause water carryover into the steam piping.
- Do not reduce the size or number of steam supply risers below the minimum shown in Table 4.1. Insufficient or undersized risers can cause damage to the boiler.
- Do not use a bullhead tee to provide steam supply to the system. This will cause water carryover into the steam piping.

4. Use threaded fittings for manifold piping to provide flexibility for thermal expansion.
5. Connect the equalizing line as shown in Figure 4.3 or 4.4 assuring that the reducing elbow is facing down and that any bushings are vertical to prevent water build-up in the steam header.