City of Portland, N	Iaine - Buil	lding or Use	Permi	t Application	n Permit No:	Issue Dat	e:	CBL:	
389 Congress Street,		-				63		062 F0	03001
Location of Construction:		Owner Name:			Owner Address:	<u></u> _		Phone:	
21 THOMAS ST		STEVENS DO	ORIS J		21 THOMAS	ST			
Business Name:	-	Contractor Name	e:		Contractor Addi	ress:		Phone	
		Caron & Walt	z		321 Lincoln S	Street South Po	rtland	20779922	228
Lessee/Buyer's Name		Phone:			Permit Type:			Zone:	
					HVAC				166
Past Use:	<u>=</u>	Proposed Use:		-	Permit Fee:	Cost of Wo	rk:	CEO District:	<u> </u>
Single Family Home		Single Family	Home	- install a new	\$160.0	00 \$13,5	00.00	2	
		Burnham Inde	penden	ce IN9	FIRE DEPT:	Approved	INSPE	CTION:	HVA
						Denied	Use Gr	oup: <i>R</i> 3	Type: 5B
						Defiled			_
								20 200° ME GAS / Ire: Dw/10	3,
Proposed Project Description	on:	<u> </u>			1		5	ME GAS	Cogy la J
install a new Burnham	Independence	IN9			Signature:		Signatu	re: 2)~ ((1/27/02
					PEDESTRIAN A	CTIVITIES DIS	TRICT (F	P.A.D.)	-1 -1 -1 -10
					Action: A	pproved	nroved w/	Conditions	Denied
					Action. A	pploved A	proved w	Conditions	Demed
					Signature:			Date:	
Permit Taken By:	Date A	pplied For:			Zon	ing Approv	al		
ldobson	10/27	7/2008							
1. This permit applica	ation does not	preclude the	Spe	cial Zone or Revie	ews 2	Zoning Appeal		Historic Preservation	
Applicant(s) from Federal Rules.			Sł	oreland	☐ Vai	riance		Not in Distri	ct or Landmar
2. Building permits do not include plumbing, septic or electrical work.			Wetland		☐ Mis	☐ Miscellaneous		Does Not Require Review	
3. Building permits a within six (6) month	re void if work		☐ Fl	ood Zone $\left(O^{\mathcal{X}} \right)$	Con	nditional Use		Requires Rev	view
False information repermit and stop all		a building	∏ Su	ıbdivision	☐ Inte	erpretation		Approved	
			☐ Si	te Plan	□ Арј	proved		Approved w/	/Conditions
D.C.	25 A ST 10 C I I	rn T	Maj [Minor MM	Der	nied		Denied	
PET	<u>rmit issu</u>	EU	Date:	h	- Date:		D	ate: has 1	/>>
		1 1	Date.	am 10/27	Date.			arc. Jyn 101	17
0	CT 27 .							•	
CITY	OF PORTI	IAND							
UIII	U. I U.AA								
			C	CERTIFICATI	ON				
I hereby certify that I an									
I have been authorized b									
jurisdiction. In addition shall have the authority									
such permit.	wii wie	00 1010u 07 30	peri	at any rouser		no prov	.5.011 01	00 a0(0) up	F
•									
OLOMATURE OF ARRIVES	AITT			ADDRES				DITO	NIE .
SIGNATURE OF APPLICAT	NI			ADDRES	5	DATI	3	PHC	INE
RESPONSIBLE PERSON IN	CHARGE OF W	ORK, TITLE		_		DATI	Ξ	PHO)NE

City of Portland, M	Iaine - Bui	ilding or Use Permi	t		Permit No:	Date Applied For:	CBL:	
389 Congress Street, (04101 Tel:	(207) 874-8703, Fax: ((207) 874-87	16	08-1363	10/27/2008	062	F003001
Location of Construction:		Owner Name:		Ov	wner Address:		Phone:	
21 THOMAS ST		STEVENS DORIS J		2	1 THOMAS ST			
Business Name:		Contractor Name:		Co	ontractor Address:		Phone	
		Caron & Waltz		3	21 Lincoln Street	South Portland	(207)	799-2228
Lessee/Buyer's Name		Phone:		Pe	rmit Type:			
_				I	HVAC			
Proposed Use:		 -	Propo	osed 1	Project Description:			
Single Family Home -	install a new	Burnham Independence l	IN9 insta	all a	new Burnham Ind	dependence IN9		
Dept: Zoning	Status:	Approved	Reviewe	er:	Tom Markley	Approval D	ate:	10/27/2008
Note:							Ok to	Issue: ✓
1) This property shall:	remain a sing	le family dwelling. Any	change of use	shall	l require a separat	te permit application	for rev	iew and
approval.		, og,,	80 . 1					
Dept: Building	Status:	Approved with Condition	ns Reviewe	er:	Tom Markley	Approval D	ate:	10/27/2008
Note:							Ok to	Issue: 🗹
1) The installation mus	st comply wit	h the State of Maine Gas	Regulations.					
2) Application approva	al based upor	information provided by	v applicant Ar	nv de	eviation from ann	roved plans requires	senarat	re review
and approrval prior		i miorination provided by	, applicant. Th	., u		a piano requires	- Pui ui	



APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

White - Inspection

Yellow - File

Pink - Applicant's

Gold - Assessor's Copy

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 21 THOMAS STREET Name and address of owner of appliance PAUL STEVEN	Use of Building Date
Installer's name and address CANONT WALTZ SO-PORTUND	
Location of appliance: Basement Floor Roof Attic Roof Type of Fuel: A Gas Oil Solid Appliance Name: Ban N HAM INDEFENDENT INDEFENDEN	Type of Chimney: Masonry Lined Factory built Metal Factory Built U.L. Listing # Direct Vent Type UL# Type of Fuel Tank
IF NO Explain: The Type of License of Installer: Master Plumber #	Oil Gas Size of Tank Number of Tanks NA Number of Tanks NA Distance from Tank to Center of Flame Cost of Work: \$ 13,500 Permit Fee: \$ 160
Approved Fire: Ele.: Bldg.: Signature of Installer	Approved with Conditions ☐ See attached letter or requirement ☐ Inspector's Signature ☐ Date Approved

Dimensional Data

		Dimensi	ons	(in inch	es)		Recommended		Water Volume (Gal		(Gal.)		
Boiler Model	Approx. Shipping Weight Lbs.	'A'	Έ	Ç	Ō,	Ē	'F'	'G'	Min. Round Chimney Size (Diameter x Height) (1)	Gas Conn. (NPT)	Steam Boiler	Water Boiler	(3)
IN3	350	14-1/2		33-3/4	4		4-3/4	7-1/4	4" x 15 ft.		5.1	7.8	3.9
IN4	420	17-3/4	1	34-3/4	5		4-3/4	8-7/8	5" x 15 ft.		6.5	10.0	5.0
IN5	485	21		35-3/4	6		5-1/4	10-1/2	G!! v. 45 #	1/2"	7.9	12.2	6.1
IN6 USA			Ì '	35-3/4	0		5-1/4		6" x 15 ft.	1/2			
IN6 Canada	555	24-1/4	40			40-1/4		12-1/8			9.3	14.4	7.2
IN7	620	27-1/2		36-3/4	7			13-3/4	7" x 15 ft.		10.7	16.6	8.3
IN8 USA IN8 Canada	690	30-3/4		37-3/4				15-3/8		3/4"	12.1	18.8	9.4
IN9	760	34			8		7-1/2	17	8" x 15 ft.		13.5	21.0	10.5
IN10 USA	815	37-1/4						18-5/8		0/40	14.9	23.2	11.6
IN10 Canada	815	37-1/4	45	38-3/4		45-1/2		18-5/8		3/4" (2)	14.9	23.2	11.6
IN11	885	40-1/2			9			20-1/4	9" x 15 ft.	L .	16.3	25.4	12.7
IN12	955	43-3/4						21-7/8		1"	17.7	27.6	13.8

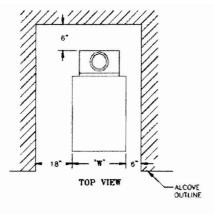
^{(1) 15&#}x27; chimney height is from bottom of Draft Hood opening to top of Chimney.

Heating Surface: 4.35 sq. ft. per flueway (steam); 5.72 sq. ft. per flueway (water)

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VI.	Gas Piping22	XII.	Appendix Low Water Cut Off (LWCO)90

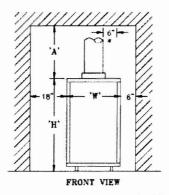
⁽²⁾ Gas connection size on IN10-IN11 Continuous Ignition (Standing Pilot) is 1 NPT.

⁽³⁾ Steam boiler's "steamable water volume": water volume from NWL (normal water level) to low water cutoff level.



DIN	IENSION	,Y,	"H,	'W'
Τ	IN3	17*	40"	143
	IN4	17*	40"	173 21 21 241 241 241 241 241 241 241 241 2
u [IN5	17"	40"	
MODELS	IN6	17"	40"	
	IN7	17"	40"	271
BOILER	IN8	17"	40"	30}
8	1119	17*	40"	34"
	IN10	12"	45"	374
	IN11	12"	45"	40}
Γ	IN12	12"	45"	432

* MINIMUM RADIAL CLEARANCE AROUND FLUE.



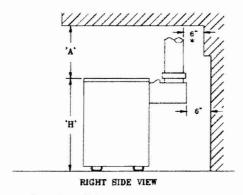


Figure 3: Clearance to Combustible Materials

- For boiler located in an unconfined space in a building of other than unusually tight construction, adequate combustion and ventilation air is normally provided by fresh air infiltration through cracks around windows and doors.
- 6. For boiler located within unconfined space in building of unusually tight construction or within confined space, provide outdoor air through 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:
 - a. Direct communication with outdoors. Minimum free area of 1 square inch per 4,000 Btu per hour input of all equipment in space.
 - b. 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.
 - 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 with additional space(s) of sufficient volume such that combined volume of all spaces meet criteria for unconfined space. Size each opening for minimum free area of 1 square inch per 1,000 Btu per hour input of all equipment in spaces, but not less than 100 square inches.
- 7. Ventilation Duct Louvers and Grilles. Equip outside openings with louvers to prevent entrance of rain and snow, and screens to prevent entrance of insects and rodents. Louvers and grilles must be fixed in open position or interlocked with equipment to open automatically before burner operation. Screens must not be smaller than ¼ inch mesh.
 - Consider the blocking effect of louvers, grilles and screens when calculating the opening size to provide the required free area. If free area of louver or grille is not known, assume wood louvers have 20-25 percent free area and metal louvers and grilles have 60-75 percent free area.
- **H.** Do not install boiler where gasoline or other flammable vapors or liquids, or sources of hydrocarbons (i.e. bleaches, cleaners, chemicals, sprays, paint removers, fabric softeners, etc.) are used or stored.

- D. Install Vent Connector from draft hood or vent damper to chimney. See Figure 30.
 - 1. Do not connect into same leg of chimney serving an open fireplace.
 - Vent pipe to chimney must not be smaller than outlet on draft hood or vent damper. Type B is recommended, but single-wall vent pipe may be used. Arrange venting system so boiler is served by vent damper device.
 - 3. Where two or more appliances vent into a common vent, the area of the common vent should be at least equal to the area of the largest vent plus 50% of the area in the additional vent(s). Do not connect the vent of this appliance into any portion of mechanical draft systems operating under positive pressure.
 - Horizontal run should be as short as possible. The maximum length of an uninsulated horizontal run must not exceed 75% of the height of the chimney.
 - 5. Vent pipe should have the greatest possible initial rise above draft hood consistent with headroom available and required clearance from adjacent combustible building structure. Vent pipe should be installed above bottom of chimney to prevent blockage.
 - Vent pipe should slope upward from draft hood to chimney not less than one inch in four feet. No portion of vent pipe should run downward or have dips or sags. Vent pipe must be securely supported.
 - 7. Vent pipe must be inserted into but not beyond inside wall of chimney liner. Seal tight between vent pipe and chimney.

E. If an Existing Boiler is Removed:

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 appliances remaining connected to it.

At the time of removal of an existing boiler, the following steps shall be followed 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:

- 1. Seal any unused openings in the common venting system.
- Visually inspect the venting system for proper size and horizontal pitch and determine there is no blockage or restriction, leakage, corrosion, and other deficiencies which could cause an unsafe condition.

- 3. Insofar as is practical, close all building doors and windows and all doors between the space in which the appliances remaining connected to the common venting system are located and other spaces of the building. Turn on clothes dryers and any appliance not connected to the common venting system. Turn on any exhaust fans, such as range-hoods and bathroom exhausts, so they will operate at maximum speed. Do not operate a summer exhaust fan. Close fireplace dampers.
- 4. Place in operation the appliance being inspected. Follow the Lighting (or Operating) Instructions. Adjust thermostat so appliance will operate continuously.
- 5. 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.
- 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 condition of use.
- 7. Any improper operation of the common venting system should be corrected so the installation conforms with the *National Fuel Gas Code*, NFPA 54/ANSI Z223.1. When resizing any portion of the common venting system, the common venting system should be resized to approach the minimum size as determined using the appropriate tables in Part 11 in the *National Fuel Gas Code*, NFPA 54/ANSI Z223.1.

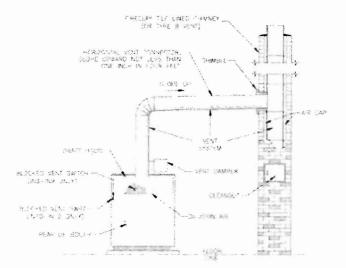


Figure 30: Typical Vent Installation