

# DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK CITY OF PORTLAND BUILDING PERMIT



11.9.12

This is to certify that SAPKO, ELEANOR

Located At 787 OCEAN AVE

Job ID: 2012-10-5274-HVAC

CBL: 423- A-002-030

has permission to Install a Pensotti Gas Fired Boiler

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

#### **Fire Prevention Officer**

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY PENALTY FOR REMOVING THIS CARD

## City of Portland, Maine - Building or Use Permit Application

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

Job No:	Date Applied:		CBL:				
2012-10-5274-HVAC	10/25/2012		423- A-002-030				
Location of Construction: 787 OCEAN AVE (76 ASHLEY LANE)	Owner Name: ELEANOR SAPKO & SHERRY ALLEN		Owner Address: 76 ASHLEY LN PORTLAND, ME 04103			Phone:	
Business Name:	Contractor Name: Caron & Waltz		Contractor Address: 321 Lincoln St South Portland ME 04106			Phone: 207-799-2228	
Lessee/Buyer's Name:	Phone:		Permit Type: HVAC - HVAC			Zone: R-3	
Past Use: Residential condo – one of three units in building	Proposed Use: Same – residential con of three units in the bu		Cost of Work: 8000.00 Fire Dept:			CEO District: Inspection:	
	install direct vent gas boiler in basement	-	Signature:	Approved Denied N/A A. Partone	, 11/8/12	Use Group: Type: Mare for Reg. Signature	
Proposed Project Description Installa Pensotti Gas Fired Boiler			Pedestrian Activ	ities District (P.A.I	D.)	/	
Permit Taken By: Lannie			1	Zoning Appro	oval		
<ol> <li>This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</li> <li>Building Permits do not include plumbing, septic or electrial work.</li> <li>Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.</li> </ol>		Special Zone or ReviewsShorelandWetlandsFlood ZoneSubdivisionSite PlanMajMinMM		Zoning Appeal Variance Miscellaneous Conditional Use Interpretation Approved Denied	Not in Di Does not Requires Approved Denied		
		Date: 0K	10/20/12	Date:	Date: ABA	人	

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 O	OF WORK, TITLE	DATE	PHONE

BUILDING PERMIT INSPECTION PROCEDURES Please call 874-8703 or 874-8693 (ONLY) or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.
- Permits expire in 6 months. If the project is not started or ceases for 6 months.
- If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.

**Final Inspection** 

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



Strengthening a Remarkable City, Building a Community for Life . www.portlandmaine.gov

Director of Planning and Urban Development Jeff Levine

Job ID: 2012-10-5274-HVAC

Located At: 787 OCEAN AVE

CBL: 423- A-002-030

## **Conditions of Approval:**

#### Building

- 713.3 Fire-resistance-rated walls. Penetrations into or through fire walls, fire barriers, smoke barrier walls and fire partitions shall comply with Sections 713.3.1 through 713.3.3. Penetrations in smoke barrier walls shall also comply with Section 713.5.
- 2. The installation must comply with UL, the Manufacturers' Listing, MUBEC (IRC, 2009), and State of Maine Gas Regulations.
- 3. Separate permits are required for any electrical: plumbing, sprinkler, fire alarm, HVAC systems, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.
- 4. Maintain proper setback(s) from property lines/buildings and proper clearances from vertical openings when direct venting
- 5. A Carbon Monoxide (CO) alarm shall be installed in each area within or giving access to bedrooms. That detection must be powered by the electrical service (plug-in or hardwired) in the building and battery.

#### Fire

- 1. Installation shall comply with City Code Chapter 10.
- 2. Fuel-fired boilers shall be protected in accordance with NFPA 101, Life Safety Code.
- 3. Installation shall comply with NFPA 211, *Standard for Chimneys, Fireplaces, Vents, and Solid Fuel–Burning Appliances*;
- 4. NFPA 31, Standard for the Installation of Oil-Burning Equipment;
- 5. NFPA 54, National Fuel Gas Code;
- 6. NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems;
- 7. NFPA 91, Standard for Exhaust Systems for Air Conveying Vapors, Gases, Mists, and Noncombustible Particulate Solids,
- 8. NFPA 70, National Electrical Code; and the manufacturer's published instructions.

05/05/2011 10:37 2078748716	2012-10-5274 PAGE 01/01	
3 FILL IN AND	Sign with Ink	
APPLICATION	VER EQUIPMENT	
423-A -2630		
To the INSPECTOR OF BUILDINGS, PORTLAND, ME. The undersigned hereby applies for a permit to insta accordance with the Laws of Maine, the Building Code of t	all the following heating, cooking or power equipment in the heating of Portland, and the following specifications:	
Location / CBL <u>76</u> ASHLEY LANE Name and address of owner of appliance <u>SHERNY</u> A 76 ASHLEY LANE, OCEAN	Use of Building <u>NECIDENCE</u> Desc <u>10/22/12</u> UEN <u>NWODS (DADOMINIANS, PUNTIMO</u> , MEQ410) <u>321 LINCOLN STREET, SO. PUNTIAND</u> , <u>Telephone</u> <u>779-2228</u>	
Installer's name and address CARON + WALTZ	321 LINCOLN STREET, SO. PUTTIMO	
ME 04106	Telephone 799-2228	
Location of appliance:	Type of Chimney:	
Basement D Floor	Masonry Lined	
C Attic C Roof	Factory built	
Type of Fuel:	Ci Metal	
Gas 🛛 Oil 🖾 Solid	Factory Built U.L. Listing #	
Appliance Name: PENSOTTI SOLENNE PCC34	Diroct Vent	
U.L. Approved I Yes I No	TYPE LOUYIROPYLENE ANE	
Will appliance be installed in accordance with the manufacture's installation instructions? X Yes	Type <u>10 VY(RopyLEVE</u> Type of Fuel Tank U Oil NA OCT 25 2012 Gas Size of Tank <u>NA</u> Number of Tanks <u>NA</u>	
	Gas Building nd Mo	
IF NO Explain:	Size of Tank NA Deptor of Port	
The Type of License of Installer:	Number of Tanks NA	
Master Plumber #		
Solid Fuel #	Distance from Tank to Center of Flame feet.	
Gas#PNT1913	NT 1913 Cont of Work: 5. 7,825.00	
Q Other	Permit Fee: \$	
Approved	Approved with Conditions	
Fire:	See attached letter or requirement	
Ele.:		
Bidg.:	Inspector's Signature Date Approved	
signature of Installer		
White - Inspection Yellow - File P	ink - Applicant's Gold - Assessor's Copy	

# 2. TECHNICAL CHARACTERISTICS

# 2.1 Technical data

Model		PCC 34
CE Certification	n°	0694BN3485
Appliance Type		B23p-B33-C13-C33-C43-C53-C63-C83-C93
Appliance Category		II2H3B/P
Heat Input max	kW - BTU/hr	34 - 116013
Heat Input min	kW - BTU/hr	10 - 34121
Heat Output max - 122/86°F	kW - BTU/hr	36.2 - 123670
Heat Output max - 176/140°F	kW - BTU/hr	33.4 - 114041
Heat Output min - 176/140°F	kW - BTU/hr	9.7 - 33200
Efficiency 100% (full load 122/86°F)	%	95
		97.5
Efficiency 30% (partial load 122/86°F)	%	
Efficiency 100% (full load 176/140°F)	%	87.7
Efficiency 30% (partial load 176/140°F)	%	88.9
GAS DIRECTIVE 92/42/ECC - Efficiency marking	stars	4
Sedbuk	band	Α
Central Heating circuit		
Central Heating water temperature setting (min-max)	°C °F	30-80 / 25-40 - 86-176 / 77-104
Max. heating working temperature	°C – °F	80 - 176
Expansion vessel capacity	gal	1.85
Max. working pressure (heating)	bar - psi	2.1 - 30
Min. working pressure (heating)	bar - psi	0.3 - 4.29
Domestic Hot Water circuit		
D.H.W. temperature setting (min-max)	°C – °F	35-70 - 95-160
Max. Hot water working pressure	bar - psi	6-86
Min. Hot water working pressure	bar - psi	0.5 - 7.16
D.H.W. flow rate at ∆T 45°F (25°C)	I/min - gal/min	19.96 - 5.27
D.H.W. flow rate at ∆T 54°F (30°C)	I/min - gal/min	16.63 - 4.40
D.H.W. flow rate at $\Delta T 63^{\circ}F$ (35°C)	l/min - gal/min	14.26 - 3.77
Dimensions (Boller casing size)		
Width	in	16.1
Height	in	28.7
Depth	in	12.2
Weight (net)	lb	88
Hydraulic connections		
Central Heating Flow connection	NPT	3/4*
Central heating Return connection	NPT	3/4"
Cold water mains connection	NPT	1/2"
D. Hot water connection	NPT	1/2"
Gas connection	NPT	1/2"
Flue systems		
Horizontal-Concentric flue system	Ømm-in	80/125 - 3.15/5
Max. Flue length	m – ft	8 - 26
Gas Supply		
Natural gas G 20		
Inlet pressure	mbar - psi	20 - 0.29
Gas consumption	m <sup>3</sup> /h - ft <sup>3</sup> /h	3.60 - 127.13
Propane G31		
Inlet pressure	mbar - psi	37 - 0.53
Gas consumption	m <sup>3</sup> /h - ft <sup>3</sup> /h	1.38 - 48.73
Electrical specifications		
Power supply	V/Hz	110/60
Electrical power consumption	W	180
Electrical power consumption	IP	X4D

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#### 3.10 Venting

Improper venting of combination water heater can result in excessive levels of carbon monoxide which can result in severe personal injury or death. This combination water heater must be vented in accordance with the "Venting of Equipment" section of the latest edition of the ANSI Z223.1 / NFPA 54 Natural Gas Code and/or the "Venting systems and air supply for appliances" section of the latest version of the CAN/CSA B149.1 Natural Gas and Propane Installation Code in Canada and in accordance with all applicable local building codes.

#### **Venting Guidelines**

For best results, keep the vent system as short and straight as possible.

Locate the combination water heater as close as possible to the vent termination.

The combination water heater vent must not be common vented with any other gas appliance or vent stack.

Slope vent upwards towards the vent terminal at a rate of 1/8" per foot (1% slope).

Vent termination must be a minimum of 12" above grade or expected snowfall.

Vent and air intake pipe must be supported every 4 feet of horizontal run and every 5 feet of vertical run.

#### **PENSOTTI and Direct Vent**

All PENSOTTI Combination Water Heaters are prepared at the factory to be direct vent (sealed combustion) units which draw all of their required combustible air directly from outside the building.

All PENSOTTI Combination Water Heaters use a 3/5" concentric vent (polypropylene inner exhaust pipe with a painted aluminum outer pipe).

The exhaust vent material must only be polypropylene. Do not use anything other than polypropylene as a means of venting flue gases from the Pensotti Combination Water Heater.

#### **Contaminated Make-Up Air Will Damage the Unit**

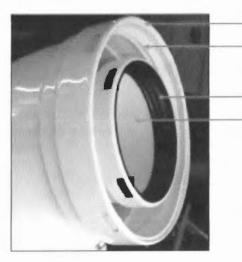
We recommend not operating the combination water heater in an area that is or will be under construction or renovation.

The PENSOTTI warranty will not cover damage and premature wear caused to the unit due to installation in a contaminated environment.

All concentric venting must be checking for cross contamination using a combustion analyzer inserted into the makeup air test port on the venting adapter. Analyzer must NOT read anything in excess of "0 ppm" Carbon Monoxide (CO). Any leaks must be repaired before continuing operation of the water heater.

Warranty will not be available if the water heater is used for construction heat.

# **Venting Pictures & Illustrations**



5" Painted Aluminum

EPDM Seal

EPDM Seal

3.15" Polypropylene Pipe 240 Degree F Rating

Maximum Equivalent Vent Lengths

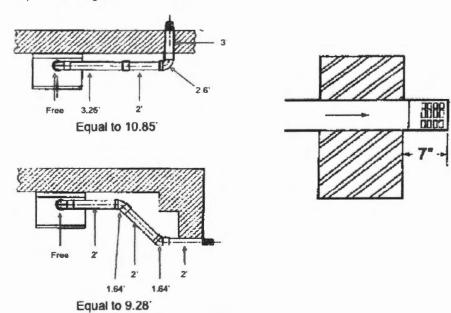
PC 18	29.25 Feet
PC 34	26 Feet
PC 50	16.25 Feet

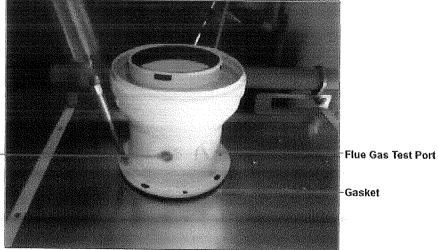
#### **Equivalent Fittings Lengths**

90 Degree Elbow	2.6 Feet
45 Degree Elbow	1.64 Feet
Extensions/Terminals	Measured Lengths

On Horizontal vent systems the 2/4" to 3.15/5" transition and first elbow are not calculated into the equivalent length of run.

On Vertical vent systems the vent termination is not calculated into the equivalent length of run.





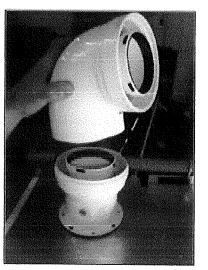
Rotate Transition To Desired Position And Secure Using Screws Provided

**Combustion Air Test Port-**

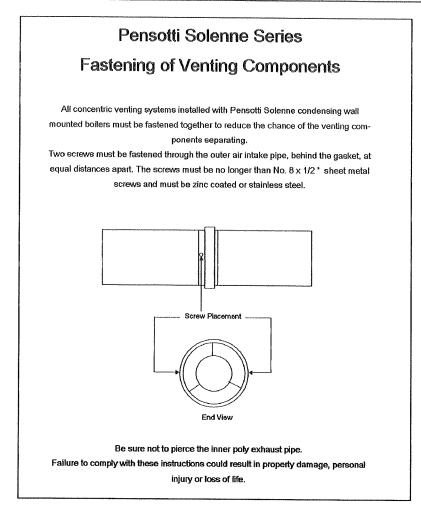
Included With Each Combination Water Heater Is A PAHVK Horizontal Kit



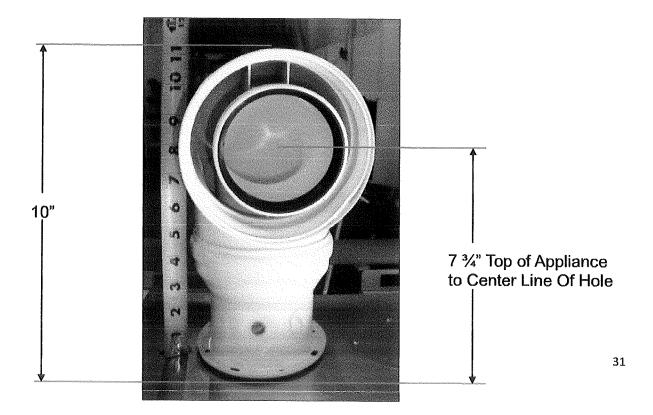
Lubricate Rubber Gaskets, with Supplied Silicone Lubricant, and Install Venting Components. Fully Seat Then Secure With 2 - No. 8 x 1/2" Zinc Coated Screws



Do not over lubricate Assemble immediately after lubrication

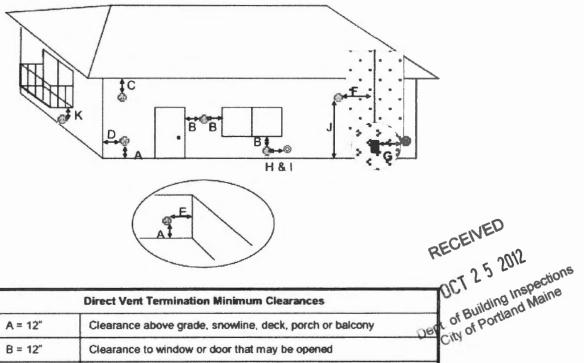


# 12" Clearance Suggested From The Top Of The Appliance To Ceiling



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Direct Vent Termination Minimum Clearances		
A = 12"	Clearance above grade, snowline, deck, porch or balcony	
B = 12"	Clearance to window or door that may be opened	
C = 24"	Vertical clearance to ventilated and unventilated soffit within a 2' distance horizontally from center line of DV termination	
D = 12"	Minimum distance to outside corner	
E = 18"	Minimum distance to inside corner, included walls and fences.	
F = 48 <sup>-</sup>	Not to be installed above a gas meter/regulator within F from the center line of the meter/regulator	
G = 48"	Minimum clearance to service regulator vent outlet, gas meter or electrical meter	
H = 12"	Clearance to non-mechanical inlet air opening into the building	
I = 36°	Clearance to a mechanical air inlet into the building	
J = 84"	Minimum distance above a paved sidewalk or driveway located on public property. If terminal is located between two single family residences with a sidewalk or driveway between; the same 84" clearance applies.	
K = 24"	Minimum clearance beneath porch, deck, veranda or balcony, only if the area below is completely open on at least two sides.	

State and local codes may require different clearances, consult the local authority having jurisdiction in each area for details.

The vent hood must be installed on the leeward side of the structure. Avoid installing the vent hood on the side of the structure receiving normal prevailing winds.

The termination shall be located so that flue gasses, or condensate from the flues gasses, are not directed as to jeopardize people, building materials, building construction, siding or soffits. Flue gasses from the termination shall not be allowed to enter any type of structure.

The termination shall be located no less than 48" above or to the side of the exhaust for any other oil, gas or solid fuel appliance

