

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND BUILDING PERMIT

**This is to certify that**

EAST END STUDIOS LLC

**PERMIT ID:** 2012-49969

**Located at**

273 CONGRESS ST

**CBL:** 021 E018001

has permission to **Install Viessmann gas boiler; vent in chimney**

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes 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 procured prior to occupancy.

\_\_\_\_\_  
**Fire Prevention Officer**

*Jamie Bank*  
\_\_\_\_\_  
**Code Enforcement Officer / Plan Reviewer**

**THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY  
THERE IS A PENALTY FOR REMOVING THIS CARD**

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

**REQUIRED INSPECTIONS:**

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

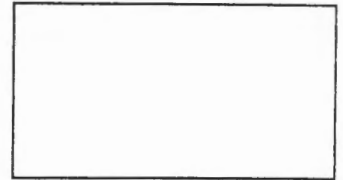
IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.





FILL IN AND SIGN WITH INK

# APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT



**B** 2012-11-5341 - HVAC

Entered 11/5/12



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 273 Congress Str 001 E018 Use of Building \_\_\_\_\_ Date 11-5-12

Name and address of owner of appliance East End Studios, 273 Congress Str B-2b

Installer's name and address Charlie Burkham Heating Service Inc  
P.O. Box 332 Freeport ME 04032 Telephone 865-9010

**Location of appliance:**  
 Basement  
 Attic  
 Floor  
 Roof  
Vent through Chimney

**Type of Fuel:**  
 Gas  
 Oil  
 Solid

**Appliance Name:** Viessmann  
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 6050  
 Other \_\_\_\_\_

**Type of Chimney:**  
 Masonry Lined CPUC  
Factory built \_\_\_\_\_

Metal  
Factory Built U.L. Listed \_\_\_\_\_

Direct Vent  
Type \_\_\_\_\_

**Type of Fuel Tank**  
 Oil  
 Gas

Size of Tank N/A

Number of Tanks N/A

Distance from Tank to Center of Flame \_\_\_\_\_ feet.

Cost of Work: ~~\$ 17,000~~ \$ 16,870.00

Permit Fee: \$ 190.00

RECEIVED  
NOV 05 2012  
Dept. of Building Inspections  
City of Portland Maine

Approved

Approved with Conditions

Fire: \_\_\_\_\_  
Ele.: \_\_\_\_\_  
Bldg.: \_\_\_\_\_

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



# PORTLAND MAINE

*Strengthening a Remarkable City, Building a Community for Life • [www.portlandmaine.gov](http://www.portlandmaine.gov)*

## Receipts Details:

**Tender Information:** Check , Check Number: 8221\$190.00

**Tender Amount:** 190.00

## Receipt Header:

**Cashier Id:** bsaucier

**Receipt Date:** 11/6/2012

**Receipt Number:** 49970

## Receipt Details:

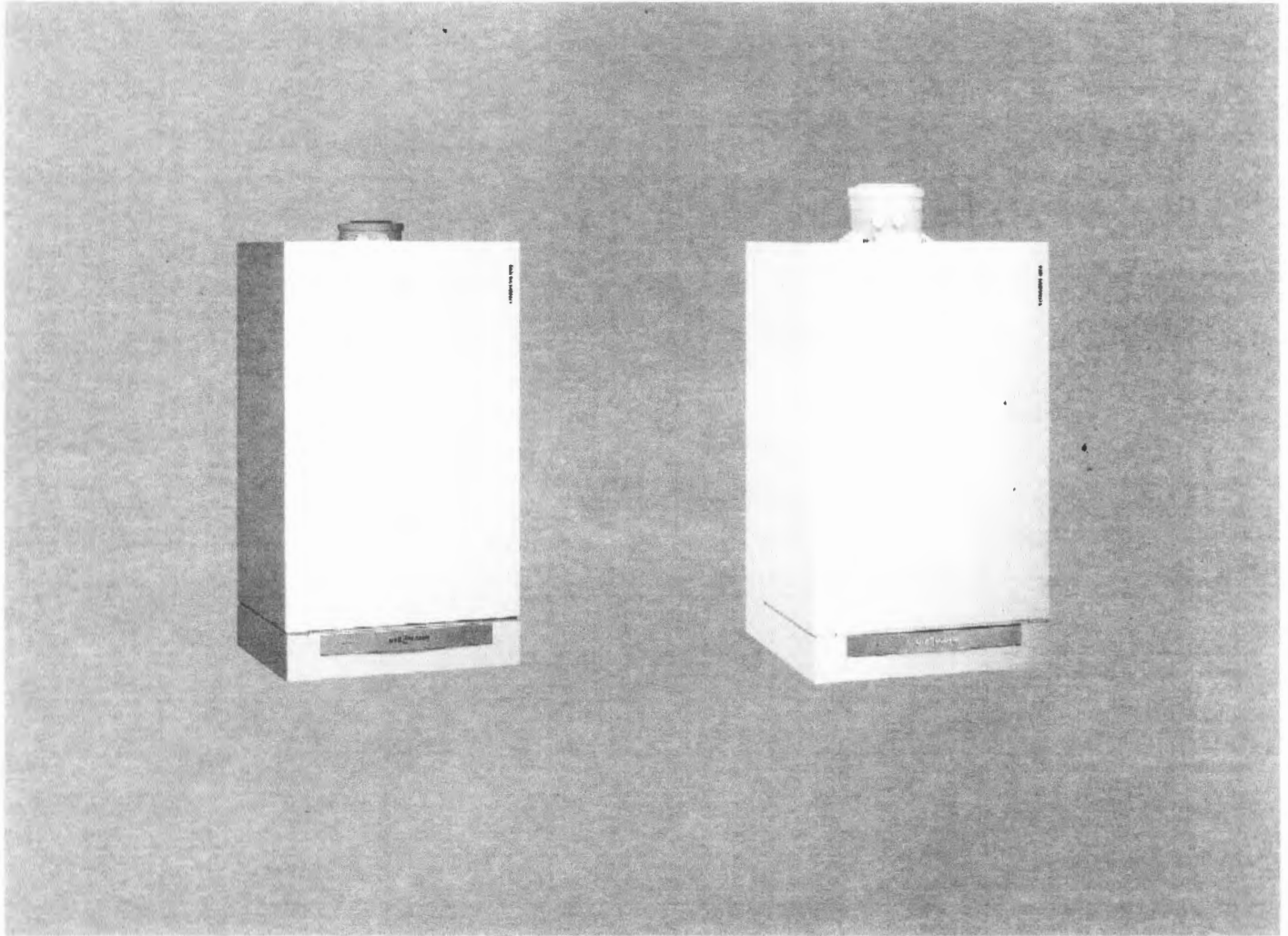
Reference ID:	8650	Fee Type:	BP-Constr
Receipt Number:	0	Payment Date:	
Transaction Amount:	190.00	Charge Amount:	190.00
Job ID: Job ID: 2012-11-5341-HVAC - Install Viessmann gas boiler; vent in chimney			
Additional Comments: 273 Congress			

Thank You for your Payment!

Gas-fired wall-mounted condensing boiler  
 31 to 370 MBH / 9 to 105 kW  
 Multi-boiler installation 320 to 1480 MBH/

**Technical Data Manual**

Model Nos. and pricing: see Price List



**Vitodens 200-W**

**WB2B Series**

**Gas-Fired Wall-Mounted Condensing Boiler**  
 with modulating Matrix cylinder burner  
 for room air independent operation  
 (using a direct vent system) or room air  
 dependent operation

For Natural Gas and Liquid Propane Gas  
 Heating input 31 to 370 MBH  
 for NG and LPG 9 to 105 kW



# Dimensional Information

## Models WB2B 80, 105

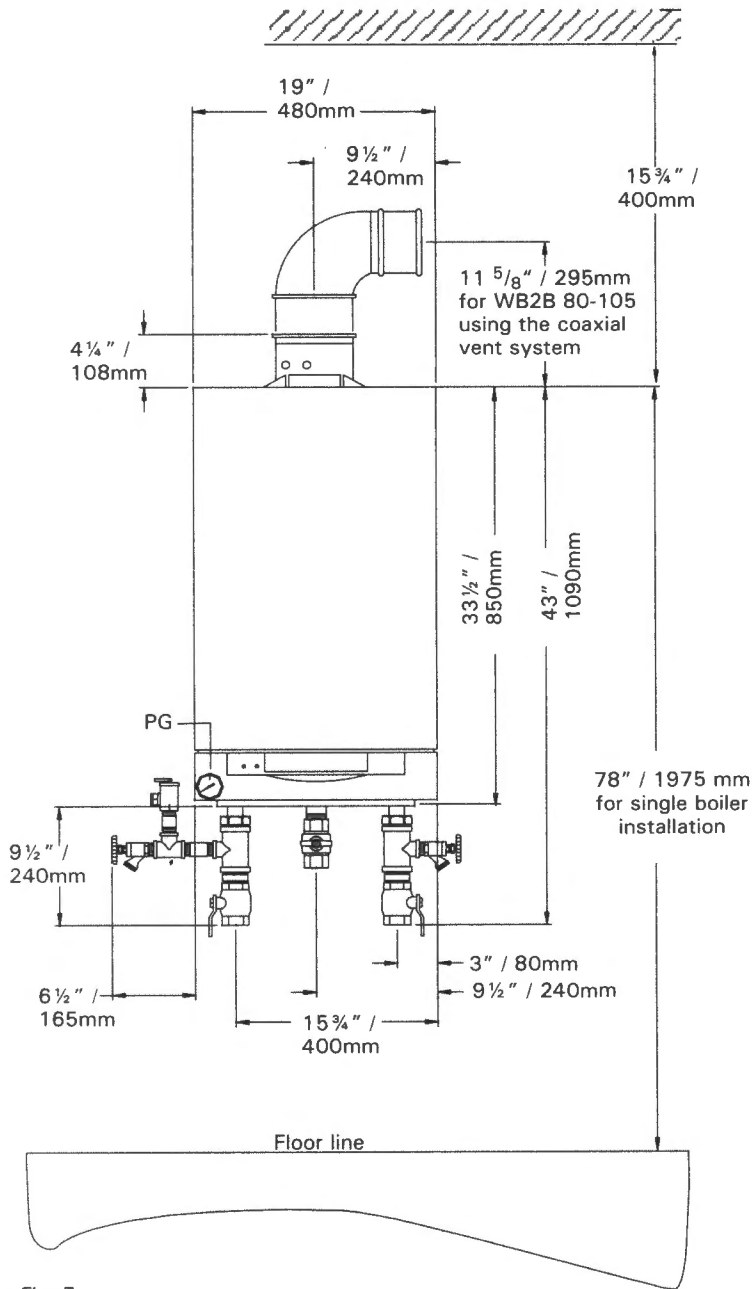


Fig. 7

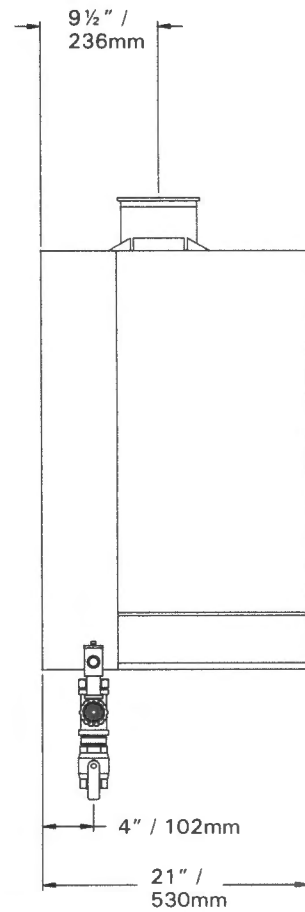


Fig. 8

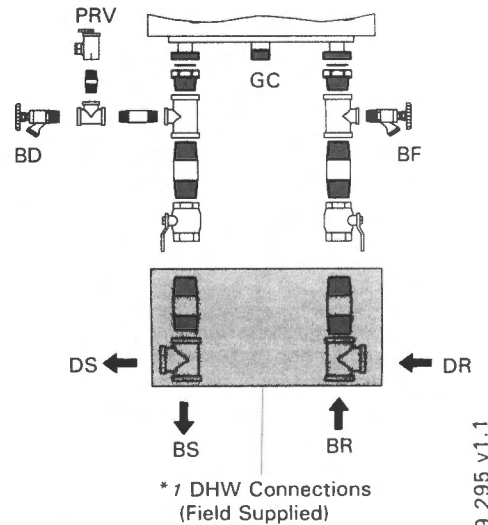


Fig. 9

**Legend**

- BD Boiler Drain
- BR Boiler Return
- BS Boiler Supply
- GC Gas Connection, 1" NPT
- PRV Pressure Relief Valve
- BF Boiler Fill
- PG Pressure Gage
- DR Boiler heating return for domestic hot water production 1 1/4"
- DS Boiler heating supply for domestic hot water production 1 1/4"
- \*1 See page 38 for alternate DHW connection.

**Recommended Minimum Service Clearances**

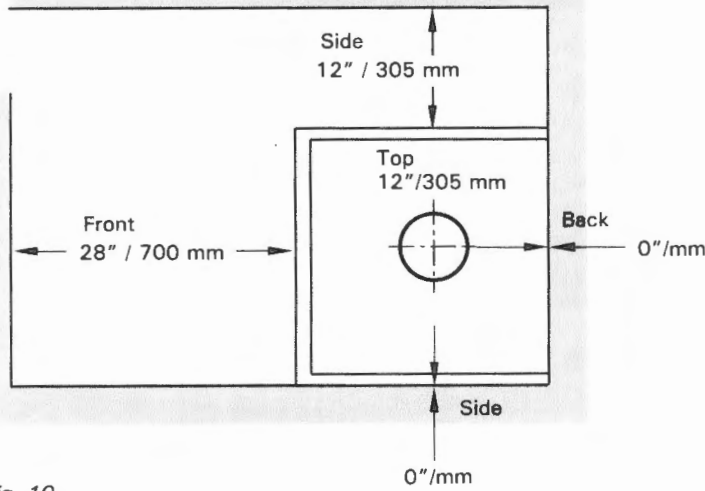


Fig. 10

**Minimum Clearances to Combustibles**

Top	Front	Rear	Left	Right	Vent pipe*1
0	0 AL, CL	0	0	0	0

AL = Alcove

CL = Closet

\*1 Refer to the Installation Instructions of the Vitodens 200-W, WB2B Venting System for details.

**Please note:**

The Vitodens boiler has passed the zero inches vent clearance to combustibles testing requirements dictated by the Harmonized Standard ANSI Z21.13, CSA 4.9.2000 and therefore is listed for zero clearance to combustibles when vented with a single wall special venting system (AL-29-4C material). The zero inches vent clearance to combustibles for the Vitodens boiler supercedes the clearance to combustibles listing that appears on the special venting system label.



# Vent Length Requirements *(continued)*

## Maximum vent/air intake pipe length - horizontal/vertical (hybrid system) *(continued)*

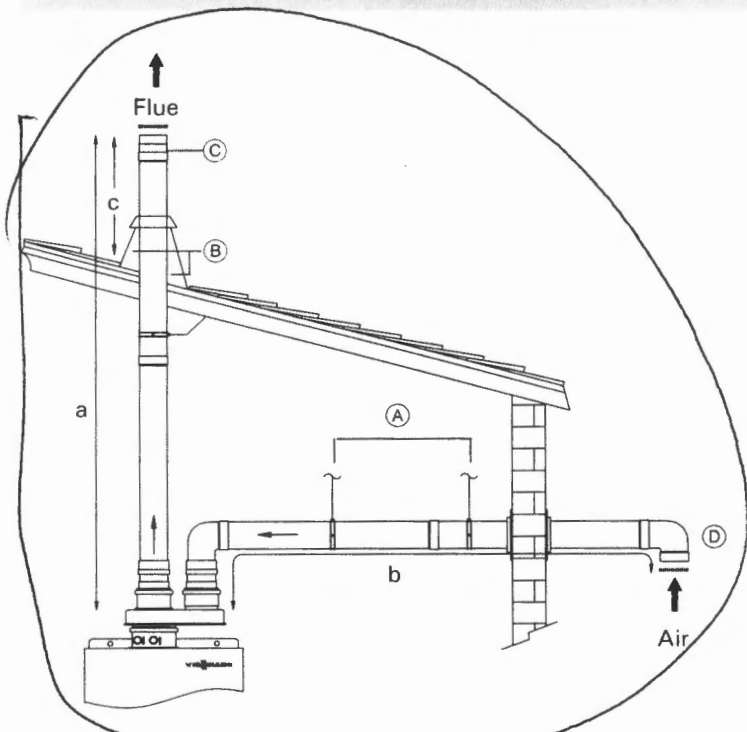
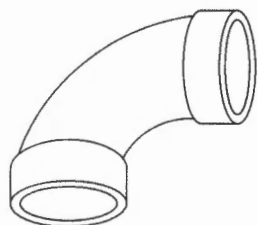


Fig. 62 Vitodens 200-W WB2B 45, 60, 80, 105

**Legend**

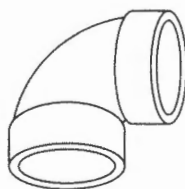
- (A) Support system
- (B) Flashings
- (C) Exhaust (straight coupling) with screen
- (D) Combustion air intake with screen
- a Equivalent length (exhaust)
- b Equivalent length (air intake)
- c min. 18" / max. 48"

## Standard long sweep elbows (for CPVC pipe only)



For plastic pipe only

90° long sweep elbow  
equivalent to 5 ft. / 1.5 m



90° short sweep elbow  
equivalent to 8 ft. / 2.4 m  
(if used)

Fig. 63

*Note:*  
If standard sweep elbows are used the allowable vent lengths are reduced.  
One standard 90° elbow is equivalent to 8 ft. / 2.4 m of straight pipe.

**Table 44. Standard long sweep elbows**

Material	90° elbow equivalent length ft. / m	45° elbow equivalent length ft. / m	87° elbow / 87° inspection tee ft. / m
Stainless steel	3 / 0.91	2 / 0.61	---
CPVC plastic pipe	5 / 1.52	3 / 0.91	---
PP(s)	---	1 / 0.30	1.6 / 0.50

## Vent Length Requirements

### Equivalent vent length calculation example - stainless steel system with plastic air intake pipe

Table 45. (see also fig. 63)

Vent type	Type of fitting	Equivalent length ft. / m
Exhaust vent pipe	90° elbow (stainless steel)	3 / 0.91
	45° elbow (stainless steel)	2 / 0.61
Air intake pipe	90° elbow (ABS/PVC)	5 / 1.52
	45° elbow (ABS/PVC)	3 / 0.91

### IMPORTANT

Always include vent termination length in calculations.

### Equivalent vent length calculation example (Vitodens WB1B and WB2B system diameter 3")

Maximum allowable equivalent length is 164 ft. / 50 m  
(see table 41 and fig. 53 on page 59)

2 x 90° stainless steel elbow ..... 6 ft. / 1.83 m  
2 x 45° stainless steel elbow ..... 4 ft. / 1.22 m

#### Air intake pipe

1 x 90° plastic (ABS/CPVC/PVC) elbow ... 5 ft. / 1.52 m  
1 x 45° plastic (ABS/CPVC/PVC) elbow ... 3 ft. / 0.91 m

Exhaust vent pipe ..... 10 ft. / 3.05 m  
Air intake pipe ..... 10 ft. / 3.05 m  
Combined total equivalent vent length  
(a + b) ..... 38 ft. / 11.58 m