

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND

BUILDING PERMIT

This is to certify that HOUSINGAUTHORITY PORTLAND

Located At 63 FRONT

Job ID: 2011-02-467-DUP

CBL: 167 - - E - 001 - 001 - - - - -

has permission to install a Prestige PE110 in Basement

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 CAR**

City of Portland, Maine - Building or Use Permit Application

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

Job No: 2011-02-467-DUP #2011-2716 HVAC	Date Applied: 4/13/2011	CBL: 167 - - E - 001 - 001 - - - -	
Location of Construction: 43-45 West Presumpscot Street	Owner Name: HOUSING AUTHORITY PORTLAND	Owner Address: 14 BAXTER BLVD PORTLAND, ME - MAINE 04101	Phone:
Business Name:	Contractor Name: Chris Butterfield @ Caron and Waltz	Contractor Address: 321 Lincoln St., South Portland, ME	Phone: (207) 799-2228
Lessee/Buyer's Name:	Phone:	Permit Type: BLDG - HVAC	Zone: R-5
Past Use: Duplex part of larger Portland Housing Authority Project	Proposed Use: Same: Duplex part of larger Portland Housing Authority Project - To install Prestige PE110 boiler in basement	Cost of Work: \$93,000.00	CEO District:
		Fire Dept: <input checked="" type="checkbox"/> Approved w/ conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A	Inspection: Use Group: R-3 Type: HVAC
Proposed Project Description: 43 & 45 W Presumpscot - to install Prestige PE 110 boiler in basement		Signature: <i>B. Butterfield</i> (58)	Signature: <i>[Signature]</i>
		Pedestrian Activities District (P.A.D.)	

Permit Taken By: Lannie	Zoning Approval		
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 informatin may invalidate a building permit and stop all work.	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetlands <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan <input type="checkbox"/> Maj <input type="checkbox"/> Min <input type="checkbox"/> MM Date: <i>ok</i> <i>4/14/11</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 Dist or Landmark <input 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>[Signature]</i>
	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	PHON

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.**

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.



PORTLAND MAINE

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

Director of Planning and Urban Development
Penny St. Louis

Job ID: 2011-02-467-DUP

Located At: 63 FRONT

CBL: 167 - - E - 001 - 001 - - - -

Conditions of Approval:

Zoning

1. This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work. It is understood that all alterations are interior and that the exterior entry way may be repaired, but all repairs shall be within the existing footprint.

Fire

Installation shall comply with City Code Chapter 10.

Fuel-fired boilers shall be protected in accordance with NFPA 101, *Life Safety Code*.

Installation shall comply with NFPA 211, *Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances*; NFPA 54, *National Fuel Gas Code*; NFPA 70, *National Electrical Code*; and the manufacturer's published instructions.

Building

The installation must comply with the State of Maine gas regulations.

Specifications & Performance

Boiler



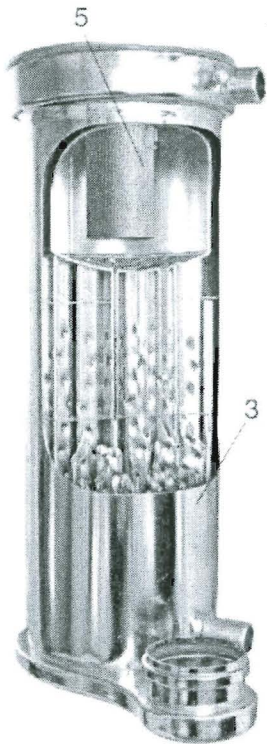
Model	Fuel	Input Modulation MBH	AFUE	DOE Heating Capacity MBH	NET I=B=R MBH	Boiler Water Content Gal.
PE 110	Natural Gas	30 -110	95%	99	86	2.5
PE 110 LP	Propane Gas	25 - 97	95%	87	76	2.5

Model	Fuel	Supply / Return Connections	Gas Connection	Vent/Air Diameter	Dimensions D x W x H	Weight Lbs
PE 110	Natural Gas/ Propane	1"	1/2"	3"	20.8" x 24.7" x 37.2"	190

Water Heater

Model	10 Min. Peak Flow* (Gal.)	1st Hour Rating* (GPH)	Continuous Flow @70° Rise (GPH)	Domestic Inlet/Outlet	Domestic Capacity (Gal.)	Heating Water Capacity (Gal.)
PE 110	55	210	180	3/4"	14	2.3

* Domestic performance based on average water temperature of 108°F at mixing valve outlet and 50°F inlet



439 GRADE STAINLESS STEEL HEAT EXCHANGER
Vertical Firetube Design. Impervious to chloride cracking. Unparalleled resistance to corrosion.

HIGHEST WATER CONTENT IN THE INDUSTRY

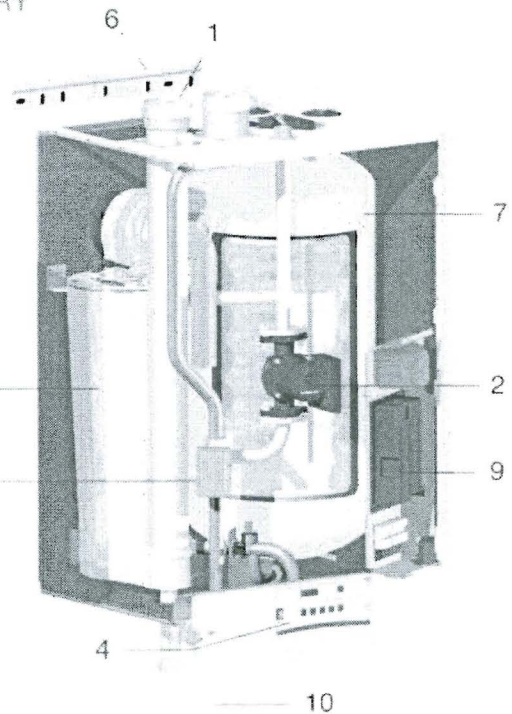
- Ideal for small zones without short cycling
- Stable temperature control
- Low pressure drop
- Less sensitive to water flow

SELF CLEANING /SELF DESCALING

Condensate washes combustion residue away when streaming down the tubes resulting in a constant efficiency and reduced maintenance.

Legend

- 3" Flue connection - 1
- 3 Speed System Circulator - 7
- ASME Stainless steel heat exchanger - 3
- Control panel with digital display - 4
- Stainless steel premix gas burner - 5
- Wall bracket - 6
- Insulated "tank-in-tank" water heater - 7
- 3-way valve - 8
- Honeywell MCBA control on swing door - 9
- Condensate Drain Assembly - 10



Available with optional wall kit or floor stand



One Triangle Lane
p 856.228.8881 f 856.228.35845 www.triangletube



Recommended Clearances

The PRESTIGE Excellence is approved for zero clearance to combustibles, excluding vent and boiler piping.

- Vent & Boiler Piping - 1/4 inch from combustible materials.

BEST PRACTICE

To provide serviceability to the unit it is recommended that the following clearances be maintained:

- Top boiler jacket - 24 inches.
- Front - 24 inches.
- Bottom boiler piping - 24 inches.
- Rear - 0 inches
- Sides - 6 inches

⚠ WARNING

If the clearances listed above cannot be maintained or the enclosure in which the boiler is installed is less than 85 cubic feet, the space must be ventilated. See page 6 for ventilation requirements.

NOTICE

When maintaining zero clearance or less than recommended clearances, some product labeling may become hidden and unreadable

⚠ WARNING

When installing the PRESTIGE Excellence in a confined space, sufficient air must be provided for proper combustion and venting and to allow, under normal operating conditions, proper air flow around the product to maintain ambient temperatures within safe limits to comply with the National Fuel Gas Code NFPA 54 - latest edition.

Residential Garage Installations

When installing the PRESTIGE Excellence in a residential garage, the following special precautions per NFPA 54/ANSI Z223.1 must be taken.

- Mount the unit with a minimum 18 inches above the floor level of the garage. Ensure the burner and ignition devices / controls are no less than 18 inches above the floor level.
- Locate or protect the unit in a manner so it cannot be damaged by a moving vehicle.

Boiler Freeze Protection Feature

The boiler control has an freeze protection feature built in. This feature monitors the boiler temperature and responds as follows when no call for heat is present:

- 46°F Boiler circulator is ON
- 38°F Boiler circulator is ON and burner operates at low fire
- 50°F Burner OFF and boiler circulator operates for approximately 10 minutes

⚠ CAUTION

The boiler freeze protection feature is disabled during a hard lockout, however the CH circulator will operate and the 3-way valve will open to the CH system.

⚠ CAUTION

The boiler freeze protection feature is designed to protect the boiler and should be installed in a primary/secondary piping arrangement. If it is installed in an unheated space or exposed to water temperatures of 46°F or less, see Section IV for primary/secondary piping examples. See Section IX for antifreeze guidelines.

Combustion Air and Venting

Ventilation and Combustion Air Requirements - Direct Vent

A Direct Vent appliance utilizes uncontaminated outdoor air (piped directly to the appliance) for combustion)

For Direct Vent installations, involving only the PRESTIGE Excellence, in which the minimum service clearances are maintained as listed on page 4, no ventilation openings are required.

For Direct Vent, zero service clearance installations involving only the PRESTIGE Excellence, the space / enclosure must provide two openings for ventilation. The openings must be sized to provide 1 square inch of free area per 1,000 BTUH of boiler input. The openings shall be placed 12 inches from the top of the space and 12 inches from the floor of the space.

For installations in which the PRESTIGE Excellence shares the space with air movers (exhaust fan, clothes dryers, fireplaces, etc.) and other combustion equipment (gas or oil) the space must be provided with adequate air openings to provide ventilation and combustion air to the equipment. To properly size the ventilation / combustion air openings, the installer must comply with the National Fuel Gas Code NFPA 54, ANSI Z223.1 for installations in the U.S or CSA B149.1 and B149.2 for installations in Canada.

⚠ WARNING

The space must be provided with ventilation / combustion air openings properly sized for all make-up air requirements (exhaust fans, clothes dryers, fireplaces, etc.) and the total input of all appliances located in the same space as the PRESTIGE Excellence, excluding the input of a Direct Vent PRESTIGE Excellence which uses combustion air directly from the outside, thus additional free area for the openings is not required. Failure to provide or properly size the openings could result in severe personal injury, death or substantial property damage.

Ventilation and Combustion Air Requirements - Category IV

A Category IV appliance utilizes uncontaminated indoor or outdoor air (surrounding the appliance) for combustion.

BEST PRACTICE

In order to reduce the potential risks associated with indoor contaminants (listed on page 5), flammable vapors and tight housing construction (little or no infiltration air), it is recommended to pipe uncontaminated combustion air directly from the outdoors to the appliance. This practice also promotes higher system efficiency by reducing heated indoor air from being exhausted from the house and replaced by cold infiltration air into the house.

For installations in which the PRESTIGE Excellence shares the space with air movers (exhaust fan, clothes dryers, fireplaces, etc.) and other combustion equipment (gas or oil) the space must be provided with adequate air openings to provide ventilation and combustion air to the equipment. To properly size the ventilation / combustion air openings, the installer must comply with the National Fuel Gas Code NFPA 54, ANSI Z223.1 for installations in the U.S or CSA B149.1 and B149.2 for installations in Canada, as referenced in this section of the manual and titled Methods of Accessing Combustion Air into a Space

⚠ WARNING

The space must be provided with ventilation / combustion air openings properly sized for all make-up air requirements (exhaust fans, clothes dryers, fireplaces, etc.) and the total input of all appliances, including the PRESTIGE Excellence when located in the same space as the PRESTIGE Excellence. Failure to provide or properly size the openings could result in severe personal injury, death or substantial property damage.

SECTION V - Installing Vent / Combustion Air & Condensate Drain

Installing Vent and Combustion Air

! DANGER

The PRESTIGE Excellence must be vented and supplied with combustion air as shown in the PRESTIGE Vent Supplement, included in the boiler installation envelope. Refer to optional vent kit instructions for additional vent installation instructions. Once installation is completed, inspect the vent and combustion air system thoroughly to ensure systems are airtight and comply with the instructions given in the venting supplement and are within all requirements of applicable codes. Failure to comply with the installation requirements on the venting and combustion air piping will cause severe personal injury or death.

Installing Condensate Drain Assembly

1. Locate the condensate drain assembly and install as shown in Fig. 15 page 23.

NOTICE

The installer may want to fill the condensate trap with water prior to assembling on the unit.

2. Remove the retaining nut and rubber seal from the condensate drain assembly and slide over the heat exchanger condensate drain nipple. Connect the condensate drain assembly to the retaining nut and tighten. **Hand tight only!**

! WARNING

Ensure the condensate drain assembly contains the plastic seated ball. Do not install the condensate drain assembly if the ball is lost or missing, replace the entire assembly.

3. Remove the compression nut and rubber seal from the drain outlet.
4. Using 3/4" x 2' flexible PVC tube provided, slide the compression nut and rubber seal over the pipe.

NOTICE

The use of 3/4" PVC or CPVC pipe is also acceptable. If 3/4" pipe is used deburr and chamfer pipe to allow mating onto the drain assembly.

5. Thread the rubber seal into the compression nut to ease installation of the pipe to the drain assembly.
6. Seat the pipe onto the drain assembly and tighten the compression nut. **Hand tight only!**

NOTICE

The installer may opt to using 13/16" ID tubing in lieu of rigid piping.

NOTICE

The drain line materials must be an approved material by the authority having jurisdiction. In absence of such authority, PVC and CPVC piping must comply with ASTM D1785 or D2845. The cement and primer used on the piping must comply with ASME D2564 or F493. For installations in Canada, use CSA or ULC certified PVC or CPVC pipe, fittings and cement/primer.

- Continue the pipe from the drain assembly to a floor drain or condensate pump.

CAUTION

The condensate drain must remain filled and unobstructed and allow unrestricted flow of condensate. The condensate should not be subject to conditions where freezing could occur. If the condensate is subjected to freezing or becomes obstructed, it can exit from the heat exchanger, resulting in potential water damage to the boiler and surrounding area.

NOTICE

When selecting and installing a condensate pump, ensure the pump is approved for use with condensing boilers and furnaces. The pump should be equipped with an overflow switch to prevent property damage from potential condensate spillage.

- The PRESTIGE Excellence will typically produce a condensate that is considered slightly acidic with a pH content below 3.0. Install a neutralizing filter if required by authority having jurisdiction.

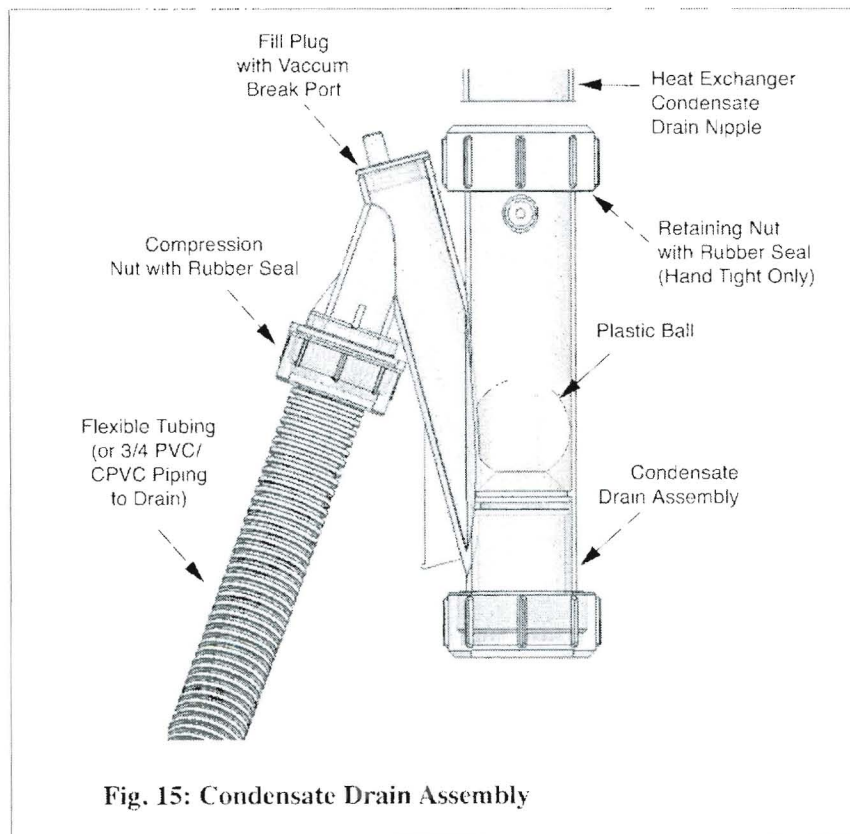


Fig. 15: Condensate Drain Assembly



CITY OF PORTLAND, MAINE

Department of Building Inspections

Original Receipt

4.13 20 11

Received from Caron E. White

Location of Work Presumpscot / Front

Cost of Construction \$ _____ Building Fee: _____

Permit Fee \$ _____ Site Fee: _____

Certificate of Occupancy Fee: _____

Building (1L) 150 HVAC Plumbing (15) 170 Electrical (12) 64.60 Site Plan (U2) _____
 Total: 384.60

Other _____

CBL: 167-E-1

Check #: 29612 Total Collected \$ 384.60

RECEIVED

No work is to be started until permit issued.
Please keep original receipt for your records.

APR 13 2011

Taken by: Dept. of Building Inspections
City of Portland, Maine

- WHITE - Applicant's Copy
- YELLOW - Office Copy
- PINK - Permit Copy