

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND

BUILDING PERMIT

This is to certify that Justin Fletcher

Located At 65 BEST ST.

Job ID: 2011-05-1006-ALTR

CBL: 134 - - E - 003 - 001 - - - -

has permission to Install a Baxi HT 380

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

Fire Prevention Officer

Code Enforcement Officer / Plan Reviewer

06/08/2011

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



PORTLAND MAINE

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Director of Planning and Urban Development
Penny St. Louis

Job ID: 2011-05-1006-ALTR

Located At: 65 BEST

CBL: 134 - - E - 003 - 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.
2. This property shall remain a single family dwelling. Any change of use shall require a separate permit application for review and approval.

Building

1. The installation must comply with UL, the Manufacturers' Listing, and State of Maine Gas Regulations.
2. 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.
3. Maintain proper setback(s) from property lines/buildings and proper clearances from vertical openings when direct venting
4. A photoelectric Carbon Monoxide (CO) detector 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.

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

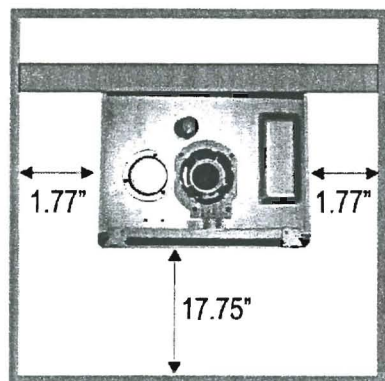


Figure 21

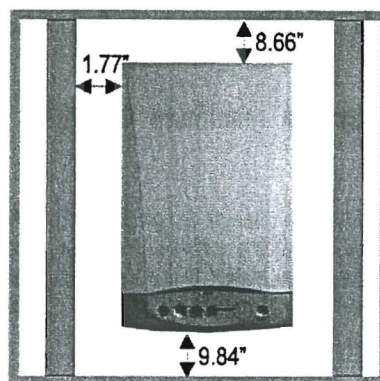


Figure 22

2.3 Venting Options

Baxi Luna HT boilers are direct-vent boilers, as such they do not require any air vents in the room in which it is installed, or when installed in a cupboard or compartment.

As with other Baxi Luna boilers, there are two standard vent options

- COAXIAL - explained in section 2.3.1
- SPLIT FLUE – explained in section 2.3.2

Additionally, there are a couple of factors that allow for increased venting options when compared to the Baxi Luna Fi series.

The lower flue temperature in a condensing boiler allows for use of alternate venting materials – see section 2.3.2.

The variable speed fan allows for longer vent lengths when using both coaxial vent (section 2.3.1) or split venting (section 2.3.2).

2.3.1 Coaxial Venting

Coaxial vent is the standards venting material for Baxi Luna HT boilers. **Coaxial (concentric) venting has a zero inch clearance to combustibles.**

COAXIAL VENT (as shown in Fig. 23) consists of

- 4" outer pipe made of epoxy coated galvanized steel that brings combustion air from the outside
- 2" inner exhaust duct made of a polypropylene composite that vents combustion gas to the outside

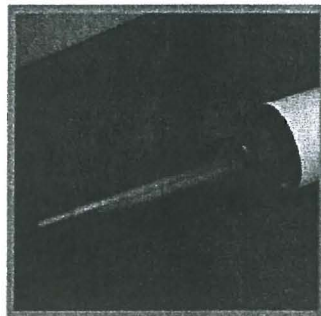


Figure 23

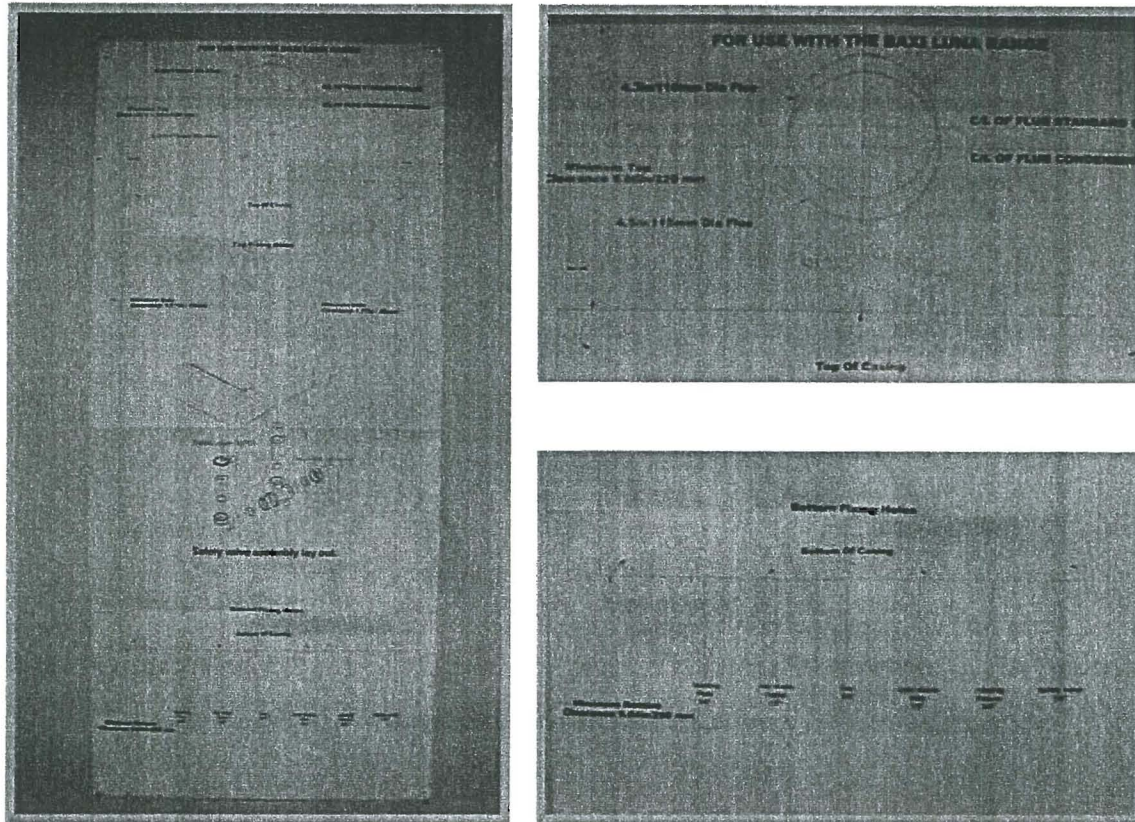


Figure 20

WALL TEMPLATE

Each Baxi Luna boiler comes included with a wall template (Fig. 20). This template is designed to assist the installer with the location of the boiler, vent hole and plumbing system connections.

1. Once the location for the boiler is chosen, unfold and hang the template on the wall.
2. If rear exit concentric venting is going to be used, mark and drill vent hole about 4-1/2" in diameter. The vent pipe fits through the hole sloping toward the boiler.
3. If side exit concentric venting is to be used, continue the horizontal centerline of the flue across the wall to the sidewall, then along the side wall (ensure the lines are horizontal). This will give the position of the center of the hole for the flue.
4. Drill pilot holes and insert lag bolts to hang boiler on – you can use pieces of 2x4 lumber horizontally along top and bottom of boiler if additional support is required.
5. The plumbing system can be roughed-in according to measurements at the bottom of the template.

NOTE:

At the bottom of the mounting template, there is an area marked $\frac{3}{4}$ " Safety Valve – this connection is not needed since the pressure relief valve is assembled as part of the fittings kit and installed as part of the boiler return.

2.2.1 Clearances

Observe the clearances to combustibles shown in Figures 21 & 22. Although a zero clearance to combustibles at the top of the boiler is allowed – when using a fire rated material between the boiler and combustible – the clearances shown in Figure 21 must be maintained for servicing purposes.



FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

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 65 Best Street 134-E-3 Use of Building Single family Date 5/20/11
Name and address of owner of appliance Justin Fletcher
99 Wellington Ave, Portland
Installer's name and address Jasaw LAMB
55 High Street, Westbrook ME 04092 Telephone 207-239-7700

Location of appliance:

- ☒ Basement ☐ Floor
☐ Attic ☐ Roof

Type of Fuel:

- ☒ Gas ☐ Oil ☐ Solid

Appliance Name: Baxi HT 380U.L. Approved ☒ Yes ☐ NoWill appliance be installed in accordance with the manufacture's installation instructions? ☒ Yes ☐ NoIF NO Explain: _____**The Type of License of Installer:**

- ☒ Master Plumber # MS90013785
☐ Solid Fuel # _____
☐ Oil # _____
☒ Gas # PNT 7169
☐ Other _____

Type of Chimney:

- ☐ Masonry Lined
Factory built _____

- ☒ Metal
Factory Built U.L. Listing # _____

- ☒ Direct Vent
Type Ceex UL# _____

Type of Fuel Tank

- ☐ Oil
☐ Gas

Size of Tank _____

Number of Tanks _____

Distance from Tank to Center of Flame _____ feet.

Cost of Work: \$ 8,000.00

Permit Fee: \$ _____

Approved

Fire: _____

Ele.: _____

Bldg.: _____

Signature of Installer _____

Approved with Conditions

- ☐ See attached letter or requirement

Inspector's Signature _____

Date Approved _____

White - Inspection

Yellow - File

Pink - Applicant's

Gold - Assessor's Copy



FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

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:

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Name and address of owner of appliance Justin Fletcher
99 Wellington Ave, Portland
Installer's name and address Tasaw LAMB
55 High Street Westbrook ME 04092 Telephone 207-239-7700

Location of appliance:

- ☒ Basement ☐ Floor
☐ Attic ☐ Roof

Type of Fuel:

- ☒ Gas ☐ Oil ☐ Solid

Appliance Name: Baxi HT 380

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 # MS90013785
☐ Solid Fuel # _____
☐ Oil # _____
☒ Gas # PNT 7169
☐ Other _____

Type of Chimney:

- ☐ Masonry Lined
Factory built _____
☒ Metal
Factory Built U.L. Listing # _____
☒ Direct Vent
Type Coax UL# _____

Type of Fuel Tank

- ☐ Oil
☐ Gas

Size of Tank _____

Number of Tanks _____

Distance from Tank to Center of Flame _____ feet.

Cost of Work: \$ 8,000.00

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

Baxi Luna HT Residential

As previously mentioned, the use of a modulating fan in the Luna HT allows for longer vent lengths than there are with the Luna Fi series.

Luna HT boilers have a maximum COAXIAL EQUIVALENT VENT LENGTH of 33' (horizontal or vertical).

As with the Fi series, vertical vent length is calculated from the top of the boiler to the bottom of the termination fitting (as shown in Fig. 29). This gives you about 3 extra feet of vent length due to the length of the termination fitting. The venting for Luna HT boilers should slope toward the boiler. Due to the designed condensing operation of the boiler, the flue condensate will be directed back to the boiler and through the integrated condensate trap on the boiler. Vent should be sloped at a rate of $\frac{1}{4}$ " for each 1' of horizontal run.

Note:

After the initial (included 90° bend) each additional 90° bend reduces the maximum flue length by 3.28 ft. Each 45° bend used reduces the maximum flue length by 1.64 ft.

Under no circumstances must the coaxial EQUIVALENT VENT LENGTH exceed 33 feet. The equivalent vent length includes physical length plus equivalent lengths of additional bends.

TO INSTALL BAXI COAXIAL VENT...

1. Determine the general vent layout for the application –
 - Will the vent elbow turn toward the rear of the boiler and exit through the wall supporting the boiler?
 - Will the vent elbow be rotated and the vent pipe be routed along the wall before terminating?

Based on the vent terminal location, position the flue elbow on the adaptor at the top of the boiler and rotate it to the required orientation - rear, right or left (as illustrated in Fig. 24).

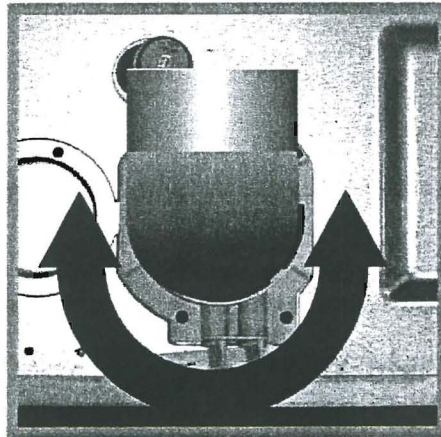


Figure 24

2. Measure the distance from the outside wall face to the elbow (As shown in Fig. 25). This dimension will be known as 'X'.

Note that on the HT 380, if the equivalent coaxial vent length is longer than 9', adjustments must be made to parameters 536 & 613 – see page 17 of the Installation & Servicing Instructions for complete details.

Fitting Kit components connected to HT 1.33

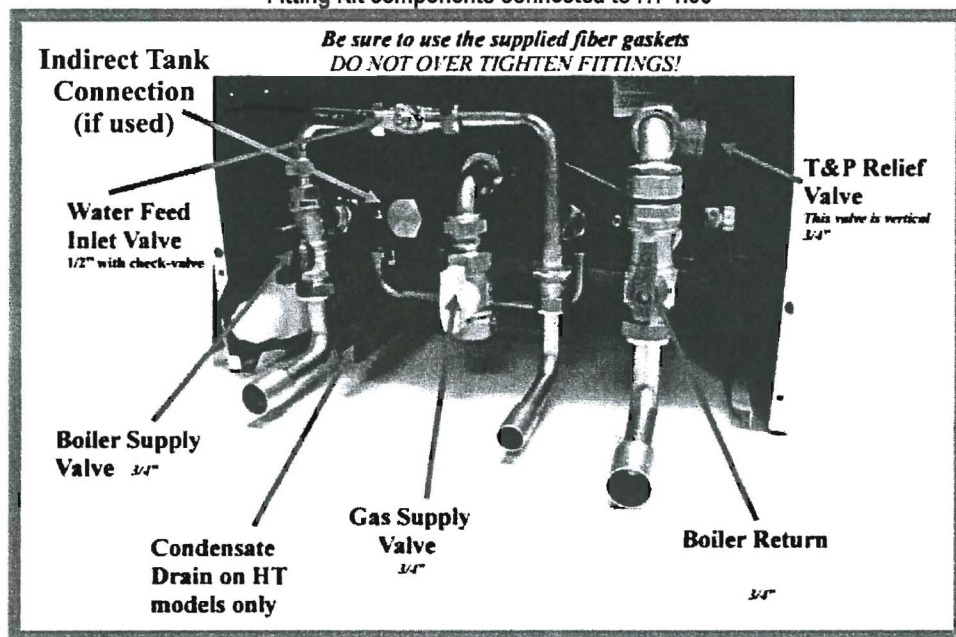


Figure 18

2.2 Locating & Hanging the Boiler

The Baxi Luna HT boiler is for internal use only. It should be installed on a level, flat wall capable of supporting the boiler's weight. It can be mounted in any room, closet, cupboard or desired space provided it is correctly designed and sufficiently vented for that purpose. The boiler must meet required combustible and service clearances as shown in Figures 21 & 22.

IMPORTANT:

- The boiler must not be installed on carpeting, keep the boiler area clear and free from flammable vapors and liquid.