

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

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

Permit No: 10-0495	Issue Date:	CBL: 387 A010001
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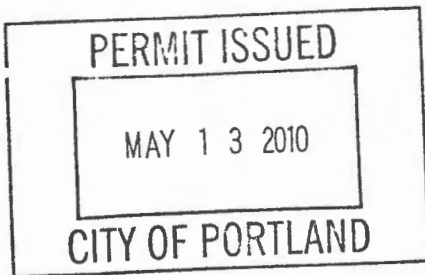
Location of Construction: 79 LONGVIEW DR	Owner Name: DRINKWATER SCOTT B	Owner Address: PO BOX 10932	Phone:
Business Name:	Contractor Name: Craig Hansen	Contractor Address: 49 Dana Court Westbrook	Phone: 2077569379
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	Zone: R2

Past Use: Single Family Home	Proposed Use: Single Family Home - intall a Baxi Luna Boiler and a 1000 gallon propane tank <i>tank separate permit</i>	Permit Fee: \$110.00	Cost of Work: \$8,400.00	CEO District: 5
Proposed Project Description: intall a Baxi Luna Boiler and a 1000 gallon propane tank		FIRE DEPT: <input type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: R3 Type: HVAC IRC-2003 Signature: <i>AMB 5/12/10</i>	

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)	
Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied	Signature: _____ Date: _____

Permit Taken By: ldobson	Date Applied For: 05/10/2010	<b>Zoning Approval</b>	
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<ol style="list-style-type: none"> <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 electrical work.</li> <li>Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..</li> </ol>	<b>Special Zone or Reviews</b> <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan  Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/> Date: <i>5/10/10</i>	<b>Zoning Appeal</b> <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: _____	<b>Historic Preservation</b> <input checked="" type="checkbox"/> Not in District 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: _____
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**CERTIFICATION**

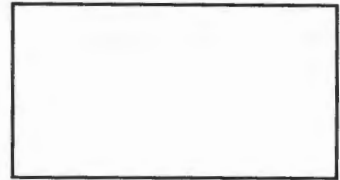
I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, 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	PHONE



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 387-A-10  
79 Longview, Portland, ME Use of Building Residential Date 5/10/10  
Name and address of owner of appliance Scott Drinkwater, 79 Longview, Portland

Installer's name and address Craig Hansen, 49 Dana Ct., Westbrook, ME 04092  
Telephone 207-756-9379

**Location of appliance:**  
 Basement       Floor  
 Attic             Roof

**Type of Fuel:**  
 Gas       Oil       Solid

**Appliance Name:** Baxi Luna  
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 # PNT5419  
 Other \_\_\_\_\_

**Type of Chimney:**  
 Masonry Lined  
Factory built \_\_\_\_\_  
 Metal  
Factory Built U.L. Listing # \_\_\_\_\_  
 Direct Vent  
Type Concrete UL# \_\_\_\_\_

**Type of Fuel Tank**  
 Oil  
 Gas

**Size of Tank** 1000 7 MAY 10 2010

**Number of Tanks** 1  
*Dept. of Building Inspections  
City of Portland Maine*

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

**Cost of Work:** \$ 8400.00  
**Permit Fee:** \$ 110

**Approved**

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

**Signature of Installer** Craig A. Hansen

**Approved with Conditions**

See attached letter or requirement

\_\_\_\_\_  
Inspector's Signature      Date Approved

**City of Portland, Maine - Building or Use Permit**

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

<b>Permit No:</b> 10-0495	<b>Date Applied For:</b> 05/10/2010	<b>CBL:</b> 387 A010001
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<b>Location of Construction:</b> 79 LONGVIEW DR	<b>Owner Name:</b> DRINKWATER SCOTT B	<b>Owner Address:</b> PO BOX 10932	<b>Phone:</b>
<b>Business Name:</b>	<b>Contractor Name:</b> Craig Hansen	<b>Contractor Address:</b> 49 Dana Court Westbrook	<b>Phone</b> (207) 756-9379
<b>Lessee/Buyer's Name</b>	<b>Phone:</b>	<b>Permit Type:</b> HVAC	

<b>Proposed Use:</b> Single Family Home - intall a Baxi Luna Boiler	<b>Proposed Project Description:</b> intall a Baxi Luna Boiler with direct vent
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**Dept:** Zoning      **Status:** Approved with Conditions      **Reviewer:** Marge Schmuckal      **Approval Date:** 05/10/2010**Note:**      **Ok to Issue:** 

- 1) This is NOT an approval for an additional dwelling unit. You SHALL NOT add any additional kitchen equipment including, but not limited to items such as stoves, microwaves, refrigerators, or kitchen sinks, etc. Without special approvals.
- 2) This property shall remain a single family dwelling. Any change of use shall require a separate permit application for review and approval.

**Dept:** Building      **Status:** Approved with Conditions      **Reviewer:** Jeanine Bourke      **Approval Date:** 05/12/2010**Note:**      **Ok to Issue:** 

- 1) The LP fuel tank shall be applied for separately.
- 2) The appliance and venting shall be installed in accordance with the UL listing

**Comments:**

5/10/2010-jmb: Left vcmmsg for Craig H. For a plot plan, if the tank is above or underground and setbacks

5/11/2010-jmb: Spoke to Craig H., the tank permit will be separate applied for by the fuel company.

## **BUILDING PERMIT INSPECTION PROCEDURES**

**Please call 874-8703 or 874-8693 (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 Inspection 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 with construction.**

  **X**   **Final inspection required at completion of work.**

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



# CITY OF PORTLAND, MAINE

Department of Building Inspections

## Original Receipt

5-10 20 10

Received from Scott Drinkwater

Location of Work 79 Longview

Cost of Construction \$ \_\_\_\_\_ Building Fee: \_\_\_\_\_

Permit Fee \$ \_\_\_\_\_ Site Fee: \_\_\_\_\_

Certificate of Occupancy Fee: \_\_\_\_\_

Total: 110

Building (I1)  Plumbing (I5)  Electrical (I2)  Site Plan (U2)

Other \_\_\_\_\_

CBL: 387-A-10

Check #: \_\_\_\_\_ Total Collected \$ 110

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

Taken by: [Signature]

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

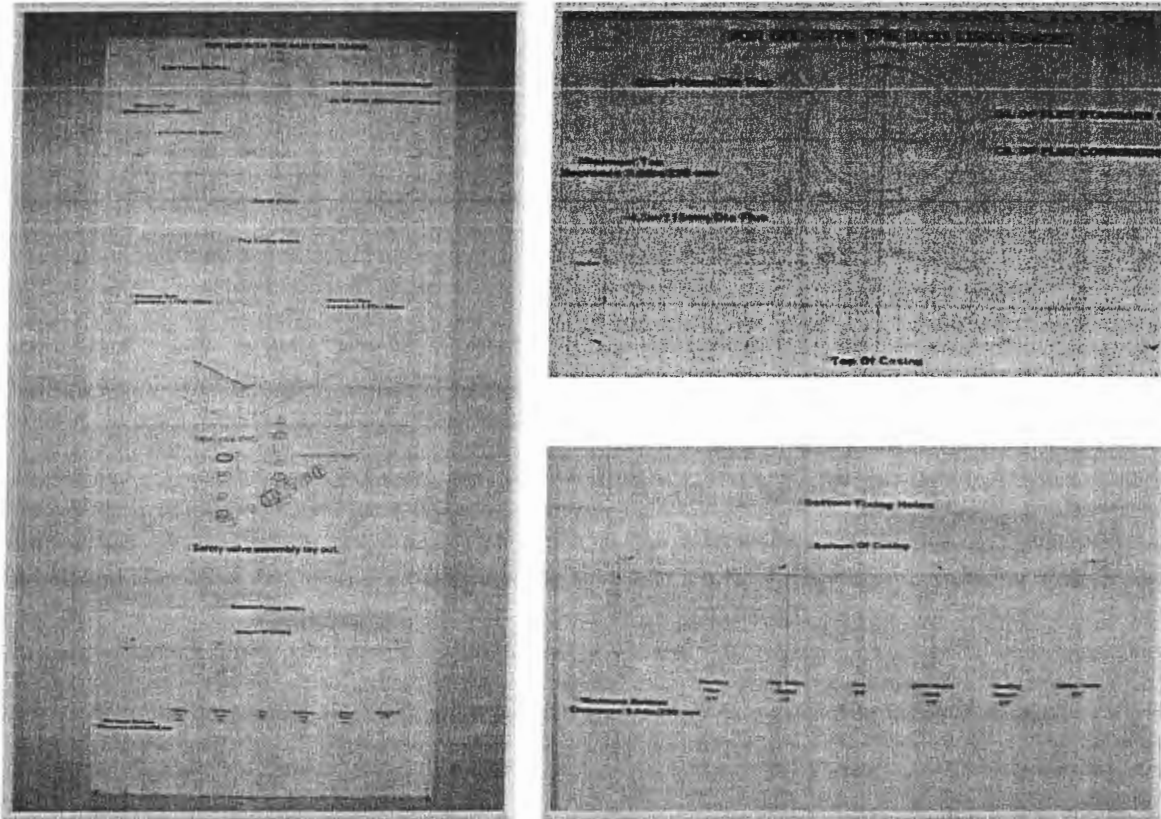


Figure 20

**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 "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.

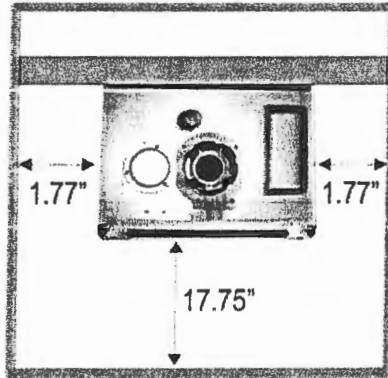


Figure 21

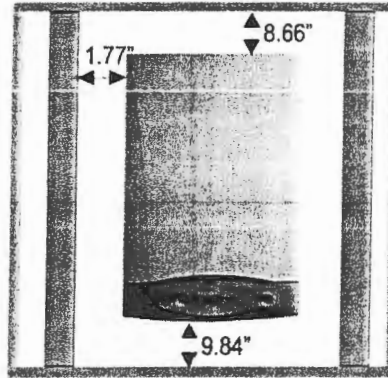


Figure 22

## 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



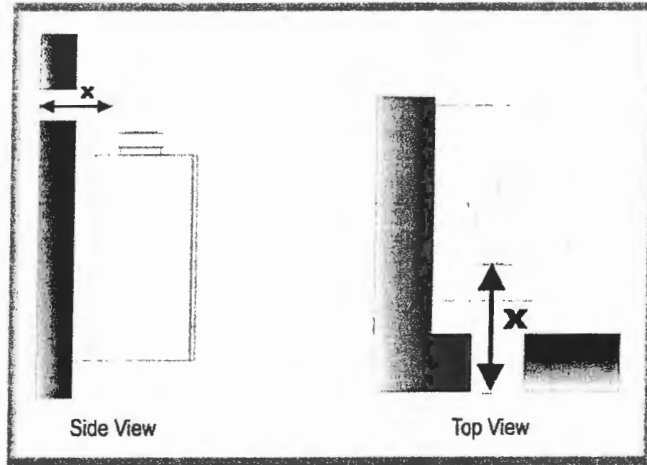


Figure 25

3. Taking the air duct, mark dimension 'X' as shown. **Add 2 inches to the measured length to account for the pipe that is inserted into the gasketed fitting.** On the Luna HT series, the inner vent and outer vent are cut square at the same point, and do not need to be separated before cutting. When cutting, be careful not to crush the outer vent.
4. Remove the waste from both ducts. Ensure that the cut ends are square and free from burrs.

**IMPORTANT:** Check all measurements before cutting

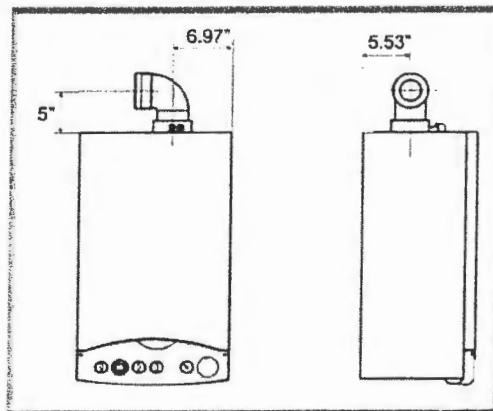


Figure 26

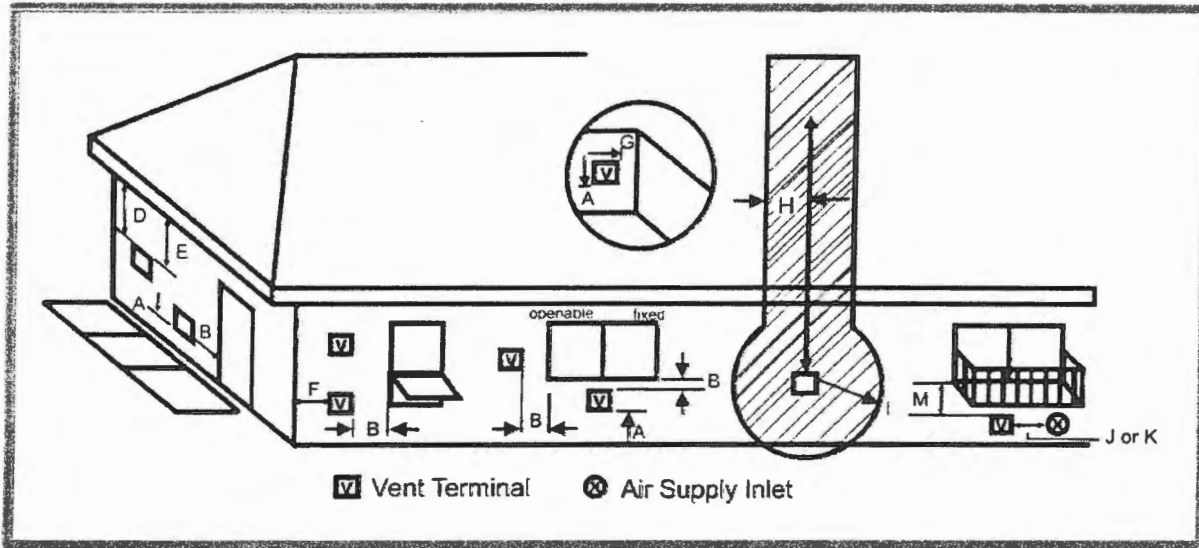
5. Depending on the vent orientation, it may be necessary to pass the vent through the wall, place the elbow on the boiler, than assemble the pipe and the elbow. Unlike the Luna Fi series, there are no clamps required for HT venting; the gasketed pipe does not need clamps. If longer horizontal runs are used, be sure to adequately support the vent pipe – especially at the joints between pipes.

**NOTE:**

**IT IS EXTREMELY IMPORTANT TO LUBRICATE THE INNER POLYPROPYLENE EXHAUST PIPE AND THE OUTER VENT GASKETS BEFORE ASSEMBLING (as shown in Fig. 28). THIS WILL AID THE ASSEMBLY OF THE VENT COMPONENTS AND HELP PREVENT THE VENT GASKET FROM BINDING AND BECOMING DISTORTED – POSSIBLY RESULTING IN CROSS CONTAMINATION OF FLUE GAS. WHEN LUBRICATING THE GASKET AND VENT, USE A NON-PETROLEUM-BASED HEAT-RATED PLUMBERS GREASE. A SOLUTION OF SOAP AND WATER WILL ALSO WORK WELL.**



### 2.3.3 External Venting Clearances



Exterior Clearances for Residential Installation	
Location	Minimum Clearance
<b>A</b> Clearance above Grade, Veranda, Porch Deck or Balcony	12"
<b>B</b> Clearance to Door or Window that may be Opened	12"
<b>D</b> Vertical Clearance to ventilated Soffit located above the Termination Fitting - within 24" from the centerline of the Termination Fitting	18"
<b>E</b> Clearance to Ventilated Soffitt	18"
<b>F</b> Clearance to Outside Corner	9"
<b>G</b> Clearance to Inside Corner of Building	6"
<b>H</b> Clearance to gas meter (in any direction) including centerline extending vertically	48"
<b>I</b> Clearance to Service Regulator Vent Outlet (in any direction)	36"
<b>J</b> Clearance to non-mechanical Air Supply Inlet to building or to the combustion Air Inlet of Any Other Appliance	9"
<b>K</b> Clearance to a Mechanical Air Supply Inlet	36"
<b>L</b> Clearance above a Paved sidewalk or paved driveway located on public property	84"
<b>M</b> Clearance under Veranda, porch, deck or balcony	18"

The Baxi Luna HT venting clearances are based on NFPA vent data. There may be additional LOCAL VENTING RESTRICTIONS that should be verified with the local authority having jurisdiction (AHJ).