

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND

# BUILDING PERMIT

This is to certify that JAMES ISAACSON

Located At 71 ST LAWRENCE ST

Job ID: 2012-01-3009-HVAC

CBL: 016- E-023-001

has permission to Install an HVAC System (Single Family Residence).

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

01/04/2011

\_\_\_\_\_  
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**

## 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 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.**
1. Close-In: (Electrical, Plumbing, Framing)
  2. 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.



# PORTLAND MAINE

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

Director of Planning and Urban Development

Job ID: 2012-01-3009-HVAC

Located At: 71 ST LAWRENCE  
ST

CBL: 016- E-023-001

## **Conditions of 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 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.
5. M1804.2.5 Direct vent terminations. Vent terminals for direct-vent appliances shall be installed in accordance with the manufacturer's installation instructions.





2012 01 3009

FILL IN AND SIGN WITH INK

60

# APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT



016 E 02 J R-6

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 71 St Lawrence St # 10-0573 Use of Building Res Date 8/22/11  
Name and address of owner of appliance Robie builder James ISAACS

Installer's name and address GALO inc  
149 Charles Mills Rd Hollis Me Telephone 807 1429  
Charles Mills Rd 04042

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

**Type of Fuel:**  
 Gas  Oil  Solid

**Appliance Name:** Baxi or Triangle tank  
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 # 8439  
 Solid Fuel # \_\_\_\_\_  
 Oil # \_\_\_\_\_  
 Gas # PAT 8575  
 Other \_\_\_\_\_

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

Metal  
Factory Built U.L. Listing # \_\_\_\_\_

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

**Type of Fuel Tank**  
 Oil  
 Gas

Size of Tank 200

Number of Tanks 2

Distance from Tank to Center of Flame 25 feet.

Cost of Work: \$ 5000

Permit Fee: \$ 70.00

**RECEIVED**  
AUG 22 2011  
DEC 20 2011  
Dept. of Building Inspections  
City of Portland, Maine

**Approved**

Fire: \_\_\_\_\_

Ele.: \_\_\_\_\_

Bldg.: \_\_\_\_\_

Signature of Installer [Signature]

White - Inspection Yellow - File Pink - Applic

1/3/12  
- notes in the system  
permit was actually  
received on 12/22/11.

66

# **BAXI HEATING**

## **LUNA HT** *wall hung boilers*

MARATHON INTERNATIONAL  
NORTH AMERICAN DISTRIBUTOR  
FOR BAXI PRODUCTS

## **Luna HT Boiler SUGGESTED SPECIFICATIONS**

### **General Requirements**

1. Supply and install \_\_\_\_\_ (qty) wall-hung packaged high efficiency gas-fired boiler(s), with modulating sealed combustion, stainless steel heat exchanger, power vented using outside air for combustion.
2. Install packaged boiler(s) according to manufacturer's instructions. All work to be carried out in a neat and workmanlike manner.
3. Baxi Luna HT \_\_\_\_\_ (qty) packaged boiler(s), capable of burning Natural or Propane gas.
4. Boiler(s) shall be 90% minimum DOE efficient as required by the National Energy Conservation Act or ASHRAE 90.1.
5. Boiler(s) shall be capable of full electronic modulation firing.
6. Boiler(s) shall be manufactured by ISO 14001 and ISO 9001 registered company to conform to Section IV of the ASME Boiler and Pressure Vessel Code.
  - Stainless steel heat exchanger to be hydrostatically pressure tested and fire tested at factory in accordance with ASME requirements.
  - Maximum allowable working pressure 30 PSIG water as listed in installation manual.
  - Boiler(s) and controls to comply with applicable regulations.
  - Boiler(s) shall meet U.S. Environment Protection Agency and Department of Energy guidelines for "Energy Star"™ energy efficiency.

### **Product**

1. Acceptable boiler manufacturer(s) include(s):
  - Baxi Luna HT only, as specified in previous section, part 3.
  - Other manufacturers or Baxi Luna HT boiler(s) must comply with specifying Engineer's requirements, including:
    - Full intent of these specifications, and
    - Provide complete submittal including literature and manuals. The alternant must be similar size and footprint and have similar clearance requirements.
    - Boiler(s) shall be supplied with a valve kit and connectors to connect boiler to system piping.

- Submittal presented to Engineer at least 7 working days before bid opening for approval. Substitutions will not be permitted after the contract is awarded.
2. Boiler Construction
    - Boiler(s) heat exchanger must be stainless steel.
    - The boiler(s) combustion chamber must be sealed
    - Boiler(s) shall be supplied with a gas valve designed for full electronic modulation. The inlet (natural) (propane) pressure to the boiler gas valve shall be minimum of 7" w.c. and a maximum of 13" w.c.
    - The burner shall be manufactured with stainless steel.
    - The boiler shall be equipped with a blower system to expel flue gasses.
    - The control system shall have an electronic display for boiler status, and boiler diagnostics.
  3. Venting and Combustion Air
    - Boiler(s) must be capable of using outside air piped directly to boiler for combustion. Inlet and termination of these pipes must be connected to either through the roof, or sidewall terminations as recommended by the manufacturer.
    - The boiler(s) shall be direct vent.
  4. Boiler Trim
    - All electrical components to be high quality manufacture and bear UL listing.
    - High limit control to 195 °F maximum allowable boiler water temperature.
    - Pressure gauge clearly marked for easy identification.
    - Outlet water temperature sensors.
    - Low water cut off protection.
    - ASME certified pressure relief valve, set to relieve at 30 PSIG.
    - Built in freeze protection.
    - Built in Grundfos circulator.
  5. Boiler Manuals
    - The boiler(s) shall be supplied with complete instruction manuals, including:
      - Boiler Installation Manual.
      - User's Manual.

**BAXI LUNA**

[www.wallhungboilers.com](http://www.wallhungboilers.com)

**Marathon International**  
**1815 Sismet Road**  
**Mississauga, Ontario L4W 1P9**

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# CITY OF PORTLAND, MAINE

Department of Building Inspections

## Original Receipt

Aug 22 2011

Received from Garcia Inc

Location of Work 71 So Lawrence

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

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

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

160. Total: \_\_\_\_\_

Building (IL) \_\_\_\_\_ Plumbing (I5)  Electrical (I2) \_\_\_\_\_ Site Plan (U2) \_\_\_\_\_

Other HVAC 70.

CBL: 016 E 023

Check #: 5399 Total Collected \$ 230.00

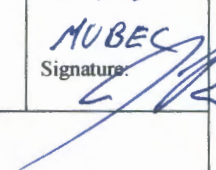
**No work is to be started until permit issued.  
Please keep original receipt for your records.**

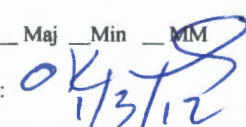
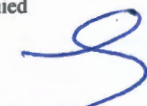
Taken by: [Signature]

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

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

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

Job No: 2012-01-3009-HVAC	Date Applied: 12/22/2011	CBL: 016- E-023-001	
Location of Construction: 71 ST LAWRENCE ST	Owner Name: JAMES ISAACSON	Owner Address: 22 SWIFT RD WAYNE, ME 04284	Phone:
Business Name:	Contractor Name: Gaco, Inc.	Contractor Address: 149 Clark Mills Road, Hollis, ME 04042	Phone: 807-1429
Lessee/Buyer's Name:	Phone:	Permit Type: HVAC	Zone: R-6 in-fill
Past Use: Single Family Dwelling	Proposed Use: Same: Single Family Dwelling to install Baxi Luna HT heating unit	Cost of Work: \$5,000.00	CEO District:
		Fire Dept: <input type="checkbox"/> Approved <input type="checkbox"/> Denied <input checked="" type="checkbox"/> N/A	Inspection: Use Group: R3 Type: SB MUBEC Signature: 
Proposed Project Description: Install Baxi Heating unit in the basement		Pedestrian Activities District (P.A.D.)	
Permit Taken By: Gayle		<b>Zoning Approval</b>	

<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building Permits do not include plumbing, septic or electrical work.</p> <p>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.</p>	<p><b>Special Zone or Reviews</b></p> <p><input type="checkbox"/> Shoreland</p> <p><input type="checkbox"/> Wetlands</p> <p><input type="checkbox"/> Flood Zone</p> <p><input type="checkbox"/> Subdivision</p> <p><input type="checkbox"/> Site Plan</p> <p>___ Maj ___ Min ___ MM</p> <p>Date:  1/3/12</p>	<p><b>Zoning Appeal</b></p> <p><input type="checkbox"/> Variance</p> <p><input type="checkbox"/> Miscellaneous</p> <p><input type="checkbox"/> Conditional Use</p> <p><input type="checkbox"/> Interpretation</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Denied</p> <p>Date:</p>	<p><b>Historic Preservation</b></p> <p><input checked="" type="checkbox"/> Not in Dist or Landmark</p> <p><input type="checkbox"/> Does not Require Review</p> <p><input type="checkbox"/> Requires Review</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Approved w/Conditions</p> <p><input type="checkbox"/> Denied</p> <p>Date: </p>
	<b>CERTIFICATION</b>		

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 appication 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



# BAXI



**BAXI** LUNA  **HT**

Modulating, Condensing Wallhung Boilers



# condensing boilers deliver

## SMART TECHNOLOGY

- ◆ Easy adjustment for natural gas or propane
- ◆ Nickel-chrome, stainless steel premix burner (AISI 316L) and primary heat exchanger, high resistance to corrosion, no internal welding, large heat exchange surface and low heat inertia
- ◆ Electronic, gradual ignition
- ◆ Fully modulating fan and calibrated venturi
- ◆ Gas valve with continuous modulation system
- ◆ Electronic 3 way diverter valve
- ◆ Gas valve has 1:1 gas/air mechanical control
- ◆ Sealed combustion

## CONTROL AND SAFETY SYSTEM\*

- ◆ Fully automatic self diagnostics
- ◆ Double CPU microprocessor for efficiency optimization
- ◆ Anti-freeze protection (Unit will operate at low fire until 86° F/30°C loop temperature is achieved)
- ◆ Pump protection (automatically operates for 10 seconds if system is static for 24 hours)
- ◆ 3-way valve protection (electronic communication and operation to main circuit board if static for 24 hours)
- ◆ Other built-in features:
  - Circulating pump with automatic air vent
  - Pressure relief valve
  - Expansion Tank
  - Heating circuit fill and drain valves
  - Independent heating and domestic temperature set point dials
  - Electronic temperature control NTC sensors
  - High limit switch
  - Flue limit switch
  - Flame sensing electrode
  - Low water cut-off
  - Backflow device
  - Automatic by-pass
  - Inducer fan

\*Not all components are included with commercial units.

## Baxi Modulo

Baxi Modulo features the Baxi Luna HT 1.330 condensing boiler atop a 21-gallon (US) stainless steel, insulated storage tank. The Modulo may also be used with the Baxi Luna 3 Comfort 1.31 standard efficiency boiler. Its sleek design and compact size (17¾" x 21¾" x 64½") makes Baxi Modulo a great addition to any space.



*Combines smart looks with smart technology*



# er home comfort

**Baxi Luna HT condensing boilers can be combined with ...**



*Wall Radiators*



*Heated Towel Racks*



*Indirect-fired Tanks*



*In-floor Heating*



*Hydronic Air Handlers*

## **Temperature Regulation Accessories**

Baxi Luna HT condensing boilers can be connected to an outdoor probe to produce greater comfort, higher efficiency and lower energy consumption. It can also be supplied with the remote controller and room thermostat which allows remote programming, setting and control of up to 50 parameters. A Baxi accessory made by Siemens, this is a smart control – meaning it assesses the R-value of a home or business space, and adjusts the rate of gas consumption accordingly.



*Outdoor Probe*



*Remote Controller*

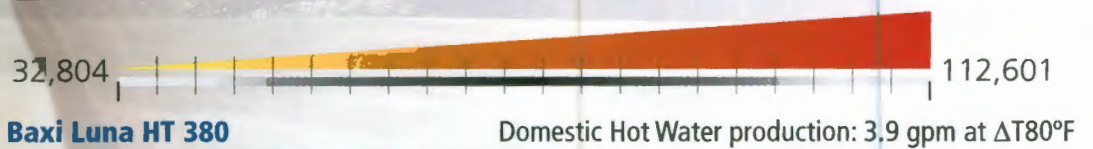


# condensing boilers

**90%** | **80%**  
less **CO** | less **NOx**

## Heat Output Modulation Range (BTU/hr)

### Combination Heating and Domestic Hot Water Model



### Heating Models



The Baxi Luna HT series features five modulating, condensing boilers that can generate up to 98% efficiency, providing heat for an entire home or office from 600 to 6,000 square feet.

Baxi technology regulates the modulation of the burner flame – a key contributor to Baxi high energy efficiency. Also, Baxi condensing boilers utilize energy from condensing water vapor in the exhaust gases, thereby optimizing fuel consumption.



# Baxi Luna HT Technical Notes

Multiple Baxi Luna HT condensing boilers can be cascaded, sharing a common venting system with a single exterior penetration. A five-unit Baxi Luna HT 1.65 application, for example, generates a combined maximum heating output of 1.1 million BTU/hr.



Description	Residential		Commercial				
	Luna HT 380	Luna HT 1.33	Luna HT 1.45	Luna HT 1.65	Luna HT 1.100		
Rated heat input	BTU/hr	126,376	126,376	167,262	241,600	379,127	
Reduced heat input	BTU/hr	37,192	37,192	55,618	73,361	112,980	
Rated heat output	BTU/hr	112,601	112,601	153,546	221,789	348,039	
Reduced heat output	BTU/hr	32,804	32,804	52,058	69,326	106,766	
Sealed combustion chamber		yes	yes	yes	yes	yes	
Ignition		electronic	electronic	electronic	electronic	electronic	
Anti-frost device on heating circuit		yes	yes	yes	yes	yes	
Maximum pressure on heating circuit	psi	30	30	30	30	30	
Regulation of heating circuit water temperature	– high temp	°F	86/180	86/180	86/180	86/180	86/180
	– low temp	°F	86/113	86/113	86/113	86/113	86/113
Dimensions:	Height	in	30.04	30.04	37.40	37.40	37.40
	Width	in	17.71	17.71	23.62	23.62	23.62
	Depth	in	13.58	13.58	18.35	18.35	25.62
Coaxial/Dual flue tube	in	2.36-3.93/2.36	2.36-3.93/2.36	3.15-4.92/3.15	3.15-4.92/3.15	4.33-6.30/4.33	
Net weight	lbs	102	102	141	158	215	
Gas type		NG/LP	NG/LP	NG/LP	NG/LP	NG/LP	

## BAXI

Marathon International  
Exclusive North American Distributor  
for Baxi Products  
1815 Sismet Road, Mississauga  
Ontario L4W 1P9, Canada

info@wallhungboilers.com

DISTRIBUTED BY:

[www.wallhungboilers.com](http://www.wallhungboilers.com)



Baxi is ISO 9001 certified for quality management, OHSAS 18001 for health and safety management and ISO 14001 for environmental management.

The Company assumes no responsibility for any possible contents mistakes, and reserves the right to make changes in products, due to technical or commercial demands, at any time without notice.



# BAXI LUNA HT wallhung

An ideal green solution for all heating and domestic hot water needs

## Environmentally friendly

- ◆ Emits 90% less CO and 80% less NO<sub>x</sub>
- ◆ Can cut utility bills in half
- ◆ Can cut greenhouse gas emissions by more than half

## Compact space saver

- ◆ Approved for closet installation
- ◆ Up to 98% efficient (92.5% AFUE)
- ◆ Endless hot water on demand

## Quietest boiler on the market

- ◆ Fully modulating fan
- ◆ Direct vent
- ◆ Automatic self diagnostics

### Baxi Field Test Results

#### **Building A Better Future**

Marathon International, Baxi's exclusive North American distributor, performs extensive field tests in the marketplace. A 2007 field test in Ontario, Canada shows impressive results. The test involves installation of a Baxi Luna combination heating and domestic hot water boiler, together with a hydronic air handler. The test site is a 2,000 square-foot home built in 1984, with well insulated windows installed seven years ago. Here are some highlights:

**Endless hot water:** Entire family of five finds hydronic heating to be much more comfortable and more even than previous forced air furnace. The separate, on-demand DHW loop on the boiler means morning arguments about running out of hot water for showers are a thing of the past.

**Gas bills cut in half:** Family is enjoying fuel consumption savings and lower gas bills totaling up to 58% a month less than last year. Previous 60-gallon tank called for heating for 15 minutes out of every hour, 24/7.

**Environmental benefits:** Household expects to cut fuel consumption in half, saving 1,500 cubic meters (530 therms) of natural gas annually. That equates to a greenhouse gas emissions reduction of about 2.6 tonnes of CO<sub>2</sub> a year – the same amount of CO<sub>2</sub> not produced by parking a car for six months, or the amount of CO<sub>2</sub> removed by planting trees on one acre of land.

For more information, visit [www.wallhungboilers.com/news](http://www.wallhungboilers.com/news)

