

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND

# BUILDING PERMIT

This is to certify that Zareh Derhagopian

Located At 27 WILKIE ST

Job ID: 2011-03-511-UI

CBL: 307- F-015-001

2012-14425HVAC

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

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

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

01/20/2012

**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.**

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.**

1. Close-In: (Electrical, Plumbing, Framing)
2. Final Inspection



# PORTLAND MAINE

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Director of Planning and Urban Development

Job ID: 2011-03-511-UI

Located At: 27 WILKIE ST

CBL: 307- F-015-001


## **Conditions of Approval:**

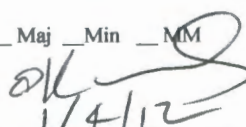
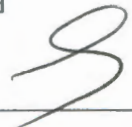
### **Building**

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.

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

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

|   |  |  |   |
|---|--|--|---|
| Job No:<br>2011-03-511-UI<br>2012-14425HVAC                   | Date Applied:<br>12/30/2011  | CBL:<br>307- F-015-001   |   |
| Location of Construction:<br>27 WILKIE ST                     | Owner Name:<br>Zareh Derhagopian   | Owner Address:<br>23 Storey Brook Road, Falm,outh, ME 04105  | Phone:  |
| Business Name:  | Contractor Name:<br>All Aspects Plumbing & Heating, INC  | Contractor Address:<br>PO BOX 10462 PORTLAND MAINE 04104   | Phone:<br>632-2857  |
| Lessee/Buyer's Name:  | Phone:   | Permit Type:<br>HVAC   | Zone:<br>R-3  |
| Past Use:<br><br>Single family dwelling<br>under construction | Proposed Use:<br><br>Same: Single family dwelling<br>under construction – to install<br>Baxi Luna 3 heating system | Cost of Work:<br>\$8,000.00  | CEO District:   |
|   |  | Fire Dept:<br><br><input type="checkbox"/> Approved<br><input checked="" type="checkbox"/> Denied<br><input checked="" type="checkbox"/> N/A<br><br>Signature: | Inspection:<br>Use Group: R3<br>Type: SB<br>MUBEC<br>Signature:  |
| Proposed Project Description:<br>27 Wilkie St - Permit#101467 |  | Pedestrian Activities District (P.A.D.)  |   |
| Permit Taken By: Brad   |  | <b>Zoning Approval</b>   |   |

|  |   |   |  |
|--|---|---|--|
| 1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.<br>2. Building Permits do not include plumbing, septic or electrical work.<br>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. | <b>Special Zone or Reviews</b><br><input type="checkbox"/> Shoreland<br><input type="checkbox"/> Wetlands<br><input type="checkbox"/> Flood Zone<br><input type="checkbox"/> Subdivision<br><input type="checkbox"/> Site Plan<br><br><input type="checkbox"/> Maj <input type="checkbox"/> Min <input type="checkbox"/> MM<br>Date:  1/4/12 | <b>Zoning Appeal</b><br><input type="checkbox"/> Variance<br><input type="checkbox"/> Miscellaneous<br><input type="checkbox"/> Conditional Use<br><input type="checkbox"/> Interpretation<br><input type="checkbox"/> Approved<br><input type="checkbox"/> Denied<br><br>Date: | <b>Historic Preservation</b><br><input checked="" type="checkbox"/> Not in Dist or Landmark<br><input type="checkbox"/> Does not Require Review<br><input type="checkbox"/> Requires Review<br><input type="checkbox"/> Approved<br><input type="checkbox"/> Approved w/Conditions<br><input type="checkbox"/> Denied<br><br>Date:  |
|  | <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 |



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 27 WILKIE ST. PORTLAND Use of Building SINGLE FAMILY Date 12/18/11  
 Name and address of owner of appliance ZAREH DERHAGOPIAN 23 Stoney Brook Rd  
Falmouth, ME 04105  
 Installer's name and address ALL ASPECTS PLUMBING + HEATING, INC  
 Telephone 207-632-2857

### Location of appliance:

- Basement
- Attic
- Floor
- Roof

### Type of Fuel:

- Gas
- Oil
- Solid

### Appliance Name:

BAXI LUNA 3 - 310FI

U.L. Approved  Yes  No

Will appliance be installed in accordance with the manufacture's installation instructions?  Yes  No

IF NO Explain: \_\_\_\_\_

**RECEIVED**

### The Type of License of Installer:

- Master Plumber # \_\_\_\_\_
- Solid Fuel # \_\_\_\_\_
- Oil # \_\_\_\_\_
- Gas # PNT2080
- Other \_\_\_\_\_

DEC 30 2011  
Dept. of Building Inspections  
City of Portland Maine

### Type of Chimney:

- Masonry Lined  
Factory built \_\_\_\_\_
- Metal  
Factory Built U.L. Listing # \_\_\_\_\_

### Direct Vent

Type CONVEYEC UL#  
STAINLESS STEEL

### Type of Fuel Tank

- Oil
- Gas

Size of Tank BY OTHERS

Number of Tanks \_\_\_\_\_

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

Cost of Work: \$ 7,500.<sup>00</sup>

Permit Fee: \$ 800.00 100

### Approved

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

### Approved with Conditions

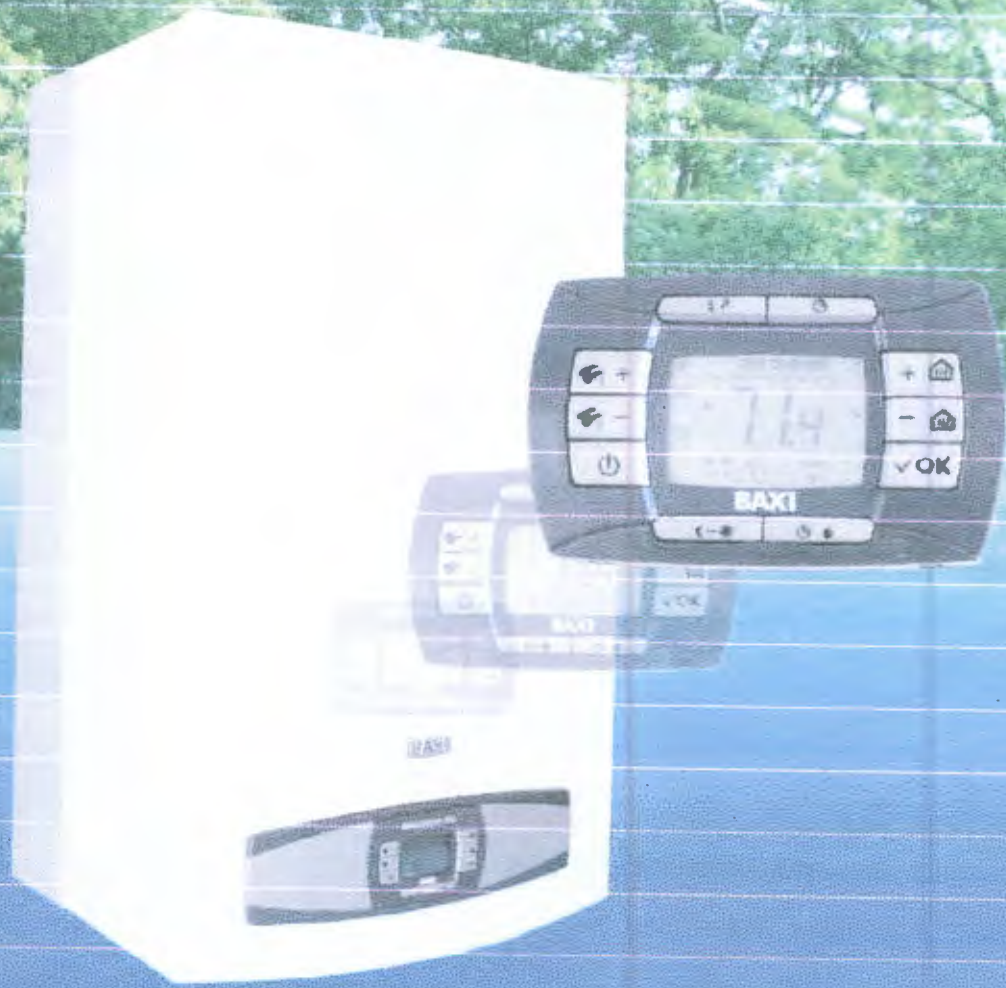
- See attached letter or requirement

Signature of Installer \_\_\_\_\_

Inspector's Signature \_\_\_\_\_

Date Approved \_\_\_\_\_

White - Inspection    Yellow - File    Pink - Applicant's    Gold - Assessor's Copy



**BAXI LUNA 3 Comfort**  
Modulating Wallhung Boiler

# Baxi Luna 3 Comfort Modulating Wallhung Boiler



The new Baxi Luna 3 Comfort controller made by Bertelli & Partners enhances boiler set up and performance. It can also be used as room thermostat, communicating with an optional external sensor to optimize performance.

### Advanced Functions

- ◆ Climatic curves selection (with external sensor)
- ◆ Selection of the type of building
- ◆ Self-learning function (automatic selection of the best climatic curve)
- ◆ Modulating thermostat
- ◆ DHW timer (with indirect cylinder)
- ◆ Sets up in F° or C°
- ◆ Optional A/C control

### Controller Info Mode

- ◆ Actual DHW temperature
- ◆ Actual external temperature
- ◆ CH set-point temperature
- ◆ Actual CH temperature
- ◆ DHW flow rate
- ◆ Current modulating %
- ◆ Boiler Output %
- ◆ Flame signal %

### Mechanical Specifications

Furnish and install a fully, modulating wallhung boiler, as shown in the plans. The boiler shall be a Baxi Luna 3 Comfort 310 Fi combination central heating and domestic hot water boiler, or approved equal. The boiler shall be pre-assembled, and NG/propane fired. The boiler shall include a Baxi controller made by Bertelli & Partners. It shall feature modulating sealed combustion with a nickel-chrome stainless steel AISI 316L premix burner and heat exchanger, as well as power venting using outdoor air for combustion. The boiler shall be CSA approved and Energy Star certified, with an AFUE rating of 85.5%. The boiler

shall be manufactured by an OHSAS 18001, ISO 14001 and ISO 9001 registered company to conform to Section IV of the ASME Boiler and Pressure Vessel Code. The boiler's heat exchangers shall bear the ASME H-Stamp. The boiler shall be solar water heating system compatible, and able to bring pre-heated water from an indirect solar tank up to demand. The boiler shall feature these built-in components:

- ◆ 3-way electronic valve
- ◆ Circulating pump with auto air vent
- ◆ Pressure relief valve
- ◆ Expansion Tank
- ◆ Heating circuit fill and drain valves
- ◆ Electronic temperature control
- ◆ High limit switch
- ◆ Low water cut-off
- ◆ Backflow device
- ◆ Automatic by-pass
- ◆ Inducer fan

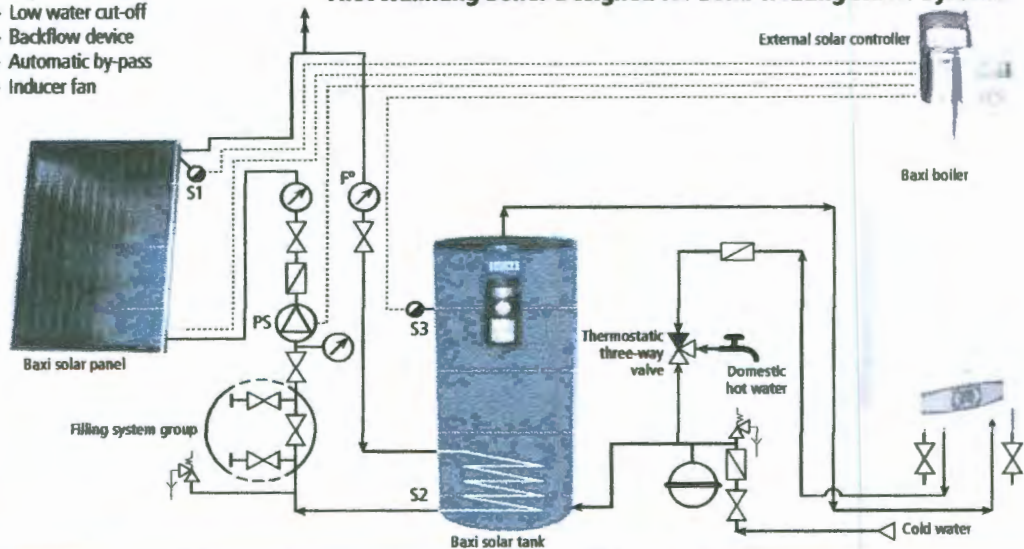
| Technical Data                                  |        | Baxi Luna 3 Comfort 310 Fi Combi CH & DHW | Baxi Luna 3 Comfort 1.31 Fi CH Boiler |
|---|--------|---|---------------------------------------|
| AFUE rating                                     | %      | 85.5                                      | 85.5                                  |
| Thermal efficiency (maximum)                    | %      | 89  | 89                                    |
| Rated heat input                                |        | 126,249                                   | 126,249                               |
| Reduced heat input                              |        | 45,040                                    | 45,040                                |
| Rated heat output                               | BTU/hr | 105,776                                   | 105,776                               |
| Reduced heat output                             |        | 35,486                                    | 35,486                                |
| Sealed combustion chamber                       |        | yes                                       | yes                                   |
| Ignition  |        | electronic                                | electronic                            |
| Anti-frost device on heating circuit            |        | yes                                       | yes                                   |
| Maximum pressure on heating circuit             | psi    | 43  | 43                                    |
| Regulation of heating circuit water temperature |        |   |                                       |
| – high temp                                     | °F     | 86/180                                    | 86/180                                |
| – low temp                                      | °F     | 86/113                                    | 86/113                                |
| Dimensions:                                     |        |   |                                       |
| Height  | in     | 30.04                                     | 30.04                                 |
| Width   | in     | 17.71                                     | 17.71                                 |
| Depth   | in     | 13.58                                     | 13.58                                 |
| Coaxial/Dual flue tube                          | in     | 2.36-3.93/3.14                            | 2.36-3.93/3.14                        |
| Net weight                                      | lbs    | 90  | 86                                    |
| Gas type  |        | NG/LP                                     | NG/LP                                 |

Baxi Luna 3 Comfort 310Fi is a combination central heating and DHW boiler. A separate plate-to-plate heat exchanger produces DHW of 3.3 gpm at delta T 77°F. All heat exchangers in Baxi Luna boilers are ASME H-Stamp certified, and come with a 10-year warranty.

### Baxi Luna 3 Comfort 310Fi and 1.31Fi Modulation Range (BTU/hr)



### First Wallhung Boiler Designed for Solar Heating Water Systems



# BAXI

Marathon International  
Exclusive North American Distributor for BAXI Products  
1815 Sismet Road, Mississauga, Ontario L4W 1P9, Canada  
1-800-461-4657 • info@wallhungboilers.com

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



3.5 FLUE TERMINAL LOCATION - Fig. 16  
IN COMPLIANCE WITH C A 4

3.5 PLACEMENT DU TERMINAL DE LA BUSE - Fig. 16  
EN CONFORMITE AVEC CGA B149

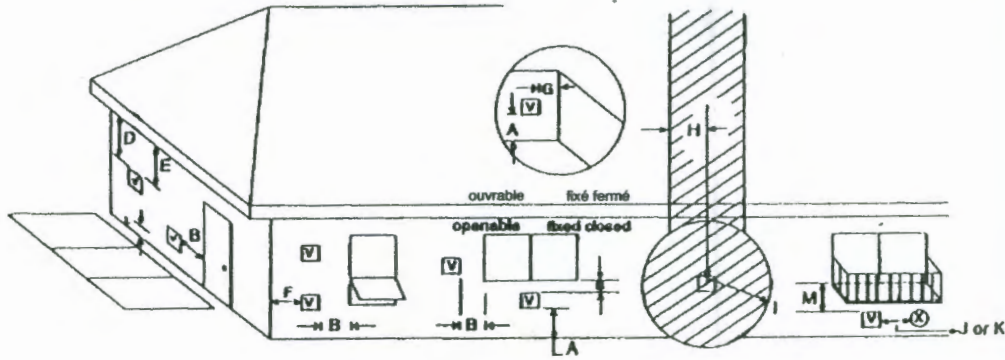


Fig. 16

= VENT TERMINAL  
= TERMINAL CONDUIT AIR

= AIR SUPPLY INLET  
= PRISE D'AIR

= AREA WHERE TERMINAL IS NOT PERMITTED  
= ZONE INTERDITE AU DEPLACEMENT DU TERMINAL

| Vent Termination Minimum Clearances - Distances minimales du terminal |  |
|---|--|
| A = 12"   | clearances above grade, veranda, porch, deck or balcony - distances au-dessus du terrain, d'une véranda, d'un porche, du sol ou d'un balcon  |
| B = 12"   | clearances to window or door that may be opened - distances d'une fenêtre ou d'une porte ouvrables   |
| D = 18"   | vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (60 cm) from the centre line of the terminal - distance verticale d'un intrados placé au-dessus du terminal à la distance horizontale de 2 ft. (60 cm) au maximum de la ligne centrale du terminal |
| E = 18"   | clearance to unventilated soffit - distance d'un intrados non ventilé  |
| F = 9"  | clearance to outside corner - distance d'un angle externe  |
| G = 6"  | clearance to inside corner - distance d'un angle interne   |
| H = 4 ft. (U.S.A.)<br>3 ft. (Canada)                                  | not to be installed above a gas meter/regulator assembly within H horizontally from the centre line of the regulator - à ne pas installer au-dessus d'un compteur du gaz / du raccord d'un limiteur placés à 3 ft. (90 cm) calculés en horizontal de la ligne centrale du limiteur                           |
| I = 3 ft. (U.S.A.)<br>6 ft. (Canada)                                  | clearance to service regulator vent outlet - distance de la sortie du conduit d'un limiteur de service   |
| J = 9" (U.S.A.)<br>12" (Canada)                                       | clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance - distance d'une prise d'air non-mécanique de l'édifice ou d'une prise d'air de combustion pour d'autres appareils   |
| K = 3 ft. (U.S.A.)<br>6 ft. (Canada)                                  | clearance to a mechanical air supply inlet - distance d'une prise d'air mécanique  |
| * L = 7 ft.   | clearance above paved side-walk or a paved driveway located on public property - distance d'un trottoir pavé ou d'une allée d'accès pavée placés sur le sol publique   |
| ** M = 18"  | clearance under veranda, porch, deck or balcony - distance au-dessous d'une véranda, d'un porche, du sol ou d'un balcon  |

\* a vent shall not terminate directly above a side-walk or paved driveway which is located between two single family dwellings and serves both dwellings unless terminated 7ft above sidewalk.

\*\* only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor.

Note: local Codes or Regulations may require different clearances.

The flue terminal must be exposed to the external air and the position must allow the free passage of air across it at all times. In certain weather conditions the terminal may emit a plume of steam. Avoid positioning the terminal where this may cause a nuisance.

If the terminal is fitted less than 6.56 ft / 2 m above a surface to which people have access, the terminal must be protected by a terminal guard.

\* si un soupirail ne s'arrête pas à 7 pieds au-dessus du trottoir, il ne peut pas se terminer sur un trottoir ou sur une voie d'accès privée avec revêtement située entre deux habitations résidentielles individuelles et utilisée par les deux habitations.

\*\* permis exclusivement si la véranda, le porche, le sol ou le balcon sont complètement ouverts sur au moins deux côtés au-dessus du pavement.

Remarque: les Codes et les Règlements locaux pourraient entraîner La terminal de la buse des fumées doit être placé au grand air de façon que sa position permette le déplacement de l'air à tout moment.

Dans certaines conditions météo le terminal peut dégager du vapeur. Evitez de placer le terminal où cela pourrait déranger.

Si le terminal est installé à moins de 6.56 ft / 2 m au dessus d'un endroit accessible aux gens, il est nécessaire d'ajouter une protection.



### 3.6 BOILER LOCATION

The boiler is not suitable for external installation.

The boiler must be installed on a flat vertical wall which is capable of supporting the weight of the boiler.

The boiler may be installed in any room or internal space, although particular attention is drawn to the requirements of the current electrical provisions with respect to the installation of the boiler in a room or internal space containing a bath or shower. Where a room-sealed boiler is installed in a room containing a bath or shower, it must not be possible for a person using the bath or shower to touch any electrical switch or boiler control utilising mains electricity.

The boiler may be installed in a cupboard or compartment, provided it is correctly designed and sufficiently ventilated for that purpose.

### 3.7 CENTRAL HEATING SYSTEM - Fig. 7

The boiler is designed for use in a sealed central heating system.

Refer to Technical Data, section 2.8, for details of the heating system volume.

The system should be designed to operate with flow temperatures of up to 185 °F / 85°C. When designing the system, the pump head, expansion vessel size, mean radiator temperature, etc. must all be taken into account. Refer to the pump performance table for guidelines.

The boiler is supplied with the following components built in:

**Pressure relief valve** - set to operate at 43 p.s.i. / 3 bar. The discharge pipe must be routed clear of the boiler to a drain, in such a manner that it can be seen, but cannot cause injury to persons or property.

Manual operation of relief valve at least once a year.

**WARNING:** 1. Avoid contact with not water coming/out  
2. Prevent water damage

**Pressure gauge** - to indicate the system pressure to be maintained.

**Expansion vessel** - with a capacity of 2.2 gal / 10 l and pre-charged to a pressure of 7.25 p.s.i. / 0.5 bar.

**By-pass** - The boiler incorporates an automatic by-pass. However, where all radiators are fitted with thermostatic radiator valves, an external by-pass must be fitted.

### 3.6 PLACEMENT DE LA CHAUDIÈRE

La chaudière n'est pas conçue pour l'installation à l'extérieur.

La chaudière est projetée pour l'installation sur une paroi verticale plate en mesure de soutenir le poids de la chaudière.

La chaudière peut être installée dans n'importe quelle pièce ou salle internes, mais il faut prêter de l'attention particulière aux Réglementations courantes et aux dispositions applicables en matière dans les différents pays, par rapport à l'installation de la chaudière dans une pièce ou dans un endroit interne à la maison où se trouvent une douche ou une baignoire. Au cas où une chaudière étanche serait installée dans une pièce contenant une baignoire ou une douche, il faut s'assurer que personne - se servant de la douche ou de la baignoire - ne peut avoir accès à aucun interrupteur d'électricité ni à aucune commande de la chaudière connectée au réseau électrique. La chaudière peut être installée dans un débarras ou une niche à condition que ces endroits sont correctement projetés et suffisamment aérés.

### 3.7 LE CIRCUIT DE CHAUFFAGE CENTRAL - Fig. 17

La chaudière est conçue pour l'emploi dans un circuit de chauffage central étanche. Référez-vous aux données techniques au paragraphe 2.8 pour les détails concernant le volume du circuit de chauffage.

Le circuit doit être en mesure de fonctionner à températures de débit jusqu'à 185 °F / 85°C. En projetant votre circuit de chauffage tenez compte aussi de la hauteur d'élévation disponible, des dimensions du vase d'expansion, de la température moyenne des radiateurs, etc.. Référez-vous à la table des performances de la pompe.

Les parties suivantes sont en dotation avec la chaudière:

**Vanne réductrice de pression**, calibrée pour le fonctionnement à 43 p.s.i. / 3 bar. Le tuyau de décharge doit être orienté vers son écoulement de façon qu'il soit visible mais n'encombre pas la chaudière et donc ne cause aucun dommage.

Faites fonctionner manuellement la soupape de sûreté au moins une fois par an.

**AVERTISSEMENT:** 1. Evitez d'entrer en contact avec l'eau chaude entrante et sortante  
2. Evitez tout dégât des eaux

**Indicateur de pression** - indique la pression à maintenir dans le circuit.

**Vase d'expansion** - 2.2 gal / 10 l de capacité, chargé préalablement à la pression de 7.25 p.s.i. / 0.5 bar.

**By-pass** - La chaudière incorpore un by-pass automatique. Cependant au cas où tous les radiateurs seraient installés avec des vannes thermostatiques un by-pass externe sera nécessaire.

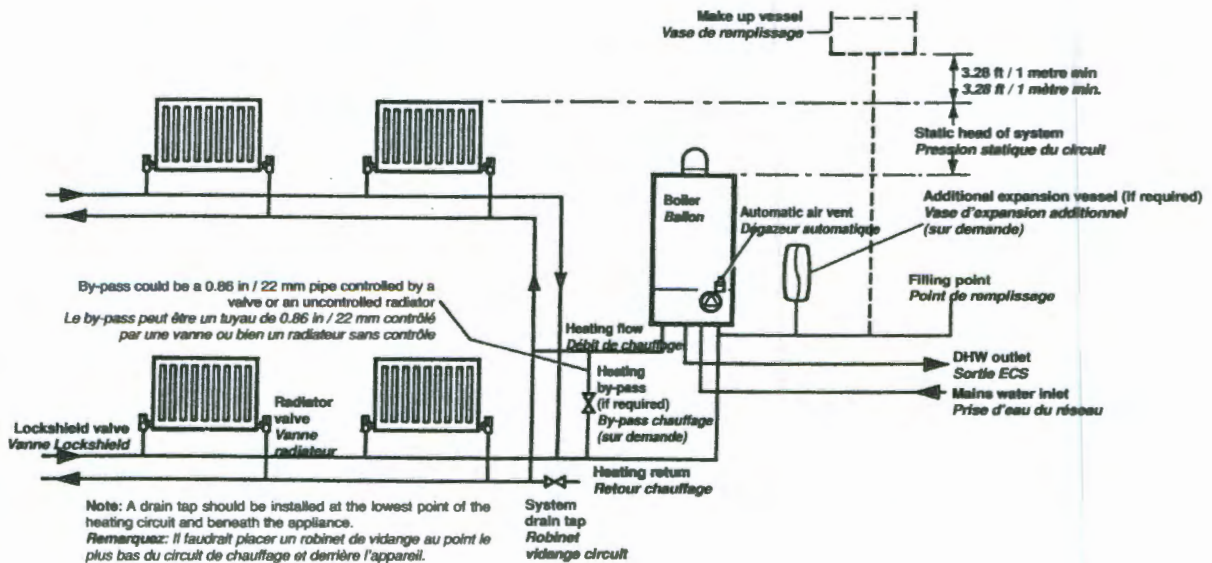


Fig. 17

### 3.8 FILLING THE CENTRAL HEATING SYSTEM

The system design pressure (cold) should be set to (7.25-14.5) p.s.i. / (0.5-1) bar. This pressure is equivalent to the maximum static head (see Fig. 17) in bar + 0.3 (14.5 p.s.i. = 1 bar = 10.2 metres of water).

Filling of the system must be carried out in a manner approved by the local Water Undertaking. The system may be filled as shown in Fig. 18.

Drain taps must be used to allow the system to be completely drained.

The heating system should be thoroughly flushed before the boiler is connected and again after the first heating.

### 3.8 REMPLISSAGE DU CIRCUIT DE CHAUFFAGE CENTRAL

La pression du circuit (à froid) devrait être établie à (7.25-14.5) p.s.i. / (0.5-1) bar. Cette valeur correspond à la pression statique maximale (voir Fig. 17) en bar + 0.3 (14.5 p.s.i. = 1 bar = 10.2 mètres d'eau).

Le remplissage du circuit doit s'effectuer (voir Fig. 18).

Les robinets de vidange sont nécessaires pour vidanger complètement le circuit.

Nettoyez et rincez soigneusement le circuit de chauffage avant la mise en marche de la chaudière et répétez l'opération après le premier allumage.

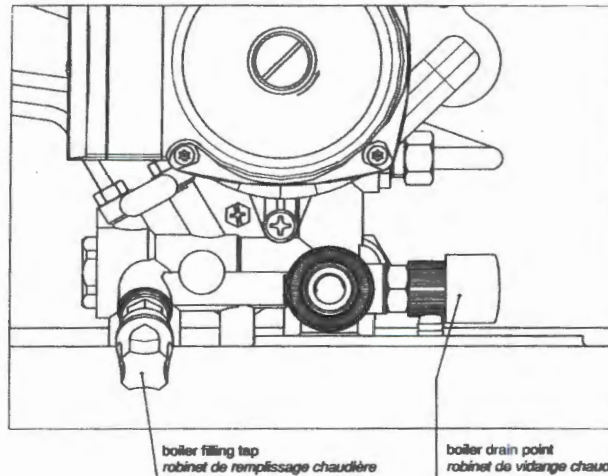


Fig. 18

### 3.9 TOXIC CHEMICAL

Toxic chemicals, such as used for boiler treatment, shall not be introduced into the potable water used for space heating.

The boiler shall not be connected to any heating system or component(s) previously used with a nonpotable water heating appliance.

### 3.9 PRODUIT CHIMIQUES

Les produits chimiques toxiques, tels que ceux utilisés pour nettoyer la chaudière, ne doivent pas polluer l'eau potable utilisée pour le chauffage des locaux.

Ne connectez pas la chaudière à un appareil ou un élément de chauffage utilisé conjointement avec un appareil de chauffage à eau non potable.

### 3.10 HEATING SYSTEM AND REFRIGERATION SYSTEM

The boiler, when used in connection with a refrigeration system, must be installed so the chilled medium is piped in parallel with the boiler with appropriate valves to prevent the chilled medium from entering the boiler.

The boiler piping system of a hot water boiler connected to heating coils located in air handling units where they may be exposed to refrigerated air circulation must be equipped with flow control valves or other automatic means to prevent gravity circulation of the boiler water during the cooling cycle.

### 3.10 SYSTEME DE CHAUFFAGE ET SYSTEME FRIGORIFIQUE

Lorsque la chaudière est utilisée avec un système frigorifique, elle doit être installée de sorte que l'élément réfrigéré soit alimenté à l'aide des valves appropriées pour éviter qu'il ne pénètre dans la chaudière.

Les conduits d'une chaudière à eau chaude connectée aux bobines thermiques des unités de traitement de l'air, où ils peuvent être exposés à l'air réfrigéré, doivent être dotés de régulateurs de débit ou d'éléments automatiques pour supprimer la circulation par gravité de l'eau de la chaudière lors du cycle de réfrigération.

## 4. Installation

### 4.1 UNPACKING

1. The boiler is supplied in four boxes, as follows:

- Box 1 Cased boiler
  - Water and gas valves plus washers
  - Water fittings.
  - Screws and wall plugs
  - Wall template
- Box 2 90° flue bend with clamp (not required for vertical flue)
- Box 3 2.64 ft / 0.75 m flue (for side and rear flue) with terminal
- Box 4 3.28 ft / 1 m flue

2. Unpack boiler and remove loose items packs.

3. Remove the two screws at the top of the front casing. Slide it up

## 4. Installation

### 4.1 DÉBALLAGE

La chaudière est délivrée dans quatre boîtes, contenant les pièces suivantes:

- Boîte 1 Chaudière dans son bâti
  - Vannes à gaz et à eau avec rondelles
  - Raccords pour réseau d'eau
  - Vis et tampons à mur
  - Gabarit
- Boîte 2 Raccord courbé à 90° pour buse des fumées avec joint (pas nécessaire pour buse verticale)
- Boîte 3 Buse de 2.64 ft / 0.75 m de long (pour buse postérieure et latérale) avec terminal
- Boîte 4 Buse de 3.28 ft / 1 m de long

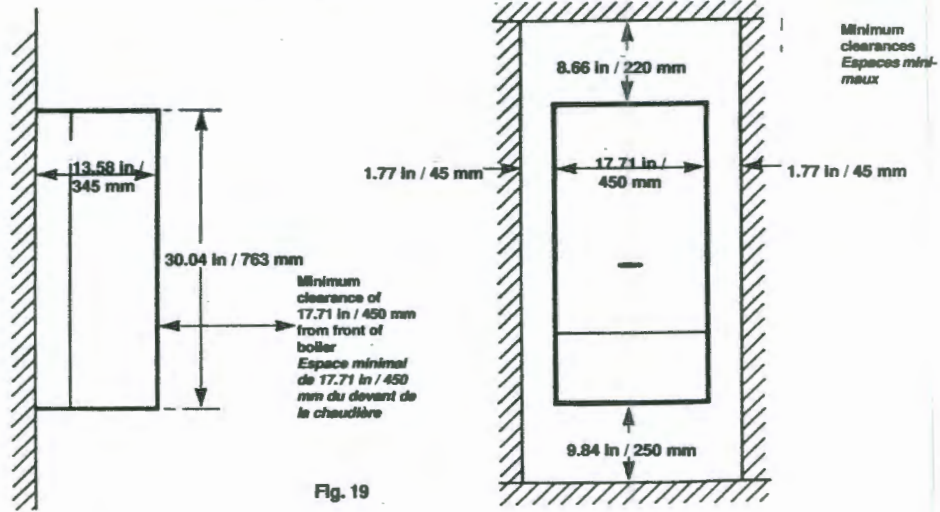


Fig. 19

4.2.1. CLEARANCES REQUIRED FOR CLOSET INSTALLATION

4.2.1. ESPACES NÉCESSAIRES POUR L'INSTALLATION DANS UN DEBARRAS

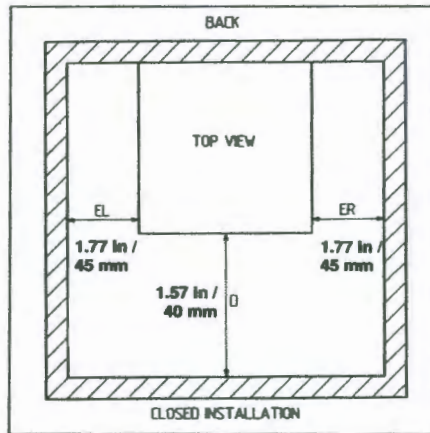


Fig. 20

4.2.2. CLEARANCES FOR COMBUSTIBLES

4.2.2. ESPACES LAISSÉS POUR DES COMBUSTIBLES

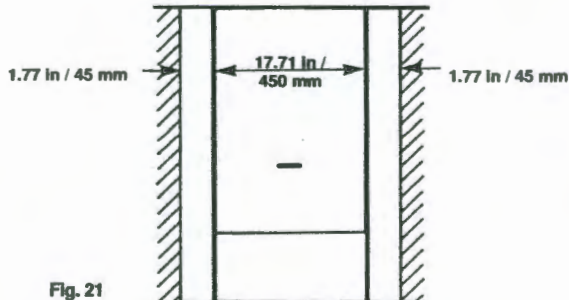


Fig. 21

Top and bottom 0 in / 0 mm with a fire-resistant material between the boiler and the combustibles material.

Sommet et fond 0" (pouces) / 0 mm avec un matériel résistant au feu, entre le ballon et les matériaux combustibles.

**IMPORTANT:**

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

**IMPORTANT:**

- N'installez pas la chaudière sur un tapis ou une moquette.
- Ne stockez pas de produits inflammables à proximité de la chaudière.

**Notes:** If an extra 90° bend is used, this reduces the maximum flue length by 3.28 ft / 1 m. Each 45° bend used reduces the maximum flue length by 1.64 ft / 0.5 m.

Under no circumstances must the flue length (including allowances for extra bends) exceed 4 metres.

**Remarque:**

Si l'on emploie un raccord additionnel de 90°, la longueur maximale de la buse des fumées sera réduite de 3.28 ft / 1 m. Tout raccord de 45° ajouté réduit la longueur maximale de la buse de 1.64 ft / 0.5 m.

En aucun cas la longueur de la buse (les longueurs des raccords additionnels inclus) ne doit pas dépasser les 4 mètres.

1. Locate the flue elbow on the adaptor at the top of the boiler. Set the elbow to the required orientation (rear, right or left).

2. Measure the distance from the outside wall face to the elbow (Fig. 3). This dimension will be known as 'X'.

3. Taking the air duct, mark dimension 'X' as shown (Fig. 4). Measure the length of waste material, and transfer the dimension to the flue duct (Fig. 4).

4. Remove the waste from both ducts. Ensure that the cut ends are square and free from burrs.

5. Remove the flue elbow from the adaptor.

1. Placer le coude d'évacuation des fumées sur l'adaptateur en haut de la chaudière. Orienter le coude selon les besoins de l'installation (en arrière, à droite ou à gauche).

2. Mesurer la distance entre le bord extérieur du mur et le coude (Fig.3). Cette cote sera indiquée par la lettre 'X'.

3. En prenant le conduit d'air, marquer la cote 'X' (voir Fig.4). Mesurer la longueur de la chute et la transférer sur le conduit des fumées (Fig.4).

4. Couper les chutes des deux conduits en s'assurant que les coupes sont bien à l'équerre et sans bavures.

5. Sortir le coude de l'adaptateur.

**IMPORTANT:** Check all measurements before cutting.

**IMPORTANT :** Contrôler toutes les cotes avant de couper.

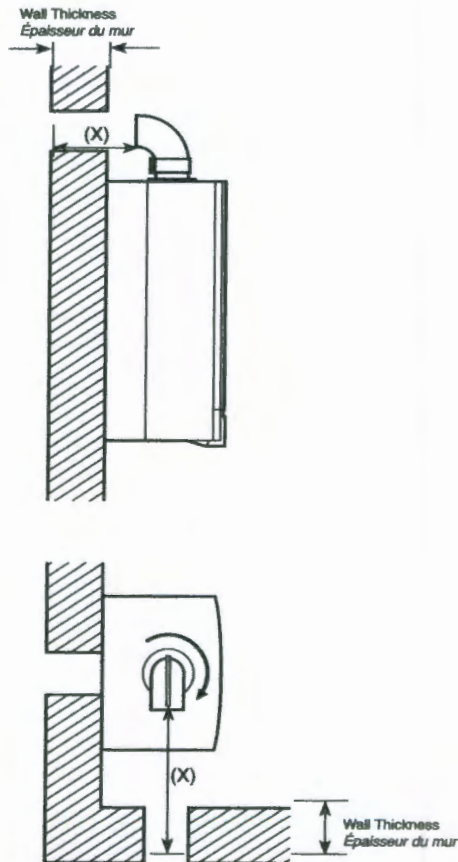


Fig. 3

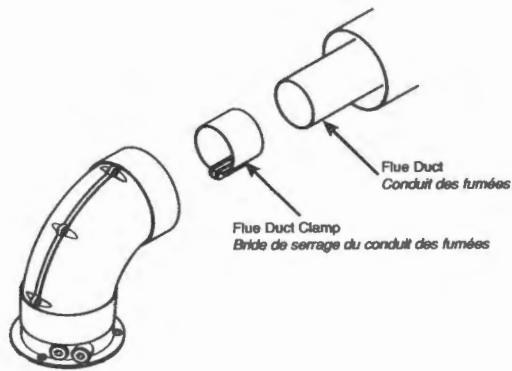


Fig. 7

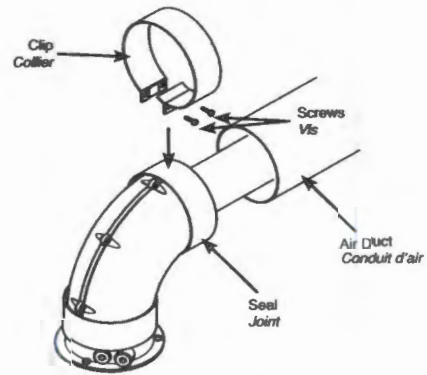


Fig. 8

### Flue Options

1. The Baxi boiler can be fitted with flue systems as illustrated.
2. The standard flue is suitable only for horizontal applications.
3. Maximum permissible equivalent flue lengths are:-

|            |    |
|------------|----|
| Concentric | 4m |
| Vertical   | 4m |

4. Any additional "in line" bends in the flue system must be taken into consideration.

Their equivalent lengths are:-

Concentric Pipes:

|          |            |
|----------|------------|
| 45° bend | 0.5 metres |
| 90° bend | 1.0 metres |

The elbow supplied with the standard horizontal flue is not included in any equivalent length calculations

5. The illustrations opposite show examples of maximum equivalent lengths.
6. Instructions for guidance and fitting are included in each kit.

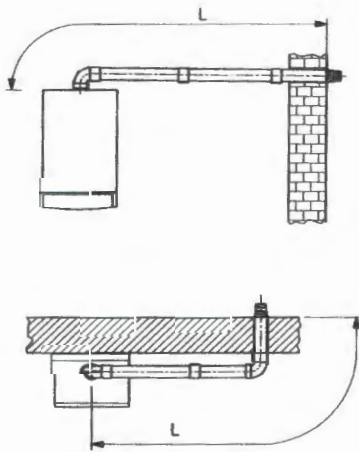


Fig. 9a

### Options pour l'évacuation des fumées

1. La chaudière Baxi peut être équipée des options d'évacuation des fumées illustrées ci-contre.
2. Le conduit standard ne convient que pour les applications horizontales.

3. Les longueurs équivalentes maximales admises pour le conduit des fumées sont :-

|                        |     |
|------------------------|-----|
| Conduits concentriques | 4 m |
| Conduits verticaux     | 4 m |

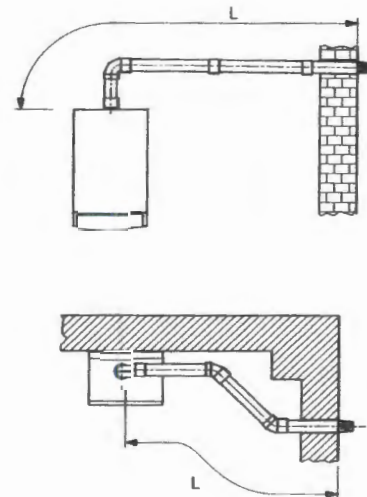
4. Il faut prendre en compte les coudes éventuellement mortés "en ligne" dans le système d'évacuation des fumées. Leurs longueurs équivalentes sont :-

Conduits concentriques :

|               |           |
|---------------|-----------|
| Coude de 45 ° | 0,5 mètre |
| Coude de 90 ° | 1,0 mètre |

Le coude fourni avec le conduit des fumées horizontal standard n'est pas pris en compte dans les calculs des longueurs équivalentes.

5. Les figures ci-contre donnent des exemples de longueurs équivalentes maximales.
6. Les instructions de montage sont incluses dans chaque kit.



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