City of Portland, Maine - Building or Use Permit Application

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

Permit No:	Issue Date:	CBL:
10-0408		338 L010001

Location of Construction:	Owner Name:	Owner Address:	Phone:
10 EASTLAWN RD	BRUCE HEIDI M	10 EASTLAWN RD	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Mainely Plumbing & Heating	674 Main Street Gorham	2078544969
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		HVAC	R-3

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Single Family Home	Single Family Home - install a Baxi HT - 380 natural gas in Basement	$110.00	$8,800.00	5

FIRE DEPT: ☐ Approved ☐ Denied — Signature:

INSPECTION: Use Group: HVAC Type: Safety Caps Reqs — Signature:

Proposed Project Description:
install a Baxi HT - 380 natural gas in Basement

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
ldobson	04/23/2010

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 information may invalidate a building permit and stop all work..

PERMIT ISSUED
MAY 11 2010
CITY OF PORTLAND

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☑ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date: 4/26/10 w/ conditions	Date:	Date:

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

City of Portland, Maine - Building or Use Permit

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

Permit No:	Date Applied For:	CBL:
10-0408	04/23/2010	338 L010001

Location of Construction:	Owner Name:	Owner Address:	Phone:
10 EASTLAWN RD	BRUCE HEIDI M	10 EASTLAWN RD	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Mainely Plumbing & Heating	674 Main Street Gorham	(207) 854-4969
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		HVAC	

Proposed Use:	Proposed Project Description:
Single Family Home - install a Baxi HT - 380 natural gas in Basement	install a Baxi HT - 380 natural gas in Basement

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 04/26/2010

Note: **Ok to Issue:** ✓

1) Separate permits shall be required for future decks, sheds, pools, and/or garages.
2) 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.
3) This property shall remain a single family dwelling. Any change of use shall require a separate permit application for review and approval.
4) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tammy Munson **Approval Date:** 05/10/2010

Note: **Ok to Issue:** ✓

1) The installation must comply with the State of Maine Gas Regulations.

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 10 Eastlawn St. Use of Building Single Family Date 4/20/10

Name and address of owner of appliance Heidi Bruce

Installer's name and address Mainely Pellets 624 Main St. Gorham, ME 04038 Telephone 854-4469

Location of appliance:

- ☒ Basement
- ☐ Floor
- ☐ Attic
- ☐ Roof

Type of Fuel:

- ☒ Gas
- ☐ Oil
- ☐ Solid

Appliance Name: Buck 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 #
- ☐ Solid Fuel #
- ☐ Oil #
- ☒ Gas # PNT347
- ☐ Other

Type of Chimney:

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

Type of Fuel Tank

- ☐ Oil
- ☒ Gas Natural

Size of Tank

Number of Tanks

Distance from Tank to Center of Flame feet.

Cost of Work: $ 8800

Permit Fee: $ 110

RECEIVED
APR 23 2010
Dept. of Building Inspections
City of Portland Maine

Approved

Fire:

Ele.:

Bldg.:

Approved with Conditions

☐ See attached letter or requirement

Inspector's Signature Date Approved

Signature of Installer

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

BAXI

LUNA HT 380

Condensing gas fired wall mounted combination boiler
Chaudière murale à gaz à condensation à deux services

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS
  - Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

AVERTISSEMENT: Assurez-vous de bien suivre les instructions dennées dans cette notice pour réduire au minimum le risque d'incendie ou d'explosion ou pour éviter tout dommage matériel, toute blessure ou la mort.

- *Ne pas entreposer ni utiliser d'essence ou ni d'autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil.*
- *QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ*
  - *Ne pas tenter d'allumer d'appareil.*
  - *Ne touchez à aucun interrupteur; ne pas vous servir des téléfhones se trouvant dans le bâtiment.*
  - *Appelez immédiatement votre fournisseur de gaz depuis un voisin.*
    Suivez les instructions du fournisseur.
  - *Si vous ne pouvez rejoindre le fournisseur, appelez le service des incendies.*
- *L'installation et l'entretien doivent être assurés par un installateur ou un service d'entretien qualifié ou par le forunisseur de gaz.*

Installation and servicing instructions
Notice d'installation et d'entretien

DESIGN CERTIFIED

CERTIFIED

C US

ENERGY STAR

BAXI S.p.A., one of the leading European enterprises to produce central heating and hot water devices for domestic use (wall-mounted gaz-operated boilers, floor-standing boilers, electrical water-heaters) has obtained the QSC certificate of conformity to the UNI EN ISO 9001 norms. This certificate guarantees that the Quality System applied at the **BAXI S.p.A.** factory in Bassano del Grappa, where your boiler was produced, meets the standards of the UNI EN ISO 9001 norm, which is the strictest and concerns all organization stages and operating personnel involved in the production and distribution processes.

CSQ CERTIFICAZIONE DEI SISTEMI QUALITA' DELLE AZIENDE UNI EN ISO 9001

***BAXI S.p.A.** , l'une des entreprises leader en Europe dans la production d'appareils de chauffage et sanitaires à usage domestique, (chaudières murales à gaz, chaudières au sol, chauffe-eau électriques), a obtenu la certification CSQ de conformité aux normes UNI EN ISO 9001. Ce certificat assure que le Système de Qualité en usage aux usines **BAXI S.p.A.** de Bassano del Grappa, où l'on a produit cette chaudière, satisfait la plus sévère des normes - c'est-à-dire la UNI EN ISO 9001 - qui concerne tous les stades d'organisation et le personnel intéressé du procès de production et distribution.*

2. Technical data

2.1 PERFORMANCE

Central Heating		MAX		MIN
		0÷2000 Ft 0÷610 m	2000÷4500 Ft 610÷1370 m	
Heat Input (Gross)	Btu/h	126 249	120 107	40 263
	kW	37	35.2	11.8
Heat Output (modulating)	Btu/h	112 601	107 141	35 486
	kW	33	31.4	10.4
CO_2 Setting natural gas (A)	%	8.7	8.7	8.4
Gas Rate natural gas (A)	ft³/h	124.3	118.1	39.5
	m³/h	3.52	3.35	1.12
CO_2 Setting LP gas (E)	%	10	10	9.8
Gas Rate LP gas (E)	ft³/h	49.1	46.6	15.5
	m³/h	1.39	1.32	0.44
CH Water Temp. (Approx.)	°F	176		
	°C	80		

Domestic Hot Water		MAX		MIN
		0÷2000 Ft 0÷610 m	2000÷4500 Ft 610÷1370 m	
Heat Input (Gross)	Btu/h	143 992	137 168	40 263
	kW	42.2	40.2	11.8
Heat Output (modulating)	Btu/h	129 661	123 519	35 486
	kW	38	36.2	10.4
CO_2 Setting natural gas (A)	%	8.7	8.7	8.4
Gas Rate natural gas (A)	ft³/h	141.8	134.7	39.5
	m³/h	4.02	3.82	1.12
CO_2 Setting LP gas (E)	%	10	10	9.8
Gas Rate LP gas (E)	ft³/h	56.0	53.2	15.5
	m³/h	1.59	1.51	0.44
Flow Rate (Can) at 72°F/40°C Rise (USA)	G.P.M.	2.6		
	G.P.M.	3.1		
	l/m	11.8		
Outlet Water Temp. (Approx.)	°F	140		
	°C	60		

2. Données Techniques

2.1 PERFORMANCE

Chauffage central		MAX		MIN
		0÷2000 Ft 0÷610 m	2000÷4500 Ft 610÷1370 m	
Débit calorifique (pcs)	Btu/h	126 249	120 107	40 263
	kW	37	35.2	11.8
Puissance utile (modulation)	Btu/h	112 601	107 141	35 486
	kW	33	31.4	10.4
Réglage CO_2 Gaz naturel (A)	%	8.7	8.7	8.4
Débit de gaz Gaz naturel (A)	ft³/h	124.3	118.1	39.5
	m³/h	3.52	3.35	1.12
Réglage CO_2 Gaz LP (E)	%	10	10	9.8
Débit de gaz Gaz LP (E)	ft³/h	49.1	46.6	15.5
	m³/h	1.39	1.32	0.44
Temp. de l'eau circuit chauffage (approx.)	°F	176		
	°C	80		

Eau chaude sanitaire		MAX		MIN
		0÷2000 Ft 0÷610 m	2000÷4500 Ft 610÷1370 m	
Débit calorifique (pcs)	Btu/h	143 992	137 168	40 263
	kW	42.2	40.2	11.8
Puissance utile (modulation)	Btu/h	129 661	123 519	35 486
	kW	38	36.2	10.4
Réglage CO_2 Gaz naturel (A)	%	8.7	8.7	8.4
Débit de gaz Gaz naturel (A)	ft³/h	141.8	134.7	39.5
	m³/h	4.02	3.82	1.12
Réglage CO_2 Gaz LP (E)	%	10	10	9.8
Débit de gaz Gaz LP (E)	ft³/h	56.0	53.2	15.5
	m³/h	1.59	1.51	0.44
Débit d'eau avec Δt 72°F/40°C (Can)	G.P.M.	2.6		
(USA)	G.P.M.	3.1		
	l/m	11.8		
Température de l'eau sanitaire (approx.)	°F	140		
	°C	60		

2.2 SYSTEM

Central Heating (Sealed System)	
Max System Pressure	30 p.s.i. / 2.11 bar
Min System Pressure	7.25 p.s.i. / 0.5 bar
Max System temperature	176°F / 80°C
Pressure Relief Valve Setting	30 p.s.i. / 2.11 bar
Expansion Vessel Size (pre-charge press.)	2.2 Gal / 10 l at 11.6 p.s.i. / 0.8 bar
Flow Connection	3/4" / 22.2 mm
Return Connection	3/4" / 22.2 mm
Relief Valve Connection	3/4" / 22.2 mm
Recommended System Pressure (cold)	21.7 p.s.i. / 1.5 bar

Domestic Hot Water		
Max Mains Inlet Pressure		116 p.s.i. / 8 bar
Min Mains Water Pressure		2.9 p.s.i. / 0.2 bar
Min DHW Flow Rate	(Can)	0.55 GPM / 2.5 l/min
	(USA)	0.66 GPM / 2.5 l/min
Mains Inlet Connection		1/2" / 15.9 mm
DHW Outlet Connection		1/2" / 15.9 mm
Max DHW Temperature		140°F / 60°C
DHW Water Content	(Can)	0.05 Gal / 0.23 l
	(USA)	0.06 Gal / 0.23 l

2.3 COMPONENTS

Burner	Stainless Steel
Main Heat exchanger	Stainless Steel
DHW Heat exchanger	Stainless Steel
Injector natural gas (A)	12.0 mm
Injector LPG gas (E)	12.0 mm
Pump	Grundfos UPS 15-62/BX AO
Fan	MVL RG 128
Gas Valve	SIT 848 SIGMA
Diverter Valve	Baxi

2.4 INSTALLATION

Minimum Clearances for Servicing	
Top	8.66 in / 220 mm
Bottom	9.84 in / 250 mm
Sides	1.77 in / 45 mm
Front	17.71 in / 450 mm
Flue Terminal Size Concentric System	3.93 in / 100 mm
Flue Terminal Size 2-Pipe Flue System	3.14 in / 80 mm
Flue Terminal Protruding	4.52 in / 115 mm
Lift Weight	lb 102.51 / kg 46.5

2.5 GENERAL

Dimensions	Height	30.04 in / 763 mm
	Width	17.71 in / 450 mm
	Depth	13.58 in / 345 mm
Gas Connection		3/4"
Primary Water Content	(Can)	0.79 Gal / 3.6 l
	(USA)	0.95 Gal / 3.6 l
Air Duct Diameter		3.93 in / 100 mm
Flue Duct Diameter		2.36 in / 60 mm

2.6 ELECTRICAL

Supply	120 V 60 Hz
Power Consumption	522 Btu /h - 153 W
Internal Fuse	F 3.15 A
Electrode Spark Gap	3.5 to 4.5 mm

2.2 CIRCUIT

Chauffage central (circuit étanche)	
Pression maximale du circuit	*30 p.s.i./ 2,11 bar*
Pression minimale du circuit	*7.25 p.s.i./0.5 bar*
Température maximale du circuit	*176°F / 80°C*
Tarage soupape de pression	*30 p.s.i./ 2,11 bar*
Dimensions du vase d'expansion (pression avant le remplissage)	*2.2 Gal / 10 l à 11.6 p.s.i. / 0.8 bar*
Connexion départ	*3/4" / 22.2 mm*
Connexion retour	*3/4" / 22.2 mm*
Connexion soupape de pression	*3/4" / 22.2 mm*
Pression du circuit recommendée (à froid)	*21.7 p.s.i. / 1.5 bar*

Eau chaude sanitaire		
Pression maximale d'entrée eau du réseau		*116 p.s.i. / 8 bar*
Pression minimale eau du réseau		*2.9 p.s.i. / 0.2 bar*
Débit min. ECS	*(Can)*	*0.55 GPM / 2.5 l/min*
	(USA)	*0.66 GPM / 2.5 l/min*
Connexion d'entrée du réseau		*1/2" / 15.9 mm*
Connexion de sortie ECS		*1/2" / 15.9 mm*
Température max. ECS		*140°F / 60°C*
Contenance ECS	*(Can)*	*0.05 Gal / 0.23 l*
	(USA)	*0.06 Gal / 0.23 l*

2.3 PARTIES COMPOSANTES

Brûleur	*acier inoxydable*
Echangeur principal de chaleur	*acier inoxydable*
Echangeur de chaleur ECS	*acier inoxydable*
Injecteur gaz naturel (A)	*12.0 mm*
Injecteur gaz LPG (E)	*12.0 mm*
Pompe	*Grundfos UPS 15-62/BX AO*
Ventilateur	*MVL RG 128*
Vanne à gaz	*SIT 848 SIGMA*
Vanne à deux voies	*Baxi*

2.4 INSTALLATION

Espaces minimaux pour l'entretien	
en haut	*8.66 in / 220 mm*
en bas	*9.84 in / 250 mm*
côtés	*1.77 in / 45 mm*
devant	*17.71 in / 450 mm*
Dimensions terminal buse fumées concentrique	*3.93 in / 100 mm*
Dimensions terminal buse fumées à 2 conduites	*3.14 in / 80 mm*
Surplomb du terminal buse fumées	*4.52 in / 115 mm*
Poids de soulèvement	*lb 102.51 / kg 46.5*

2.5 DONNÉES GÉNÉRALES

Dimensions	*Hauteur*	*30.04 in / 763 mm*
	Largeur	*17.71 in / 450 mm*
	Profondeur	*13.58 in / 345 mm*
Connexion gaz		*3/4"*
Contenance d'eau primaire	*(Can)*	*0.79 Gal / 3.6 l*
	(USA)	*0.95 Gal / 3.6 l*
Diamètre conduit d'air		*3.93 in / 100 mm*
Diamètre buse fumées		*2.36 in / 60 mm*

2.6 DONNÉES ÉLECTRIQUES

Alimentation	*120 V 60 Hz*
Consommation de courant	*522 Btu /h - 153 W*
Fusible interne	*F 3.15 A*
Ecartement pointes électrodes	*de 3.5 à 4.5 mm*

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. 2). This dimension will be known as 'X'.

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

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

IMPORTANT: Check all measurements before cutting. Clearance to combustible materials when using concentric system is zero.

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.2). Cette cote sera indiquée par la lettre 'X '.

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

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

***IMPORTANT** : Contrôler toutes les cotes avant de couper. La clairance est zéro quand il est utilisé le conduit concentrique.*

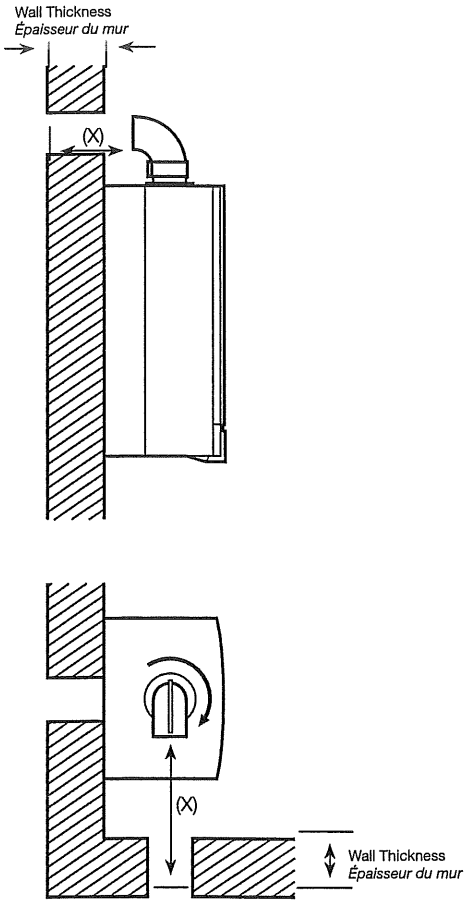


Fig. 2

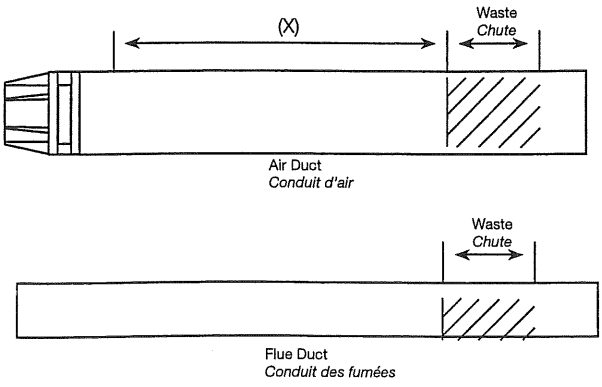


Fig. 3

5. Insert the flue duct into the air duct and pass them through the hole in the wall.

5. Introduire le conduit des fumées dans le conduit d'air et enfiler l'ensemble à travers le trou percé dans le mur.

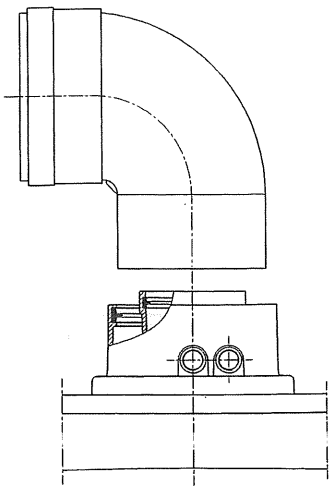


Fig. 4

IMPORTANT: Ensure a minimum downward slope of 1 cm toward the boiler per each metre of duct length
In the event of installation of the condensate collection kit, the angle of the drain duct must be directed towards the boiler.

IMPORTANT : *Le conduit doit descendre vers la chaudière avec une inclinaison d'au moins 1 centimètre par mètre linéaire.*
En cas d'installation du kit de récupération des condensats, l'angle du conduit doit être dirigé vers la chaudière.

Flue Options

1. The 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	10 m	/ 32.80 ft
Vertical	10 m	/ 32.80 ft

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 m / 1.64 ft
90° bend	1.0 m / 3.28 ft

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.

Options pour l'évacuation des fumées

1. La chaudière 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	*10 m / 32.80 ft*
Conduits verticaux	*10 m / 32.80 ft*

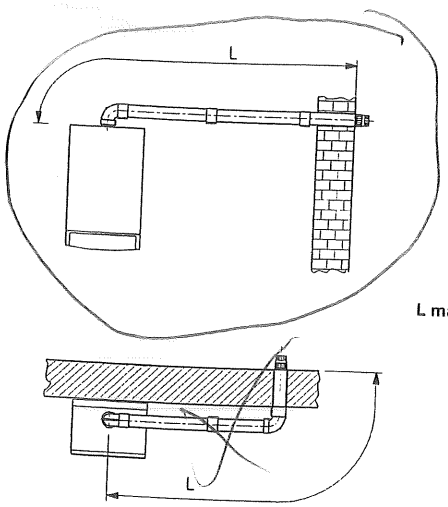
4. Il faut prendre en compte les coudes éventuellement montés "en ligne" dans le système d'évacuation des fumées. Leurs longueurs équivalentes sont :-
Conduits concentriques :

Coude de 45°	*0,5 mètre / 1.64 ft*
Coude de 90°	*1,0 mètre / 3.28 ft*

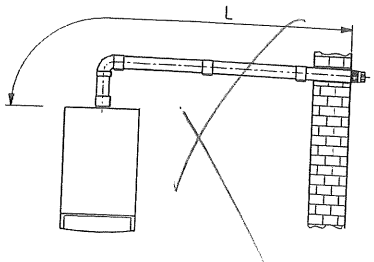
Le coude fourni avec le conduit des fumées horizontal standard n'est pas pris en compte dans les calculs des longueurs équivalentes.

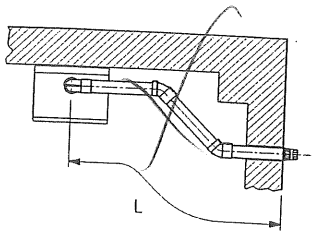
5. Les figures ci-contre donnent des exemples de longueurs équivalentes maximales.

6. Les instructions de montage sont inclues dans chaque kit.



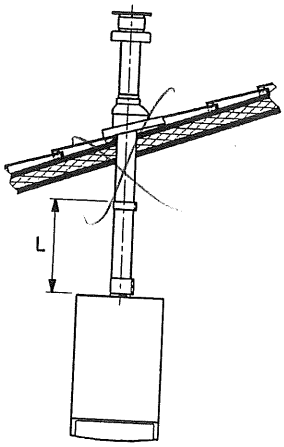
L max = 10 m / 32.80 ft

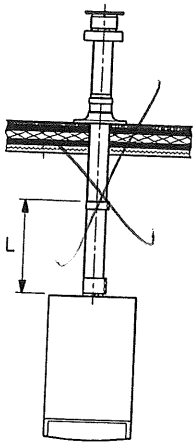




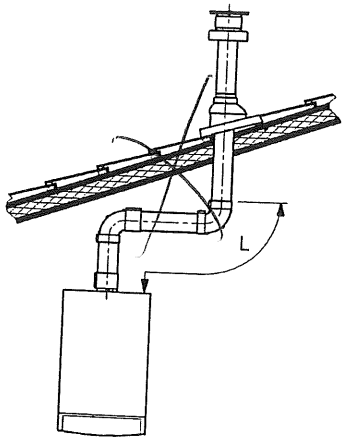
L max = 9 m / 29.52 ft

Fig. 5

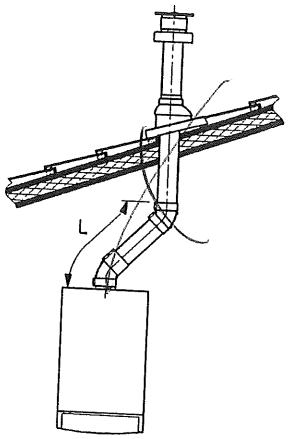




L max = 10 m / 32.80 ft



L max = 8 m / 26.24 ft



L max = 9 m / 29.52 ft

Fig. 6