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:
06-1738		293 A014001

Location of Construction:	Owner Name:	Owner Address:	Phone:
115 BISHOP ST	BJG LLC	3 CONGRESSIONAL DR	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	McKenney Plumbing & Heating LL	436 Bridge Street Westbrook	2073296583
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		HVAC	IM

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Commercial - Doggie Day Care	Happy Tails - install new Furnance	$100.00	$8,000.00	5

FIRE DEPT: ☐ Approved ☐ Denied

Signature:

INSPECTION:
Use Group: R2 Type: 5B
IBC 2003
Signature: Jm 12/4/06

Proposed Project Description:
install new Furnance

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

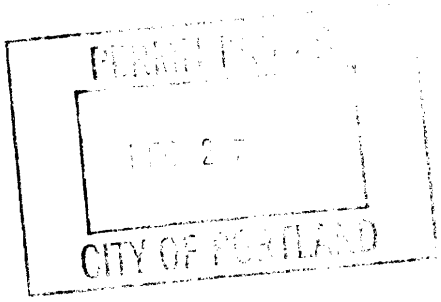
Signature: Date:

Permit Taken By:	Date Applied For:
ldobson	12/01/2006

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..

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 NA	☐ Conditional Use NA	☐ Requires Review NA
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date:	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

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 293-A-14 Use of Building Dog Care Date 12/1/06

Name and address of owner of appliance Happy Tails, 119 Bishop St. Portland, ME

Installer's name and address McKenney Plumbing + Heating LLC 436 Bridge St. Westbrook, ME 04092 Telephone 327-6583

Location of appliance:
- ☐ Basement ☑ Floor
- ☐ Attic ☐ Roof

Type of Fuel:
☑ Gas ☐ Oil ☐ Solid

Appliance Name: _____

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 # PNT1794
- ☐ Other _____

Type of Chimney:
- ☐ Masonry Lined
  Factory built _____
- ☐ Metal
  Factory Built U.L. Listing # _____
- ☑ Direct Vent
  Type B VENT UL# _____

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
DEC - 1 2006
RECEIVED

Type of Fuel Tank
- ☐ Oil
- ☑ Gas

Size of Tank 2000 gal

Number of Tanks 2

Distance from Tank to Center of Flame _____ **feet.**

Cost of Work: $ 8000

Permit Fee: $ 100

Approved

Fire: _____

Ele.: _____

Bldg.: Thomas M. Markley

Approved with Conditions

☐ See attached letter or requirement

PERMIT ISSUED

Inspector's Signature Date Approved

Signature of Installer Scott McKenney

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

City of Portland, Maine - Building or Use Permit

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	McKenney Plumbing & Heating LL	436 Bridge Street Westbrook	(207) 329-6583
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		HVAC	

Proposed Use:	Proposed Project Description:
Happy Tails - install new Furnance	install new Furnance

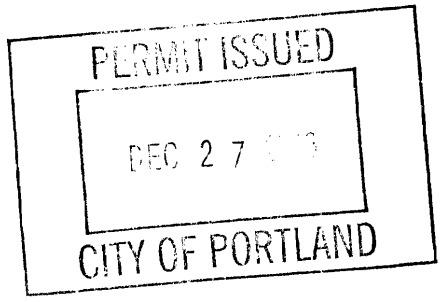
Dept: Zoning **Status:** Not Applicable **Reviewer:** **Approval Date:**

Note: **Ok to Issue:** ☑

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tom Markley **Approval Date:**

Note: **Ok to Issue:** ☑

1) The installation must comply with the State of Maine Gas Regulations.
2) Separate permits are required for any electrical, plumbing, or HVAC systems. Separate plans may need to be submitted for approval as a part of this process.
3) Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approrval prior to work.



Installation Instructions

80+ Single Stage Category I Furnace

N8MPN & N8MPL
*8MPN & *8MPL

*** Denotes Brands (C, H, T)**

See section 5 for Category I definition.

SAFETY REQUIREMENTS

Recognize safety information. This is the safety-alert symbol ⚠. When you see this symbol on the furnace and in instruction manuals be alert to the potential for personal injury.

Understand the signal words *DANGER, WARNING,* or *CAUTION.* These words are used with the safety-alert symbol. *DANGER* identifies the most serious hazards, those that will result in severe personal injury or death. *WARNING* signifies a hazard that could result in personal injury or death. *CAUTION* is used to identify unsafe practices that could result in minor personal injury or product and property damage. Note is used to highlight suggestions that will result in enhanced installation, reliability, or operation.

Installing and servicing heating equipment can be hazardous due to gas and electrical components. Only trained and qualified personnel should install, repair, or service heating equipment.

Untrained service personnel can perform basic maintenance functions such as cleaning and replacing air filters. All other operations must be performed by trained service personnel. When working on heating equipment, observe precautions in the literature, on tags, and on labels attached to or shipped with the furnace and other safety precautions that may apply.

Follow all safety codes. In the United States, follow all safety codes including the National Fuel Gas Code (NFGC) ANSI Z223.1-2002/NFPA 54-2002. In Canada, refer to the National Standard of Canada Natural Gas and Propane Installation Code (NSCNGPIC) CSA B149.1-05. Wear safety glasses and work gloves. Have fire extinguisher available during start-up and adjustment procedures and service calls.

These instructions cover minimum requirements and conform to existing national standards and safety codes. In some instances, these instructions exceed certain local codes and ordinances, especially those that may not have kept up with changing residential construction practices. We require these instructions as a minimum for a safe installation.

International Comfort Products, LLC
Lewisburg, TN 37091

INSTALLER: Affix these instructions on or adjacent to the furnace.

CONSUMER: Retain these instructions for future reference.

Table of Contents

⚠ WARNING

ELECTRIC SHOCK HAZARD

Failure to follow safety warnings exactly could result in serious injury and/or death.

Turn Off All Power Before Servicing.

⚠ WARNING

CARBON MONOXIDE POISONING AND FIRE HAZARD.

Failure to follow safety warnings exactly could result in serious injury, death, and/or property damage.

This furnace is not designed for use in mobile homes, trailers or recreational vehicles.

Printed in U.S.A.

7/18/2005

441 01 2613 (01)

The **Standard Method** may be used, if the space has no less volume than 50 cubic feet per 1,000 BTUH of the maximum input ratings for all gas appliances installed in the space. The **standard** method permits indoor air to be used for combustion and ventilation air.

The **Known Air Infiltration Rate** Method shall be used if the infiltration rate is known to be less than 0.40 air changes per hour (ACH) and equal to or greater than 0.10 ACH. Infiltration rates greater than 0.60 ACH shall not be used. The minimum required volume of the space varies with the number of ACH and shall be determined per **Table 2** or **Equations 1 and 2.** Determine the minimum required volume for each appliance in the space, and add the volumes together to get the total minimum required volume for the space.

	MINIMUM SPACE VOLUME FOR 100% COMBUSTION AND VENTILATION AIR FROM INDOORS (ft^3)							
	Other Than Fan-Assisted Total (1,000's Btuh)			Fan-assisted Total (1,000's Btuh)				
ACH	30	40	50	50	75	100	125	150
0.60	1,050	1,400	1,750	1,250	1,875	2,500	3,125	3,750
0.50	1,260	1,680	2,100	1,500	2,250	3,000	3,750	4,500
0.40	1,575	2,100	2,625	1,875	2,813	3,750	4,688	5,625
0.30	2,100	2,800	3,500	2,500	3,750	5,000	6,250	7,500
0.20	3,150	4,200	5,250	3,750	5,625	7,500	9,375	11,250
0.10	6,300	8,400	10,500	7,500	11,250	15,000	18,750	22,500
0.00	NP	NP	NP	NP	NP	NP	NP	NP

NP = Not Permitted

Table 2 Minimum Space Volumes were determined by using the following equations from the National Fuel Gas Code ANSI Z223.1/NFPA 54-2002, 8.3.3.2:

1. For **other than fan-assisted appliances** such as a draft hood-equipped water heater,

$$\text{Volume}_{other} = \frac{21\ ft^3}{ACH}\left(\frac{I_{other}}{1000\ Btu/hr}\right)$$

2. For **fan-assisted appliances** such as this furnace,

$$\text{Volume}_{fan} = \frac{15\ ft^3}{ACH}\left(\frac{I_{fan}}{1000\ Btu/hr}\right)$$

If:

I_{other} = combined input of all **other than fan-assisted appliances** in Btu/hr

I_{fan} = combined input of all **fan-assisted appliances** in Btu/hr

ACH = air changes per hour (ACH shall not exceed 0.60.)

The following requirements apply to the **Standard** Method and to the **Known Air Infiltration** Rate Method.

- Adjoining rooms can be considered part of a space, if there are no closable doors between rooms.
- An attic or crawl space may be considered a space that freely communicates with the outdoors provided there are adequate ventilation openings directly to outdoors. Openings **MUST** remain open and **NOT** have any means of being closed off. Ventilation openings to outdoors **MUST** be at least 1 square inch of free area per 4,000 BTUH of total input rating for all gas appliances in the space.
- In spaces that use the **Indoor Combustion Air** Method, infiltration should be adequate to provide air for combustion, ventilation and dilution of flue gases. However, in buildings with unusually tight construction, additional air **MUST** be provided using the methods described in section titled ***Outdoor Combustion Air Method***:
- Unusually tight construction is defined as Construction with:
  1. Walls and ceilings exposed to the outdoors have a continuous, sealed vapor barrier. Openings are gasketed or sealed and
  2. Doors and openable windows are weather stripped and
  3. Other openings are caulked or sealed. These include joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines, etc.

Ventilation Air

Some provincial codes and local municipalities require ventilation or make-up air be brought into the conditioned space as replacement air. Whichever method is used, the mixed return air temperature across the heat exchanger **MUST** not fall below 60° continuously, or 55° on an intermittent basis so that flue gases will not condense excessively in the heat exchanger. Excessive condensation will shorten the life of the heat exchanger and possibly void your warranty.

5. Gas Vent Installation

⚠ WARNING

CARBON MONOXIDE POISONING, FIRE AND EXPLOSION HAZARD.

Failure to properly vent this furnace could result in death, personal injury and/or property damage.

Read and follow all instructions in this section.

Install the vent in compliance with codes of the country having jurisdiction, local codes or ordinances and these instructions.

This Category I furnace is fan-assisted.

Category I furnace definition: A central furnace which operates with a non-positive vent static pressure and with a flue loss not less than 17 percent. These furnaces are approved for common-venting and multi-story venting with other fan-assisted or draft hood-equipped appliances in accordance with the NFGC or NSCNGPIC

Category I Safe Venting Requirements

Category I furnace vent installations shall be in accordance with Parts 10 and 13 of the National Fuel Gas Code (NFGC), ANSI

the CSA B149.1-05, National Standard of Canada, Natural Gas and Propane Installation Code; the local building codes; furnace and vent manufacturer's instructions.

NOTE: The following instructions comply with the ANSI Z223.1/NFPA 54 National Fuel Gas Code and CSA B149.1 Natural Gas and Propane Installation code, based on the input rate on the furnace rating plate.

1. If a Category I vent passes through an attic, any concealed space or floor, use **ONLY** Type B or Type L double wall vent pipe. If vent pipe passes through interior wall, use Type B vent pipe with ventilated thimble **ONLY.**
2. Do **NOT** vent furnace into any chimney serving an open fireplace or solid fuel burning appliance.
3. Use the same diameter Category I connector or pipe as permitted by:
   - the **National Fuel Gas Code** Code (NFGC) ANSI Z223.1-2002 / NFPA 54-2002 sections 10 and 13 venting requirements in the United States

     or
   - the National Standard of Canada **Natural Gas and Propane Installation Code** (NSCNGPIC) CSA B149.1-05 section 7 and appendix C venting requirements in Canada.
4. Push the vent connector onto the furnace flue collar of the venter assembly until it touches the bead (at least $^5/_8$" overlap) and fasten with at least two field-supplied, corrosion-resistant, sheet metal screws located at least 140° apart.
5. Keep vertical Category I vent pipe or vent connector runs as short and direct as possible.
6. Vertical outdoor runs of Type-B or **ANY** single wall vent pipe below the roof line are **NOT** permitted.
7. Slope all horizontal runs up from furnace to the vent terminal a minimum of $^1/_4$" per foot (21 mm/m).
8. Rigidly support all horizontal portions of the venting system every 6' or less using proper clamps and metal straps to prevent sagging and ensure there is no movement after installation.
9. Check existing gas vent or chimney to ensure they meet clearances and local codes. See **Figure 1**
10. The furnace **MUST** be connected to a factory built chimney or vent complying with a recognized standard, or a masonry or concrete chimney lined with a lining material acceptable to the authority having jurisdiction. **Venting into an unlined masonry chimney or concrete chimney is prohibited. See the 6. *Masonry Chimney Venting* section in these instructions.**
11. Fan-assisted combustion system Category I furnaces shall not be vented into single-wall metal vents.
12. Category I furnaces must be vented vertically or nearly vertically, unless equipped with a listed mechanical venter.
13. Vent connectors serving Category I furnaces shall not be connected into any portion of mechanical draft systems operating under positive pressure.

Venting and Combustion Air Check

NOTE: When an existing Category I furnace is removed or replaced, the original venting system may no longer be sized to properly vent the attached appliances, and to make sure there is adequate combustion air for all appliances, **MAKE THE FOLLOWING CHECK.**

⚠ WARNING

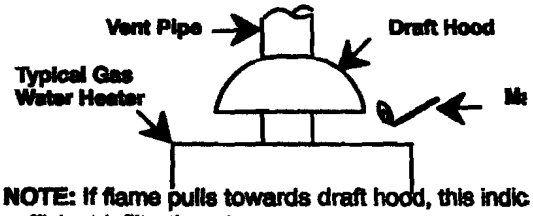
CARBON MONOXIDE POISONING HAZARD

Failure to follow the steps outlined belo appliance connected to the venting system t into operation, could result in carbon poisoning or death:

The following steps shall be followed for eac connected to the venting system being operation, while all other appliances conne venting system are not in operation:

1. Seal any unused openings in the venting sy
2. Inspect the venting system for proper size an pitch, as required in the *National Fuel Gas Z223.1/NFPA 54* or *CSA B149.1, Natural Propane Installation Code* and these instruct mine that there is no blockage or restriction, le rosion and other deficiencies which could caus condition.
3. As far as practical, close all building doors a and all doors between the space in which the a connected to the venting system are locate spaces of the building.
4. Close fireplace dampers.
5. Turn on clothes dryers and any appliance not c the venting system. Turn on any exhaust fa range hoods and bathroom exhausts, so operating at maximum speed. Do not operate exhaust fan.
6. Follow the lighting instructions. Place the appli inspected into operation. Adjust the therm appliance is operating continuously.
7. Test for spillage from draft hood equipped ap the draft hood relief opening after 5 minutes of n operation. Use the flame of a match or candle.
8. If improper venting is observed, during any of tests, the venting system must be corrected in a with the *National Fuel Gas Code, ANSI Z223.* and/or *CSA B149.1, Natural Gas and Propane I Code.*
9. After it has been determined that each appli nected to the venting system properly vents wi as outlined above, return doors, windows, exh fireplace dampers and any other gas-fired appliance to their previous conditions of use.

Vent Check



NOTE: If flame pulls towards draft hood, this indic sufficient infiltration air.

Venting to Existing Masonry Chimney

Dedicated venting of one fan assisted furnace in sonry chimney is restricted. A chimney must first b either Type B vent sized in accordance with NFGC ta

listed, metal lining system. (See Section 7 *Masonry /enting* of these instructions.)

rrugated metallic chimney liner systems in masonry shall be sized by using **NFGC** tables per 13.1.7 for dedi- ling and per 13.2.19 for common venting with the maxi- acity reduced by 20% (0.80 X maximum capacity) and um capacity as shown in the applicable table. In Canada, **SCNGPIC**, appendix C, section 10. Corrugated metal ms installed with bends or offsets require additional re- 5% of the vent capacity for each bend up to 45° and 10% t capacity for each bend from 45° up to 90°.

vo (2) 45° elbows are equivalent to one (1) 90° elbow.

Combined Venting into a Masonry Chimney

Venting into a masonry or concrete chimney is only permitted as outlined in the NFGC or NSCNGPIC venting tables. Follow all safe venting requirements.

Note: See section "7. Masonry Chimney Venting".

orizontal Venting

ıry I Furnaces With External Power

3

) maintain a Category I classification of fan-assisted fur- en vented horizontally with sidewall termination, a power **REQUIRED** to maintain a negative pressure in the vent- m.

S.: Per the NFGC, a listed power venter may be used, proved by the authority having jurisdiction.

da: Only power venters approved by the appliance turer and where allowed by the authority having jurisdic- be used

onsult the Fields Controls Co. or Tjernlund Products, Inc. r venters certified for use with our furnaces.

Vent Termination

Venting Through a Non-Combustible and Combustible Wall

Consult External Power Venter manufacturer instructions.

Select the power venter to match the Btuh input of the furnace being vented. Follow all of the Power Venter manufacturer's installation requirements included with the power venter for:

- venting installation,
- vent terminal location,
- preventing blockage by snow,
- protecting building materials from degradation by flue gases,
- see **Figure 10** for required vent termination.

NOTE: It is the responsibility of the installer to properly terminate the vent and provide adequate shielding. This is essential in order to avoid water/ice damage to building, shrubs and walkways.

CITY OF PORTLAND, MAINE

Department of Building Inspections

12-1 2006

Received from Kurt McInney-

Location of Work 360 (rear) - 117 Bishop-
153 A 1 293-A 14

Cost of Construction $_____

Permit Fee $_____

Building (IL) ___ Plumbing (I5) ___ Electrical (I2) ___ Site Plan (U2) ___

Other HVAC

CBL: _____

Check #: 2688 **Total Collected $** 450.00

THIS IS NOT A PERMIT

No work is to be started until PERMIT CARD is actually posted upon the premises. Acceptance of fee is no guarantee that permit will be granted. PRESERVE THIS RECEIPT. In case permit cannot be granted the amount of the fee will be refunded upon return of the receipt less $10.00 or 10% whichever is greater.

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