#### DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND BUILDING PERMIT



This is to certify that Donald Peterson

Located At 74 WATSON ST

Job ID: 2012-09-4968-ALTR

CBL: 431- B-007-001

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

12/11/2012

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

## City of Portland, Maine - Building or Use Permit Application 389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Job No: 2012-09-4968-ALTR #2012-50367 HVAC	Date Applied: 11/20/2012		CBL: 431- B-007-00	1		
Location of Construction: 74 WATSON ST	Owner Name: DONALD PETERSON	I	Owner Address 10 ISLAND STR PORTLAND, M	REET		Phone:
Business Name:	Contractor Name: JIM'S PLUMBING & HEATING	è	Contractor Addi 89 LAMB ST	ress: WESTBROOK MA	INE 04092	Phone: 650-0611
Lessee/Buyer's Name:	Phone:		Permit Type: Building			Zone: R-3
Past Use:	Proposed Use:		Cost of Work: \$8,000.00	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		CEO District:
Single Family Dwelling	Same: Single Family to install new heating Laars Mascott II		Fire Dept:	Approved Denied N/A		Inspection: Use Group: Type: place  Signature.
Proposed Project Description	n:		Pedestrian Activ	vities District (P.A.	.D.)	Signature.
Permit Taken By: Brad			<u> </u>	Zoning Appr	oval	
<ol> <li>This permit application of Applicant(s) from meeting Federal Rules.</li> <li>Building Permits do not septic or electrial work.</li> <li>Building permits are voing within six (6) months of False informatin may impermit and stop all work.</li> </ol>	include plumbing, d if work is not started the date of issuance. validate a building	Shoreland Wetland Flood Zc Subdivis Site Plan  Maj  Date:	s one ion	Zoning Appeal  Variance Miscellaneous Conditional Us Interpretation Approved Denied  Date:	Not in Dis Does not I Requires I Approved	et or Landmark Require Review Review
hereby certify that I am the owner of the owner to make this application as he application is issued, I certify that the enforce the provision of the code(s)	is authorized agent and I agree he code official's authorized re	or that the prop	osed work is authorize all applicable laws of	this jurisdiction. In add	dition, if a permit for wor	rk described in
IGNATURE OF APPLICAN	T Al	DDRESS		DA	TE	PHONE
ESPONSIBLE PERSON IN	CHARGE OF WORK T	TITI E		DA	TF	PHONE

		U.S. Installations (see note 1)	Canadian Installations (see note 2)
A=	Clearance above grade, veranda, porch, deck, or balcony	12 inches (30 cm) See note 6	12 inches (30 cm) See note 6
B=	Clearance to window or door that may be opened	Direct vent only: 12 inches (30cm); Other than Direct vent: 4 ft (1.2m) below or to side of opening; 1 ft (30cm) above opening	36 inches (91 cm)
C=	Clearance to permanently closed window	See note 4	See note 5
D=	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (61cm) from the center line of the terminal	See note 4	See note 5
E=	Clearance to unventilated soffit	See note 4	See note 5
F=	Clearance to outside corner	See note 4	See note 5
G=	Clearance to inside corner	3 feet (91 cm) minimum	See note 5
H=	Clearance to each side of center line extended above meter/regulator assembly	See note 4	3 feet (91 cm) within a height 15 feet above the meter/regulator assembly
<b> =</b>	Clearance to service regulator vent outlet	See note 4	3 feet (91 cm)
J=	Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance	Direct vent only: 12" (30cm) 80-285; 36" (91cm) 399-850. Other than Direct vent: 4 ft (1.2m) below or to side of opening; 1 ft (30cm) above opening	36 inches (91 cm)
K=	Clearance to a mechanical air supply inlet	3 feet (91 cm) above if within 10 feet (3 m) horizontally	6 feet (1.83 m)
L=	Clearance above paved sidewalk or paved driveway located on public property	Vent termination not allowed in this location for category IV appliances.	Vent termination not allowed in this location for category IV appliances.
M=	Clearance under veranda, porch, deck, or balcony	See note 4	12 inches (30 cm) (see note 3)

#### Notes:

- 1. In accordance with the current ANSI Z223.1 / NFPA 54 National Fuel Gas Code.
- 2. In accordance with the current CAN/CGA-B149 Installation Codes.
- 3. Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.
- For clearances not specified in ANSI Z223.1 / NFPA 54, clearance is in accordance with local installation codes and the requirements of the gas supplier.
- 5. For clearances not specified in CAN/CGA-B149, clearance is in accordance with local installation codes and the requirements of the gas supplier.
- IMPORTANT: terminal must be placed such that it remains a minimum 12" above expected snow line. Local codes may have more specific requirements, and must be consulted.

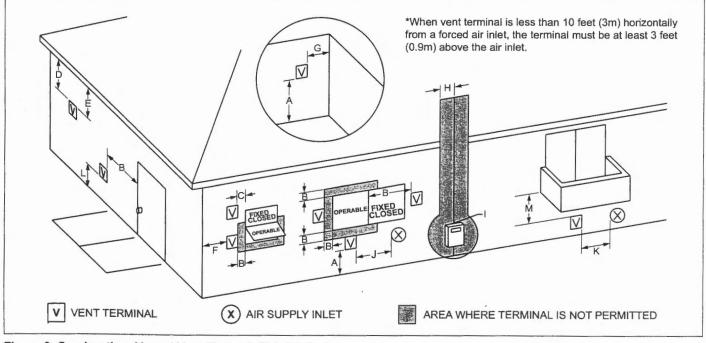


Figure 9. Combustion Air and Vent Through Side Wall.



## APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

accordance with the Laws of Maine, the Building Code of the	ull the following heating, cooking or power equipment in the City of Portland, and the following specifications:  Use of Building research Date 1/24/12
Basement   Floor   Roof RECEIVED     Attic   Roof RECEIVED     Type of Fuel:   Solinding in specific of Portland Mains     Appliance Name:   Dept of Portland Mains     U.L. Approved   Yes   No     Will appliance be installed in accordance with the manufacture's installation instructions?   Yes   No     IF NO Explain:   No   No     The Type of License of Installer:   Master Plumber #   O   P   S     Solid Fuel #   Oil #     Gas #   D   N   D   S     Gas #   D   D   D   S     Gas #   D   D   D   D   S     Gas #   D   D   D   D   D   D     Gas #   D   D   D   D   D   D   D     Gas #   D   D   D   D   D   D   D     Gas #   D   D   D   D   D   D   D   D     Gas #   D   D   D   D   D   D   D   D     Gas #   D   D   D   D   D   D   D   D   D	Type of Chimney:  Masonry Lined Factory built
Approved  Fire:  Ele.:  Bldg.:  Signature of Installer	Approved with Conditions  See attached letter or requirement  Inspector's Signature Date Approved
	nk - Applicant's Gold - Assessor's Copy



## PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life . www.portlandmaine.gov

#### **Receipts Details:**

Tender Information: Check, Check Number: 873\$190.00

Tender Amount: 190.00

Receipt Header:

Cashier Id: bsaucier

Receipt Date: 11/19/2012 Receipt Number: 50368

**Receipt Details:** 

Referance ID:	8788	Fee Type:	BP-Plumbing
Receipt Number:	0	Payment	
		Date:	
Transaction	90.00	Charge	90.00
Amount:		Amount:	
Job ID: Job ID: 2012	-09-4968-ALTR - Renovations of porch, kit	chen & bath	
Additional Comme	ents: 74 Watson		

Referance ID:	8789	Fee Type:	BP-HVAC
Receipt Number:	0	Payment	
		Date:	
Transaction	100.00	Charge	100.00
Amount:		Amount:	
Job ID: Job ID: 2012	-09-4968-ALTR - Renovations	of porch, kitchen & bath	
Additional Comme	ntc:		

Thank You for your Payment!

NOW WITH 100%
CUSTONER SATISFACTION
GUARANTEE

### LAARS® MASCOT®II

Gas-Fired Wall-Mounted
Combination Boiler &
Water Heater











View our entire product line at www.Laars.com











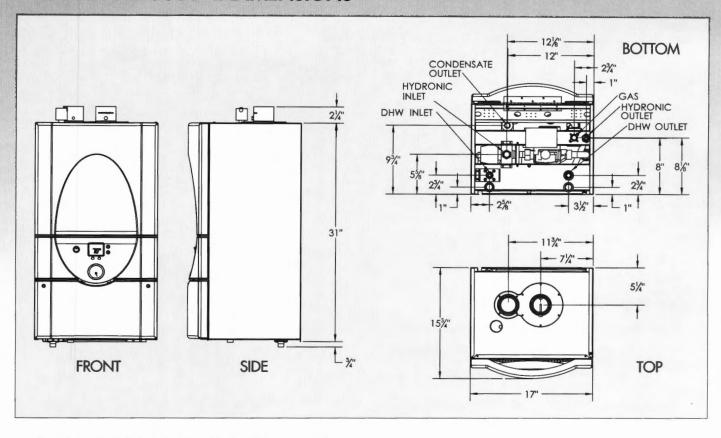




800.900.9276 • Fax 800.559.1583 (Customer Service, Service Advisors) 20 Industrial Way, Rochester, NH 03867 • **603.335.6300** • Fax **603.335.3355** (Applications Engineering) 1869 Sismet Road, Mississauga, Ontario, Canada L4W 1W8 • 905.238.0100 • Fax 905.366.0130

www.Laars.com

#### LAARS® MASCOT® II DIMENSIONS



#### **LAARS® MASCOT® II SPECIFICATIONS**

DESCRIPTION	MASCOT II - 125			
Fuel	Natural Gas / LP Gas			
Input, max fire	125,000 BTU/hr	36.6 kW		
Output, max fire	121,250 BTU/hr	35.5 kW		
DHW Max Outlet Water Temp	180 °F	.60 °C		
DHW Max Flow Rate (dt@60°F)	4.0 gpm	15.1 1/m		
Flow Rate, min	0.5 gpm	1.9 l/m		
Pressure Relief Setting	30 psi	207 kPa		
Gas Connection	1/2	NPT		
Supply Flow Connection	3/4	NPT		
Return Flow Connection	3/4	NPT		
Burner and Heat Exchanger Material	Stainless Steel			
Weight	100 lbs	45.4 kg		
Service Clearances				
Front and Bottom	24 in	61 cm		
Top and Sides	6 in	15.2cm		
Air Vents				
Two Pipe Flue Terminal	2 in	5.1 cm		
Concentric	3 / 5 in	7.6 / 12.7 cm		
Electrical Supply				
Voltage	120 V			
Frequency	60 HZ			

## High Efficiency Mascot®II Boilers

The Mascot II is a 125 MBTU heating only or combination ("Combi" - heating and domestic hot water) wall mounted boiler packed with features and benefits that both the homeowner and contractor can enjoy.

For the homeowner, the Mascot II offers a 95% plus efficiency rating for lower operating costs, has "zero clearance installation" so it can fit just about anywhere and has a modern appliance design. It is a reliable, quiet, smooth operating boiler that has enough output to keep your home warm with continuous hot water for long relaxing showers.

Contractors will love the Mascot II because they install in less time than other units do, thanks to the service-friendly design and full package of system components. Components are easily accessible for disassembly, should an unlikely call for service be required, saving service time and money.

Boiler setup is a breeze because of full access to both the gas valve and control panel at the same time (see figure on following page). The gas valve is accessible directly behind the front lower panel that rotates down via a hinged connection. While the lower panel is open, the center console that houses the control display remains closed and fully visible.

- Sleek, appliance-grade cabinet that looks great in any location
- 95% AFUE efficiency, condensing operation
- 2-year parts warranty, 12-year heat exchanger warranty
- Energy Star qualified
- Zero Installation Clearance
- Sealed combustion
- Direct spark ignition for smooth reliable starts
- Two venting options to meet the needs of almost any installation
- Optimized gas usage for lower energy bills via 20% to 100% input modulating gas valve
- Quiet variable speed blower
- Boilers are set up for natural gas, no parts necessary for conversion to LP gas
- Built in expansion tank that will handle 26 gallons of system water (enough to cover 1,800 feet of ½" PEX tubing)
- Three speed circulator with air vent and "quick-remove" mounting system

- Automatic 3-way valve for DHW priority eliminates the need for separate zone setup when using an indirect DHW tank
- Mounting kit with template and wall bracket for fast and easy installation
- Light-weight (100 lbs.) makes handling easy
- Stainless steel A.S.M.E. primary heat exchanger with externally welded manifolds for better flow rates and prevention of leaks
- Stainless steel brazed plate DHW heat exchanger (combi models) with advanced flow switch
- Hydronic system water pressure sensor for safety at low water levels
- Advanced Laars integrated control system with temperature control, diagnostics, outdoor reset capability, and easy access for field wiring
- Unique, sealed condensate trap does not need to be primed at startup
- Pump Freeze Protection



## MASCOT® II INTELLIGENTLY DESIGNED

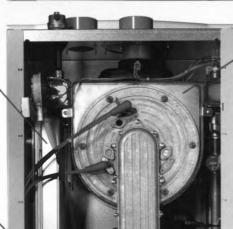
Air elimination valve

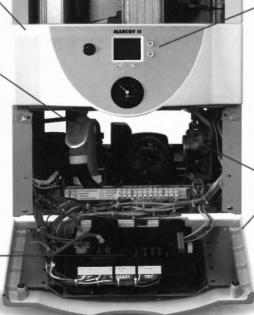
A built in expansion tank eliminates unsightly externally mounted tanks

System is fully protected with resettable circuit breakers

Each Mascot II is supplied with a unique, sealed condensate trap that does not need priming at startup.

Laars advanced integrated control system





Concentric or two-pipe venting connections, two-pipe connection uses standard off the shelf PVC or CPVC piping.

Each Mascot II uses a state of the art, condensing, stainless steel heat exchanger with a 5:1 turndown.

The design delivers 95% AFUE, a low 10ppm NOx emissions and only 1.5 amp electrical draw resulting in one of the most environmentally friendly, compact, combination units on the market.

Every Mascot II is equipped with an advanced Laars integrated LCD push button control system, illuminated power switch and pressure gauge. Temperature control, diagnostics, outdoor reset capability and many other functions are seamlessly integrated in this one easy to use center console.

The Mascot II lower door opens independently from the rest of the unit allowing access to both the gas valve and controls at the same time, making setup very easy.

Mascot II boilers are designed with a built-in expansion tank, air elimination vent, three-speed circulator, primeless condensate trap and direct access to wiring. These features, along with a wall-mounting template, save contractors hundreds of dollars in material & labor and help reduce installation errors. Not to mention most components are "off the shelf" replacement parts and can easily be obtained from many distribution locations.

#### THE MASCOT® II

- · Operates quietly, smoothly and reliably
- Energy Star rated, 95% Efficient (AFUE)
- Low emissions, 10ppm NOx
- · Zero installation clearance, fits almost anywhere
- · Easy to install, setup and service
- · 2 year parts, 12 year heat exchanger warranty



## 100% CUSTOMER SATISFACTION GUARANTEE

If your Mascot II requires more than two warranty service repairs during the first year of operation, we will replace the boiler at no charge!

This program rivals any in the industry. All you have to do is have the boiler installed and started up per the installation & operations manual and register with Laars via a 10-Point installation checklist. It's that simple, Laars is engineered to be the best.

Ask your local Laars representative for details.

#### MASCOT® II APPLICATIONS

- Perfect for radiant floor heating applications, and systems with large emitters - no restriction on low return water temperatures
- Approved for closet and alcove installations perfect for condominiums and town homes
- Great for saving space by combining heating and domestic hot water in one small appliance



American design, with clean appliance look and feel

