

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

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

Permit No: 09-1103	Issue Date:	CBL: 335 B007001
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Location of Construction: 45 Beverly St	Owner Name: Diversified Properties Inc	Owner Address: Po Box 10127	Phone:
Business Name:	Contractor Name: Dorr, Robert Jr.	Contractor Address: 17 Milliken Road Scarborough	Phone 2074153375
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	Zone: <i>R-2</i>

Past Use: Single Family	Proposed Use: Single Family / Install Mascot / Laars aluminium direct vent gas heating system in the basement.	Permit Fee: \$80.00	Cost of Work: \$6,000.00	CEO District: 5
Proposed Project Description: Install Mascot / Laars aluminium direct vent gas heating system in the basement.		FIRE DEPT: <input type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: <i>R3</i> Type: <i>H/TAC</i> <i>IXC 2003</i> <i>STME GAS ROSS</i>	
		Signature: _____		Signature: <i>Jm 10/15/09</i>
PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)				
Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied				
Signature: _____ Date: _____				

Permit Taken By: gg	Date Applied For: 10/05/2009	<b>Zoning Approval</b>		
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<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building permits do not include plumbing, septic or electrical work.</p> <p>3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..</p>	<p align="center"><b>Special Zone or Reviews</b></p> <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan  <input type="checkbox"/> Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/>	<p align="center"><b>Zoning Appeal</b></p> <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied	<p align="center"><b>Historic Preservation</b></p> <input checked="" type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied
	<p>Date: <i>10/6/09</i></p>	<p>Date: _____</p>	<p>Date: _____</p>

**PERMIT ISSUED**

**CERTIFICATION**

**OCT 26 2009**

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

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<b>Location of Construction:</b> 45 Beverly St	<b>Owner Name:</b> Diversified Properties Inc	<b>Owner Address:</b> Po Box 10127	<b>Phone:</b>
<b>Business Name:</b>	<b>Contractor Name:</b> Dorr, Robert Jr.	<b>Contractor Address:</b> 17 Milliken Road Scarborough	<b>Phone:</b> (207) 415-3375
<b>Lessee/Buyer's Name</b>	<b>Phone:</b>	<b>Permit Type:</b> HVAC	

<b>Proposed Use:</b> Single Family / Install Mascot / Laars aluminium direct vent gas heating system in the basement.	<b>Proposed Project Description:</b> Install Mascot / Laars aluminium direct vent gas heating system in the basement.
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**Dept:** Zoning      **Status:** Approved with Conditions      **Reviewer:** Marge Schmuckal      **Approval Date:** 10/06/2009

**Note:** **Ok to Issue:**

- 1) 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.
- 2) This property shall remain a single family dwelling. Any change of use shall require a separate permit application for review and approval.
- 3) 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:** Tom Markley      **Approval Date:** 10/15/2009

**Note:** **Ok to Issue:**

- 1) The installation must comply with the State of Maine Gas Regulations.
- 2) Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approval prior to work.

**PERMIT ISSUED**

OCT 26 2009

City of Portland



FILL IN AND SIGN WITH INK

PERMIT ISSUED  
OCT 26 2009

# APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

City of Portland  
335 \$ 007

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 \_\_\_\_\_ Use of Building \_\_\_\_\_ Date 10-1-09

Name and address of owner of appliance 45 Beverly St. Portland

Installer's name and address Robert S. Dorr Jr. FXMWD  
17 Milliken Rd. Scarborough Me. 04074 Telephone 415-3375

### Location of appliance:

- Basement
- Floor
- Attic
- Roof

### Type of Fuel:

- Gas
- Oil
- Solid

Appliance Name: Loan's Mascot

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 # 08566
- Solid Fuel # \_\_\_\_\_
- Oil # \_\_\_\_\_
- Gas # PNT-3597
- Other \_\_\_\_\_

### Type of Chimney:

- Masonry Lined  
Factory built \_\_\_\_\_
- Metal  
Factory Built U.L. Listing # \_\_\_\_\_
- Direct Vent  
Type Aluminum UL# \_\_\_\_\_

### Type of Fuel Tank

- Oil
- Gas

Size of Tank \_\_\_\_\_

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

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

Cost of Work: \$ 6000.00

Permit Fee: \$ 30.00

RECEIVED

OCT 5 2009

Dept. of Building Inspections  
City of Portland Maine

### Approved

### Approved with Conditions

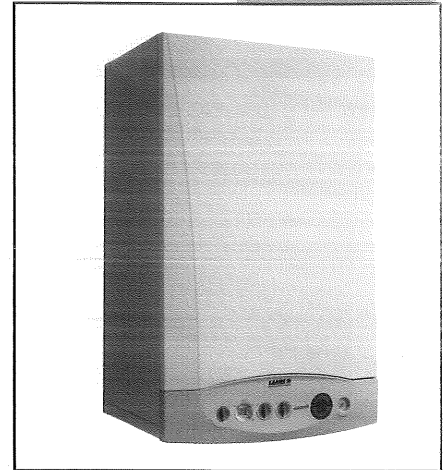
Fire: \_\_\_\_\_  
Ele.: \_\_\_\_\_  
Bldg.: \_\_\_\_\_

See attached letter or requirement

Signature of Installer Robert S. Dorr Inspector's Signature \_\_\_\_\_ Date Approved \_\_\_\_\_

# Mascot<sup>®</sup>

Gas-Fired Residential  
and Commercial  
Wall-Mounted Boiler



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**Easy Installation,**

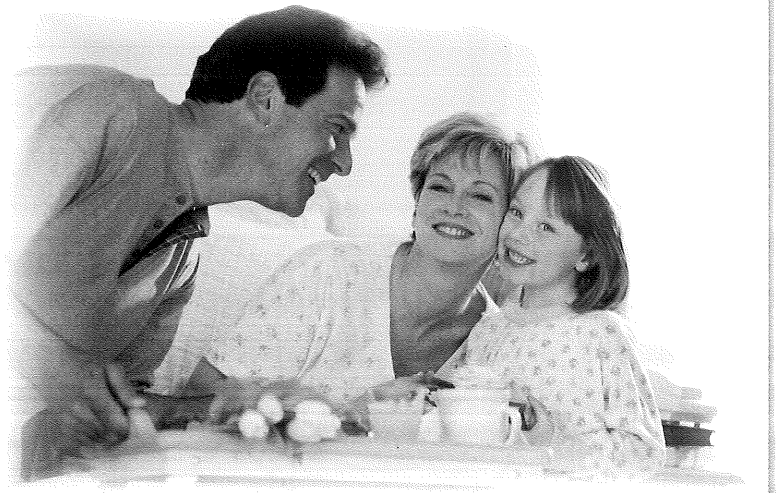
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**96% Efficiency,**

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**Fully Condensing**

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**LAARS<sup>®</sup>** 

*Heating Systems Company*

A subsidiary of **BRADFORD WHITE<sup>®</sup>** Corporation

**Mascot** is a high-efficiency, wall-mounted boiler available in three BTU sizes – 126, 167, and 242 MBTU. The two 126 MBTU boilers are considered residential and they are available both as “heating only” boilers (model HT 1.330) and as “combi” boilers with both hydronic heating and domestic hot water (model HT 330).

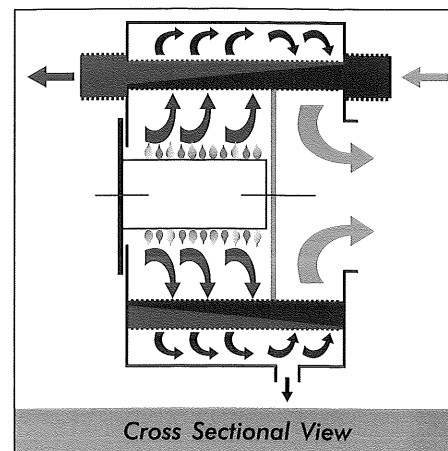
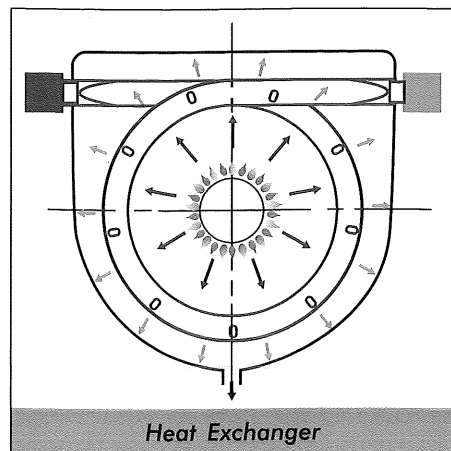
The **Mascot** 167 & 242 MBTU boilers (HT 1.450 & HT 1.650) are packaged differently for potential commercial applications using either single or multiple boiler installations. This means that customers may order single or multiple piping assemblies with the Mascot HT 1.450 or HT 1.650.

### Residential Boilers are Fully Packaged

Both residential models (HT 330 & HT 1.330) are loaded with features that most other boilers don't include, making **Mascot** boilers faster, easier and less expensive to install. **Mascot** residential boiler features that are standard with every 330 and 1.330 boiler include:

- Sleek, appliance-grade cabinet that looks great in any location
- Up to 96% efficiency, condensing operation
- 2-year parts warranty, 10-year heat exchanger warranty
- Sealed combustion
- Direct spark ignition for reliability and smooth starts
- Three venting options to meet the needs of almost any installation
- Modulating gas valve that varies from 30% to 100% input
- Variable speed quiet blower
- Boilers are set up for natural gas, no parts necessary for conversion to LP gas
- Built in expansion tank that will handle 26.4 gallons of system water (enough to cover 1,800' feet of 1/2" PEX tubing)
- Built-in water fill valve

- Water flow sensor for hydronic system
- Grundfos circulator with air vent and “quick-remove” mounting system
- Automatic 3-way valve for DHW priority (both combi and heating only)
- Back-flow preventer
- 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 plane DHW heat exchanger (combi models) with advanced hall sensor flow switch that detects .5 gpm DHW flow rates
- Built-in reverse-pressure by-pass to prevent short cycling
- Advanced Siemens control system with temperature control, diagnostics, outdoor reset capability, and easy access for field wiring
- Complete piping kit with isolation valves, gas cock, domestic water connection adapters with unions, hydronic connectors with unions
- Condensate trap that is easy to inspect & remove from outside the boiler



### Specifications

DESCRIPTION	RESIDENTIAL				COMMERCIAL						
	HT 330		HT 1.330		HT 1.450		HT 1.650				
Fuel	NG / LP		NG / LP		NG / LP		NG / LP				
Input, max fire	BTU/h	kW	126,376	37.0	126,376	37.0	167,262	49.0	241,600	70.8	
Output, maximum fire	BTU/h	kW	112,601	33.0	112,601	33.0	153,618	45.0	221,789	65.0	
DHW Outlet Water Temp.	°F	°C	140	60	n/a		n/a		n/a		
Max. DHW flow rate (dt@80°F)	gpm	l/m	3.6	14	n/a		n/a		n/a		
Min. DHW pressure	psi	kPa	2.9	20	n/a		n/a		n/a		
Max. DHW pressure	psi	kPa	116	800	n/a		n/a		n/a		
Pressure Relief Valve Setting	psi	kPa	30	207	30	207	30	207	30	207	
Supply Flow Connection	in	cm	3/4	1.9	3/4	1.9	3/4	1.9	3/4	1.9	
Return Connection	in	cm	3/4	1.9	3/4	1.9	3/4	1.9	3/4	1.9	
Relief Valve Connection	in	cm	3/4	1.9	3/4	1.9	3/4	1.9	3/4	1.9	
Burner and Heat Exchanger			stainless		stainless		stainless		stainless		
Service Clearances	top	in	cm	9	23	9	23	9	23	9	23
	bottom	in	cm	10	25	10	25	10	25	10	25
	sides	in	cm	2	5	2	5	2	5	2	5
	front	in	cm	18	46	18	46	18	46	18	46
Dimensions	height	in	cm	30.0	76	30.0	76	37.4	95	37.4	95
	width	in	cm	17.7	45	17.7	45	23.6	60	23.6	60
	depth	in	cm	13.6	35	13.6	35	18.4	47	18.4	47
Gas Connection	in	cm	3/4	1.9	3/4	1.9	3/4	1.9	3/4	1.9	
Air Duct Diameter	in	cm	3.93	10	3.93	10	4.92	10	4.92	10	
Flue Duct Diameter	in	cm	2.36	6	2.36	6	3.15	8	3.15	8	
Electrical Supply	voltage	V	120		120		120		120		
	frequency	Hz	60		60		60		60		
Water Content	gal	L	31.7	120	31.7	120	31.7	120	31.7	120	
Concentric Vent-Air	in	cm	2.36-3.93	6-10	2.36-3.93	6-10	3.15-4.92	8-12	3.15-4.92	8-12	
Flue Terminal Size (2-pipe)	in	cm	3.14	8	3.14	8	3.14	8	3.14	8	
Flue Terminal Protrusion	in	cm	4.52	11	4.52	11	4.52	11	4.52	11	
Lift Weight	lbs	kg	103	47	102	46	141	64	159	72	

### Mascot Applications

- Perfect for radiant floor heating applications, with 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 (HT 330 only)
- Multiple commercial boilers can easily be installed with pre-designed & manufactured water manifolds with “low-loss” headers for up to three boilers (HT 1.450 and HT 1.650 only)

### Mascot Advantages

- **Mascot** is a high-quality, high-performance boiler with premium components and a superior design
- **Mascot's** features far surpass those of the competition, and at a competitive price.
- **Mascot** boilers install in less time than competitors because of the service-friendly design and full package of system components.
- **Mascot** boilers are designed with the contractor in mind. Easy removal of internal circulator, unions on gas valves, unions on all water piping connections, and gasketed venting connections save service time and money.

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### Mascot Applications

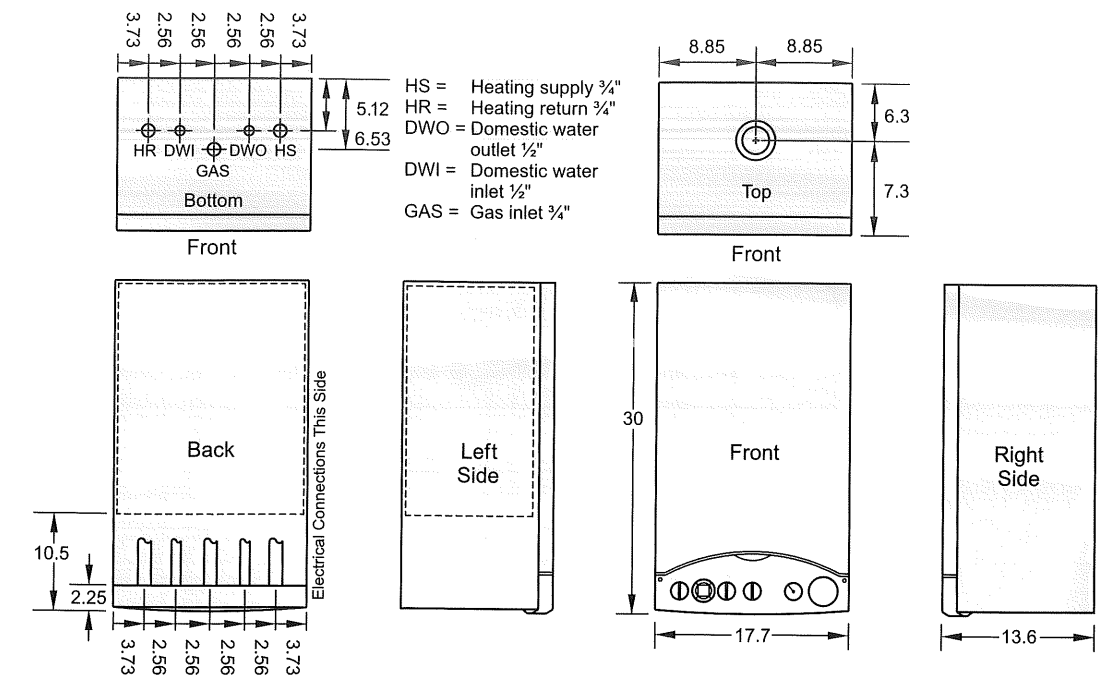
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### Mascot Advantages

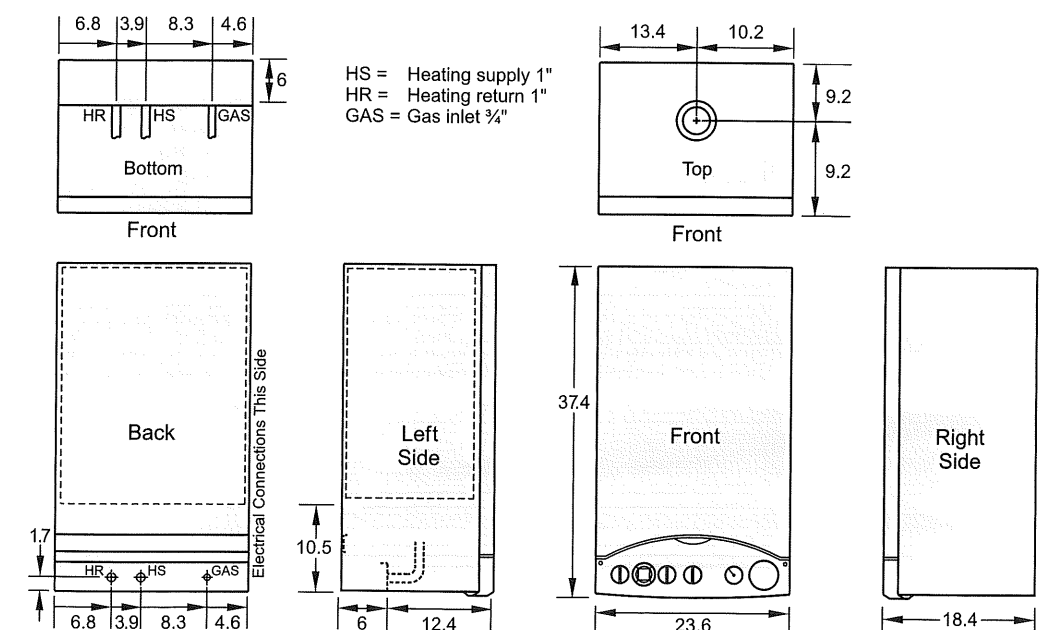
- **Mascot** is a high-quality, high-performance boiler with premium components and a superior design
- **Mascot's** features far surpass those of the competition, and at a competitive price.
- **Mascot** boilers install in less time than competitors because of the service-friendly design and full package of system components.
- **Mascot** boilers are designed with the contractor in mind. Easy removal of internal circulator, unions on gas valves, unions on all water piping connections, and gasketed venting connections – save service time and money.

## Dimensions

### Sizes 330 and 1.330



### Sizes 1.450 and 1.650



## Premium Components

### Contractor Competitive Advantage

Fully packaged with premium components to save the contractor time and money. **Each residential unit comes with an installation kit that includes all necessary connections, isolation valves and unions for water and gas.**

Mascot residential boilers are designed with a built-in expansion tank, air elimination vents, and circulator. This will save contractors hundreds of dollars in material and labor.

CONDENSATE TRAP  
EASILY REACHABLE  
AND RECHARGEABLE  
FROM OUTSIDE

AUTOMATIC BY-PASS  
ENSURES PROPER FLOW

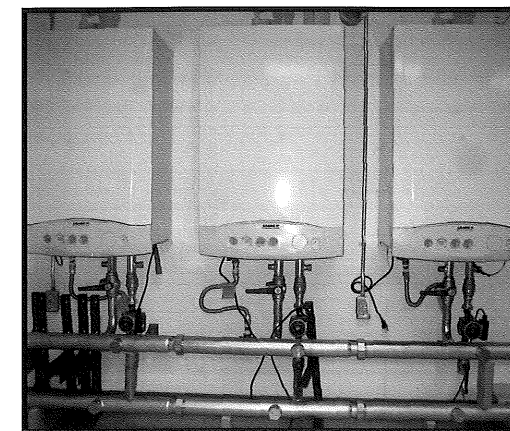
DHW EXCHANGER  
HIGH QUALITY, FLAT PLATE  
STAINLESS STEEL EXCHANGER  
(model HT 330 only)



### Mascot Piping Kit Makes Installation Quick and Easy.

With every residential boiler comes an installation kit that includes boiler & DHW water and gas piping connections, isolation valves, and unions.

Mascot installation kits save contractors time & money and reduce installation errors.

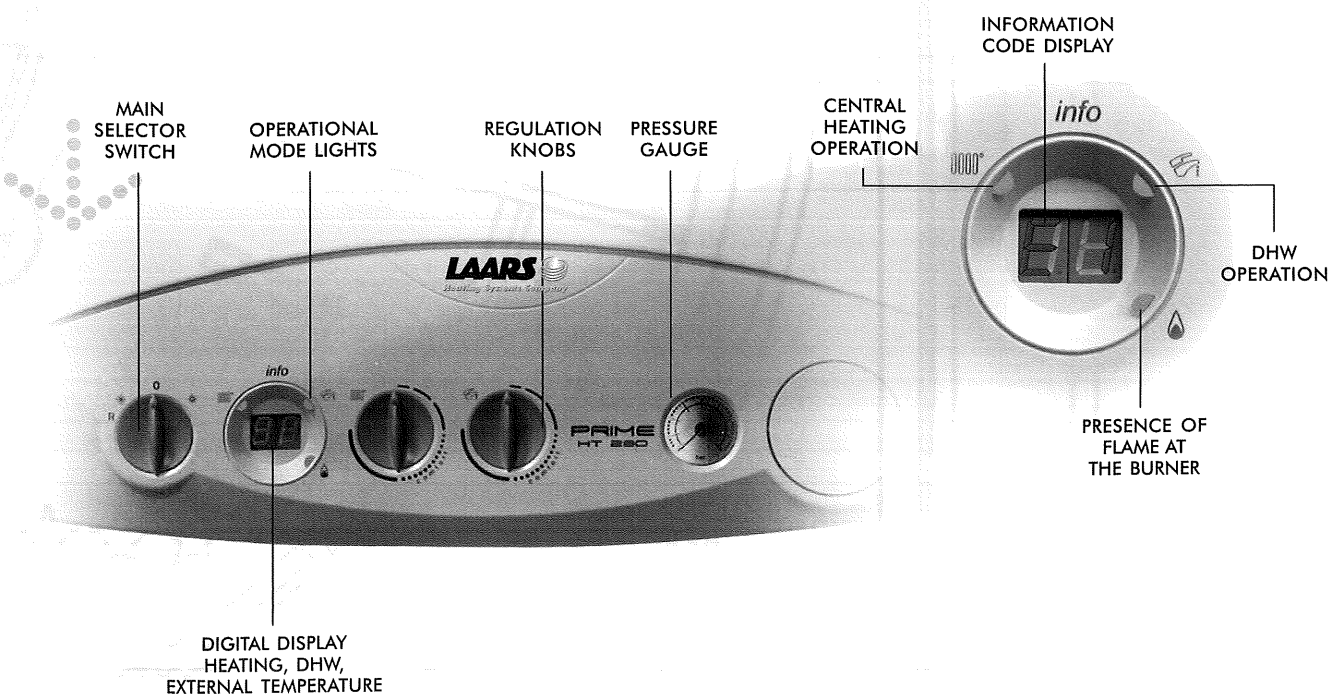


### Common Plumbing Connections.

The commercial Mascot boilers may be common piped.

Pre-assembled low-loss manifolds save time and provide proper piping configuration to maximize condensing mode for optimum efficiency.

*Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.*



**LAARS**  
Heating Systems Company  
A subsidiary of BRADFORD WHITE Corporation

20 Industrial Way, Rochester, NH 03867 • 603.335.6300 • Fax 603.335.3355  
1355 Kuehner Drive, Simi Valley, CA 93063 • 800.900.9276 • Fax 800.559.1583 (Sales, Service)  
1869 Sismet Road, Mississauga, Ontario, Canada L4W 1W8 • 905.238.0100 • Fax 905.366.0130  
[www.Laars.com](http://www.Laars.com)

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