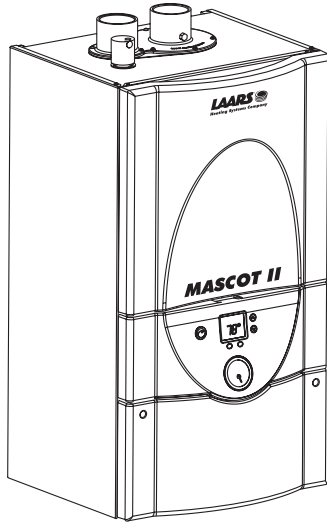


MASCOT II



Residential Hydronic Boiler

LMC | Combi Boiler / Water Heater

Indoor Size 125

Submission Data **LAARS**
Heating Systems Company

Date:

Project #:

Engineer:

Prepared By:

Bid Date:

Project Name:

Location:

Contractor:

Standard Equipment

- High condensing efficiency
- Modulation down to 20% of full fire (5:1 turndown)
- Sealed combustion chamber
- Pre-mix stainless steel burner
- Low NOx system exceeds the most stringent regulations for air quality – 10ppm NOx
- Horizontal or vertical direct vent
- Vent and air pipe lengths of up to 40 equivalent feet (each)
- Horizontal vent and air terminals
- Stainless steel heat exchanger with welded construction
- ASME 30 psi (207kPa) working pressure heat exchanger
- ASME "H" stamp
- 30 psi (207kPa) ASME pressure relief valve
- Stainless Steel brazed-plate DHW heat exchanger with priority for on-demand hot water
- Boiler pump, wired and mounted inside jacket
- Expansion tank piped and mounted inside jacket
- Built-in condensate trap and drain, priming not required
- Automatic air vent
- Temperature and pressure gauge
- Boiler water pressure switch
- Blocked vent pressure switch
- Blocked condensate pressure switch
- Burner site glass
- Electronic PID modulating control
- Direct spark ignition
- Multiple pump control for boiler pump and system pump, each with delay
- Large user-interface and display
- Alarm output
- Accepts external (4-20mA or 0-10VDC) modulation signal
- Outdoor reset (sensor included)
- Vent temp auto turn-down before lockout
- Manual reset high limit
- Lighted on/off toggle switch
- Wall mount template
- Field convertible between natural gas and propane
- Zero clearance to combustible surfaces
- 12-Year limited warranty

Boiler Data

Number of Units:

Fuel

- Natural
 Propane



Sizing Data

Model	Input		Output		DHW Output @ 75°F Rise	AFUE	Gas Conn. Size inches	Water Conn. Size inches	Shipping Weight	
	BTU/h	kW	BTU/h	kW					lbs	kg
LMC 125	125,000	36.6	121,250	35.5	3.1 gpm	95%	1/2 NPT	3/4 NPT	100	45

NOTES:

1. For other boiler ratings:

$$\text{Boiler Horsepower: HP} = \frac{\text{Output}}{33,475} \quad \text{Radiation Surface: EDR sq. ft.} = \frac{\text{Output}}{150}$$

Clearances

Appliance Surface	Suggested Service Access Clearance	
	inches	cm
Left Side	6	15
Right Side	6	15
Top	6	15
Closet, Front	6	15
Front	24	61
Bottom	24	61
Vent	1	3

NOTE: Certified by CSA for zero clearance to combustible materials on all sides.

Electrical Data

Size	Boiler (includes pump)		
	Volts	Phase	Amps
LMC 125 (With Pump)	120	Single	1.5

* Minimum 15A circuit required

Vent System

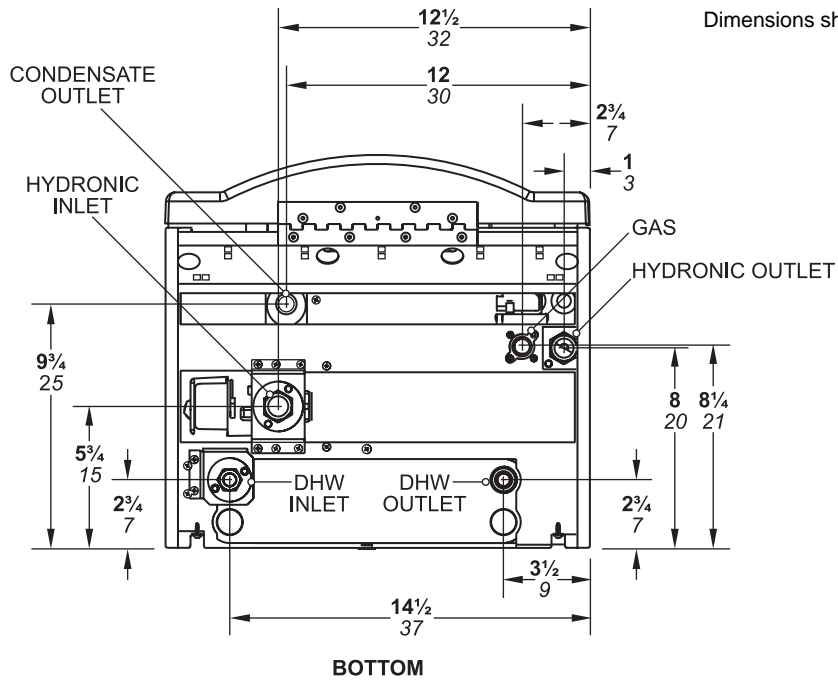
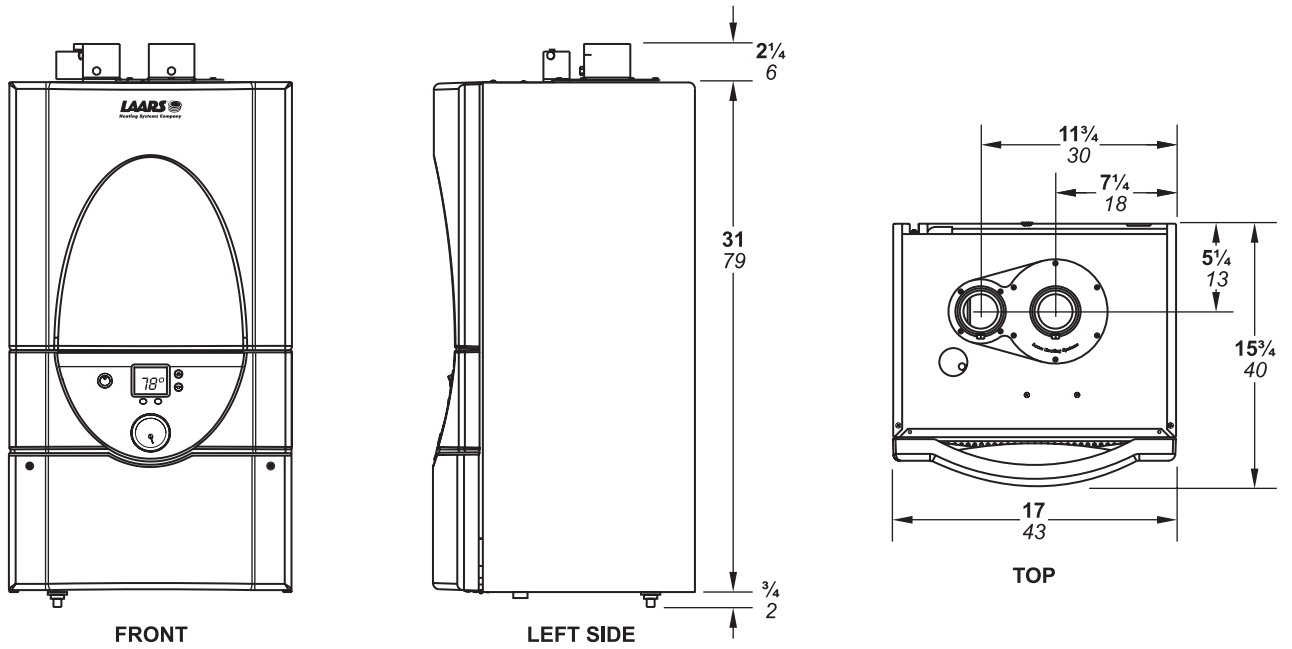
Size	INTAKE / EXHAUST			
	Max Equivalent* Vent and Air Pipe Length (each)			
	STANDARD		OPTIONAL	
	2" dia	5.1cm	3"/5" dia	7.6/12.7cm
125	40 ft	12.2m	40 ft	12.2m

Installations in the U.S. require exhaust vent pipe that is PVC or CPVC complying with ANSI/ASTM D1785 F441 or stainless steel complying with UL1738. Laars supplies the first section of vent pipe which is 16" of CPVC with each boiler. Installations in Canada require exhaust vent pipe that is certified to ULC S636.

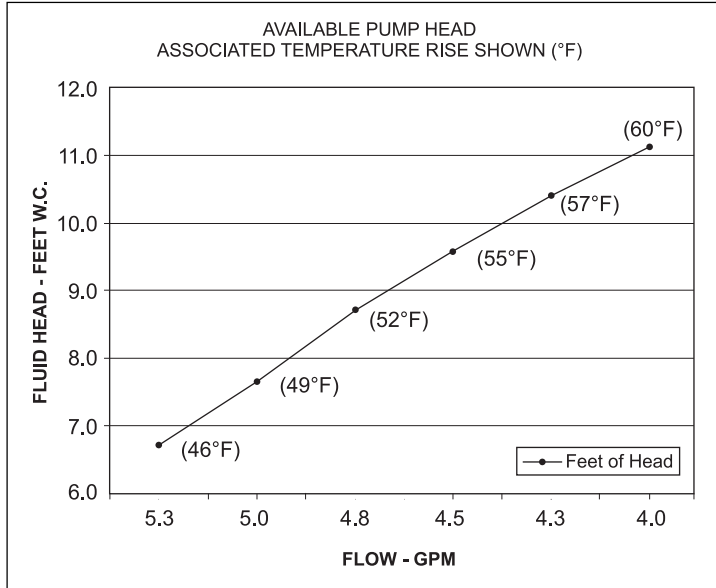
Intake (air) pipe may be PVC, CPVC, ABS or galvanized pipe.

*To calculate equivalent length, measure the linear feet of the pipe, and add 5 feet (1.5m) for each elbow used.

**Dimensional
Data**



Heating System Pump Capacity



Domestic Hot Water Heating Capacity

ESTIMATED MAXIMUM TEMPERATURE RISE (°F) LMC 125			
GPM	INLET TEMPERATURE °F		
	50	60	70
1.0	100	90	81
2.0	90	83	79
3.0	78	76	68
4.0	59	56	51

ESTIMATED MAXIMUM TEMPERATURE RISE (°C) LMC 125			
LPM	INLET TEMPERATURE °C		
	10	16	21
3.79	38	32	27
7.57	32	28	26
11.36	26	24	20
15.14	15	13	11

Laars Heating Systems Company reserves the right to change specifications, components, features, or to discontinue products without notice.