

City of Portland, Maine - Building or Use Permit Application

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

| | | |
|-----------------------|-------------|---------------------|
| Permit No: 09-1343 | Issue Date: | CBL: 126 F008001 |
|-----------------------|-------------|---------------------|

| | | | |
|---|---|---|---------------------|
| Location of Construction: 8 ARLINGTON ST | Owner Name: DENNEY MICHAEL T & MARLE | Owner Address: 8 ARLINGTON ST | Phone: |
| Business Name: | Contractor Name: Carlo Doria | Contractor Address: 19 Sunrise Dr Cape Elizabeth | Phone 2077990066 |
| Lessee/Buyer's Name | Phone: | Permit Type: HVAC | Zone: R5 |

| | | | | |
|---|--|---|--|--------------------|
| Past Use: Single Family Home | Proposed Use: Single Family Home - install a Lochinvar - Knight | Permit Fee: \$80.00 | Cost of Work: \$6,000.00 | CEO District: 3 |
| Proposed Project Description: install a Lochinvar - Knight | | FIRE DEPT: <input type="checkbox"/> Approved <input type="checkbox"/> Denied | INSPECTION: Use Group: R3 Type: 5B IRC 2003 ST ME. GAS Regs Signature: Jm 11/30/09 | |
| | | 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: Ldobson | Date Applied For: 11/23/2009 | Zoning Approval | | |
| <ol style="list-style-type: none">This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.Building permits do not include plumbing, septic or electrical work.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.. | | Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/> Date: Jm 11/30/09 | Zoning Appeal <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 Date: | Historic Preservation <input type="checkbox"/> Not in District or Landmark <input checked="" 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 Date: Jm 11/30/09 |
| | | | | |

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

NOV 30 2009

PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE

DATE

City of Portland

PHONE



FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

PERMIT ISSUED

NOV 30 2009

City of Portland

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 126-F-8 Use of Building Single Fam Date 11/23/09
Name and address of owner of appliance Mike + Marlene Denney
#8 Ardingway Portland ME
Installer's name and address Carlo Davis P+H 23 Waterhouse Rd
Cape Elizabeth ME 04107 Telephone 799-0066

Location of appliance:

- ☒ Basement ☐ Floor
☐ Attic ☐ Roof

Type of Fuel:

- ☒ Gas ☐ Oil ☐ Solid

Appliance Name: Lochmar-KnightU.L. Approved ☐ Yes ☐ NoWill appliance be installed in accordance with the manufacture's installation instructions? ☒ Yes ☐ NoIF NO Explain: _____**The Type of License of Installer:**

- ☐ Master Plumber # _____
☐ Solid Fuel # _____
☐ Oil # _____
☒ Gas # PNT 2335
☐ Other _____

Type of Chimney:

- ☐ Masonry Lined
Factory built _____

- ☐ Metal
Factory Built U.L. Listing # _____

- ☒ Direct Vent
Type PVC 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.-

Permit Fee: \$ _____

Approved

Fire: _____

Ele.: _____

Bldg.: _____

Signature of Installer Carlo Davis**Approved with Conditions**

- ☐ See attached letter or requirement

Inspector's Signature _____

Date Approved _____

White - Inspection

Yellow - File

Pink - Applicant's

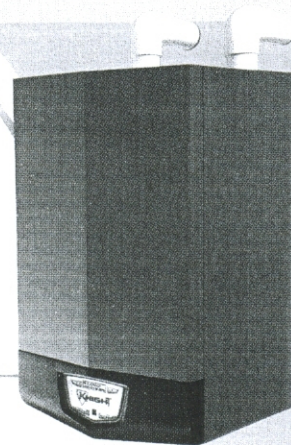
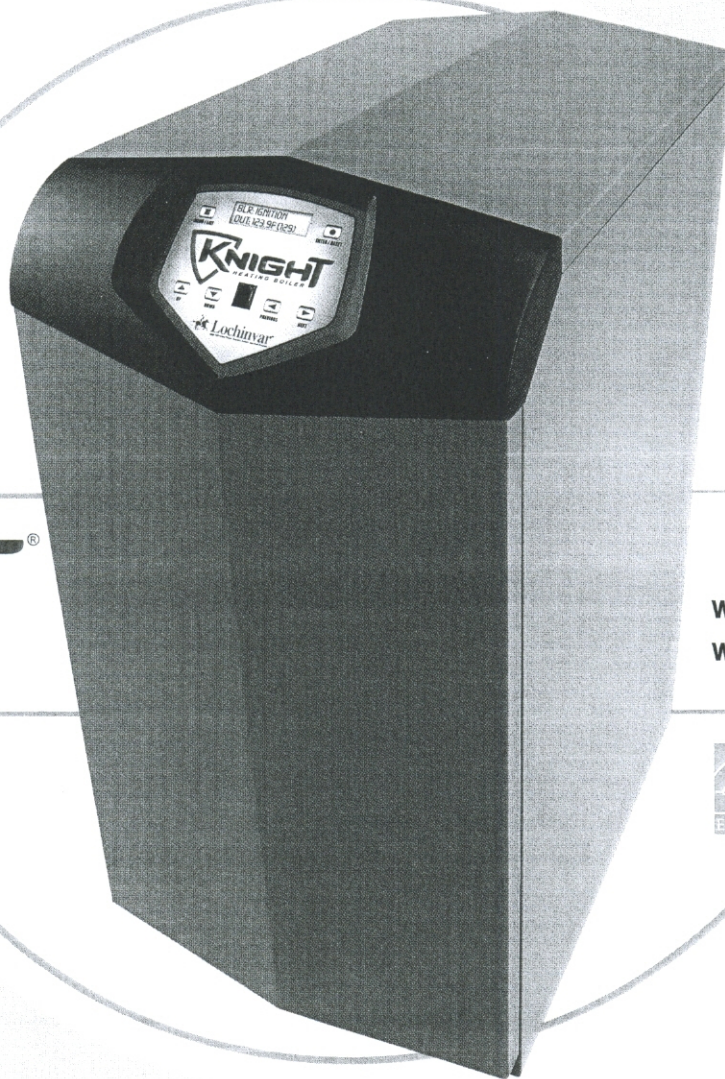
Gold - Assessor's Copy

Up to
\$1500
Energy Tax Credit
Qualified Product!

the best

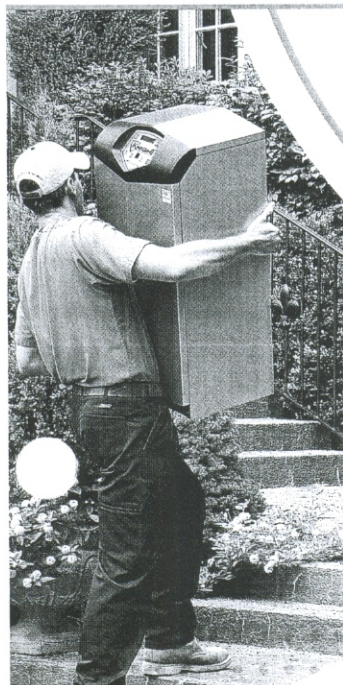
mod/con **Performance**
and **Versatility**

UP TO
96%
DOE AFUE
Efficiency



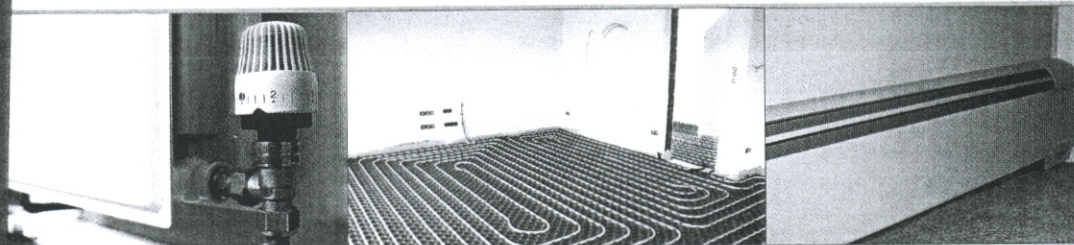
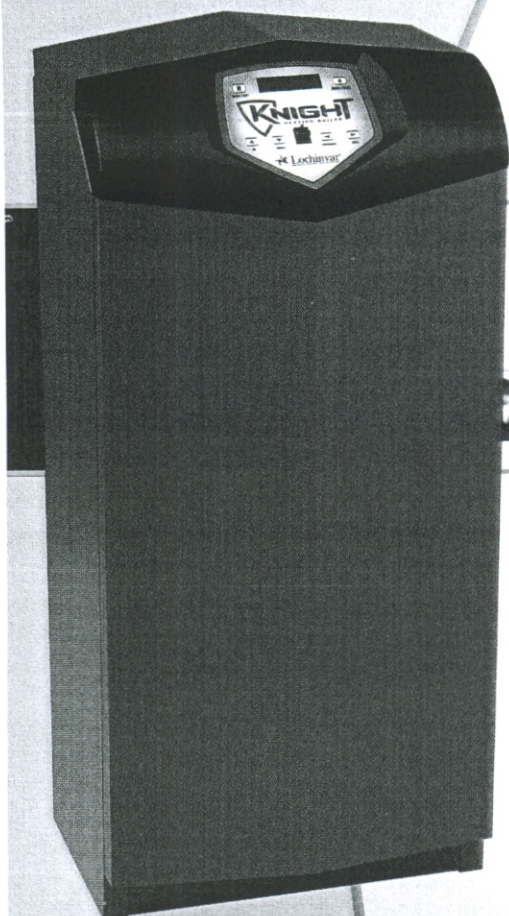
With Floor and
Wall Mount Models

KNIGHT
HEATING BOILER



Lochinvar
High Efficiency Water Heaters, Boilers and Pool Heaters

www.knightheatingboiler.com



KNIGHT is a great choice for radiant floor heating, baseboard and panel heater applications

Since its introduction in 2005, the KNIGHT modulating-condensing heating boiler has consistently delivered everything the professional needs for ease of installation and maintenance, and everything homeowners need for total comfort and long-term savings on energy costs.

With 5 floor-standing models and 5 compact Wall Mount units, Lochinvar offers the industry's broadest selection of modulating-condensing heating boilers. And KNIGHT is the industry's most advanced boiler design, including the SMART SYSTEM™

operating control that has quickly become a legendary benchmark among the trade!

For traditional space heating or radiant floor heating applications, KNIGHT offers your customers tremendous savings on energy costs compared to less efficient boilers.

KNIGHT has earned the ENERGY STAR, signifying that it has met strict energy-efficiency guidelines set by the EPA and U.S. Department of Energy.



10 Models – The Right Choice, for Every Application

5 Flexible Venting Options

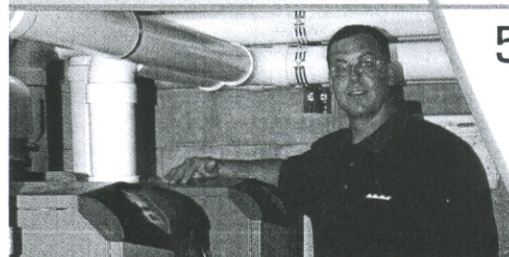
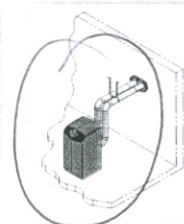
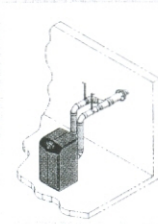
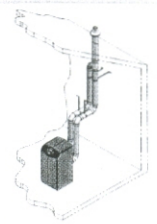
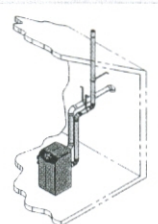
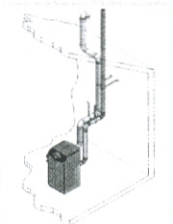
Direct Vent Vertical

Vertical w/Sidewall Air

Direct Vent Vertical*

Direct Vent Sidewall*

Direct Vent Sidewall



Why do I like the KNIGHT? I don't know where to begin.

The direct venting with 100 feet of intake and exhaust eliminates a lot of problems. I also like the low voltage features, and the SMART SYSTEM's outdoor reset capability. The internal sequencer is tremendously powerful and ideal for multiple boiler installations. It's so great-looking, and aesthetics are important to my customers. When I install KNIGHT, my customers know they are getting a highly efficient state-of-the-art system, and they've all been completely satisfied."

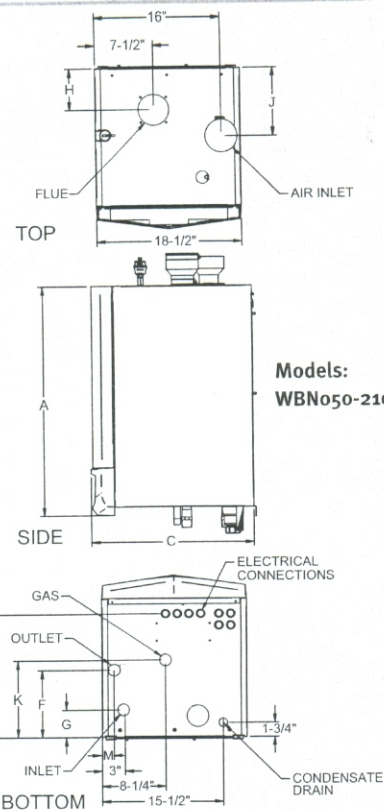
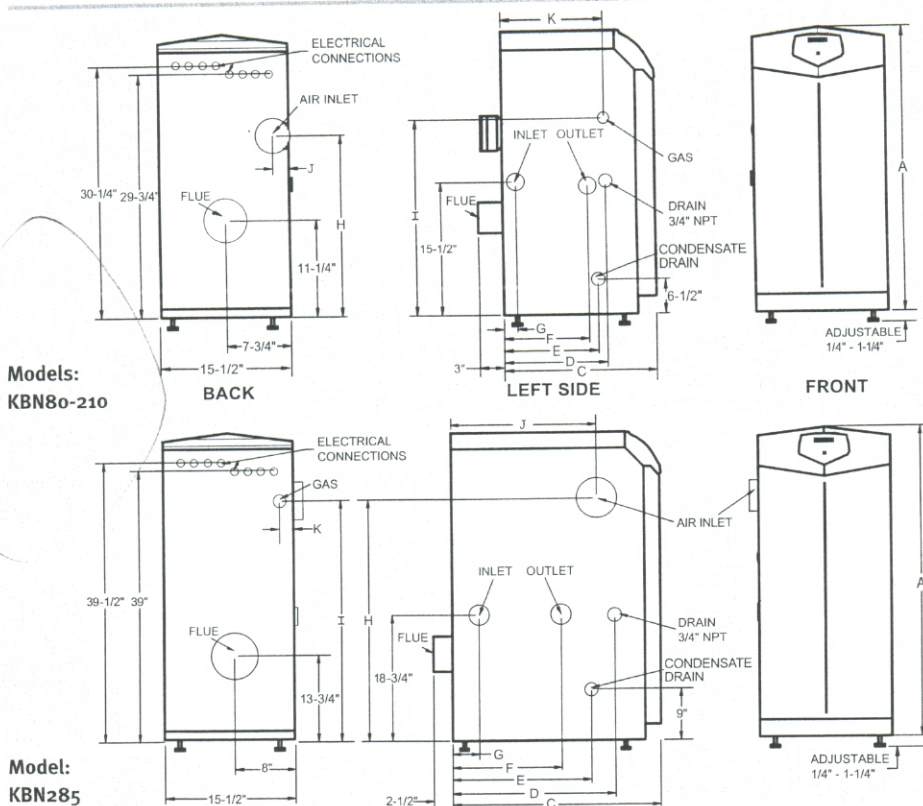
— Paul Rohrs, Biggerstaff Radiant Solutions, Lincoln, NE

Vent using PVC, CPVC or Stainless Steel

Up to 100 feet of air intake and 100 feet of exhaust vent with PVC, CPVC or SS. *Optional Concentric Vent Kit sold separately.

Knight Heating Boiler Dimensions & Specifications- Floor Standing Models

Wall Mount Models



| KNIGHT Heating Boiler | | | | | | Dimensions and Specifications | | | | | | | | | | | | | | | | |
|-----------------------|-----|-----|---------|----------|-------|-------------------------------|---------|---------|---------|---------|--------|---------|-----|---------|---------|--------|-----------|-------------|-----------|-----------|-----------------|--|
| Input | | | Heating | | NET | | | | | | | | | | | | | | | | | |
| Model | Min | Max | AFUE | Capacity | I=B=R | | | | | | | | | | | | | | | | | |
| Number | MBH | MBH | % | MBH | MBH | A | C | D | E | F | G | H | I | J | K | M | Gas Conn. | Water Conn. | Air Inlet | Vent Size | Shipping Weight | |
| WBN050 | 10 | 50 | 95.3 | 45 | 39 | 29-1/4" | 15-3/4" | NA | 10-3/4" | 10-3/4" | 2" | 6-3/4" | NA | 3-1/4" | 4-1/4" | 2-3/4" | 1/2" | 1" | 2" | 2" | 130 | |
| WBN080 | 16 | 80 | 95.3 | 72 | 63 | 29-1/4" | 15-3/4" | NA | 10-3/4" | 10-3/4" | 2" | 6-3/4" | NA | 3-1/4" | 4-1/4" | 2-3/4" | 1/2" | 1" | 2" | 2" | 130 | |
| WBN105 | 21 | 105 | 95.4 | 94 | 82 | 29-1/4" | 15-3/4" | NA | 10-3/4" | 10-3/4" | 3-1/2" | 5-1/2" | NA | 3-1/4" | 4-1/4" | 2-3/4" | 1/2" | 1" | 2" | 2" | 134 | |
| WBN150 | 30 | 150 | 95.5 | 135 | 119 | 29-1/4" | 20-3/4" | NA | 15-3/4" | 8-1/2" | 3-1/2" | 5-1/2" | NA | 8-3/4" | 9-3/4" | 1-1/2" | 1/2" | 1" | 3" | 3" | 162 | |
| WBN210 | 42 | 210 | 95.7 | 190 | 165 | 29-1/4" | 25" | NA | 20" | 12" | 3-1/2" | 5-1/2" | NA | 13" | 14" | 1-1/2" | 1/2" | 1" | 3" | 3" | 177 | |
| KBN080 | 16 | 80 | 95.3 | 72 | 63 | 33-1/4" | 14" | 7" | 5-3/4" | 5" | 3" | 20-1/2" | 22" | 1-3/4" | 6-1/2" | NA | 1/2" | 1" | 3" | 3" | 125 | |
| KBN105 | 21 | 105 | 95.4 | 94 | 82 | 33-1/4" | 14" | 6-1/2" | 5-3/4" | 4-1/2" | 1-1/2" | 20-1/2" | 22" | 1-3/4" | 6-1/2" | NA | 1/2" | 1" | 3" | 3" | 129 | |
| KBN150 | 30 | 150 | 95.5 | 135 | 119 | 33-1/4" | 18" | 12-1/4" | 11-1/2" | 10" | 1-1/2" | 21-1/4" | 23" | 1-3/4" | 12" | NA | 1/2" | 1" | 3" | 3" | 157 | |
| KBN210 | 42 | 210 | 95.7 | 190 | 165 | 33-1/4" | 22-1/4" | 16-1/2" | 15-3/4" | 14-1/4" | 5-1/4" | 21-1/4" | 23" | 1-3/4" | 16-1/4" | NA | 1/2" | 1" | 3" | 3" | 172 | |
| KBN285 | 57 | 285 | 96.0 | 260 | 226 | 42-1/2" | 19-3/4" | 12-3/4" | 13-1/2" | 6" | 2" | 34" | 31" | 11-3/4" | 4-1/4" | NA | 3/4" | 1-1/4" | 4" | 4" | 224 | |

Notes: Performance data based on manufacturer's test results. Indoor installation only. All information subject to change. Change "N" to "L" for LP gas models.

Standard Features

- ▶ Energy Star® Qualified
- ▶ Up to 96% DOE AFUE Efficiency
- ▶ Modulating Burner with 5:1 Turndown
 - ▶ Direct-Spark Ignition
 - ▶ Low NOx Operation
 - ▶ Field Convertible from Natural to LP Gas
- ▶ Vertical & Horizontal Direct-Vent
 - ▶ PVC, CPVC or SS Venting up to 100 Feet
 - ▶ Factory Supplied Sidewall Vent Termination
- ▶ ASME Stainless Steel Heat Exchanger
- ▶ Automatic Reset High Limit
- ▶ Inlet & Outlet Temperature Sensors
- ▶ Boiler Circulating Pump
- ▶ 30 psi ASME Relief Valve
- ▶ Adjustable Leveling Legs (KB Models only)
- ▶ Wall Mount Bracket (WB Models only)
- ▶ Zero Clearances to Combustible Material
- ▶ 12 Year Limited Warranty (See Warranty for Details)

SMART SYSTEM™ Features

- ▶ SMART SYSTEM Digital Operating Control
 - ▶ 2 line, 16 Character Display
 - ▶ Dual Level Password Security
 - ▶ Domestic Hot Water Prioritization
 - ▶ Built in Cascading Sequencer for up to 8 Boilers
 - ▶ 0-10 VDC Input Control
 - ▶ Outdoor Reset Control with Outdoor Air Sensor
 - ▶ Low Water Flow Safety Control & Indication
 - ▶ Alarm on Any Failure Contacts
 - ▶ Service Reminder
 - ▶ Freeze Protection
 - ▶ Night Setback
 - ▶ Time Clock
 - ▶ Three Pump Control (System, Boiler & DHWP)
 - ▶ Data Logging
 - ▶ Examples: Hours Running, Space Heating
 - ▶ Programmable System Efficiency Optimizers
 - ▶ Examples: Anti-cycling, Ramp Delay

Optional Equipment

- ▶ Adjustable High Limit w/ Manual Reset
- ▶ Flow Switch
- ▶ Low Water Cutoff w/Manual Reset & Test
- ▶ Alarm Bell
- ▶ Concentric Vent Kit
- ▶ Condensate Neutralization Kit
- ▶ SMART SYSTEM PC Software
- ▶ Multi-Stack Frame

Firing Codes

- ▶ M9 Standard Construction
- ▶ M7 California Code



Lochinvar®
High Efficiency Water Heaters, Boilers and Pool Heaters