

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT



This is to certify that

DONALCO INC /Alex Lehmann

Located at

31 RANDALL ST

PERMIT ID: 2013-00347

CBL: 166 B012001

has permission to **Install a Biasi Riva Boiler**

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 clsoed-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 procured prior to occupancy.

A handwritten signature in black ink, appearing to be "A. Lehmann", written over a horizontal line.

Fire Prevention Officer

Code Enforcement Officer / Plan Reviewer

**THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
THERE IS A PENALTY FOR REMOVING THIS CARD**

PERMIT ID: 2013-00347

Located at: 31 RANDALL ST

CBL: 166 B012001

City of Portland, Maine - Building or Use Permit Application

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

Permit No: 2013-00347	Issue Date:	CBL: 166 B012001
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Location of Construction: 31 RANDALL ST	Owner Name: DONALCO INC	Owner Address: 141 MAIN ST SOUTH PORTLAND, ME 04106		Phone:
Business Name:	Contractor Name: Alex Lehmann	Contractor Address: 132 Beach Street Saco ME 04072		Phone (207) 615-1451
Lessee/Buyer's Name	Phone:	Permit Type: HVAC		Zone: R5
Past Use: Single Family Home (new)	Proposed Use: Single Family Home (new)	Permit Fee: \$70.00	Cost of Work: \$5,000.00	CEO District: 5
Proposed Project Description: Install a Biasi Riva Boiler		FIRE DEPT: <input type="checkbox"/> Approved <input type="checkbox"/> Denied <input type="checkbox"/> N/A Signature: <i>[Signature]</i>	INSPECTION: Use Group: 11-3 Type: HVAC <i>State Gas Regs</i> Signature: <i>[Signature]</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: LDOBSON	Date Applied For: 02/20/2013	Zoning Approval	
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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>Special Zone or Reviews</p> <p><input type="checkbox"/> Shoreland</p> <p><input type="checkbox"/> Wetland</p> <p><input type="checkbox"/> Flood Zone</p> <p><input type="checkbox"/> Subdivision</p> <p><input type="checkbox"/> Site Plan</p> <p>Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/></p> <p>Date: <i>ok - 2/21/13</i></p>	<p>Zoning Appeal</p> <p><input type="checkbox"/> Variance</p> <p><input type="checkbox"/> Miscellaneous</p> <p><input type="checkbox"/> Conditional Use</p> <p><input type="checkbox"/> Interpretation</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Denied</p> <p>Date: _____</p>	<p>Historic Preservation</p> <p><input checked="" type="checkbox"/> Not in District or Landmark</p> <p><input type="checkbox"/> Does Not Require Review</p> <p><input type="checkbox"/> Requires Review</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Approved w/Conditions</p> <p><input type="checkbox"/> Denied</p> <p>Date: <i>[Signature]</i></p>
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CERTIFICATION

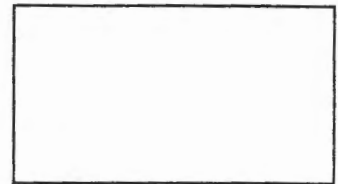
I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, 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



166 B 12

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 29 Bramhall St Portland Use of Building Residential Date 2-20-13
Name and address of owner of appliance Pete Peters

Installer's name and address Alex Lehmann 132 Beach St Saco ME
Telephone 207 615-1451

Location of appliance:

- Basement
- Attic
- Floor
- Roof

Type of Fuel:

- Gas
- Oil
- Solid

Appliance Name: Biasi P.Va ^{103,000 BTUs}

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 # PNT 1210
- Other _____

Type of Chimney:

- Masonry Lined
Factory built Direct Vent
- Metal
Factory Built U.L. Listing # _____

Direct Vent
Type Boiler Vent UL# _____

Type of Fuel Tank

- Oil
- Gas

Size of Tank _____

Number of Tanks _____

Distance from Tank to Center of Flame _____ feet.

Cost of Work: \$ 5,000.

Permit Fee: \$ _____

RECEIVED

FEB 20 2013

Dept. of Building Inspections
City of Portland Maine

Approved

Fire: _____
Ele.: _____
Bldg.: _____

Approved with Conditions

- See attached letter or requirement

Inspector's Signature

Date Approved

Signature of Installer Alex Lehmann

BOILER INSTALLATION, OPERATION INSTRUCTIONS

RECEIVED

FEB 20 2013

Riva

Dept. of Building Inspections
Maine

FP

WALL HUNG GAS BOILER FOR CENTRAL HEATING SUPPLY

Please Read Instructions Carefully
Save for Future Reference

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS
 - Do not try to light any appliance.
 - Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you can not reach your gas supplier call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

Manufactured by:

 **BIASI**
Biasi S.p.A.
Verona, Italy



Distributed By:

QHT

Quincy Hydronic Technologies, Inc.
80 Rochester AVE. Suite # 12
Portsmouth, NH 03801
Phone: 603-334-6400
Fax: 603-334-6401

RIVA FP MANUAL

6. Installation Location

The installation location chosen must:

- Comply with all clearances listed below.
- Provide suitable location for the exhaust and intake venting.
- Not be installed in an unheated space.
- Comply with all local codes and standards.

Note: Dimensions shown are minimums. Greater clearances will simplify installation and service.

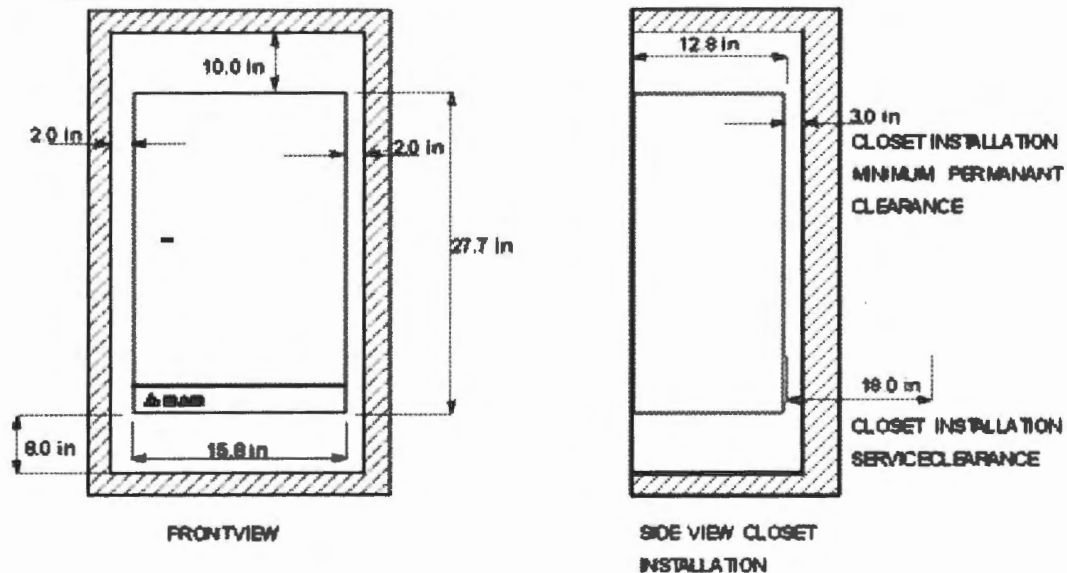


Figure 6.1

WARNING: Do not install the boiler on carpeting

If the boiler is to be installed in an enclosed room with no fresh air intake, the room must have proper vent louvers installed. There should be two louvers, place each within 12" of the ceiling and floor respectively. Each vent will have a free area of 54 square inches.

Note: For boilers in an enclosed space it is recommended to install a CO detector in the boiler room.

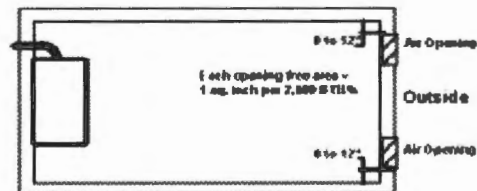


Figure 6.2

When choosing an installation location insure the exhaust and intake pipes comply with NFPA 54. The drawing on the next page illustrates the restrictions on exhaust locations.

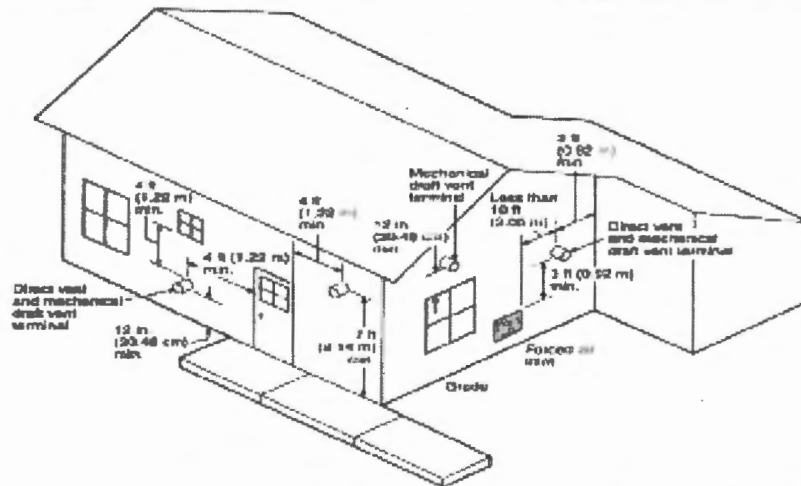
7. Exhaust Pipe Location

CAUTION

EXTERNAL VENT SURFACES ARE HOT.

IT IS RESPONSABILITY OF THE HOMEOWNER TO KEEP THE VENT TERMINAL CLEAR OF SNOW AND ICE

NOTE: USE ONLY LISTED COMPONENTS SUPPLIED WITH THE BOILER. SURFACE DISCOLORATION OF THE BUILDING MAY OCCUR DUE TO IMPROPER INSTALLATION. QHT WILL NOT ACCEPT RESPONSIBILITY OR LIABILITY FOR SUCH DISCOLORATION.



The Exhaust Hood must be installed on the leeward side of house and conform to the following guidelines:

1. The Vent hood shall not be less than 3 feet above any forced air inlet to the house.
2. The Vent hood shall not be less than 4 feet below, 4 feet horizontally, or 1 foot above any door, window or gravity inlet into any building.
3. The Vent hood shall not be less than 2 feet from an adjacent building.
4. The Vent hood shall be not less than 7 feet above grade when located adjacent to public walkway.
5. The Vent hood shall be located so that flue gasses are not directed to jeopardize people, overheat combustible structures, materials or enter buildings.
6. Minimum of 6 feet horizontal clearance from electric meters, gas meters, regulators and relief equipment.
- 7.
8. Avoid installing exhaust hood on the North, West, or the side of the house receiving the prevailing winds.
9. The vent should not be situated so that the flue gasses are directed towards brickwork, siding, or other construction, in such a manner that may cause damage from heat or condensate from the flue gasses

8. Mounting Bracket

After a suitable installation location is chosen, verify that the mounting wall is properly braced and strong enough to support the 80 pound weight of the unit when filled with water.

NOTE: The boiler shall be installed such that the gas ignition system components are protected from water and liquids in general (dripping, spraying, rain, etc) during the appliance operation and service.

Use the paper template provided with the boiler to determine the location of the mounting bracket. Securely mount the bracket to the wall using appropriate hardware for the particular wall construction.

Mounting Steps:

1. Tape the paper template to the wall in the chosen location. Be sure to level the template.
2. Pre-drill two holes in the center of the "oval" slots on the mounting bracket, sized for the hardware being used.
3. Mount the bracket to the wall. Be sure to level the bracket by adjusting the screw in the vertical slot.
4. Pre-drill the remaining hole in the mounting bracket and secure the final screw.
5. Mark and drill the exhaust/intake pipe holes through the house. If you are using a coaxial pipe system, drill the hole marked A (\varnothing 4") in the drawing below and on the paper template. If you are using a separate pipe system drill holes marked B and C (\varnothing 3.25") shown below as well as on the paper template.
6. Remove paper template and hang boiler on bracket.

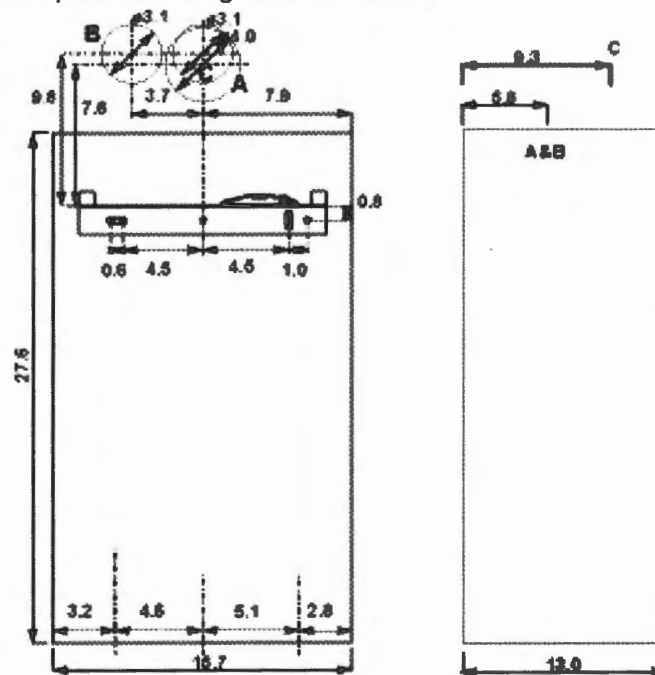


Figure 8.1

9. Ventilation Cont.

The Riva is a mechanical draft, side wall vented boiler. There are two flue options available - separate and coaxial. The coaxial option has one configuration shown on the next page. The separate option has two possible configurations shown on the following pages.

9.1 Restrictor Sizing:

Each exhaust option is shipped standard with 3 feet of exhaust pipe, 3 feet of intake air pipe. There is also a restrictor kit in which there are some restrictors that must be placed in exhaust breach of fan on the top of the boiler (Fig. 9.1) according to the flue configuration used.

If additional flue piping is need for a particular application, it can be ordered separately in 3 feet increments. Depending on the final flue pipe length, an alternative restrictor may be required. Refer to the tables 9.1 for proper restrictor ring sizing.



Figure 9.1

Coaxial 2.5/4.0	Restrictor Size
From 1.65 to 3.30 (ft)	41
From 3.30 to 8.86 (ft)	44
Separate 3.25/3.25	Restrictor Size
For 1.65 (in) and 1.65 (out)	38
From 3.30 to 39.40 (in+out)	41

Table 9.1

9.2 Fitting the flue system:

In general, it has to be taken in consideration that the horizontal sections of the flue pipe must have an horizontal sloping not less than 1.5 degree (0.3 in per ft) towards the boiler.

In the standard horizontal flue kit the flue pipe is angled within the air duct therefore the air duct must be horizontally installed.

If one or more exstensions have to be used they must be adequately supported so that there is no sag in the flue pipe and a minimum fall of 1.5 degree (0.3 in per ft) over the whole lenght towards the boiler is ensured.

9. Ventilation Cont.

B Standard separate horizontal flue kit (Exhaust & intake outside)

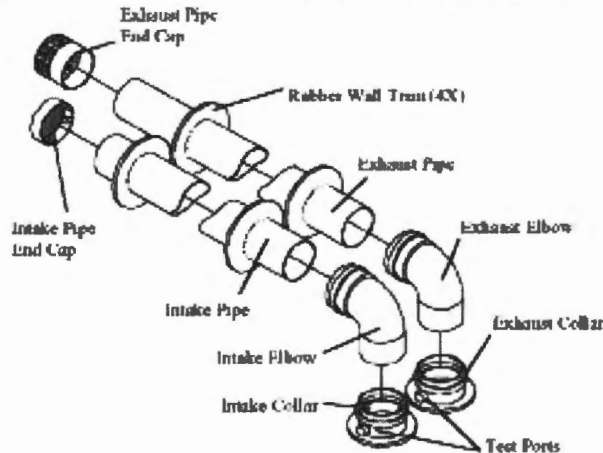


Figure 9.4 (Twin pipe ϕ 3.25 in)

Various twin (split) pipes kits and optional accessories (elbows) are available to assist in the termination of the flue where the boiler is installed in a location remote to an outside wall. These kits allow for separation of the air supply pipe from the pipe that discharges the exhaust gasses. Consequently it is possible to extend the flue system to a greater distance than that provided by the standard coaxial horizontal flue.

If either an additional 45° or 90° accessory elbow is used then the maximum permissible length of either pipe must be reduced by 3.0 ft or 5.4 ft respectively. The sum of the lengths of the two horizontal part must be less than 131 ft.

Installation:

- Drill holes B & C (on the wall template) through the outside wall that is less than 18" thick
- Cut the pipes as necessary so that no more than 6" of intake pipe protrudes from the house and the exhaust pipe is a minimum of 4 inches longer than the intake pipe.
- Slide the Intake and exhaust pipes through the respective holes.
- Slide one rubber wall trim piece on each pipe from inside and one from outside.
- Attach each collar to the boiler with the gasket and screws provided.
- Insert each elbow into its corresponding collar.
- Connect each pipe to its corresponding elbow (as shown in the diagram).
- Secure end cap on the intake and exhaust pipe outside the house.

9. Ventilation Cont.

E Alternative separate kit (Exhaust & intake outside)

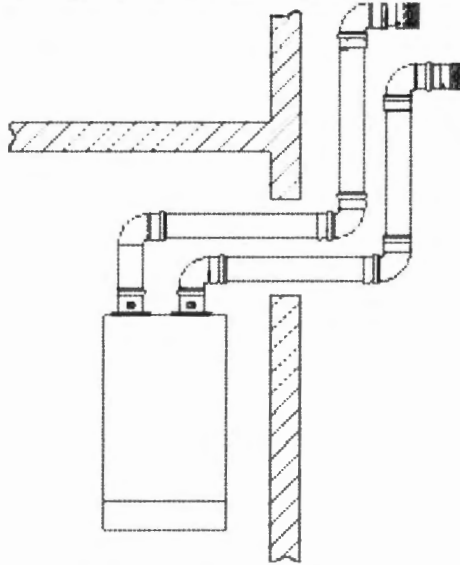


Figure 9.7 (Twin Pipe ϕ 3.25 in)

These kits allow for separation of the air supply pipe from the pipe that discharges the exhaust gasses. Consequently it is possible to extend the flue system to a greater distance than that provided by the standard coaxial horizontal flue.

If either an additional 45° or 90° accessory elbow is used then the maximum permissible length of either pipe must be reduced by 3.0 ft or 5.4 ft respectively. The sum of the lengths of the two horizontal part must be less than 49. ft.

Installation:

- Drill holes B & C (on the wall template) through the outside wall Drill hole C (on the wall template) through the outside wall that is less than 18" thick.
- Cut the pipes as necessary so that no more than 6" of intake pipe protrudes from the house and the exhaust pipe is a minimum of 4 inches longer than the intake pipe.
- Slide the Intake and exhaust pipes through the respective holes.
- Slide one rubber wall trim piece on each pipe from inside and one from outside.
- Attach each collar to the boiler with the gasket and screws provided.
- Insert each elbow into its corresponding collar.
- Connect each pipe to its corresponding elbow (as shown in the diagram).
- Secure end cap on the intake and exhaust pipe outside the house.

9. Ventilation Cont.

F Standard Vertical-roof kit (Exhaust & intake outside)

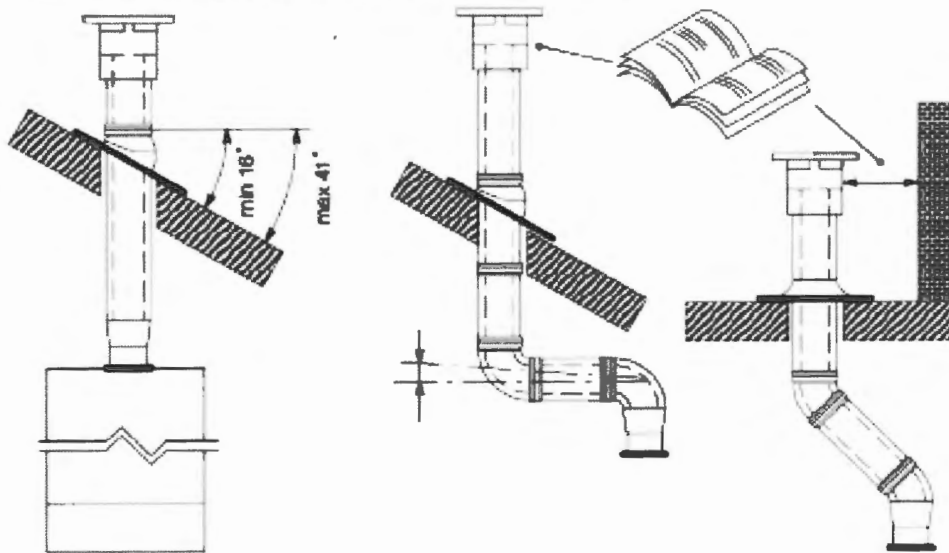


Figure 9.8 (vertical pipe ϕ 3.1 / ϕ 4.9 in)

This kit allows vertical termination of the flue pipe through the roof. The kit is 1.2 min length. Extension pieces (Co-axial) are also available which allows the flue system to be extended to a total overall maximum permissible length of 29 ft.

Optional 45° and 90° elbows can be used to offset the flue route.

Each additional elbow reduces the overall acceptable length of the flue system as follows:

45° reduce length by 1.6 ft.

90° reduce length by 3.2 ft.

Installation:

- Drill hole through the outside roof.
- Cut the pipe as necessary.
- Slide the intake and exhaust pipes through the hole.
- Slide one rubber wall trim piece on the pipe from inside and one from outside.
- Connect exhaust (inner) pipe to concentric elbow.
- Connect intake (outer) pipe to concentric elbow.
- Secure elbow to boiler using gasket and four screws provided.
- Secure end cap on the intake pipe outside the house.