CITY OF PORTLAND, MAINE
Department of Building Inspections

Original Receipt

2.27. 2010

Received from Geoff Oxsted

Location of Work 192 Ohio St

Cost of Construction $_____ Building Fee:_____

Permit Fee $_____ Site Fee: _____

Certificate of Occupancy Fee: _____

Total: 70

Building (IL) ___ Plumbing (I5) ___ Electrical (I2) ___ Site Plan (U2) ___

Other _____

CBL: 186 A B 20

Check #: 514 **Total Collected $** 70

No work is to be started until permit issued.
Please keep original receipt for your records.

Taken by: L. J.

WHITE - Applicant's Copy
YELLOW - Office Copy
PINK - Permit Copy

City of Portland, Maine - Building or Use Permit Application

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

Permit No:	Issue Date:	CBL:
10-1059		186A B020001

Location of Construction:	Owner Name:	Owner Address:	Phone:
192 WHITNEY AVE	PIERRE PATRICK & JESSICA P P	192 WHITNEY AVE	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Geoff Gergler	280 Beech Ridge Road Scarborough	2074152904
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		HVAC	R-3

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Single Family	Single Family - install a Rinnai E110 in basement	$70.00	$4,500.00	3

64.60#

FIRE DEPT: ☐ Approved ☐ Denied

N/A

Signature.

INSPECTION:
Use Group: R-3 Type: HVAC
IRC-2003

Signature:

Proposed Project Description:
install a Rinnai E110 in basement

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date.

Permit Taken By:	Date Applied For:
ldobson	08/27/2010

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
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..

PERMIT ISSUED

AUG 30

City of Portland

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☑ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date: OL - 8/30/10	Date.	Date:

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

City of Portland, Maine - Building or Use Permit

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

Permit No:	Date Applied For:	CBL:
10-1059	08/27/2010	186A B020001

Location of Construction:	Owner Name:	Owner Address:	Phone:
192 WHITNEY AVE	PIERRE PATRICK & JESSICA P P	192 WHITNEY AVE	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Geoff Gergler	280 Beech Ridge Road Scarborough	(207) 415-2904
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		HVAC	

Proposed Use:	Proposed Project Description:
Single Family - install a Rinnai E110 in basement	install a Rinnai E110 in basement

Dept: Zoning **Status:** Approved **Reviewer:** Marge Schmuckal **Approval Date:** 08/30/2010

Note: **Ok to Issue:** ☑

Dept: Building **Status:** Approved with Conditions **Reviewer:** Nicholas Adams **Approval Date:** 09/14/2010

Note: **Ok to Issue:** ☑

1) Equipment and venting must be installed in compliance per the manufacturer's specifications

2) The installation must comply with the State of Maine Gas Regulations.

PERMIT ISSUED

AUG 30

City of Portland

FILL IN AND SIGN WITH INK

PERMIT ISSUED
AUG 30
City of Portland

APPLICATION FOR PERMIT
HEATING OR POWER EQUIPMENT

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 186A B020001 Use of Building Single family Date 8/5/10

Name and address of owner of appliance Patrick & Jessica Pierce

192 Whitney St. Ave 04102

Installer's name and address Geoff Gengler

280 Beech Ridge Rd Scarborough Telephone 415-2904

Location of appliance:

- ☒ Basement
- ☐ Floor
- ☐ Attic
- ☐ Roof

Type of Fuel:

- ☒ Gas
- ☐ Oil
- ☐ Solid

Appliance Name: Rinnai E110

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 # PVT1199
- ☐ Other

Type of Chimney:

- ☐ Masonry Lined
  Factory built
- ☐ Metal
  Factory Built U.L. Listing #
- ☐ Direct Vent
  Type PVC UL#

RECEIVED
AUG 27 2010
Dept. of Building Inspections
City of Portland Maine

Type of Fuel Tank

- ☐ Oil
- ☐ Gas

Size of Tank

Number of Tanks

Distance from Tank to Center of Flame feet.

Cost of Work: $ 4500.

Permit Fee: $ 70.00

Approved

Fire:

Ele.:

Bldg.:

Approved with Conditions

☐ See attached letter or requirement

Inspector's Signature

Date Approved

Signature of Installer

White - Inspection Yellow - File Pink - Applicant's Gold - Assessor's Copy

FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT
HEATING OR POWER EQUIPMENT

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:

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Name and address of owner of appliance Patrick : Jessica Pierce

197 Whitney St. ME 04102

Installer's name and address Geoff Gergler

280 Beech Ridge Rd Scarborough Telephone 415-2904

Location of appliance:

- ☐ Basement
- ☐ Floor
- ☐ Attic
- ☐ Roof

Type of Fuel:

- ☒ Gas
- ☐ Oil
- ☐ Solid

Appliance Name: Rinnai E110

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 # PM+1199
- ☐ 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: $ 4500.

Permit Fee: $ 70.00

Approved

Fire: _____

Ele.: _____

Bldg.: _____

Approved with Conditions

☐ See attached letter or requirement

_____ Inspector's Signature

_____ Date Approved

Signature of Installer _____

White - Inspection Yellow - File Pink - Applicant's Gold - Assessor's Copy

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the City of Portland Inspection Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months, if the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue with construction.**

__X__ **Final inspection required at completion of work.**

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OR CIRCUMSTANCES.

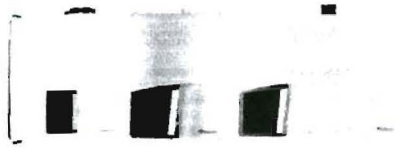
IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.

PERMIT ISSUED

AUG 30

City of Portland

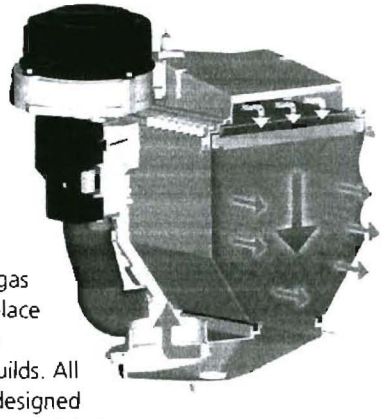
CBL: 186A B020001 **Building Permit #:** 10-1059

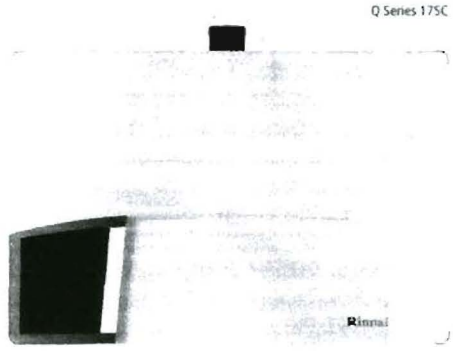


Rinnai.

INTRODUCING RINNAI CONDENSING TECHNOLOGY FOR HEATING YOUR WHOLE HOUSE – AND YOUR WATER

RINNAI'S CONDENSING WALL-MOUNTED GAS BOILERS FOR WHOLE-HOUSE HEATING AND HOT WATER





Heat an entire home – even get domestic hot water – with the economical, reliable and compact choice from Rinnai. Now, the premier name in tankless water heating brings you two new series of wall-mounted, condensing gas boilers that can be easily retrofitted to replace traditional, less efficient boilers or provide simple, space-saving installation in new builds. All seven models feature Rinnai's exclusively designed stainless steel heat exchanger to deliver unparalleled performance and efficiency.

Rinnai offers more efficiency, more energy cost savings and more durability. Choose from the Rinnai E Series, perfect for homes with small domestic hot water needs, or the Q Series, ideal in all homes where more sophisticated demands call for zone heating. Four heating-only models and three combi models offer maximum BTU inputs ranging from 75,000 to 205,000 and operate on either natural or LP gas.

Rinnai E Series

Two compact combi models for heating and domestic hot water
Stainless steel primary boiler heat exchanger
Copper nickel integrated secondary plate heat exchanger for domestic hot water
Integrated single-speed pump and expansion tank
A variety of venting options

Rinnai Q Series

Fully modulating pump combines with stainless steel heat exchanger to make this one of the more efficient units available
Combi unit includes 6.6 gallon fully insulated indirect tank
Optional 3-way diverter valve (indirect DHW tank kit) available for "S" System models

ULTRA-EFFICIENT CONDENSING TECHNOLOGY

*Up to 96.5% Efficiency

- Up to 96.5% AFUE efficiency
- Stainless steel primary boiler heat exchanger
- Copper nickel integrated secondary plate exchanger
- Compact wall-mounted design saves space over traditional boilers
- Super quiet operation
- Optional internal 3-way valve eliminates the need for a pump for the indirect tank
- Outdoor reset function with sensor included
- Plumbing kits with low-loss header included
- Choose between propane or natural gas units (conversion kits available)
- Variety of venting options available, with direct-vent ready out-of-the-box; dual-pipe adaptor included
- ASME accredited units
- ENERGY STAR® qualified models

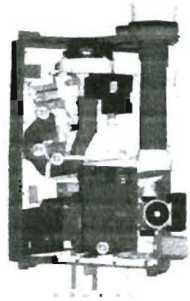
RINNAI CONDENSING WALL-MOUNTED GAS BOILERS

RS100

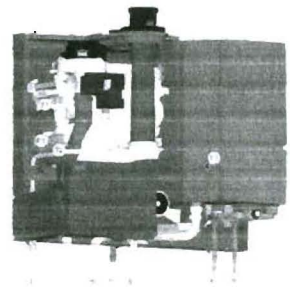
RS100 Controller

- Simple digital controller with backlit display
- Direct communication with boiler
- Adaptive room control
- Error reporting and auto service message
- Automatic summer/winter time change
- Local override of the room temperature
- Flow temperature control
- Features three clock programs and three week profile programs; programmable for holidays

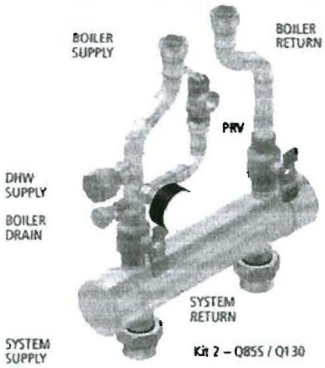
E Series



Q Series



Plumbing Kits - Kits for other models are available.



Kit 2 – Q85S / Q130

Kit 1 – E75C / E110C

Kit 3 – Q175 / Q205

Condensing Gas Boilers - Parts

E SERIES		SHARED COMPONENTS		Q SERIES	
8	plate exchanger DHW	1	heat exchanger	8	cylinder DHW (combi)
14	exhaust	2	ignition unit	10	Control Tower (CMS)
15	combustion air supply	3	fan unit	14	thermostatic mixing valve
16	Brazed plate heat exchanger	4	air inlet attenuator	15	exhaust
T1	supply sensor	5	gas valve	16	combustion air supply
T3	sensor DHW and flow switch	6	automatic air vent	17	air box
A	supply connection central heating	7	ceramic burner cassette	18	identification plate
R	return connection central heating	9	operating panel	T1	flow sensor
C	condensate pipe	11	water filter return CH	T3	cylinder sensor DHW (combi)
K	domestic cold water pipe	12	three-way valve	F	supply connection central heating
W	domestic hot water pipe	13	boiler loop pump	R	return connection central heating
		T2	return sensor	C	condensate pipe
		P1	water pressure sensor	E	expansion vessel pipe (Q51C)
		G	gas pipe	K	domestic water pipe (combi)
				W	domestic hot water pipe (combi)

Rinnai Condensing Wall-Mounted Gas Boilers – "C" Combi and "S" System

Dimensions	W 20" (500 mm) H 26" (650 mm)* D 16" (395 mm)	W 20" (500 mm) H 26" (650 mm)* D 16" (395 mm)	W 20" (500 mm) H 27" (680 mm) D 15" (385 mm)	W 20" (500 mm) H 27" (680 mm) D 15" (385 mm)	W 26" (660 mm) H 27" (680 mm) D 15" (385 mm)	W 40" (1000 mm) H 27" (680 mm) D 15" (385 mm)	W 26" (660 mm) H 27" (680 mm) D 15" (385 mm)
Weight	86 lbs (39 kg)	88 lbs (40 kg)	110 lbs (50 kg)	117 lbs (53 kg)	141 lbs (64 kg)	196 lbs (89 kg)	141 lbs (64 kg)
Minimum/Maximum Input BTU (Heating)	17,000-75,000 (NG) 37,000-75,000 (LP)	26,000-110,000 (NG) 59,000-110,000 (LP)	17,000-85,000 (NG) 37,000-85,000 (LP)	26,000-130,000 (NG) 59,000-130,000 (LP)	35,000-175,000 (NG) 74,000-175,000 (LP)	35,000-175,000 (NG) 74,000-175,000 (LP)	41,000-205,000 (NG) 74,000-205,000 (LP)
Minimum/Maximum Input BTU (Direct Hot Water)	17,000-85,000 (NG) 37,000-85,000 (LP)	26,000-130,000 (NG) 59,000-130,000 (LP)					
Maximum Flow Rate Domestic Hot Water	2.1 GPM (75° F Delta T)	4.8 GPM (50° F Delta T)	Indirect tank compatible	Indirect tank compatible	Indirect tank compatible	6.2 GPM (50° F Delta T)	Indirect tank compatible
AFUE Rating (NG and LP)	96.5%	96.1%	96.5%	96.1%	95.7%	95.7%	95.7%
Optional Digital Controller (s)	RS100	RS100	RS100	RS100	RS100	RS100	RS100

*Includes expansion tank

Rinnai is continually updating and improving products; therefore, specifications are subject to change without prior notice. Local, state, provincial and federal codes must be adhered to prior to and upon installation.

FOR MORE INFORMATION ON RINNAI PRODUCTS

ADDITIONAL RINNAI LITERATURE AVAILABLE

RESIDENTIAL TANKLESS WATER HEATERS

INTELLIGENT FIREPLACES

DIRECT VENT WALL FURNACES

Rinnai America Corporation
103 International Drive
Peachtree City, GA 30269
Toll Free 1-866-RINNAI-1
Phone: 678-829-1700 • Fax: 678-364-8643
Visit our Websites: www.rinnai.us
E-mail: marketing@rinnai.us

Rinnai.

6.7 Vent system and air supply system

Provisions for combustion and ventilation air must be made in accordance with section, Air for Combustion and Ventilation of the National Flue Gas Code, ANSI Z223.1, or Sections 7 2, 7.3 of 7.4 of CAN/CGA B149.1, Installation Codes, or applicable provisions of the local building codes.

- Do not store chemicals near the boiler or in rooms where the air is being supplied to the boiler. **See the list on page 10.**
- Do not allow the flue gases of other appliances to enter the boiler.
- Keep cabinet free of moisture

NOTICE

In the event that the system has actuated to shut off the main burner gas, do not attempt to place the boiler in operation. Contact a qualified service agency.

6.7.1 Intake / Exhaust Guidelines

Refer to the specific instructions on your vent product for additional installation requirements.

- You must use vent components that are certified and listed with this model.
- Do not combine vent components from different manufacturers.
- Venting should be as direct as possible with a minimum number of pipe fittings.
- Avoid dips or sags in horizontal vent runs by installing supports per the vent manufacturer's instructions.
- Support horizontal vent runs every four feet and all vertical vent runs every six feet or in accordance with local codes.
- Vent diameter must not be reduced.
- The boiler is unsuitable to install on a common vent installation, see also chapter 19.
- Do not connect the venting system with an existing vent or chimney.
- Do not common vent with the vent pipe of any other water heater or appliance.
- Vent connections must be firmly pressed together so that the gaskets form an air tight seal.
- Refer to the instructions of the vent system manufacturer for component assembly instructions.
- If the vent system is to be enclosed, it is suggested that the design of the enclosure shall permit inspection of the vent system. The design of such enclosure shall be deemed acceptable by the installer or the local inspector.

NOTICE

If it becomes necessary to access an enclosed vent system for service or repairs, Rinnai is not responsible for any costs or difficulties in accessing the vent system. Warranty does not cover obtaining access to an enclosed vent system.

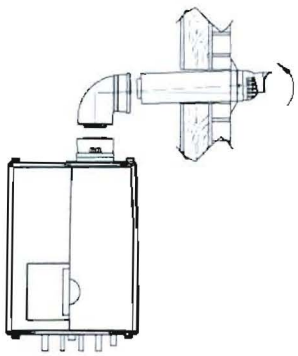
The instructions for the installations of the venting system shall specifiy that the horizontal portions of the venting system shall be supported to prevent sagging; the methods of and intervals for support shall be specified. These instructions shall also specify that the venting system:

- For category I, II and IV boilers, have horizontal runs sloping upwards not less than 1/4" per foot (21mm/m) from the boiler to the vent terminal;
- For category III boilers, slope shall be as specified in the boiler manufacturer's instructions;
- For category II and IV boilers, be installed so as to prevent accumulation of condensate; and
- For category II and IV boilers, where necessary, have means provided for drainage of condensate.

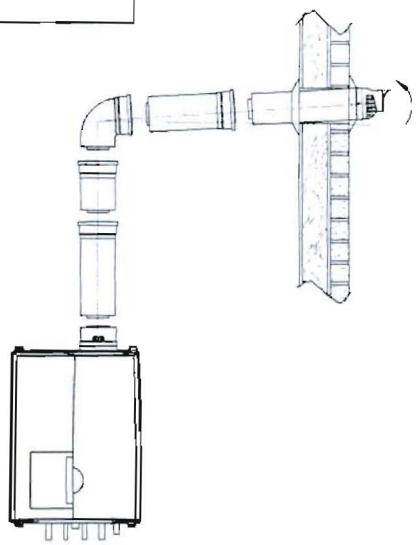
6.7.2a Examples vent and air supply systems (concentric)

Wall thickness for vent termination installation:
Minimum: 100mm / 4'
Maximum: 508mm / 20"

Examples wall terminals

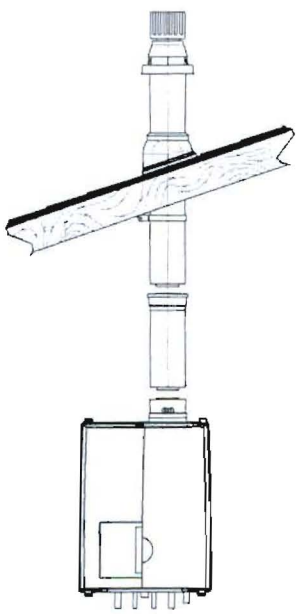


Short termination with wall terminal
figure 11A

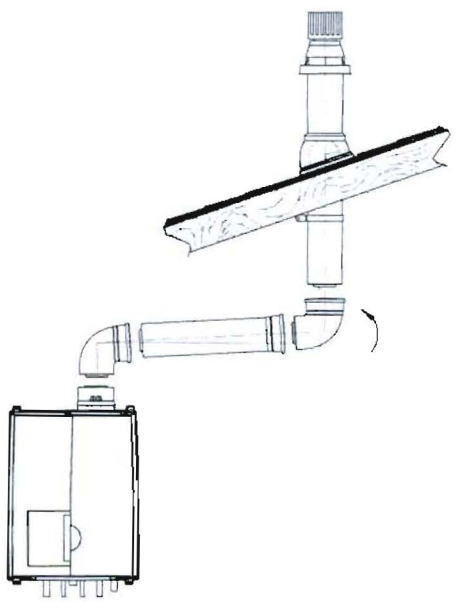


Termination with wall terminal on higher level
figure 11B

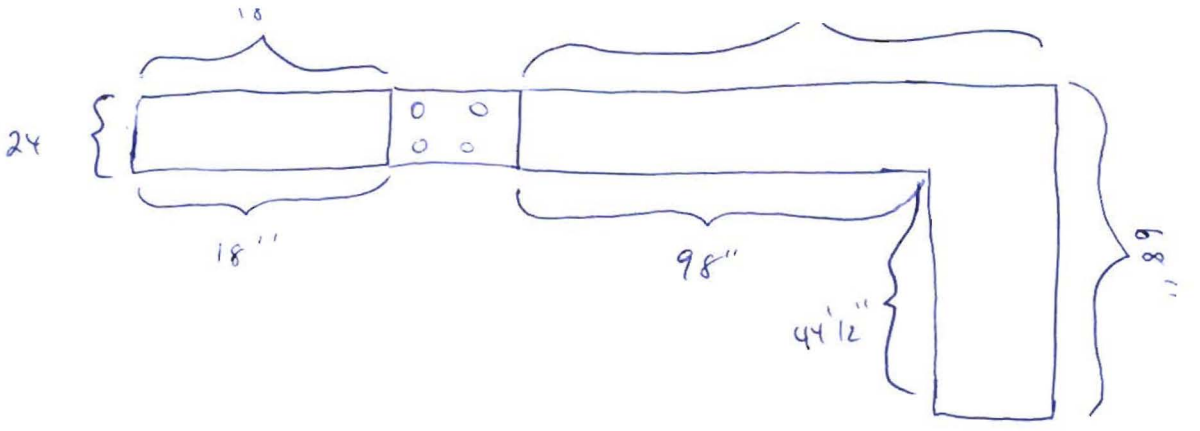
Examples roof terminals



Short termination with roof terminal
figure 12A



Termination with roof terminal and bends
figure 12B



- 208.5" around Back
- 160.5" around front
- 4" Backsplash

98
24.5
122.5