Portland, Maine | Yes. Life's good here.

Jeff Levine, AICP, Director
Planning & Urban Development Department

Tammy Munson
Inspections Divi

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

HVAC / Power Equipment Application & Checklist

Date: 12/08/14

All of the following information is required and must be submitted. Checking off each item as you prepare your application package will ensure your package is complete and will help to expedite the permitting process.

- [ ] A floor plan that includes structural details, size and dimensions of the floor and location where the equipment is going to be installed.
- [ ] Information on how the unit is being vented & hanging details if appropriate.
- [ ] Details of the specific equipment being installed; ie; specifications and any heating technical specifications. (Often this information can be obtained from the manufacturer's spec sheet or retail advertisements.)
- [ ] A plot plan showing the shape and dimension of the lot, with the distance from the actual property lines, and the principal structure may be required.
- [ ] Proof of ownership is required if it is inconsistent with the assessors records.
- [ ] All documents as individual PDFs and named appropriately

All HVAC installations must be conducted in compliance with the IRC 2009 Building Code

Separate permits are required for plumbing and electrical installations, as required.

Separate permits are also required based on different properties (different Chart, Block and Lot.)

Permit Fee: $30.00 for the first $1000.00 construction cost, $10.00 per additional $1000.00 cost

This is not a Permit; you may not commence any work until the Permit is issued.

FILL IN AND SIGN WITH INK

Application for Heating, Ventilation, Air Condition (HVAC) Cooking or Power Equipment

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

To the Inspector of Buildings, Portland Maine:

Date: 12/08/14

The undersigned hereby applies for a permit to install the following HVAC, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

Address/CBL: 38 Columbia St. Use of Building: Residential Date: 11/20/14

Name and Address of Owner: John McVeigh
38 Columbia St. Portland, Me. 04102

Installer's Name and Address: Brian Leighton
49 Maggie Lane Portland, 04103 E-Mail: leightonplumbingandheating@gmail.com

Location of Appliance:
- [X] Basement
- [ ] Floor
- [ ] Attic
- [ ] Roof

Type of Fuel:
- [X] Gas
- [ ] Oil
- [ ] Solid

Appliance Name: Baxi Duo-Tech 40 GA

UL Approved: [X] Yes [ ] No

Will appliance be installed in accordance with the manufacturer's installation instructions? [X] Yes [ ] No

Type of License of Installer:
Master Plumber #:
Solid Fuel #:
Oil #:
Gas #: PNT8474
Other:

Type of Venting: (*Plan required for submittal*)
- [ ] Masonry Lined
- [ ] Factory Built:
- [ ] Metal
- [ ] Factory Built UL Listing:
- [X] Direct Vent
  Type: UL #:

# of Tanks:
Natural Gas.
Type of Fuel Tank:
- [ ] Gas
- [ ] Oil

Size of Tank:

Distance from tank to center of flame:

Cost of Work: $ 15,500

Permit Fee: $

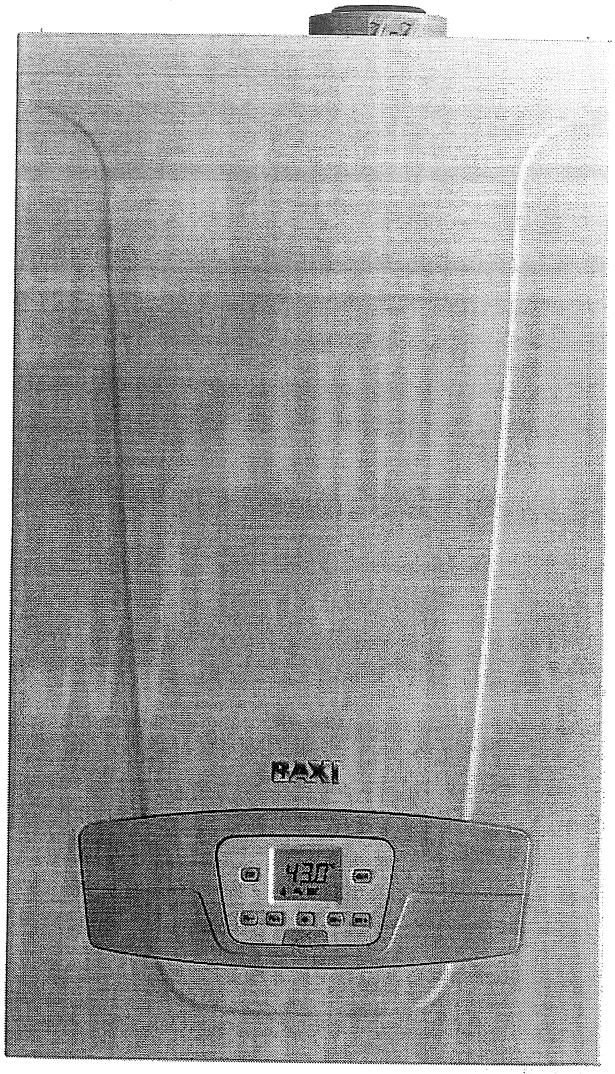
Approved
Fire:
Electric:
Building:

Approved with Conditions
☐ See attached letter or requirements

Inspector's Signature Date Approved

Signature of Installer: **E:Mail:** leightonplumbingandheating@gmail.com

BAXI



Luna Duo-tec

North America

SPARE PARTS CATALOGUE

BAXI

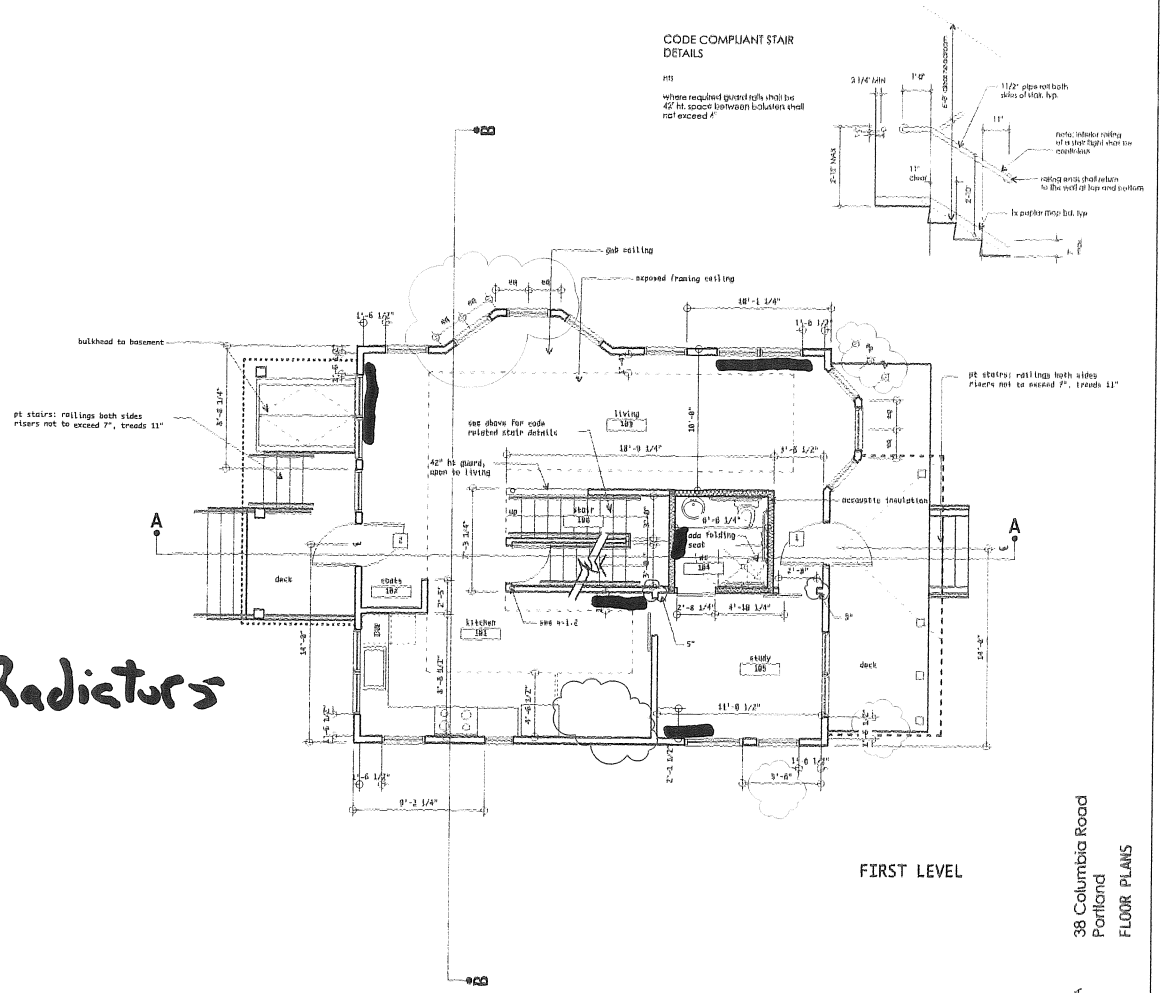
LUNA DUO-TEC 40 GA
LUNA DUO-TEC 1.33 GA

en	**CONDENSING GAS FIRED WALL MOUNTED COMBINATION BOILER**
	Installation instructions for the installer

fr	**CHAUDIÈRE MURALE À GAZ À CONDENSATION À DEUX SERVICES**
	Notice d'installation pour l'installateur

GENERAL NOTES:

1. foundation dimension/footprint same as original building.
2. provide nfpa 13D (2013) sprinkler system as per CITY requirements.
3. reserved.
4. interior doors, except as noted, by owner and contractor.
5. all finishes by owner and contractor except as noted on the drawings.
6. ELECTRICAL: electrical work to be design build and shall conform to all local, state and national building codes. provide service to hot tub, exterior lights as located and selected by owner and contractor.
7. all existing services (water, sewer, cmp, gas) to be re-connected.
8. there will be no change to existing site plan as pertains to sidewalks, curb cuts and site access.



— Location of Panel Radiators

FIRST LEVEL

38 Columbia Road
Portland
FLOOR PLANS

Architect:
James Sterling, AIA
Architect
142 High Street
Portland, Maine

A-1.1

20 June 2014
rev: 07 July, 10 July

SCALE: 1/4" = 1' 0"

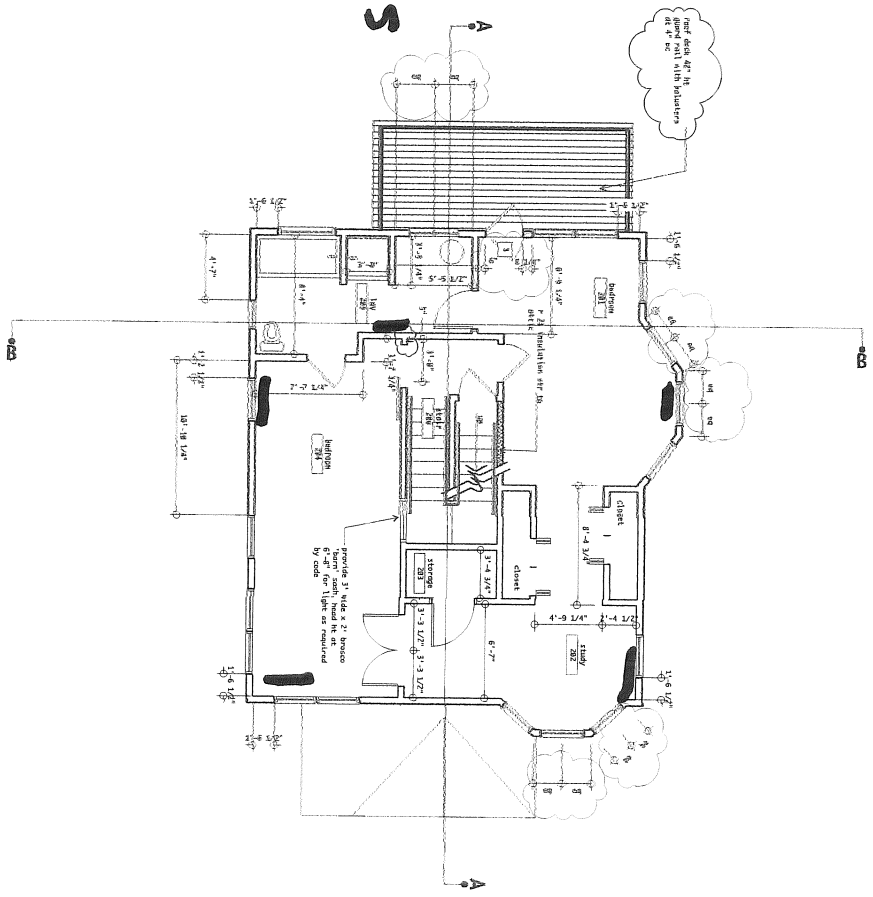
5 0 5 10 15

RESURGAM
CITY OF PORTLAND, MAINE

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 12/08/14

Location of Panel Radiators



SCALE: 1/4" = 1'-0"

5 0 5 10 15

Architect:

James Sterling, AIA
Architect
142 High Street
Portland, Maine

38 Columbia Road
Portland

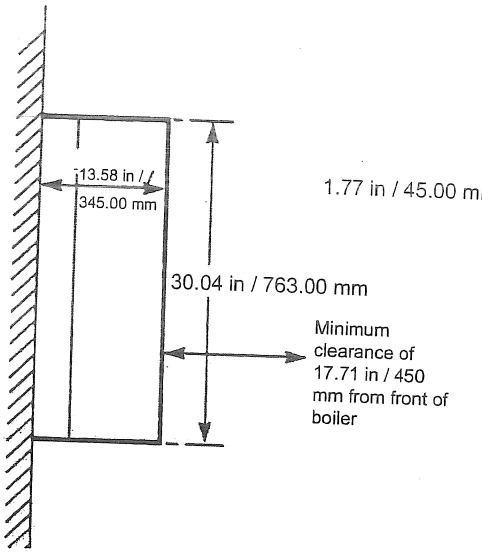
FLOOR PLANS

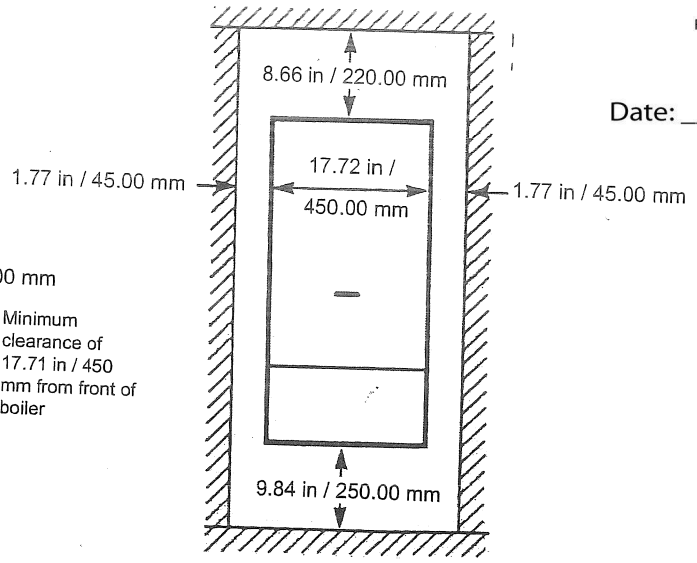
A-1.2

20 June 2014
rev. 07 July 2014

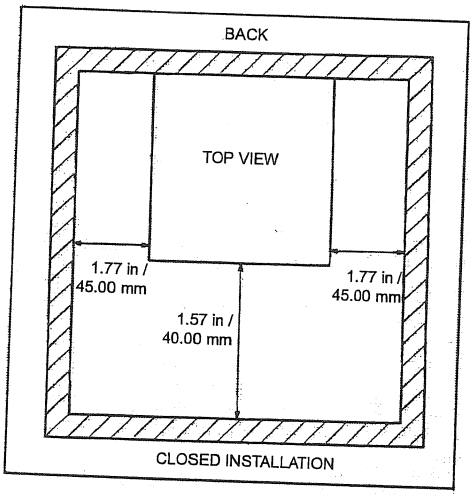
3. GENERAL BOILER INFORMATION

SERVICE CLEARANCES

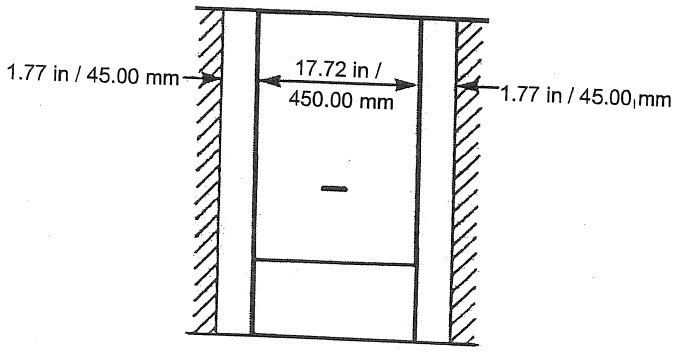




CLEARANCES REQUIRED FOR CLOSET INSTALLATION



CLEARANCES FOR COMBUSTIBLES



0 in /0 mm between the Back of the Unit and the wall

Note:

It is recommended that service clearances are considered when locating a suitable area for the unit.

WARNING

- **The boiler must not be installed on carpeting.**
- **Keep boiler area clear and free from flammable vapors and liquid.**

INSTALLER Section (en)

Ecostyle Panel Radiators provide exceptional radiant heat while adding style and effi
Radiant heat acts like the sun, heating objects and people, not just air. This even war
spots and drafts throughout the home.

Ecostyle Panel Radiators are equipped with integrated, flow-regulating valves which p
individually control each radiator. This feature offers a convenient and inexpensive me
provide targeted distribution where the heat is needed.

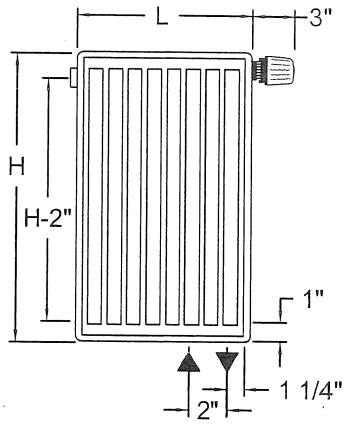
Ecostyle Panel Radiators are designed for not only their appearance and efficiency, b
to deterioration. They are manufactured from high quality steel and finished with high
them scratch and corrosion resistant. With clamp mounting brackets and bottom connections, Ecostyle
Panel Radiators are easy to install and pipe.

Whether you are installing or replacing your heating system, give your home the comfort of radiant heat
with the elegance of Italian design.

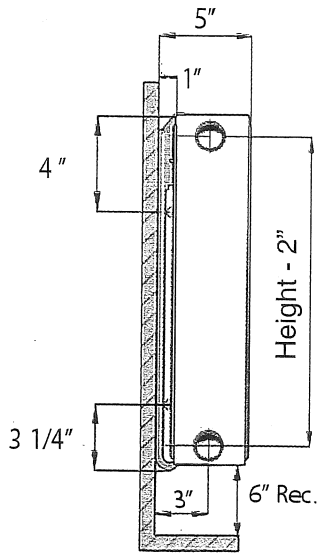
Panel Radiator Specifications

Radiator Model	Height (in)	Length (in)	Output (BTU) @ 180°F	Output (BTU) @ 140°F	Weight (lbs)	Water Content (gal)	Equivalent Baseboard @ 180°F (ft)
B-12.16 ECO	12	16	1,705	1,031	15	0.37	3.0
B-12.24 ECO		24	2,562	1,548	22	0.53	4.5
B-12.32 ECO		32	3,414	2,064	29	0.71	6.0
B-12.40 ECO		40	4,266	2,579	37	0.90	7.5
B-12.48 ECO		48	5,119	3,094	44	1.08	9.0
B-12.56 ECO		56	5,971	3,610	51	1.27	10.5
B-12.64 ECO		64	6,828	4,128	58	1.43	12.0
B-16.16 ECO	16	16	2,167	1,310	20	0.48	3.8
B-16.24 ECO		24	3,254	1,967	30	0.71	5.7
B-16.32 ECO		32	4,337	2,622	40	0.95	7.6
B-16.40 ECO		40	5,421	3,277	49	1.19	9.5
B-16.48 ECO		48	6,504	3,932	59	1.43	11.4
B-16.56 ECO		56	7,587	4,586	69	1.66	13.3
B-16.64 ECO		64	8,675	5,244	78	1.90	15.2
B-16.71 ECO		71	9,758	5,899	88	2.11	17.1
B-20.16 ECO	20	16	2,610	1,578	25	0.58	4.6
B-20.24 ECO		24	3,916	2,367	37	0.87	6.9
B-20.32 ECO		32	5,221	3,156	50	1.14	9.2
B-20.40 ECO		40	6,526	3,945	62	1.43	11.4
B-20.48 ECO		48	7,831	4,734	74	1.72	13.7
B-20.56 ECO		56	9,137	5,523	86	2.01	16.0
B-20.64 ECO		64	10,442	6,312	98	2.30	18.3
B-24.16 ECO	24	16	3,037	1,836	30	0.69	5.3
B-24.24 ECO		24	4,551	2,751	45	1.06	8.0
B-24.32 ECO		32	6,069	3,669	60	1.40	10.6
B-24.40 ECO		40	7,587	4,586	74	1.74	13.3
B-24.48 ECO		48	9,106	5,504	89	2.09	16.0
B-24.56 ECO		56	10,624	6,422	104	2.43	18.6
B-24.64 ECO		64	12,138	7,337	118	2.80	21.3
B-24.71 ECO		71	13,656	8,255	133	3.14	24.0
B-36.16 ECO	36	16	4,240	2,563	46	0.95	7.4
B-36.24 ECO		24	6,362	3,846	68	1.43	11.2
B-36.32 ECO		32	8,480	5,126	90	1.90	14.9
B-36.40 ECO		40	10,602	6,409	112	2.38	18.6
B-36.48 ECO		48	12,724	7,691	135	2.85	22.3

Outputs based on supply temperatures shown, 20° F ΔT and 68° F Room Temperature



CONNECTIONS

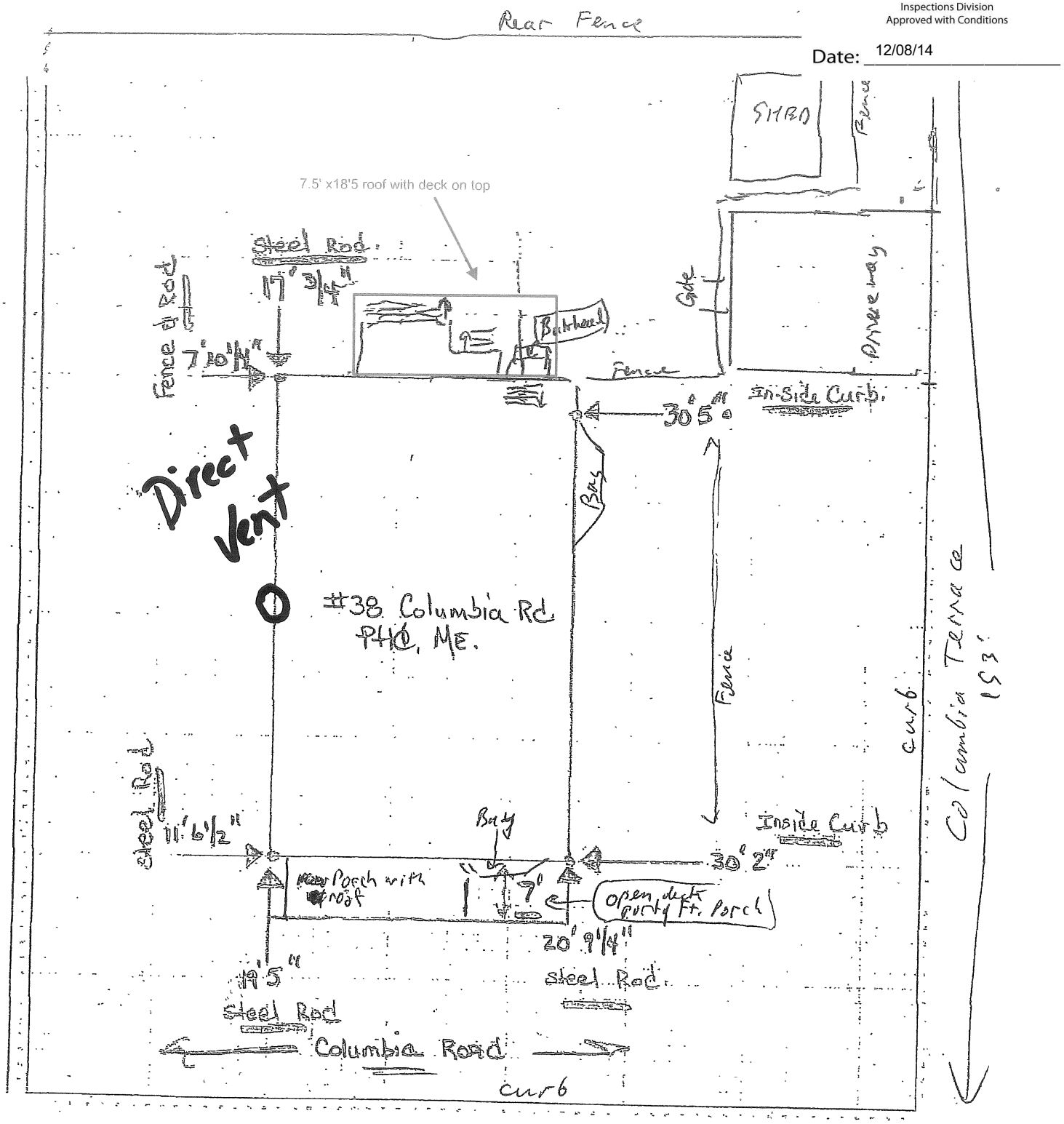


SIDE VIEW

Inspections Division
Date: 07/08/14

35 Columbia
Plot Plan
(as to be built)
C with measurements from
spiked rebar for placing foundation in s

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 12/08/14



C PRODUCT 207

Ecostyle Panel Radiato

- **Elegant Design**
- **Engineered for efficiency**
- **Easy to sub-zone**
- **Provides hybrid heat - radiant and convective**
- **Well suited for standard efficiency and condensing boilers**
- **Stove enameled finish for scratch and corrosion resistance**

QUALITY 10 YEAR GUARANTEE

4. VENT SYSTEM

GENERAL

- Install the boiler / venting system in accordance with these instructions and with the N NFPA 54, CAN/CSA B149.1, and/or applicable provisions of local building codes.
- This boiler is a direct vent appliance according to ANSI Z21.13/CSA4.9 standard.

DANGER

Ensure the exhaust and intake piping comply with these instructions regardin combustion air intake and exhaust piping thoroughly to ensure all joints are well sec all applicable code requirements, as well as with the instructions provided in this manual. Failure to provide a properl installed vent system will cause severe personal injury or death.

WARNING

This vent system will operate with a positive pressure in the pipe. Do not connect vent connectors serving appliance vented by natural draft into any portion of mechanical draft systems operating under positive pressure. Follow th venting instructions below carefully. Failure to do so may result in severe personal injury, death, or substantial property damage.

- **Do not use Foam Core Pipe in any portion of the exhaust piping from this boiler. Use of Foam Core Pipe may resul in severe personal injury, death, or substantial property damage.**
- **Cellular foam core piping may be used on air inlet piping only. Never use cellular foam core material for exhaus vent piping.**

- **Determine exhaust vent location:**

a) See illustration within this section of clearances for the location of the exit terminals of direct-vent venting systems.
b) Provide a minimum of 3.00 ft / 0.92 m distance from any door, operable window, or gravity intake into any building.
c) Provide a minimum of 1.00 ft / 0.30 m clearance from the bottom of the exhaust above the grade (snow removal may be neces sary to maintain clearance).
d) In the United States provide a 4.00 ft / 1.22 m horizontal clearance and in Canada a 3.00 ft / 0.92 m clearance from electrica meters, gas meters, gas regulators and relief equipment. In no case shall the exit terminal be above or below the aforemen tioned equipment unless the 4.00 ft / 1.22 m horizontal distance is maintained.
e) Do not locate the exhaust over public walkways where condensate could drip and/or freeze and create a nuisance or hazard.
f) When adjacent to a public walkway, locate exit terminal at least 7.00 ft / 2.13 m above grade.
g) Do not locate the exhaust directly under roof overhangs to prevent icicles from forming.
h) Provide a 6 in / 152 mm clearance from the inside corner of vertical walls, chimneys, etc., as well as horizontal corners created by roof overhangs.

- **Determine air intake vent location.**

a) Provide 1.00 ft / 0.30 m clearance from the bottom of the intake air vent and the grade.
b) Do not locate intake air vent in a parking area where machinery may damage the pipe.
c) When venting with a two-pipe system. Minimum distance between exhaust vent and intake air vent on a single boiler is 4.72 in / 120.00 mm center-to-center.

EXHAUST VENT AND INTAKE AIR VENT

This boiler is a direct vent appliance according to ANSI Z21.13/CSA4.9 standard. The intake and exhaust venting methods are detailed in the section 4: "VENT SYSTEM". Do not attempt to install the Boiler using any other means. Be sure to locate the boiler such that the air intake and exhaust vent piping can be routed through the building and properly terminated.

INSTALLING EXHAUST VENT AND INTAKE AIR VENT

DANGER

Ensure that the flow of combustion and ventilation air are not obstructed.
BAXI urges users to install CO detectors in buildings where the boiler is located, even though such detectors may not be required by local law. CO detectors should be calibrated regularly as specified by the manufacturer.

Note:
To fix flue pipes to the wall, supports should be approximately 3.28 feet (1 meter) from each other. Supports should be fixed along the joint point of each pipe.

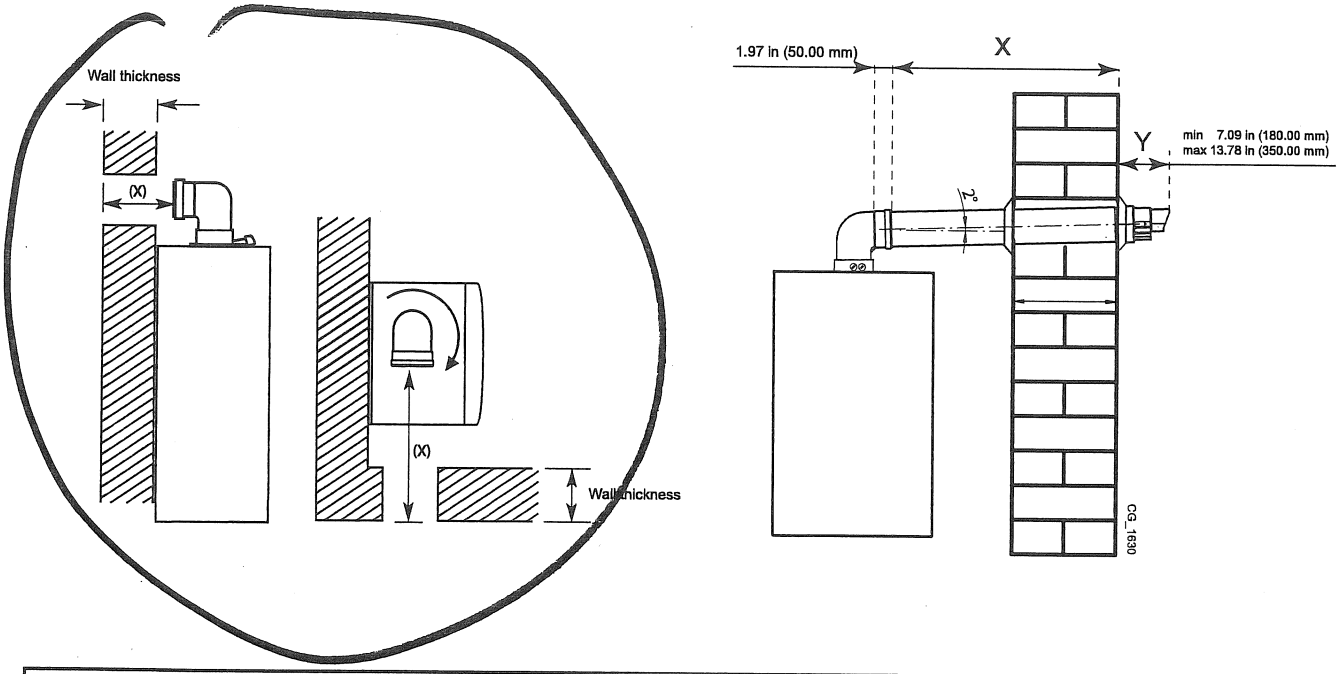
4.1 VENTING INSTRUCTIONS

4.1.1 Concentric venting

- Examine all components for possible shipping damage, prior to installation.
- This venting system must be free to expand and contract.
- The venting system must be supported in accordance with these instructions.
- The vent system must have unrestricted movement through walls, ceilings and roof penetrations.
- Check for proper joint construction when joining pipe to fittings.
- If venting is penetrating ceilings and floors, the openings must have firestopping provided in joist areas firestop spacer assemblies.
- Roof flashing parts are shown in the manual. Standard roof flashing methods must be employed to install roof flashing.
- Wall and roof openings must be framed to provide support and the attachment of termination assemblies.

Please Note:
The manual uses the terms 'vent' , 'venting' and 'flue' interchangeably. All references to 'flue' are synonymous with 'vent' or 'venting'.

WARNING
Check all measurements before cutting. Clearance to combustible materials when using a concentric vent system is zero.



WARNING
All concentric venting must be fastened together using screws.

Note: Dual flue venting is not to be fastened with screws. This procedure only pertains to concentric venting.

INSTALLER Section (en)