

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND

BUILDING PERMIT

This is to certify that JOYCE L KNAPP

Located At 180 HIGH ST

Job ID: 2011-12-2918-HVAC

CBL: 046- B-014-010

has permission to 36 HVAC Units (Condominium)

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 closed-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

Fire Prevention Officer


12/27/2011
Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
PENALTY FOR REMOVING THIS CARD



PORTLAND MAINE

Strengthening a Remarkable City. Building a Community for Life • www.portlandmaine.gov

Director of Planning and Urban Development

Job ID: 2011-12-2918-HVAC

Located At: 180 HIGH ST

CBL: 046- B-014-010

Conditions of Approval:

Building

1. The installation must comply with UL, the Manufacturers' Listing, and State of Maine Gas Regulations.
2. Separate permits are required for any electrical: plumbing, sprinkler, fire alarm, HVAC systems, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.
3. Maintain proper setback(s) from property lines/buildings and proper clearances from vertical openings when direct venting
4. A Carbon Monoxide (CO) detector shall be installed in each area within or giving access to bedrooms. That detection must be powered by the electrical service (plug-in or hardwired) in the building and battery.
5. M1804.2.5 Direct vent terminations. Vent terminals for direct-vent appliances shall be installed in accordance with the manufacturer's installation instructions.
6. M1804.2.6 Mechanical draft systems. Mechanical draft systems shall be installed in accordance with their listing, the manufacturer's installation instructions and, except for direct vent appliances, the following requirements:
 - The vent terminal shall be located not less than 3 feet above a forced air inlet located within 10 feet.
 - The vent terminal shall be located not less than 4 feet below, 4 feet horizontally from, or 1 foot above any door, window or gravity air inlet into a dwelling.
 - The vent termination point shall not be located closer than 3 feet to an interior corner formed by two walls perpendicular to each other.
 - The bottom of the vent terminal shall be located at least 12 inches above finished ground level.
 - The vent termination shall not be mounted directly above or within 3 feet horizontally of an oil tank vent or gas meter.
 - Power exhauster terminations shall be located not less than 10 feet from lot lines and adjacent buildings.
 - The discharge shall be directed away from the building.

Historic

1. Vents are not allowed on the front or visible side of the building.

Fire

1. Installation shall comply with City Code Chapter 10.
2. Fuel-fired boilers shall be protected in accordance with NFPA 101, *Life Safety Code*.
3. Installation shall comply with NFPA 211, *Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances*;
4. NFPA 54, *National Fuel Gas Code*;
5. NFPA 91, *Standard for Exhaust Systems for Air Conveying Vapors, Gases, Mists, and Noncombustible Particulate Solids*;
6. NFPA 70, *National Electrical Code*; and the manufacturer's published instructions.

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 Inspections 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.**

1. Close-In: (Electrical, Plumbing, Framing)
2. Final Inspection

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

City of Portland, Maine - Building or Use Permit Application

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

Job No: 2011-12-2918-HVAC	Date Applied: 12/12/2011	CBL: 046- B-014-010	
Location of Construction: 180 HIGH ST	Owner Name: JOYCE L KNAPP	Owner Address: 180 HIGH ST # 10 PORTLAND, ME 04101	Phone:
Business Name:	Contractor Name: Michael N Salvas @ Revision Heat	Contractor Address: 1053 Forest Ave., Portland, ME 04103	Phone: (207) 221-5677
Lessee/Buyer's Name:	Phone:	Permit Type: HVAC	Zone: B-3
Past Use: 36 Residential Condos	Proposed Use: Same: 36 Residential Codos of which this is one - to install Rinnai RC981	Cost of Work: \$38,000.00	CEO District:
		Fire Dept: <input checked="" type="checkbox"/> Approved w/conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A	Inspection: Use Group: Type: HVAC More Co. Rep.
		Signature: <i>Capt. P. Monie 12-18-11</i>	Signature: <i>[Signature]</i>
Proposed Project Description: Power Flame & Rinnai RC 981 for entire building		Pedestrian Activities District (P.A.D.)	

Permit Taken By: Lannie	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 informatin 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"/> Wetlands</p> <p><input type="checkbox"/> Flood Zone</p> <p><input type="checkbox"/> Subdivision</p> <p><input type="checkbox"/> Site Plan</p> <p>___ Maj ___ Min ___ MM</p> <p>Date: <i>OK 12/14/11</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><i>with in</i></p> <p><input type="checkbox"/> Not in Dist 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 checked="" type="checkbox"/> Approved w/Conditions</p> <p><input type="checkbox"/> Denied</p> <p><i>Any extension work requires a separate review & approval</i></p> <p>Date: <i>12/19/11</i></p>
	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.

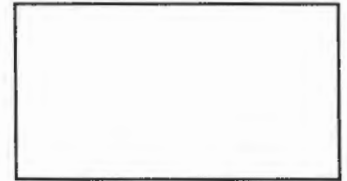
W. Andrews
12/19/11

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



B-3

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 180 High St Portland 46-B.14 Use of Building Residential Date Dec. 6, 2011
 Name and address of owner of appliance Marlborough Building 36 Res. Condos
 Installer's name and address Revision Heat 1053 Forest Ave. Portland ME. 04103 Telephone 221 5677

Location of appliance:
 Basement Floor
 Attic Roof

Type of Fuel:
 Gas Oil Solid

Appliance Name: Power Flame CG, Rinnai RC 981
 U.L. Approved Yes No

Will appliance be installed in accordance with the manufacture's installation instructions? Yes No

IF NO Explain: Rinnai is not UL listed
HAS CSA certified

The Type of License of Installer:

Master Plumber # _____
 Solid Fuel # _____
 Oil # _____
 Gas # PNT 9322
 Other _____

Type of Chimney:
 Masonry Lined
 Factory built _____
 Metal
 Factory Built U.L. Listing # 1777
 Direct Vent
 Type Rinnai RC 981 UL# _____
 Elec. components
 UL 1411 - Transformer
 UL 41515 - relay
 UL 1430 - Wire & Cond.

Type of Fuel Tank
 Oil
 Gas

Size of Tank N/A
 Number of Tanks N/A
 Distance from Tank to Center of Flame N/A feet.

Cost of Work: \$ 37,319
 Permit Fee: \$ 400

Approved

Fire: _____
 Ele.: _____
 Bldg.: _____

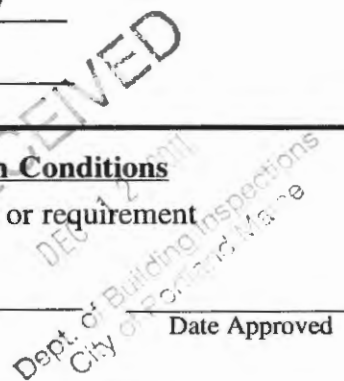
Approved with Conditions

See attached letter or requirement

Inspector's Signature _____ Date Approved _____

Signature of Installer Michael [Signature]

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



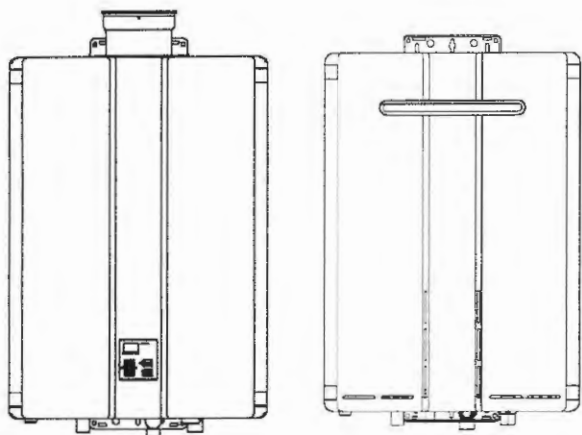




Rinnai®

Direct Vent Tankless Water Heater

Operation and Installation Manual



FOR INDOOR APPLICATIONS ONLY

RC80HPiREU-KA2530FFUD-US

RC98HPiREU-KA3237FFUD-US

FOR OUTDOOR APPLICATIONS ONLY

RC80HPeREU-KA2530WD-US

RC98HPeREU-KA3237WD-US

Register your product at www.rinnairegistration.com or call 1-866-RINNAI1 (746-6241)

Table of Contents	2
Consumer Safety Information ..	4
Operating Instructions.....	5
Maintenance	12
Error Codes	13
Installation Instructions	17
Consumer Support.....	42
French Version	44



ANS Z21.10.3

•
CSA 4.3

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

— 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 electrical 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 cannot reach your gas supplier, call the fire department.

— Installation and service must be performed by a qualified installer, service agency or the gas supplier.

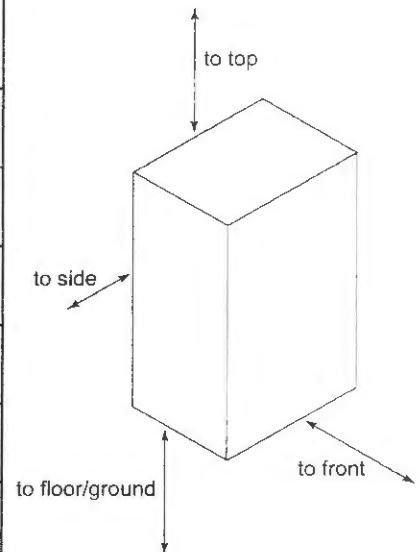
Clearances from Appliance

RC80HPi, RC98HPi

	to Com- bustibles	to Non- Combus- tibles
Top of Heater	6 inches (152 mm)	2 inches (51 mm)
Back of Heater	0 (zero)	0 (zero)
Front of Heater	6 inches (152 mm)	6 inches (152 mm)
Sides of Heater	2 inches (51 mm)	1/2 inch (13 mm)
Ground	12 inches (305 mm)	12 inches (305 mm)
Vent	0 (zero)	0 (zero)

RC80HPe, RC98HPe

	to Com- bustibles	to Non- Combus- tibles
Top of Heater	12 inches (305 mm)	2 inches (51 mm)
Back of Heater	0 (zero)	0 (zero)
Front (Panel)	24 inches (610 mm)	0 inches (0 mm)
Front (Exhaust)	24 inches (610 mm)	24 inches (610 mm)
Sides of Heater	6 inches (152 mm)	1/8 inch (3.2 mm)
Ground	12 inches (305 mm)	2 inches (51 mm)



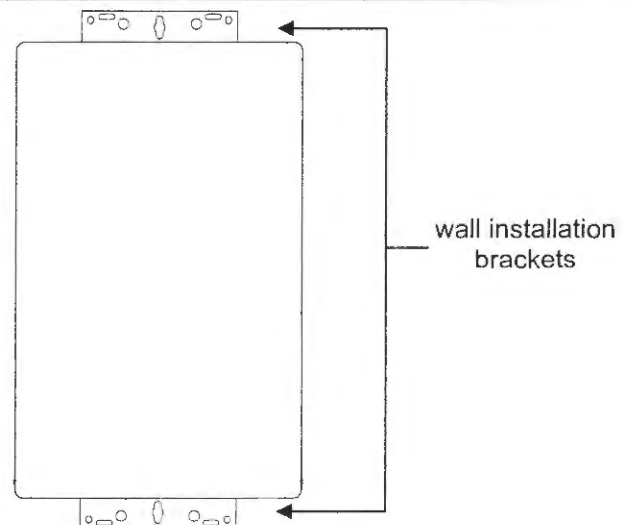
Zero inches from vent components and condensate drain line.

The clearance for servicing is 24 inches in front of the water heater.


For closet installation: clearance is 6 inches (152 mm) from the front.

Attachment of the Water Heater

1. Identify the installation location and confirm that the installation will meet all required clearances.
2. Securely attach the water heater to the wall using any of the holes in the wall installation brackets which are at the top and bottom of the water heater. Ensure that the attachment strength is sufficient to support the weight. Refer to the weight of the water heater in the Specifications section.



Specifications

Model		<i>RC80HPI</i>	<i>RC80HPE</i>	<i>RC98HPI</i> 	<i>RC98HPE</i>
Minimum Gas Consumption Btu/h		9,500 (NG)		10,300 (LPG)	
Maximum Gas Consumption Btu/h		157,000		199,000	
Hot water capacity (Min - Max) *		0.4 - 8.0 GPM (1.5 - 30 L/min)		0.4 - 9.8 GPM (1.5 - 37 L/min)	
Hot water capacity (45°F rise)		6.6 GPM (25 L/min)		8.5 GPM (32 L/min)	
Default Temperature Setting (no controller)		120° F (49° C)			
Temperature Controller Default Setting		104° F (40° C)			
Maximum Temp Setting (commercial **)		185° F (85° C)			
Maximum Temp Setting (residential) see Temperature Ranges for more information		Selectable at 120° F (49° C) or at 140° F (60° C)			
Minimum Temperature Setting		98° F (37° C)			
Weight		63.9 lb (29 kg)		70.5 lb (32 kg)	
Thermal Efficiency		97%		96%	95%
Energy Factor		0.96		0.94	0.93
Noise level		50 dB			
Electrical Consumption	Normal	63 W	44 W	80 W	59 W
	Standby	2 W			
	Anti-frost Protection	220 W	172 W	220 W	172 W
By-Pass Control		Electronic			
Minimum Gas Supply Pressure	Natural Gas	5.0 inch W.C.			
	Propane	8.0 inch W.C.			
Maximum Gas Supply Pressure	Natural Gas	10.5 inch W.C.			
	Propane	13.5 inch W.C.			
Type of Appliance		Condensing, Tankless, Temperature controlled continuous flow gas hot water system.			
Operation		With or without remote controls, mounted in kitchen, bathroom, etc.			
Approved Gas Type		Natural Gas or Propane - Ensure unit matches gas type supplied at the installation location.			
Connections		Gas Supply: 3/4" MNPT, Cold Water Inlet: 3/4" MNPT, Hot Water Outlet: 3/4" MNPT			
Ignition System		Direct Electronic Ignition			
Electric Connections		Appliance: AC 120 Volts, 60Hz. Remote Control: DC 12 Volts (Digital)			
Water Temperature Control		Simulation Feedforward and Feedback.			
Water Supply Pressure		Minimum Water Pressure: 50 PSI (Recommended 60-80 PSI for maximum performance)			
Maximum Water Supply Pressure		150 PSI			
Remote Control Cable		Non-Polarized Two Core Cable (Minimum 22 AWG)			
Energy Star Qualified		Yes			

* Minimum flow may vary slightly depending on the temperature setting and the inlet water temperature.

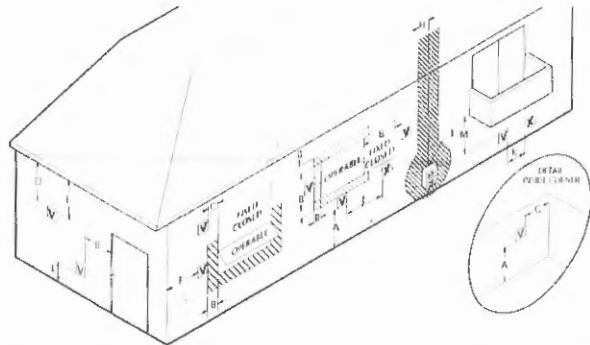
** for commercial and hydronic applications requiring higher temperatures

Rinnai is continually updating and improving products. Therefore, specifications are subject to change without prior notice.

The maximum inlet gas pressure must not exceed the value specified by the manufacturer. The minimum value listed is for the purpose of input adjustment.

Recommended vent/air intake terminal position

Terminals should be so positioned as to avoid products of combustion entering openings into buildings or other flues or vents. The Ubbink Rolux White Vent extension material is primarily designed for indoor use. If used outdoors the material should be protected for UV-radiation (direct sunlight).



V VENT TERMINAL PERMITTED
 AREA WHERE TERMINAL IS NOT PERMITTED
 X AIR SUPPLY INLET



CAUTION

Maintain 12" of clearance above the highest anticipated snow level or grade or whichever is greater. Please refer to your local codes for the snow level in your area.

REF	DESCRIPTION	U.S. INSTALLATIONS	CANADIAN INSTALLATIONS
A	Clearance above grade, veranda, porch, deck, or balcony	1 foot	1 foot (0,30 m)
B	Clearance to window or door that may be opened	1 foot	3 feet (0,91 m)
C	Clearance to permanently closed window	*	*
D	Vertical clearance to ventilated soffit, eaves or overhang	*	*
E	Clearance to unventilated soffit, eaves, or overhang	*	*
F	Clearance to outside corner	*	*
G	Clearance to inside corner	*	*
H	Clearance to each side of center line extended above meter/regulator assembly	*	3 feet (0,91 m) within a height 15 feet (4,57 m) above the meter/regulator assembly
I	Clearance to service regulator vent outlet	*	3 feet (0,91 m)
J	Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance	1 foot	3 feet (0,91 m)
K	Clearance to a forced air inlet into a building	3 feet above if within 10 feet horizontally	6 feet (1,83 m)
L	Clearance above paved sidewalk or paved driveway located on public property	*	7 feet (2,13 m)
M	Clearance under deck, veranda, porch, or balcony (open on 3 sides)	*	1 foot (0,30 m)

* For clearances not specified in ANSI Z223.1 / NFPA 54 or CGA-B149, please use clearances in accordance with local installation codes and the requirements of the gas supplier.

Lannie Dobson - 180 High street

From: Mike Salvas <mike@revisionheat.com>
To: <ldobson@portlandmaine.gov>
Date: 12/13/2011 11:15 AM
Subject: 180 High street
Attachments: 2011-12-12 11.57.58.jpg; 2011-12-12 11.56.31.jpg

Front and rear veiw. Vent to be located lower left window rear. Not visible from street. Sorry for the delay on the pics.

Power Flame

The Power to Manage Energy

Optional NOVA® Low NOx systems: Induced Flue Gas Recirculation shown.



STANDARD EQUIPMENT

- Alpha System™ LED (power, demand, main fuel, FSG alarm, selectable) and control switch
- Gas electric pilot and gas ignition transformer
- Leakage test cock, pilot cock and main gas cock
- Pilot and main gas pressure regulators
- Air safety switch

ADDED FEATURES

X-Standard O-Optional NA-Not Available

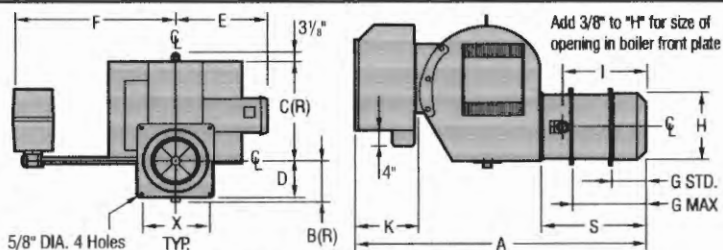
Flame Safeguard with UV and intermittent pilot	X	X	NA	NA	NA	NA	NA
Flame Safeguard with UV and interrupted pilot	O	O	X	X	X	X	X
On-Off diaphragm gas valve with fixed air control manual adjustment	X	NA	NA	NA	NA	NA	NA
Low-Hi-Off motorized gas valve with automatic air control	O	X	X	X	X	NA	NA
Low-Hi-Low motorized gas valve with automatic air control	O	O	O	O	O	NA	NA
Modulation with automatic air control (Standard on all CG HTD)	O	O	O	O	O	X	X
Dual gas safety valves (A)	X	X	X	X	X	X	X
High and Low gas pressure switches	O	O	X	X	X	X	X
Nova® Low NOx systems	O	O	O	O	O	O	O
Customized control systems and accessories	O	O	O	O	O	O	O
Man/Auto switch - manual potentiometer-modulation units	X	X	X	X	X	X	X

- Conforms to UL795

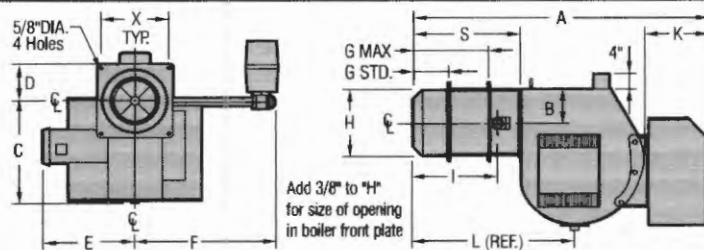
C1-G-10 C1-G-12 C2-G-15	C2-G-20A	C2-G-20B	C3-G-20 C3-G-25 C3-G-25B	C4-G-25	C4-G-30 C5-G-30(B) C6-G-30	C7-G-30 C8-G-30
X	X	NA	NA	NA	NA	NA
O	O	X	X	X	X	X
X	NA	NA	NA	NA	NA	NA
O	X	X	X	X	NA	NA
O	O	O	O	O	NA	NA
O	O	O	O	O	X	X
X	X	X	X	X	X	X
O	O	X	X	X	X	X
O	O	O	O	O	O	O
O	O	O	O	O	O	O
X	X	X	X	X	X	X

(A) 5,000 MBH and below may be replaced by one (1) proof of closure valve; Above 5,000 MBH one (1) of the safety valves will include proof of closure feature.

MODEL CR (For low centerline applications)



MODEL C



DIMENSIONS (Inches) Standard Models.

RATINGS & SPECIFICATIONS

Burner Model	DIMENSIONS (Inches)															CAPACITY ¹				Gas Pressure Required (In. W.C.) ²	
	A	B	B(R)	C	C(R)	D	E	F**	G Std.	G *Max.	H	I	K	L	S	X	Nat. Gas MBH Max.	Nominal Boiler H.P. Max.	Blower Motor H.P. (3450RPM)		Standard Gas Train Size(In.)
C1-G-10	34 ¹ / ₈	3 ¹⁹ / ₁₆	5 ⁹ / ₁₆	14 ¹ / ₂	14 ¹ / ₂	4 ⁵ / ₈	12 ¹ / ₄	20	3 ¹ / ₄	4 ³ / ₄	7 ¹ / ₄	7 ⁵ / ₈	10 ¹ / ₄	17 ¹ / ₈	12 ⁵ / ₈	7 ¹ / ₄	980	23.5	1/3	1	5.6
C1-G-12	34 ¹ / ₈	3 ¹⁹ / ₁₆	5 ⁹ / ₁₆	14 ¹ / ₂	14 ¹ / ₂	4 ⁵ / ₈	12 ¹ / ₄	20	3 ¹ / ₄	4 ³ / ₄	7 ¹ / ₄	7 ⁵ / ₈	10 ¹ / ₄	17 ¹ / ₈	12 ⁵ / ₈	7 ¹ / ₄	1,360	32.3	1/3	1 ¹ / ₄	5.3
C2-G-15	39 ¹ / ₈	4 ¹ / ₂	6 ¹ / ₈	14 ⁷ / ₈	14	5 ¹ / ₄	14	20	4	6 ³ / ₄	8 ³ / ₄	8 ¹ / ₂	10 ¹ / ₄	18 ⁷ / ₈	13 ³ / ₈	8 ¹ / ₂	2,200	52.3	1/2	1 ¹ / ₂	5.2
C2-G-20A	39 ¹ / ₈	4 ¹ / ₂	6 ¹ / ₈	14 ⁷ / ₈	14	5 ¹ / ₄	14	20	4	6 ³ / ₄	8 ³ / ₄	8 ¹ / ₂	10 ¹ / ₄	18 ⁷ / ₈	13 ³ / ₈	8 ¹ / ₂	2,500	60.0	3/4	2	4.8
C2-G-20B	39 ¹ / ₈	4 ¹ / ₂	6 ¹ / ₈	14 ⁷ / ₈	14	5 ¹ / ₄	14	20	4	6 ³ / ₄	8 ³ / ₄	8 ¹ / ₂	10 ¹ / ₄	18 ⁷ / ₈	13 ³ / ₈	8 ¹ / ₂	3,080	73.5	1	2	4.8
C3-G-20	44	5 ¹ / ₄	7	16 ⁵ / ₈	15 ¹ / ₄	6	16	22 ³ / ₈	4 ¹ / ₂	8	10 ¹ / ₈	11 ¹ / ₂	10 ¹ / ₄	22	15 ¹ / ₂	10	4,200	100.0	1 ¹ / ₂	2	7.6
C3-G-25	44	5 ¹ / ₄	7	16 ⁵ / ₈	15 ¹ / ₄	6	16	22 ³ / ₈	4 ¹ / ₂	8	10 ¹ / ₈	11 ¹ / ₂	10 ¹ / ₄	22	15 ¹ / ₂	10	4,718	112.0	1 ¹ / ₂	2 ¹ / ₂	7.0
C3-G-25B	44	5 ¹ / ₄	7	16 ⁵ / ₈	15 ¹ / ₄	6	16	22 ³ / ₈	4 ¹ / ₂	8	10 ¹ / ₈	11 ¹ / ₂	10 ¹ / ₄	22	15 ¹ / ₂	10	5,250	125.0	3	2 ¹ / ₂	7.2
C4-G-25	50	6 ¹ / ₄	7 ¹ / ₁₆	18 ⁷ / ₈	17 ¹¹ / ₁₆	7	18 ¹ / ₂	28	6	9	12 ¹ / ₈	14 ¹ / ₄	10 ¹ / ₄	26 ⁵ / ₈	19 ¹ / ₈	12	6,300	150.0	3	2 ¹ / ₂	10.0
C4-G-30	50	6 ¹ / ₄	7 ¹ / ₁₆	18 ⁷ / ₈	17 ¹¹ / ₁₆	7	18 ¹ / ₂	28	6	9	12 ¹ / ₈	14 ¹ / ₄	10 ¹ / ₄	26 ⁵ / ₈	19 ¹ / ₈	12	7,840	190.0	5	3	12.1
C5-G-30(B)	50	6 ¹ / ₄	7 ¹ / ₁₆	18 ⁷ / ₈	17 ¹¹ / ₁₆	7	18 ¹ / ₂	26 ¹ / ₂	6	9	12 ¹ / ₈	14 ¹ / ₄	10 ¹ / ₄	26 ⁵ / ₈	19 ¹ / ₈	12	10,500	250.0	7 ¹ / ₂	3	19.9, 17.8
C6-G-30	49 ⁷ / ₈	6 ¹ / ₄	7 ¹ / ₁₆	18 ⁷ / ₈	17 ¹¹ / ₁₆	7 ¹ / ₄	19 ⁵ / ₈	26 ¹ / ₂	5	11 ¹ / ₂	13 ³ / ₈	14 ¹ / ₈	10 ¹ / ₄	26 ¹ / ₂	19	13 ¹ / ₂	14,215	340.0	10	3	26.5
C7-G-30	51 ¹¹ / ₁₆	8 ¹ / ₈	10 ¹ / ₈	24 ⁵ / ₁₆	22 ³ / ₈	8 ³ / ₄	18	21 ¹³ / ₁₆	4 ⁷ / ₈	11 ¹ / ₄	15 ⁵ / ₈	13 ⁷ / ₈	9 ¹ / ₈	26 ¹ / ₂	19	13 ¹ / ₂	17,000	404.0	15	3	40.0
C7-G-30B	51 ¹¹ / ₁₆	8 ¹ / ₈	10 ¹ / ₈	24 ⁵ / ₁₆	22 ³ / ₈	8 ³ / ₄	18	21 ¹³ / ₁₆	4 ⁷ / ₈	11 ¹ / ₄	15 ⁵ / ₈	13 ⁷ / ₈	9 ¹ / ₈	26 ¹ / ₂	19	13 ¹ / ₂	17,700	421.0	20	3	45.0
C8-G-30	56 ⁹ / ₁₆	8 ¹ / ₈	10 ¹ / ₈	27 ¹ / ₈	27 ³ / ₈	8 ³ / ₄	20	24 ³ / ₈	3 ¹ / ₄	9 ⁵ / ₈	15 ⁵ / ₈	12 ¹ / ₄	9 ¹ / ₈	24 ⁷ / ₈	17 ¹ / ₁₆	13 ¹ / ₂	19,100	454.0	15	3	50.0

- Capacities listed are based on 0.20" W.C. positive pressure, except for C5-G-30B, which is rated at +1.2" W.C. Refer to capacity curves for derates based upon combustion chamber pressure.
 - At inlet to main manual shutoff cock to obtain P/F certified ratings with standard U.L. gas train. Optional gas trains and combustion heads available for lower pressures.
- * This dimension may be increased. Consult factory.
 ** This dimension depicts space required to accommodate a standard gas train.



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17. Do Rinnai tankless water heaters have a UL Rating?

Rinnai tankless water heaters are not UL certified, but are certified by CSA International to ANSI Z21.10.3 Standard Gas Water Heaters, Volume III, Storage Water Heaters with Input Ratings Above 75,000 Btu/h. However, the following internal electrical components are UL certified:

1. Transformer E (UL 1411)
2. Relay (UL 41515)
3. Wire & Conduit (UL 1430)