



CERTIFIED TO ANSI Z21.13 — CSA 4.9

#### CONDENSING WALL-MOUNTED HEAT-ONLY BOILER

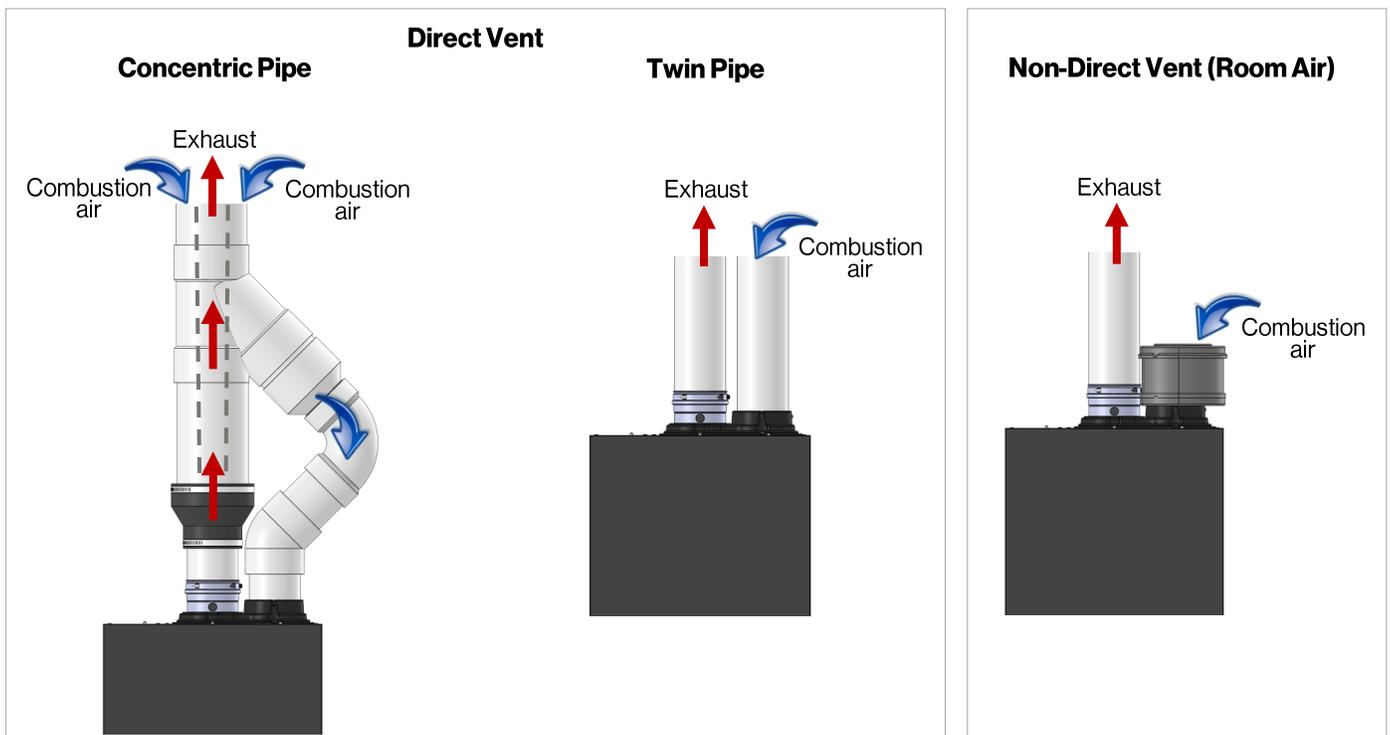
Appliance Type	Wall-Mounted, Gas-Fired, Heat-Only (Solo) Boiler
Installation Type	Internal (Indoor) Commercial Applications
Model Numbers	RCB301AN, RCB399AN
Gas Types	Natural and Propane
Certifications	ANSI Z21.13, CSA 4.9, ASME
Included with Purchase	<ul style="list-style-type: none"> <li>Boiler</li> <li>Wall Mounting Bracket with Screws</li> <li>Pressure Relief Valve (75 PSI / 517 kPa)</li> <li>Outdoor Temperature Sensor</li> <li>Documentation: Installation and Operation Manual, User Manual, Warranty Card</li> </ul>
Optional Accessories	Condensate Neutralizer, Air Inlet Filter, Cascade System Sensor, Boiler Stand, and Gas Conversion Kit
Venting Options	<ul style="list-style-type: none"> <li>Direct Vent (Concentric and Twin Pipe)</li> <li>Non-Direct Vent (Room Air)</li> <li>Vent Materials: PVC, CPVC, PP and Stainless Steel</li> </ul>

#### Maximum Equivalent Vent Lengths:

Vent Sizes	4 in. (110 mm)
Min-Max Exhaust Vent Run	10 ft (3 m) - 140 ft (43 m)
Min-Max Intake Vent Run	0 ft (0 m) - 140 ft (43 m)

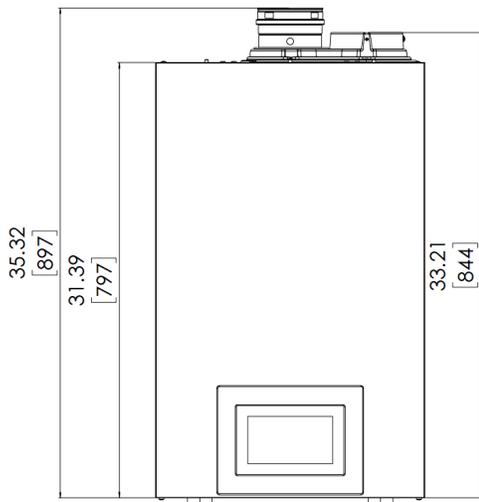
45° elbow is equivalent to 3 ft (1 m). 90° elbow is equivalent to 6 ft (2 m).

#### VENTING OPTIONS



**DIMENSIONS**

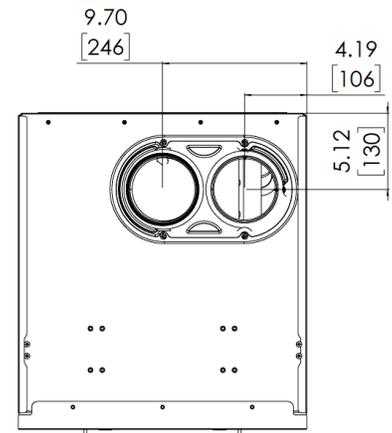
**Front View**



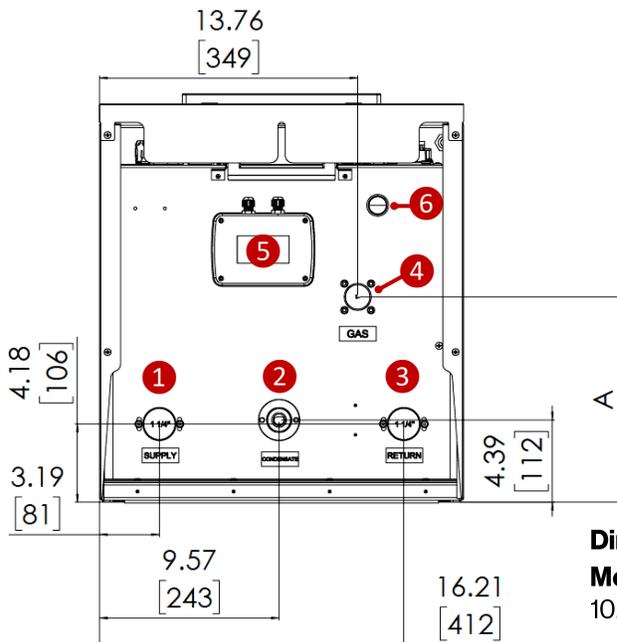
**Side View**



**Top View**



**Bottom View**



①	Central Heating Supply
②	Condensate Drain
③	Central Heating Return
④	Gas
⑤	Wi-Fi Module
⑥	Reset Button

**Dimension "A":**

**Model RCB301AN:**  
10.96 [278]

**Model RCB399AN:**  
13.84 [352]

Connection	Connection Size	Minimum Pipe Size
Gas	1 in. NPT	1 in.
CH In (CH Return)	1-1/4 in. NPT	1-1/4 in.
CH Out (CH Supply)	1-1/4 in. NPT	1-1/4 in.
Condensate Drain	1 in. NPT	3/4 in.

**Vent Connection:** 4 in. (101.6 mm) nominal PVC/Polypropylene

**TECHNICAL SPECIFICATIONS**

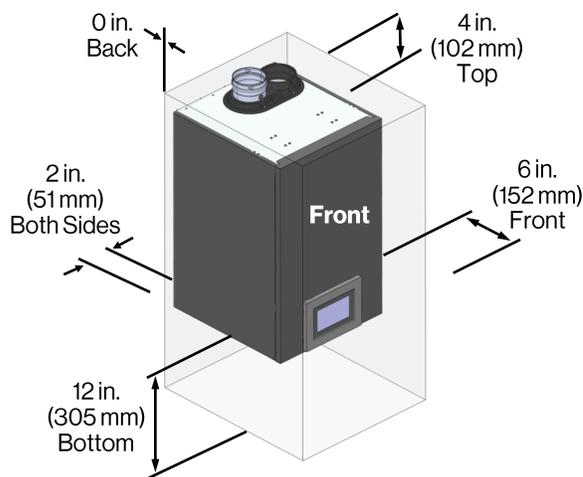
Model		RCB301AN	RCB399AN
Appliance Type		Condensing Wall-Mounted, Gas-Fired, Heat-Only (Solo) Boiler	
Installation Type		Internal (Indoor) Commercial Applications	
Ignition System		Direct Electronic Ignition	
Gas Types		Natural Gas (NG) and Propane (LP) <b>IMPORTANT:</b> Units ship as NG only. LP conversion kits available as accessory (purchased separately).	
Dimensions - w, h, d		19.4 in. x 33.1 in. x 21.3 in. (493 mm x 841 mm x 541 mm)	
Weight (Shipping)		194 lb (88 kg)	207 lb (94 kg)
Weight (Appliance)		170 lb (77 kg)	183 lb (83 kg)
Heat Exchanger Surface Area		24.6 sq ft	30.7 sq ft
Gas Consumption (Btu/h)	Minimum	30,100	39,900
	Maximum	301,000	399,000
Temperature Setting	CH	(Minimum - Maximum) 46°F - 180°F (8°C - 82°C)	
	Indirect Tank (DHW)	104°F - 180°F (40°C - 82°C)	
Water Content		1.8 gal (6.8 lt)	2.2 gal (8.3 lt)
Water Pressure	CH	Minimum: 13 PSI (90 kPa) Maximum: 80 PSI (552 kPa) Recommended: 17-26 PSI (117-180 kPa)	
	Pressure Relief Valve	75 PSI (517 kPa) (Pressure Relieve Valve included with system)	
Sound Level		55 dB(A)	56 dB(A)
Electrical Data	Normal <sup>1</sup>	133 W	210 W
	Standby	10 W	
	Max Current	6.3 Amps	
	Fuse	2 x 6.3 Amps	
Gas Supply Pressure <sup>2</sup>	Natural Gas	3.5 in. - 10.5 in. wc (0.87 - 2.61 kPa)	
	Propane	8.0 in. - 13.5 in. wc (1.99 - 3.36 kPa)	
Electric Connections		AC 120 Volts, 60 Hz	
Certifications		ANSI Z21.13, CSA 4.9, ASME	
Canada CRN		2089.9CL	
Warranty		<ul style="list-style-type: none"> <li>• Heat Exchanger: 10 Years</li> <li>• All Other Parts &amp; Components: 1 Year</li> <li>• Reasonable Labor: 1 Year</li> </ul> See the "Rinnai Commercial Boiler Warranty" for Complete Details	

<sup>1</sup> Power consumption without any pumps connected.

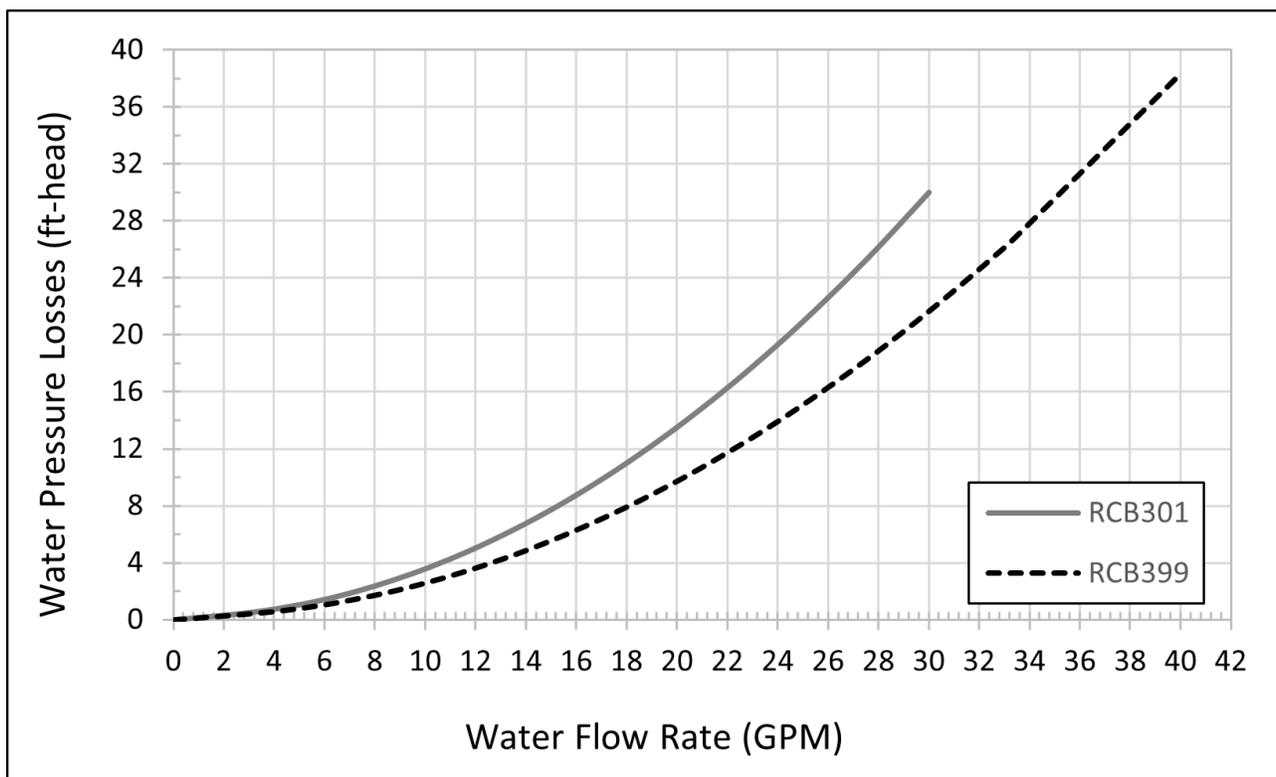
<sup>2</sup> Maximum gas supply pressure must not exceed the value specified by the manufacturer.

## CLEARANCES

Location	Clearance
Top	4 in. (102 mm) <i>0 in. from vent components</i>
Bottom (Ground)	12 in. (305 mm)
Front	6 in. (152 mm) <i>Clearance for servicing is 24 in. (610 mm) in front of boiler</i>
Back	0 in. (0 mm)
Sides (Left and Right)	2 in. (51 mm) <i>Clearance for servicing is 12 in. (305 mm) on the sides.</i>
Vent	0 in. (0 mm)



## PRESSURE DROP AND WATER FLOW CURVE WITH HYDRAULIC SEPARATION



The Rinnai Commercial Boiler does not have an included boiler pump. An external boiler pump must be installed and sized to the flow rate and pressure drop through the boiler, system piping, and system components. Larger systems, or systems with large pressure drops, should incorporate a form of hydraulic separation, such as closely spaced tees or a low loss header.