

### RGBRE Recess Box

For help with product installation, troubleshooting, servicing and more, visit  
[rinnai.pro.myabsorb.com](http://rinnai.pro.myabsorb.com)

Recess Box Part Number	RGBRE	
For Use with Rinnai Tankless Water Heater Models:	<ul style="list-style-type: none"> <li>• RE199e (REU-VE2737WD-US)</li> <li>• REP199e (REU-VEP2730WD-US)</li> <li>• RE180e (REU-VE2432WD-US)</li> </ul>	<ul style="list-style-type: none"> <li>• RE160e (REU-VE2125WD-US)</li> <li>• REP160e (REU-VEP2125WD-US)</li> <li>• RE140e (REU-VE1720WD-US)</li> </ul>

#### **WARNING**

- Failure to correctly assemble the components according to these instructions may result in electric shock, injury, or death.
- A trained and qualified professional must install and inspect the recess box before use.
- Warranty will be voided due to any improper installation.
- For outdoor installation only.
- Make sure the recess box is accessible for servicing and maintenance of the water heater.

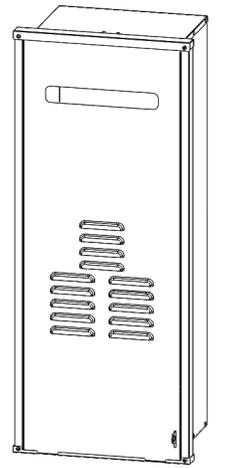
### Items Inside Product Box

Before installation, please make sure all parts are located inside the product box.

Item #	Item	Qty
1	Recess Box	1
2	Front Door Panel	1
3	Hanging Bracket	1
4	Mounting Screw (for top mounting bracket)	1
5	Lock Nut with Washer	4
6	Locking Bracket	1
7	Instructions (includes piping template)	1

**IMPORTANT:** The template used to drill the piping connections is located on the last page of this document.

Figure 1



### You Will Need (Field-Supplied)

- Standard plumbing tools such as pliers, pipe wrenches and screwdrivers
- Isolation Valve Kit (Included with REP Models)
- Sealant and Caulk Gun
- Drill (for drilling the piping connections)
- Screws (galvanized or stainless steel to secure the recess box to the building structure)
- Phillips Head Screwdriver

## Step 1: Determine Location and Clearances

### **!WARNING**

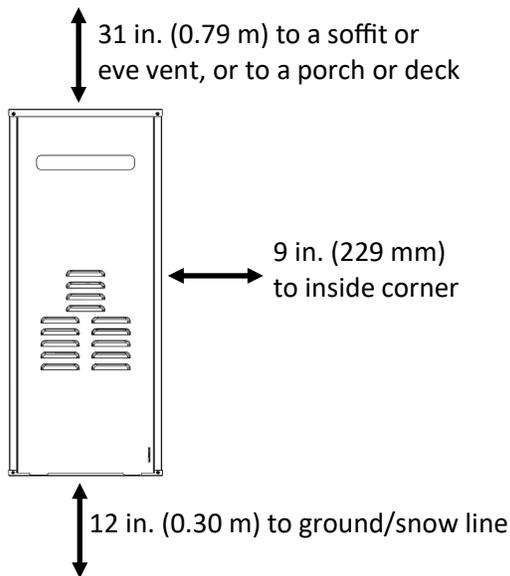
Below are general clearance requirements:

All clearances must conform with local codes or, in the absence of local codes, with the *National Fuel Gas Code, ANSI Z223.1/NFPA 54*, or the *Natural Gas and Propane Installation Code, CSA B149.1* (also shown in the Rinnai Tankless Water Heater Installation and Operation Manual).

If you do not have access to the above Standards or the Rinnai Tankless Water Heater Installation and Operation Manual, an excerpt has been provided in Appendix A of this document.

1. Determine a suitable location for the recess box that meets the installation clearances shown below (Figure 2).

**Figure 2**



### **!IMPORTANT**

- All dimensions are from edge of box.
- Tankless water heater/recess box assembly are zero inches to all surfaces of the recess box. A 24 in. (610 mm) clearance to combustibles and non-combustibles must be maintained from the front of the unit for servicing.

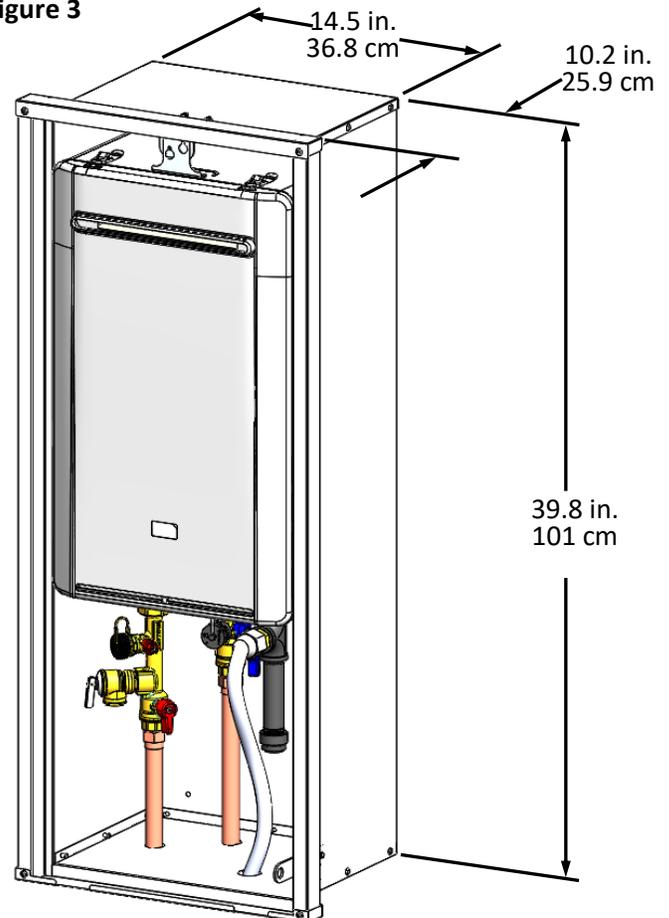
### **!WARNING**

- Local building codes may restrict the clearances shown in this section. If you are unsure if the clearances are acceptable in your area, consult with local building officials to verify prior to proceeding with installation.
- Clearance to the gas meter and electric meter shall be in accordance with local codes and the requirements of the gas supplier or electric supplier.
- Ensure all clearances are met per the Rinnai Tankless Water Heater Installation and Operation Manual.
- This recess box is designed to be installed between 2 studs in a wall cavity. Do not install the recess box in any other type of configuration. Warranty will be voided due to any improper installation.

## Step 2: Prepare the Wall

Prepare an opening for the recess box to the following dimensions below (Figure 3). The recess box is designed to fit between 16 in. (41 cm) centered framing.

**Figure 3**

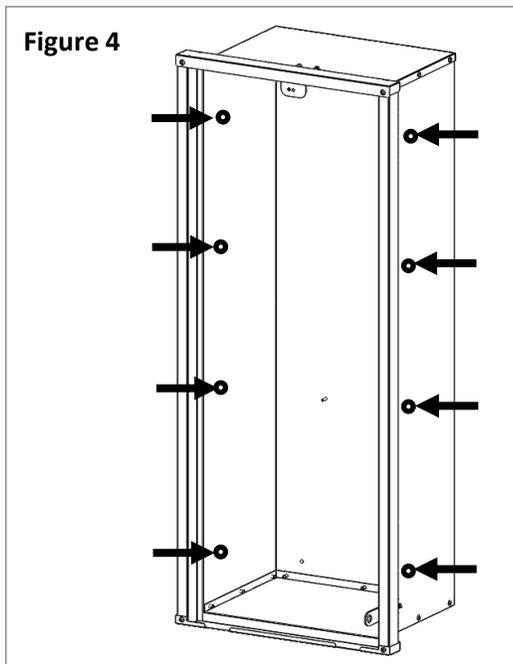


## Step 3: Prepare the Recess Box

### IMPORTANT

Hole size and spacing on images are not to scale; they are for illustrative purposes only.

1. Drill 4 holes spaced out along the length of the left and right sides of the recess box (Figure 4) (hole sizes dependent on screw size). The recess box is designed to fit between two studs and secured through these holes.

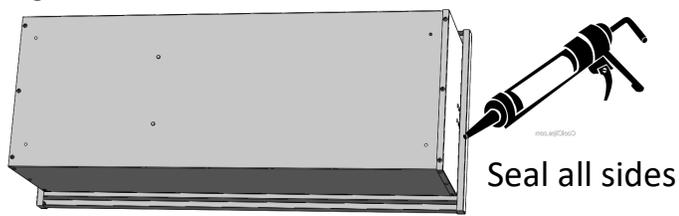


2. Using the supplied piping template (last page in this document), drill 4 holes in the bottom of the recess box to accommodate the hot water, cold water, gas and electric lines. The pressure relief valve (PRV) location is not identified on the template.

If needed, holes can be drilled on the sides of the recess box to accommodate the hot water, cold water, gas and electric lines. Watch for interference with the framing stud before drilling the holes.

3. Apply a 3/8 in. bead of sealant along the back of the recess box flange (Figure 5).

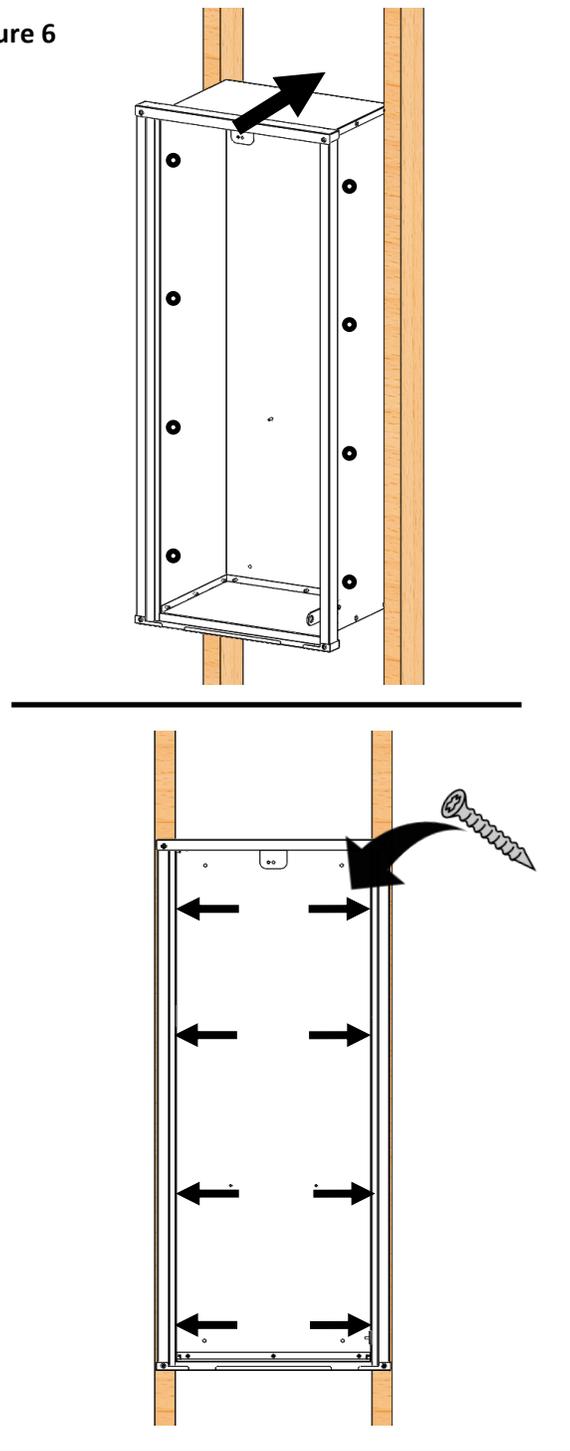
Figure 5



## Step 4: Install the Recess Box

Position and secure the recess box to the building structure with suitable screws (galvanized or stainless steel) through the 8 holes in the sides (4 holes on the left side and 4 holes on the right side) (Figure 6).

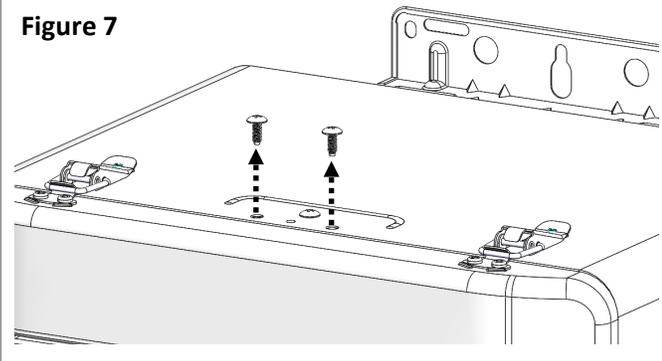
Figure 6



## Step 5: Install the Water Heater into the Recess Box

1. Attach the hanging bracket (supplied) to the water heater:
  - A Remove the 2 screws on the top of the water heater (Figure 7).

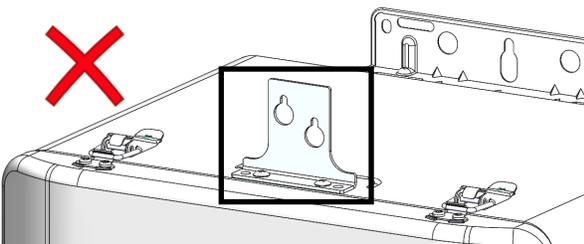
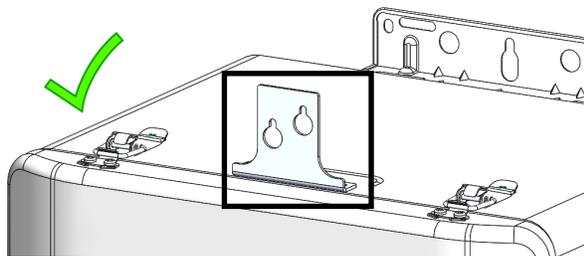
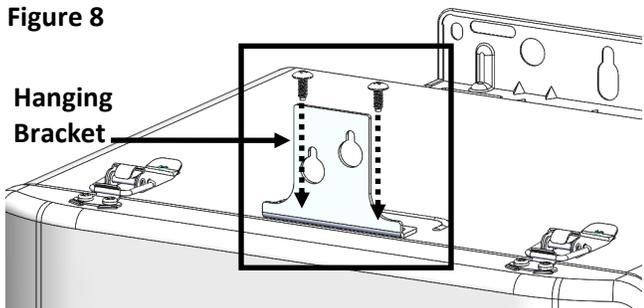
**Figure 7**



- B Position the hanging bracket as shown below and re-insert the 2 screws. Pay close attention to the orientation of the bracket (Figure 8).

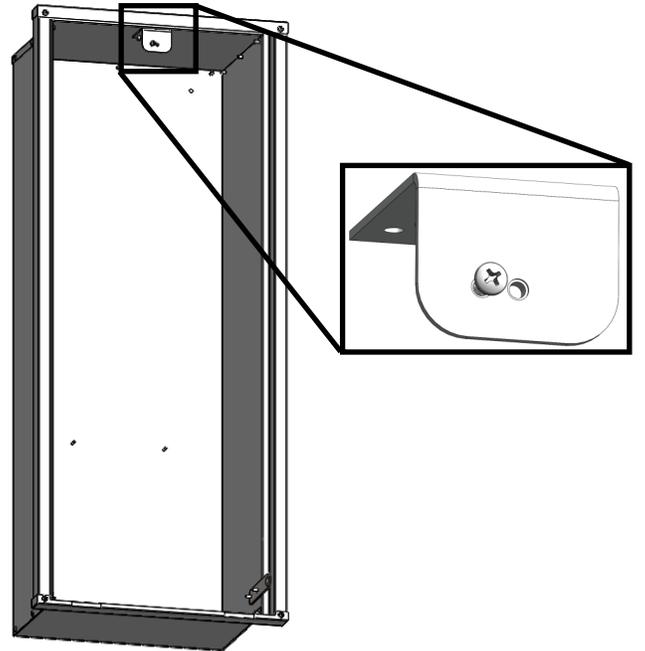
**Figure 8**

**Hanging Bracket**



2. Install the mounting screw (supplied) halfway through the recess box top mounting bracket (Figure 9).

**Figure 9**

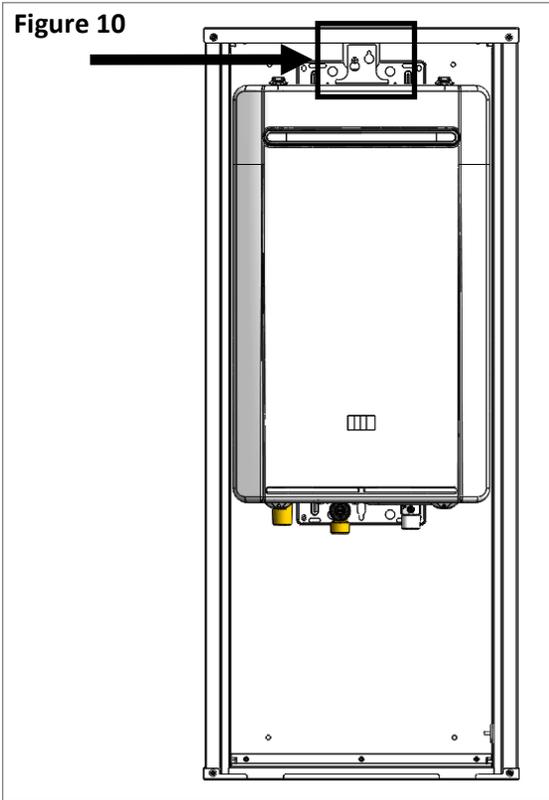


3. Copy the water heater serial number and model number from the data plate located on the left side of the water heater onto the sticker located inside the recess box cover. You will need to know this information for any future warranty or service work.

<b>Model #:</b>	
<b>Serial #:</b>	
<b>Gas Type:</b>	<input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane

- Lift the water heater into the recess box and guide the hanging bracket over the mounting screw (Figure 10).

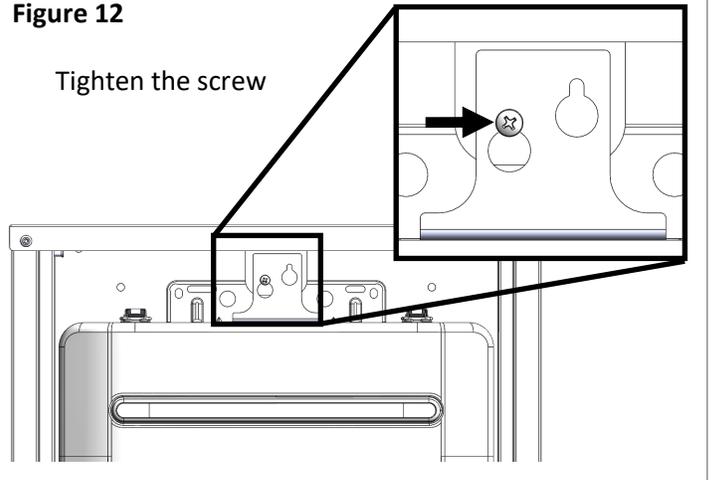
**Figure 10**



- Tighten the top mounting bracket screw (Figure 12). The hanging bracket on the water heater may bend slightly during tightening.

**Figure 12**

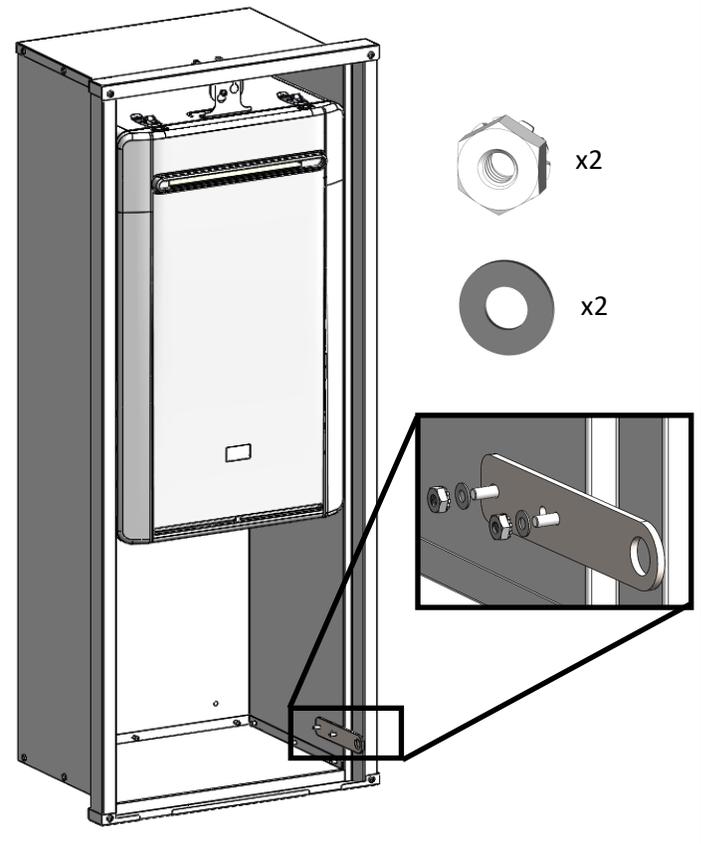
Tighten the screw



## Step 6: Install the Locking Bracket

- Install the locking bracket with the 2 lock nuts and washers (supplied) (Figure 13).

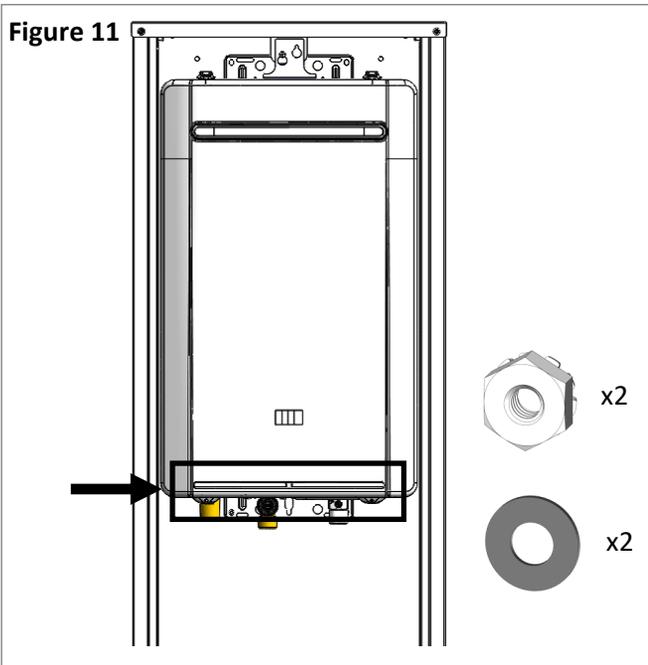
**Figure 13**



- Guide the water heater's bottom bracket over the 2 studs in the bottom portion of the recess box (Figure 11).

Attach 2 lock nuts and washers (supplied) to the studs and tighten.

**Figure 11**



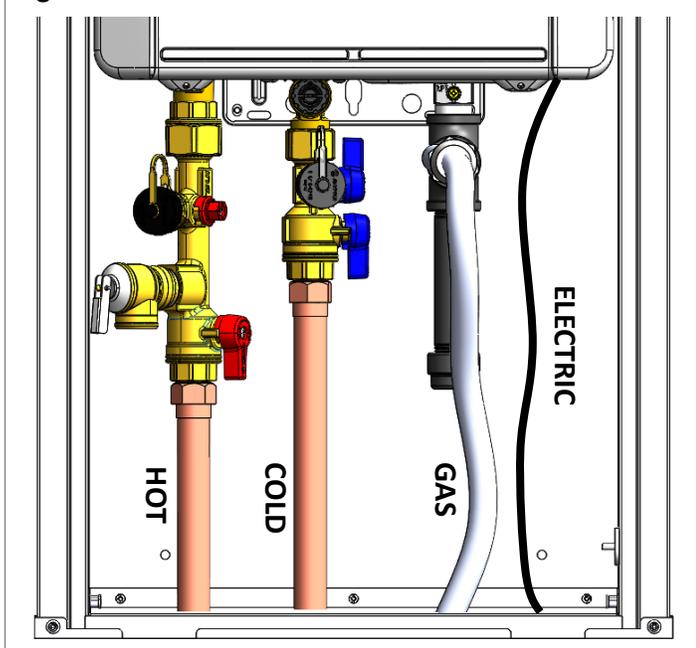
## Step 7: Connect the Pipes

1. Remove the caps from the water heater pipes and install the isolation valve kit (field-supplied).
2. Install the pipes through the drilled access holes in the recess box (Figure 14).
3. Connect gas, water and electric service to the water heater. A waterproof electrical outlet can be fitted inside.

The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1. If installed in a manufactured home, the installation must conform with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 and/or CAN/CSA Z240 MH Series, Mobile Homes.

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1.

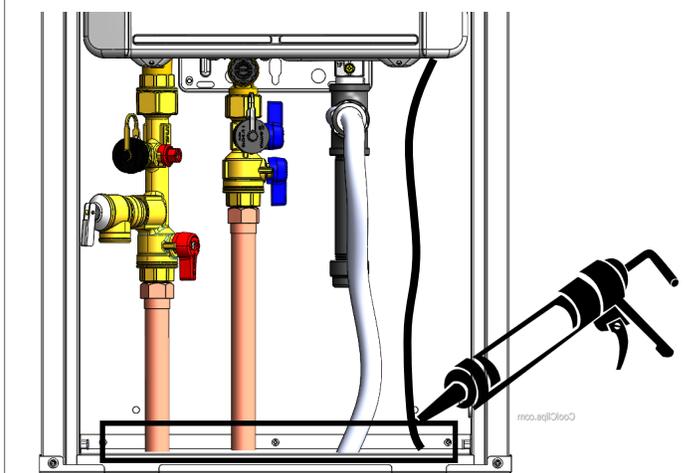
Figure 14



## Step 8: Seal the Recess Box

1. Seal all access hole penetrations with sealant to prevent moisture from leaking out of the recess box (Figure 15).

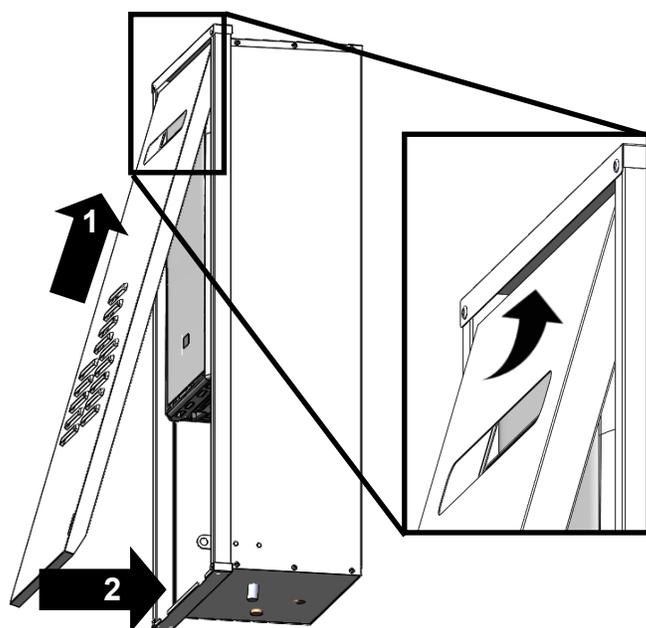
Figure 15



## Step 9: Final Assembly and Inspection

1. Check for gas and water leaks.
2. Install the recess box front door panel by inserting the top end first and then pressing the bottom end into the recess box (Figure 16).

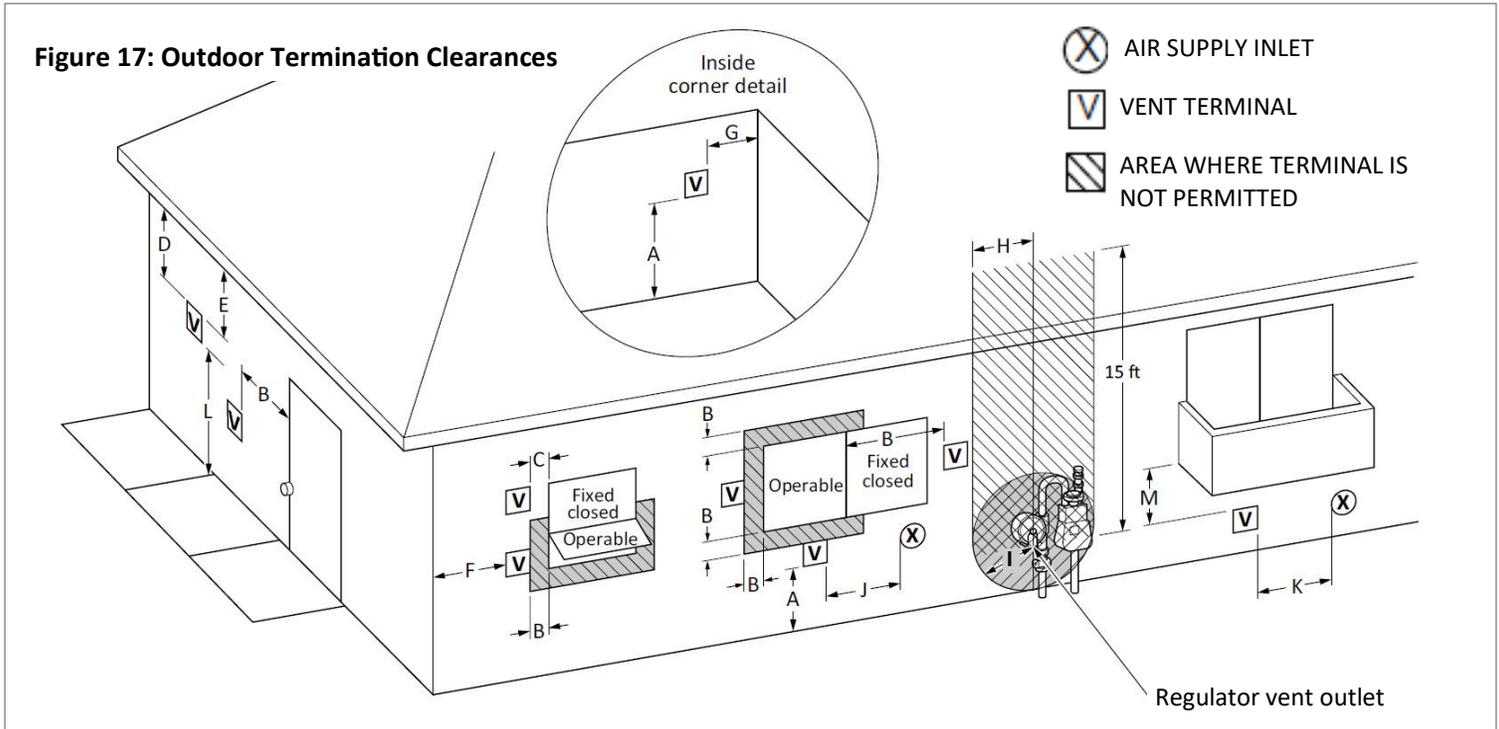
Figure 16



# Appendix A: Clearances

## Other than Direct Vent (Outdoor): Termination Clearances

**Figure 17: Outdoor Termination Clearances**



Ref	Description	U.S. Installations <sup>1</sup> (ANSI Z223.1/NFPA 54)
		Other than direct vent (Outdoor unit)
A	Clearance above grade, veranda, porch, deck, or balcony	12 in. (30 cm)
B	Clearance to window or door that may be opened	4 ft (1.2 m) below or to side of opening; 1 ft (300 mm) above opening
C	Clearance to permanently closed window	*
D	Vertical clearance to ventilated soffit, located above the terminal within a horizontal distance of 2 ft (61 cm) from the center line of the terminal	*
E	Clearance to unventilated soffit	*
F	Clearance to outside corner	*
G	Clearance to inside corner	12 in.
H	Clearance to each side of center line extended above meter/regulator assembly	*
I	Clearance to service regulator vent outlet	*
J	Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance	4 ft (1.2 m) below or to side of opening; 1 ft (300 mm) above opening
K	Clearance to a mechanical air supply inlet	3 ft (91 cm) above if within 10 ft (3 m) horizontally
L	Clearance above paved sidewalk or paved driveway located on public property	Vents for Category II and IV appliances cannot be located above public walkways or other areas where condensate or vapor can cause a nuisance or hazard.
M	Clearance under veranda, porch, deck, or balcony	*

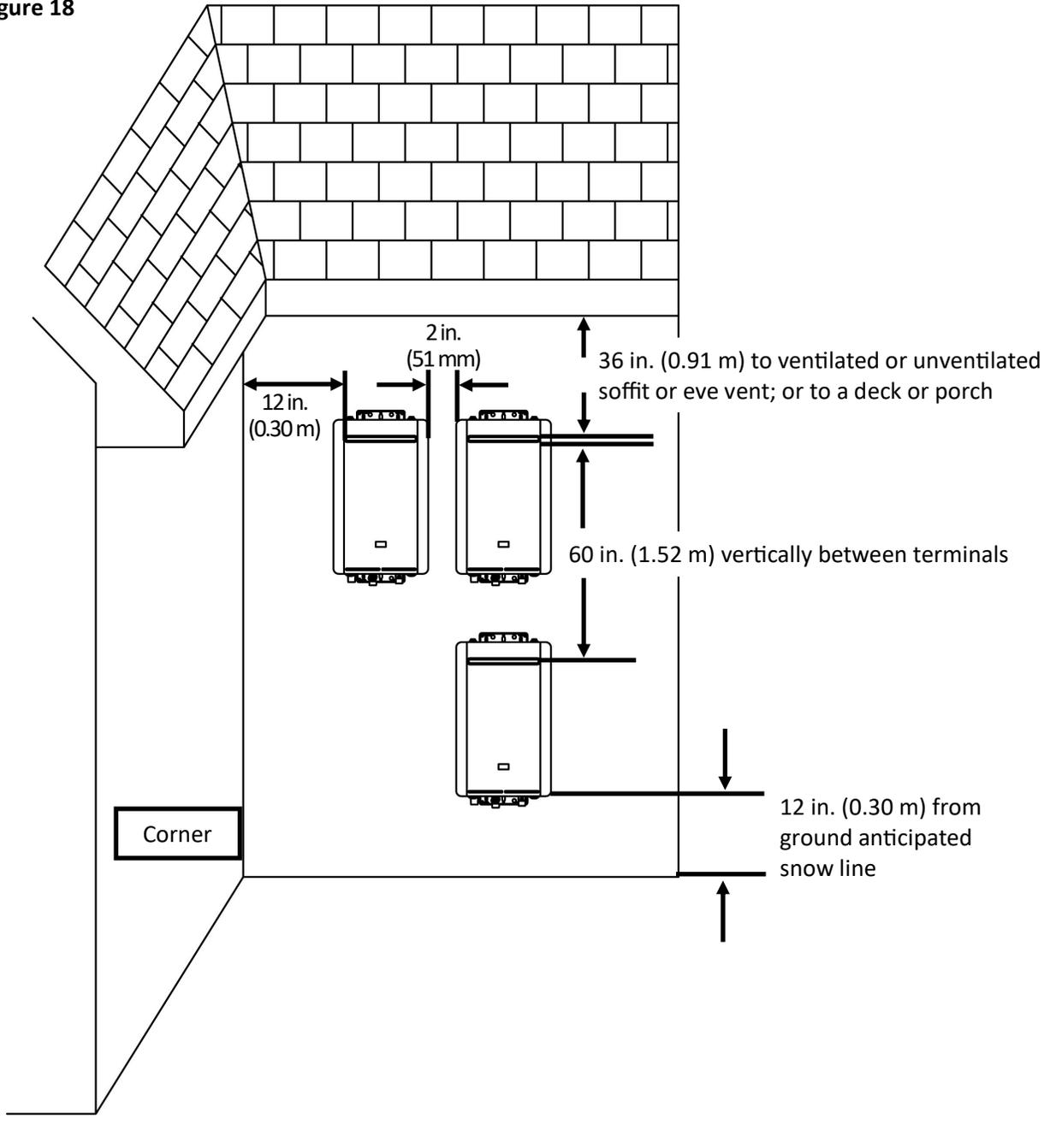
Notes: <sup>1</sup>In accordance with the current ANSI Z223.1/NFPA 54, National Fuel Gas Code.

Clearance to opposite wall is 24 in. (60 cm).	
[1] A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings. [2] Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.	* Clearances are in accordance with local installation codes and the requirements of the gas supplier.

If locally adopted installation codes specify clearances different than those illustrated, then the most stringent clearance shall prevail. 36 inches minimum from the top of the water heater to the overhang. The area under the overhang must be open on 3 sides.

## Termination Clearance for External (Outdoor) Water Heaters

Figure 18

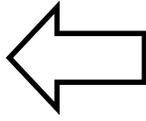
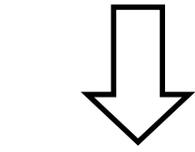


## If You Need Service

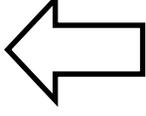
Contact Rinnai Customer Care at 1-800-621-9419.

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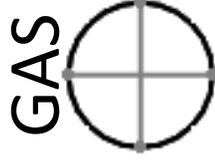
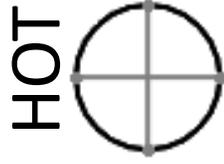
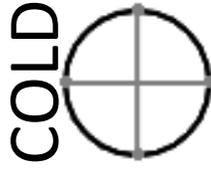


ALIGN THE PAPER EDGE WITH THE  
**BACK** OF THE RECESS BOX

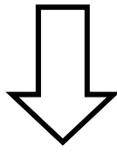


This Template is for RE and REP Outdoor Models Only

ALIGN THE PAPER EDGE WITH THE  
**LEFT** OF THE RECESS BOX



Hot, Cold and Gas  
Connections are for  
RE and REP models.



PRV AND ELECTRIC LOCATION NOT  
IDENTIFIED