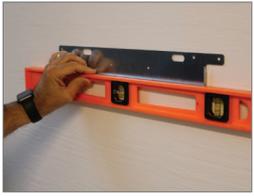


Step 1. Mount the Water Heater

After selecting a suitable location as outlined in the Use and Care Manual, locate a sturdy surface. The water heater should be mounted onto a stud or framing behind the dry wall. It is not recommended to mount the water heater directly to drywall without some type of rigid support, such as plywood or stud framing. Appropriate fasteners should be used. Basic wood screws are provided with the unit.



Mark the center line of the water heater and install the easy mounting bracket on the wall using the enclosed screws.

Lift the water heater up and align the keyhole slots on the back of the unit with the hooks on the mounting bracket and lower into place. Level the water heater and secure with additional fasteners at



the bottom. Use washers to ensure the water heater is secured.

See the "Water Heater Installation" section of the "Installation Instructions" in the Use and Care Manual for details.

Step 2. Install Vent Pipe

The vent system for this water heater is designed for use with solid core, Schedule 40 PVC pipe only. **DO NOT** use foam/cell core PVC pipe. Other alternative pipe material is listed in the "Venting" section of the Use and Care manual. **DO NOT** use any other material not listed in the Use and Care "Installation Instructions."



Both the exhaust and air intake vents **MUST** be run to the outside. This appliance cannot use indoor air for operation as improper operation or failure can occur.

You can use up to 60 ft of 2" PVC and 150 ft of 3" PVC, **DO NOT** mix vent sizes. The exhaust and air intake must be close to the same length each and they must go out the same side of the building.

Measure, cut, and dry fit the venting together before gluing the fittings. Start at the water heater with the exhaust and work your way to the termination outdoors. Complete the air intake as well. Once all the pieces are cut, mark and label each piece so you know which order to reassemble the venting.

Disassemble the dry-fit venting, clean each fitting and piece. Starting at the water heater, carefully glue the pipe and fittings together. Ensure each joint is sealed and tight. Use plumbing strap or pipe support clamps to secure any long vent runs.

Once complete, reinspect the venting, ensure all the connections are solid and verify that local codes and all requirements outlined in the Use and Care Manual have been followed.

See the "Venting" section of the "Installation Instructions" in the Use and Care Manual for the requirements for venting.

Step 3. Install Vent Termination

This guide covers a basic two-pipe, side wall installation only. Instructions may vary depending on the termination style and location. Select a location for the vent termination.



From the outside, locate and mark a center line for the exhaust vent location. Mark a center line 5-1/2" to the right of the center of the exhaust for the air intake vent. Ensure that the exhaust vent location is at least 12" below or from a window or door. Check all clearances as listed in the "Venting" section of the "Installation Instructions" in the Use Care Manual. **DO NOT** locate the intake and exhaust more than 24" apart.

At each center mark, cut a 2-1/2" hole through the wall. The intake vent pipe should extend out 1" to 6" from the finished wall surface. The exhaust pipe must extend 12" past the intake; 13" to a maximum of 18" from the finished wall surface. Seal around the vent pipe at the wall with caulking. Flashing may be used as needed.

Alternative vent kits are available that provide a clean, finished appearance. Use only approved termination kits.

See the "Venting" section of the "Installation Instructions" in the Use and Care Manual for details and alternatives to venting locations and using other termination options.

Step 4. Install Water Lines

The hot and cold water connections are a 3/4" NPT male connection. We recommend the use of Service Valves as these provide an easy means to service the water heater in the future, such as flushing for hard water scale build-ups.

The piping should be 3/4"-diameter copper, or other code-approved material, such as PEX or CPVC. Piping smaller than 3/4" will result in a noticeable loss of pressure on the hot water side. **DO NOT** use galvanized pipe or fittings with this water heater.



Seal the threaded connections with an approved Teflon® tape. Pipe dope is not recommended. When tightening the fittings, use a wrench for support. **DO NOT** overtighten as damage to the fittings can occur.

A pressure-only relief valve rated at 150 PSI is required. Pipe the relief valve to a drain or outside per local code requirements.

See the "Water Supply" section of the "Installation Instructions" in the Use and Care Manual for details.

Step 5. Install Gas Lines

A properly sized and installed gas supply is critical to the proper operation of this water heater. The gas supply connection is a 3/4"-male NPT fitting; the minimum pipe size must be 1/2" or larger. Flexible connectors may be used; however, the BTU capacity rating on the connector must exceed the maximum input rating of the water heater. **DO NOT** use connectors with a rating lower than that of the water heater as improper operation can occur.

Seal the threaded connections with an approved pipe thread sealant, such as Teflon® tape. When tightening the fittings, use a wrench for support. **DO NOT** overtighten as damage to the fittings can occur.

Install the gas shut-off valve, included with the water heater, directly on the gas fitting on the bottom of the water heater. Connect the gas piping to the valve. It is recommended to have a union near the water heater, as well as a drip leg between the main gas supply valve and the water heater. Check for any leaks using a soapy water mix.

See the "Gas Supply" section of the "Installation Instructions" in the Use and Care Manual or the National Fuel Gas Code for details.



Step 10. Turn On and Test

You are ready to operate your water heater after completing and verifying Steps 1 through 9 and following any guidelines and requirements outlined in the "Installation Instructions" in the Use Care Manual. Complete and fill out the Installation Checklist. Also, fill out the Product Information block with the water heater's model and serial number.



With no fixtures running, turn on the water, the gas, and the electricity to the water heater. Wait 90 seconds to allow water heater to complete start up system checks. Press the Power button on the remote control as it will beep and a green light will come on. The remote will display "100" the first time you turn it on.

Press the up arrow key to adjust the unit to your desired temperature up to 120° F. Higher temperatures are available. See "Setting the Water Temperature" in the Use and Care Manual.

Go to a nearby fixture or faucet, such as a tub, and turn on the hot water only. The water heater will begin to turn on: fan first, with a few "clicks" from the gas valve and the igniter until it lights. Once it has lit, the unit will ramp-up to match the water flow. Check the water temperature after about 30 seconds. It should be within a couple degrees of the thermostat setting.



Troubleshooting

If a problem occurs, the unit will stop operating and display an error code. Note the error code and stop the water flow. The most common error codes on start-up are:

- 11** : Failed to ignite: Check the gas and purge any air from lines.
- 12** : Lost flame: Check the gas supply, maybe insufficient.
- 29** : Neutralizer not draining: Review Step 4 and check for blockage.
- P1** : Not enough water flow: Try another fixture or faucet.
- No Display** : Check the connections in Steps 2 and 3.
- Will Not Power On** : Check if water is flowing into the water heater; check outlet.

Refer to the Use and Care Manual for important information about maintaining and operating your new tankless water heater.



Step 6. Install Condensate Drain

NOTICE: REMOVE THE FACTORY SHIPPING CAP FROM THE DRAIN CONNECTION, INSTALL A DRAIN LINE AND RUN TO A SUITABLE DRAIN. THIS WATER HEATER WILL NOT FUNCTION PROPERLY AND ERROR OUT WITH A CODE 29 IF THIS STEP IS NOT COMPLETED PROPERLY.

Slide a 1/2" inner diameter drain hose over the fitting at the bottom of the water heater. Secure the hose with a clamp.

Run this drain hose to an open drain. **DO NOT** create a trap in the hose, and **DO NOT** pinch or collapse the hose.

Leave an air gap between the end of the hose and the drain. The condensate water must be allowed to run free into the drain.

See the "Condensate" section of the "Installation Instructions" in the Use and Care Manual for details.



Step 7. Mount the Remote Control (Optional)



Remote will have a magnet on the back for easy mounting directly to the unit cabinet. If mounting on the cabinet, skip to step 8; if mounting on a more accessible wall location, continue reading.

Select an easily accessible location for the remote to be installed, such as the laundry room. Secure the remote wall plate to the wall using the screws provided or appropriate fasteners. The wall plate may be attached to a standard electrical box and the remote wire run inside the wall.

If the remote is more than 10 feet from the water heater (the length of the wire provided), use a 2-conductor, 18-gauge thermostat wire. **DO NOT** use twisted pair wire, such as telephone or network cable. They will cause the remote to malfunction.

Connect the remote wire, one to each end of the screw terminals on the back of the control. Place the wire under one or both strain reliefs and route the wire out the bottom "knock out" or into the wall.

Secure the remote to the mounting plate using the small screw to fasten the remote at the bottom.

See the "Remote Control Installation" section of the "Installation Instructions" in the Use and Care Manual for details.

Step 8. Connect Electrical

This water heater plugs into a standard 120VAC, 3-prong grounded outlet. **DO NOT** use any ground adapters. The water heater may be hard-wired if required by local codes. **DO NOT** connect this water heater to a GFCI or AFCI circuit. The water heater only draws a maximum of 3 amps of current. Multiple water heaters may be installed on the same circuit if needed.

See the "Electrical Wiring" section of the "Installation Instructions" in the Use and Care Manual for details.



Draining the Water heater

NOTICE: IF THE BUILDING IS TO REMAIN UNOCCUPIED FOR AN EXTENDED PERIOD OF TIME, IT IS RECOMMENDED THAT THE TANKLESS WATER HEATER BE DRAINED TO PREVENT POSSIBLE DAMAGE DUE TO FREEZING CONDITIONS.

When a building is without electricity, water, or gas, the water heater should be drained to prevent freezing in winter conditions. Shut off gas, water, and power to the water heater. Connect a hose to the drain valve on the hot water side and open the valve. Remove the cold water inlet filter to allow air into the system so it will drain.

See the "Freeze Protection" section of the "Installation Instructions" in the Use and Care Manual for details.



6. CONDENSATE SERVICE DRAIN - No Need to Connect
This is not a physical drain connection, but used in the event of service. **DO NOT** connect this to a drain.

5. REMOTE CONNECTION - Two-Terminal Connection
There is no need to remove the front cover of the unit to connect the remote as there are no connection points inside the unit. The connection is under this cover on the bottom of the unit. Remove the single screw holding the cover on, insert the wire through the grommet, and connect the wires to the screw terminals.

4. CONDENSATE DRAIN - 1/2" SLIP FIT Secure Line with Clamp
The factory shipping cap **must be removed** as this unit will produce an extreme amount of condensate and must be connected to a drain. A flexible 1/2" inside diameter line is recommended. Rigid PVC can be used. Leave an air gap at the drain and **DO NOT** form a trap in the line.

3. HOT WATER - 3/4" NPT PIPE THREAD with Service Drain
Copper pipe is recommended. PVC and PE-X are permitted as local codes allow. Pipe sizes less than 3/4" are not recommended as you could experience pressure loss at your fixtures.

2. COLD WATER - 3/4" NPT PIPE THREAD with Inlet Filter
Copper pipe is recommended. PVC and PE-X are permitted as local codes allow. Pipe sizes less than 3/4" are not recommended as you could experience pressure loss at your fixtures.

1. GAS SUPPLY - 3/4" NPT PIPE THREAD with Pressure Tap
An improperly sized gas line will cause operational issues with this water heater. The gas system must be sized to allow enough gas for the water heater to operate at full capacity. A minimum of a 1/2" black iron pipe is required. See the "Gas Piping" section in the "Installation Instructions" in the Use and Care Manual or the National Fuel Gas Code for specifics on gas piping and installing your water heater. Flexible connectors are permitted; however, verify that the BTU rating of the connector meets or exceeds the requirement of the water heater. Just the size of the fittings on the ends is not enough.

INSTALLATION CONNECTIONS

CONDENSING GAS TANKLESS WATER HEATER

EZ-INSTALLATION GUIDE

TIPS FOR A PROPER INSTALLATION

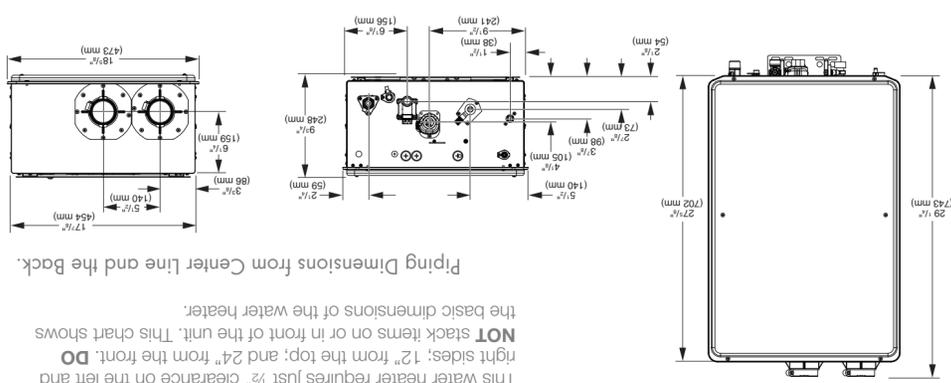
- GAS SUPPLY REQUIREMENTS
- VENTING REQUIREMENTS
- WATER CONNECTIONS
- REMOTE INSTALLATION
- POWER REQUIREMENTS

This guide is designed to provide a high-level installation overview and address key installation questions. It does not supplement the "Installation Instructions" in the Use and Care Manual provided with the water heater. All instructions and installation requirements, as well as any local or national codes, must be followed.

Included Accessories:
Remote Control - Remote Wire - Mounting Screws - Gas Shut-Off Valve - Use and Care Manual with Installation Instructions (includes Warranty Certificate)



This guide covers Rheem, Ruud, Richmond, and EcoSmart-branded condensing direct vent tankless water heaters.



D. DIMENSIONS
This water heater requires just 1/2" clearance on the left and right sides; 12" from the top; and 24" from the front. **DO NOT** stack items on or in front of the unit. This chart shows the basic dimensions of the water heater.

D. DIMENSIONS



A. EXHAUST VENT - 2" SCH 40 PVC Pipe
The exhaust vent must terminate outside of the building. It is not acceptable to allow the unit to draw air from inside the building as it may cause operational issues with the water heater. This system is designed for use with schedule 40 PVC; foam or cellular materials is not permitted. A list of acceptable materials is located in the "Venting" section of the "Installation Instructions" in the Use and Care Manual. **DO NOT** attempt to use any other material. **DO NOT** combine or connect this vent to any other vent from another appliance or run into a chimney. Unauthorized installation of this vent system can result in the improper operation or failure of this water heater. Read and follow all recommended installation instructions in the "Venting" section of the "Installation Instructions" in the Use and Care Manual.

B. INTAKE VENT - 2" PVC Pipe
The air intake vent must terminate outside of the building. It is not acceptable to allow the unit to draw air from inside the building as it may cause operational issues with the water heater. This system is designed for use with schedule 40 PVC; foam or cellular materials is not permitted. A list of acceptable materials is located in the "Venting" section of the "Installation Instructions" in the Use and Care Manual. **DO NOT** attempt to use any other material. **DO NOT** combine or connect this vent to any other vent from another appliance or run into a chimney. Unauthorized installation of this vent system can result in the improper operation or failure of this water heater. Read and follow all recommended installation instructions in the "Venting" section of the "Installation Instructions" in the Use and Care Manual.

MOUNTING AND VENTING

INSTALLATION ACCESSORIES

CONDENSING TERMINATION KITS

The PVC vent terminations allow for an aesthetic and easy installation of the High Efficiency Tankless Water Heaters.



HORIZONTAL VENT TERMINATION

Low Profile Design for two pipe Direct Vent, fits PVC or CPVC venting. Installed Dimensions: 11-3/4" x 8" x 2-1/2"
• SP20286 - for 3" PVC Venting
• SP20285 - for 2" PVC Venting

COSMETIC PIPE COVERS

These cosmetic pipe covers enhance the installation of the water heater. Providing protection from tampering and hiding the plumbing.



- RTG20227 - Fits RTGH-Series models

HORIZONTAL OR VERTICAL CONCENTRIC TERMINATION

Combines a 2-pipe vent system to a single concentric through the wall or roof penetration. Designed for two pipe Direct Vent, fits PVC or CPVC venting. Installed Dimensions: 39" long x 7-1/4" dia.
• SP20245 - for 3" PVC Venting
• SP20897 - for 2" PVC Venting



EZ-LINK™ CABLE

Easily connect two Tankless units together. When connected the units will operate as a single system. Compatible with all current models.
• RTG20040
Must use two identical models



SERVICE VALVES

Webstone-Brand Tankless Service Valves, Clean Brass for California Low Lead Code.
• RTG20220AB includes Cold and Hot Water set and Pressure Relief Valve

FLUSH KIT

The Tankless Flush Kit connects to the service valves for an easy way to flush and de-scale your tankless water heater.
• RTG20124 includes pump, hoses, and 5 gallon bucket.



PROBLEMS OR QUESTIONS

DO NOT RETURN THIS WATER HEATER TO THE STORE

CALL CUSTOMER SERVICE AND SUPPORT

We are here to answer any question you might have about this Tankless Water Heater or any Tankless Parts and Accessories.

For Technical Support Call **1-800-432-8373**
Open 7 Days a Week • 7 am - 7 pm CST