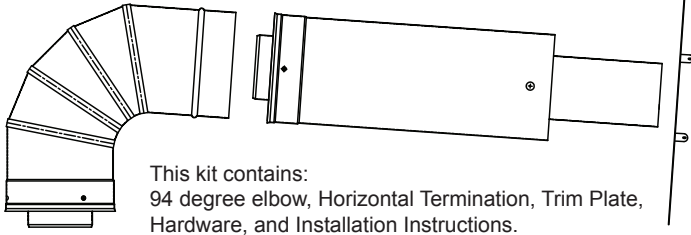


# Tankless Water Heater 3"/5" Concentric Direct Vent Horizontal Vent Kit Installation Instructions



This kit contains:  
94 degree elbow, Horizontal Termination, Trim Plate,  
Hardware, and Installation Instructions.

**NOTICE:** Additional vent piping can be purchased separately to extend the installation of this kit. See the Use and Care Manual provided with the tankless water heater for maximum vent lengths.

Unpack the Horizontal Vent Kit, inspect all parts for damage, and make sure none of the parts are missing. Contact the supplier if there are parts missing.

This instruction will only cover the installation of the Metal-Fab, Inc., Sealed Combustion Horizontal Vent Kit to the tankless water heater. Refer to the Owner's Use and Care Manual provided with your Direct Vent Tankless Water Heater for additional installation considerations and directions.

The Sealed Combustion Horizontal Vent Kit (RTG20210) is designed for use with ONLY the following models:

RTG-95DVN	RUTG-95DVN	RMTG95DVN	ECO200DVN3
RTG-84DVN	RUTG-84DVN	RMTG84DVN	ECO180DVN3
RTG-64DVN	RUTG-64DVN	RMTG64DVN	ECO150DVN3
PH2-28RDVSN	PH2-25RDVSN	PH2-20RDVSN	

Replace the "N" suffix for Natural Gas with a "P" for LP Gas

This kit may be used with the following models provided a RTG20144-3 Appliance Adapter is installed, must be purchased separately. Installation distances will vary from the instruction below.

RTG-66DV*	RUTG-53DV*	PH-25R DVS*	ECO-180DV*
RUTG-66DV*	RUTG-53DV*	PH-20R DVS*	PTG-53DV*
RMTG-66DV*	RMTG-53DV*		

\* P - suffix for LP Gas  
\* N - suffix for Natural Gas

**It is very important that all persons who are expected to install, operate, or adjust this vent system and/or water heater read these instructions along with those instructions provided with the tankless water heater.**

**WARNING : IMPROPER INSTALLATION OF VENTING, OR FAILURE TO FOLLOW ALL INSTALLATION INSTRUCTIONS COMPLETELY, CAN RESULT IN PROPERTY DAMAGE AND/OR DEATH.**

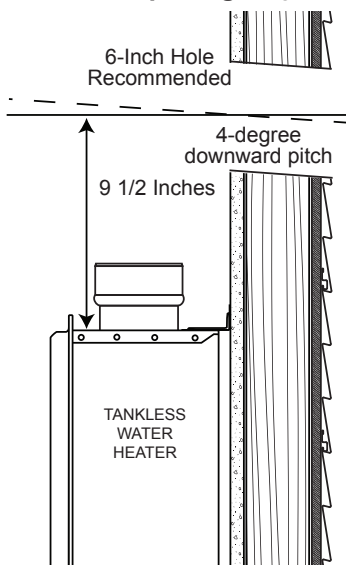
**WARNING: SHEET METAL SCREWS ARE FOR OUTER WALL ONLY. NEVER USE SCREWS, RIVETS OR OTHER FASTENERS TO PENETRATE THE INNER PIPE WALL.**

**NOTICE: THIS KIT CONTAINS SHEET METAL PARTS, WHICH MAY HAVE VERY SHARP EDGES. USE LEATHER GLOVES WHEN HANDLING VENT COMPONENTS.**

**DO NOT ATTEMPT TO CUT THIS VENTING MATERIAL. CUT SECTIONS WILL NOT SEAL AND COULD CAUSE IMPROPER OPERATION OF THE WATER HEATER.**

**Installation Location** – After choosing the installation location for the water heater, see the Use and Care Manual provided with the tankless water heater for information and clearances, mount the water heater to the wall as instructed.

### Location Opening - Figure 1



When cutting the hole, cover the vent of the water heater to prevent any debris from falling into the flue. Remove this cover prior to completing the installation

Measure up 9 1/2 inches from the top of the water heater and cut a 6-inch hole (recommended) through the wall, with a slight or 4-degree pitch down to the outside. See Figure 1.

### JOINT ASSEMBLY

Connections between vent and fittings are male/female type. The inner duct is sealed with an integral seal gasket and the joint is mechanically secured via the overlapping outer wall of the double wall pipe.

Joints are assembled per the following steps:

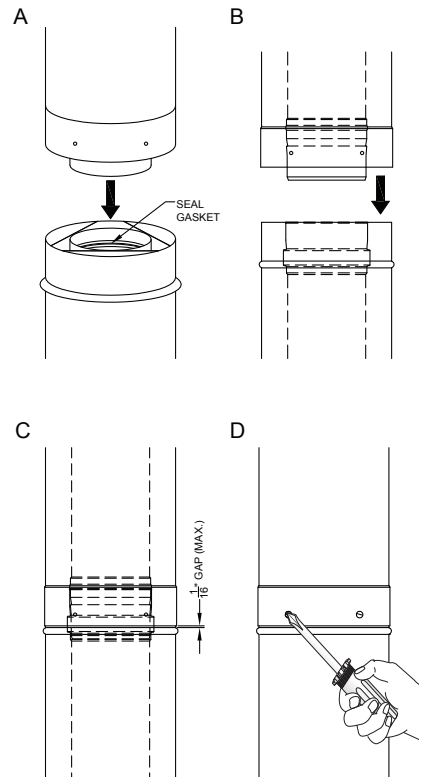
### Joint Assembly - Figure 2

A. Before assembly, observe that the seal gasket is located within the female inner pipe joint. Locate next pipe or fitting with male inner pipe joint and insert to begin engagement of inner pipe joint. To help the joints slide together apply a light amount of silicone, or water-based lubricant to the silicone seals.

B. As the joint further engages, align the male and female ends of the outer wall of each pipe so that they begin to engage as the pipes are further pushed together.

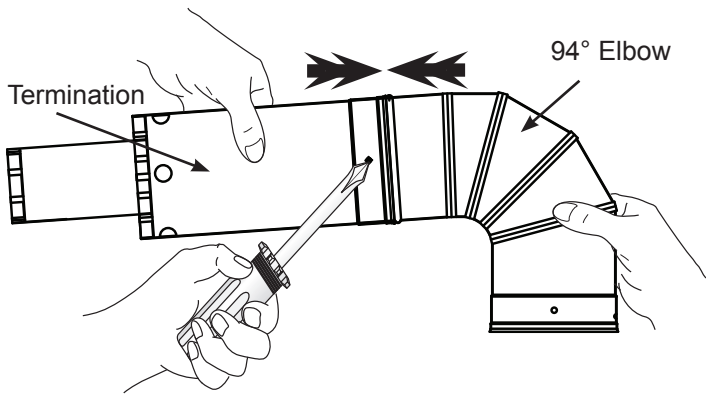
C. Pipe joint is fully engaged when the female end of the outer pipe comes in contact (or is at least within 1/16<sup>th</sup> inch) to the base of bead on the male end of the adjoining vent pipe.

D. When possible look within the pipe assembly to verify that no sign of seal gasket is showing. Complete the joint assembly by securing the joint using #8 x 1/2" sheet metal screws (3 per joint) at each pre-punched hole on the female end of each joint.



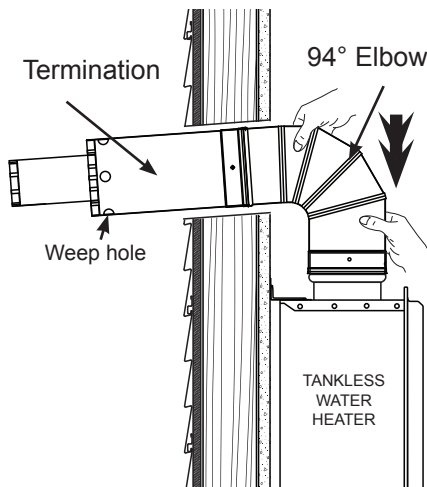
**Horizontal Termination Installation** – Attach the horizontal termination to the 94 degree elbow per the joint assembly instructions with a weep hole facing the bottom. Secure the termination to the elbow with the three screws provided. See Figure 3.

**Install Horizontal Termination to Elbow - Figure 3**



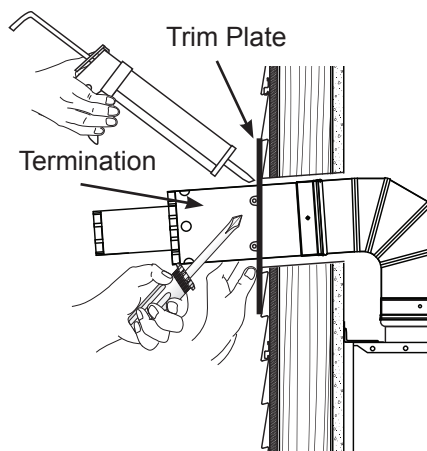
**Horizontal Termination and Elbow Installation** - Align the elbow and termination vent assembly through the hole in the wall. Align and press the elbow down onto the appliance adapter. Completely seat and secure the connection per the joint assembly instructions. A slight rotation of the joint may be necessary to line up the venting. The venting should be square and sealed at final assembly.

**Install Elbow - Figure 4**



The weep holes around the outside of the termination must be at least 1 inch from the finished wall of the building. See Figure 4.

**Install Trim Plate - Figure 5**

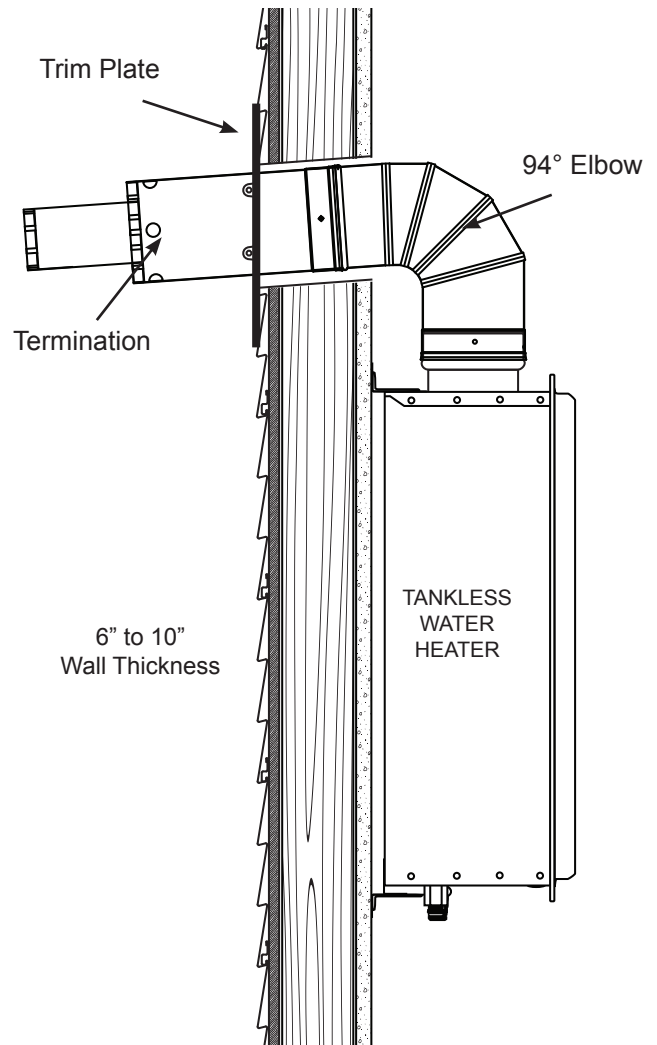


**Trim Plate Installation** - Attach the trim plate to the exterior wall and horizontal termination with hardware provided. Apply a bead of silicone sealant completely around the termination where it penetrates the trim plate and where the trim plate meets the wall to create a liquid tight assembly, which will prevent rain and snow entry into the wall construction. See Figure 5.

**Clearance Considerations** - The concentric vent piping and fittings are certified for a clearance of zero (0) inches to combustible surfaces.

## Completed Vent Kit Installation

Installation is complete. Refer to Owner's Use and Care Manual provided with your Direct Vent Tankless Water Heater for initial operation checks to ensure proper operating conditions.



This kit can be extended up to the maximum allowable lengths as listed in the Use and Care Manual provided with the water heater. **NOTICE:** If a vent length of more than two (2) feet straight up from the top of the water heater is needed, a condensate collector must be installed at the water heater.

Do not attempt to connect any other vent material from another manufacturer or brand to this vent kit.

The material used in this vent kit has been approved by the water heater manufacturer.



**DO NOT ATTEMPT TO USE ANY VENTING BY ANOTHER MANUFACTURER WITH THIS VENT KIT.**

**If you need service refer to these instructions and the instruction manual that came with the water heater for additional information.** Should you have any questions about your new water heater or vent kit, or if these require adjustment, repair, or routine maintenance, it is suggested that you first contact your installer, plumbing contractor or previously agreed upon service agency. In the event the firm has moved, or is unavailable, refer to the telephone directory, commercial listings or local utility for qualified service assistance. Should your problem not be solved to your complete satisfaction, you should then contact the Manufacturer's National Service Department. Refer to the section titled "IF YOU NEED SERVICE" in the Use and Care Manual provided with your water heater(s) for contact information and procedures.