

Installation Instructions




Concentric Gas Vent System for
Gas-Burning Appliances


Navien Concentric Vent Kit



IN ORDER TO MINIMIZE CHANCES OF VENT RELATED FIRES, PLEASE FOLLOW ALL CLEARANCE GUIDELINES TO COMBUSTIBLE MATERIALS. IN ADDITION TO CLEARANCES, REVIEW ALL PROVIDED INSTRUCTIONS AND REQUIREMENTS BEFORE PROCEEDING WITH THE INSTALLATION.

 **WARNING**

CARBON MONOXIDE POISONING HAZARD. Failure to follow the steps outlined below for each appliance connected to the venting system being placed into operation could result in carbon monoxide poisoning or death.

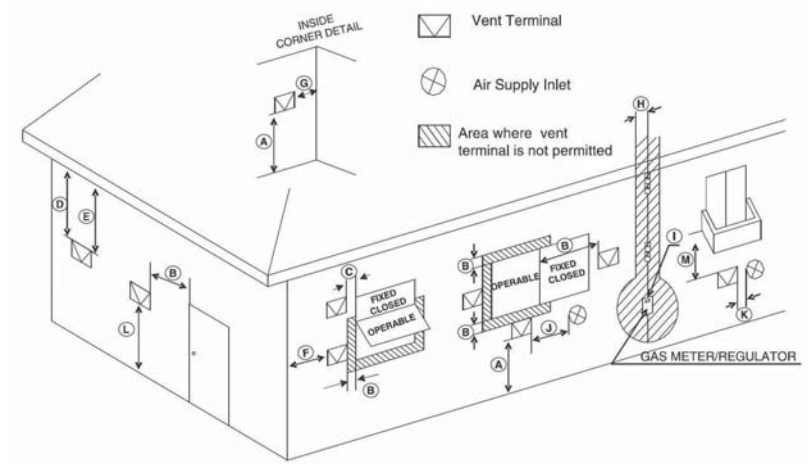
 **WARNING**

Risk of carbon monoxide poisoning or fire due to joint separation or pipe breakage.

Keep these instructions for future reference.

- Examine all components for possible shipping damage prior to installation.
 - Read all instructions before beginning the installation and follow these instructions exactly as written.
 - Proper joint assembly is essential for a safe installation. Check the integrity of ALL joints upon completion of assembly.
 - This venting system must be free to expand and contract under normal operation.
 - Ensure unrestricted vent movement where required through walls, ceilings and roof penetrations.
 - This venting system must be supported in accordance with these instructions.
 - Do not use the NaviVent Concentric Vent Kit with pipe and fittings from other manufacturers.
 - Acceptance of the installed system is dependent on full compliance with these installation instructions.
 - Installation and service must be performed by a qualified installer, service agency, or gas supplier.
- The installation must conform with local codes or, in the absence of local codes, the National Fuel Gas Code, ANSI Z223.1/NFPA54.

CLEARANCE REQUIREMENTS FOR TERMINATIONS According to the National Fuel Gas Code



Ref	Description	US Direct Vent Installations ¹
A	Clearance above grade, veranda, porch, deck, or balcony	12 in (30 cm)
B	Clearance to window or door that may be opened	12 in (30 cm)
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	*
H	Clearance to each side of center line extended above meter/regulator assembly	*
I	Clearance to service regulator vent outlet	*
J	Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance	12 in (30 cm)
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	*
M	Clearance under veranda, porch deck, or balcony	*

¹ In accordance with the current ANSI Z223.1 / NFPA 54 National Fuel Gas Code

† A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.

‡ Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

* Clearance in accordance with local installation codes and the requirements of the gas supplier.

INSTALLATION

1. Check with the Navien installation manual that was included with the appliance for restrictions or limitations on total vent length, number of elbows, approved components, and clearances.
2. Begin assembling the vent pipe at the appliance flue outlet. Measure 1.3" from the male end of the pipe and the collar to that length. The pipe must be secured to the vent collar using the supplied self-tapping metal screws as shown below. **(Fig.1)**

NOTE: The integrated condensate collector must be used when there are vertical sections of pipe that are 5 ft or longer. Make sure to use a condensate trap (**recommended**) or add a loop to the hose. **(Fig.2)**

Pitch the vent 1/4" per foot downward toward the termination or 1/4" upward to direct all condensate to the integrated condensate collector.

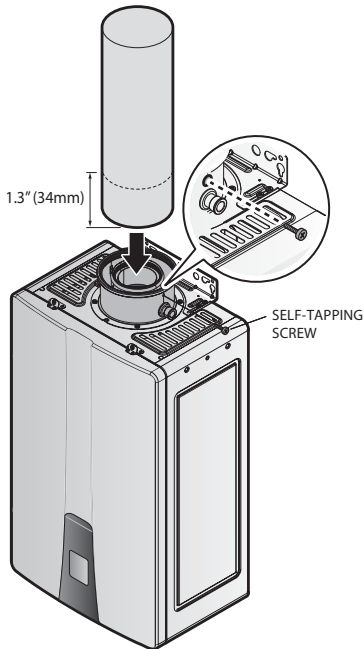


Figure 1

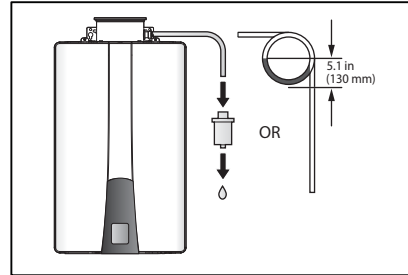


Figure 2

3. Install all sections of the vent pipe with the female gasketed ends point away from the appliance and towards the termination. Use the included grease if necessary to ease the installation. **(Fig.3)**

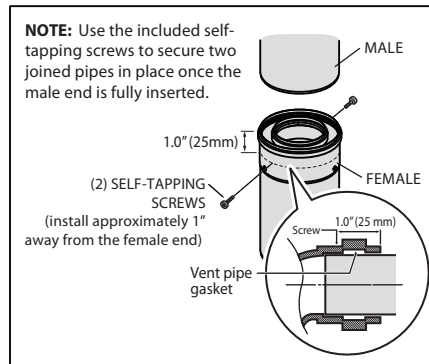


Figure 3

4. Certain sections of the vent pipe may be cut to the length needed for the installation. For the vent sections where this is allowed, a label specifying "Can be cut. This end only" will be placed on the male end. **If the vent section does not have this label then DO NOT cut the pipe.** Follow these steps to properly cut the vent pipe:
 - (a) Mark where along the vent you intend to cut. Make sure the mark is square (not at an angle) to the end of the pipe.
 - (b) Use a hack saw with a metal cutting blade to cut through the outer pipe along the mark. **(Fig.4)**
 - (c) Mark the inner pipe so it is 5/16 in. (10mm) to 1/2 in. (14mm) longer than the outer. Cut along the mark. **(Fig.5)**

NOTE: This step must be completed in order to securely connect the vent pipe.

- (d) Remove burrs on the inner and outer sleeves before assembly.
5. Continue your installation until you reach the exterior wall or roof line. Follow the appropriate installation instructions for installing wall thimbles and firestops.

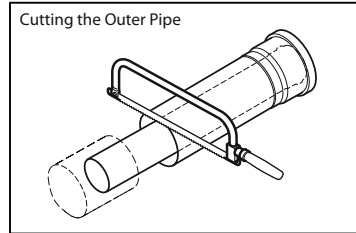


Figure 4

HORIZONTAL TERMINATIONS

1. Locate a suitable area for the wall penetration where the vent termination will be placed. Measure the intended path of the installation and make sure you have all the necessary vent components to complete the installation.
2. Cut a 5.5" diameter hole on the sidewall and frame the penetration.
3. Center the Inner Wall Thimble Plate to the wall penetration and secure with the four provided screws. (Fig.7)
4. Use a Pipe Extension or multiple elbows as necessary to complete your installation. Make sure to install the vent within the applicable guidelines and limitations. (Fig.8)
5. Before connecting the termination to

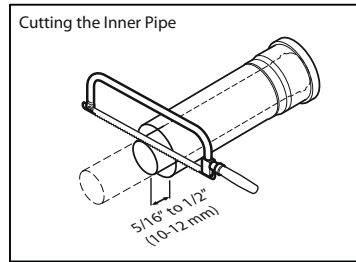


Figure 5

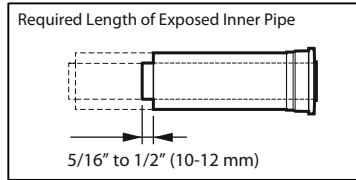


Figure 6

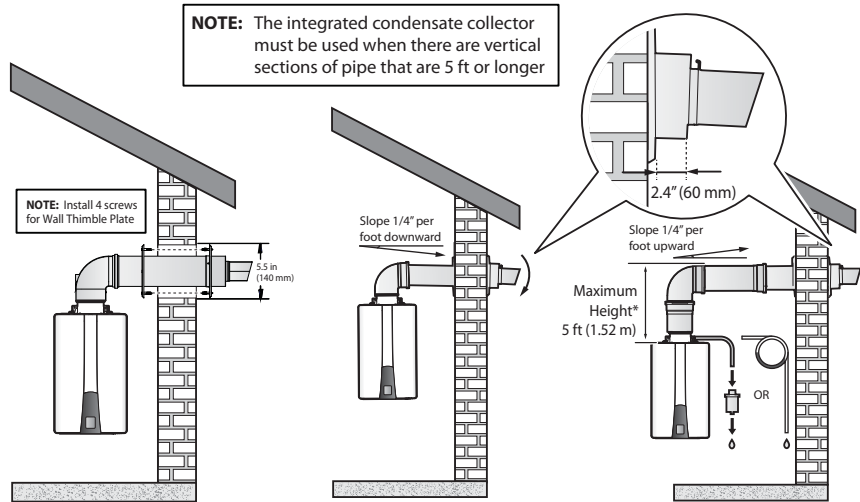


Figure 7

Figure 8

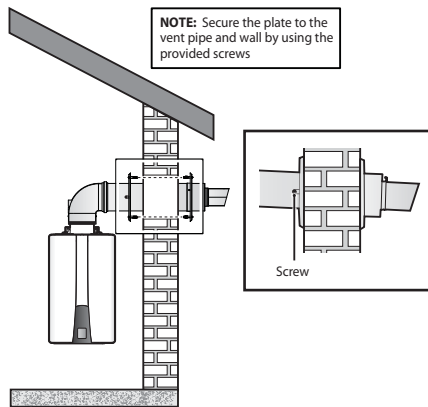


Figure 9

the pipe assembly, install the inner Wall Thimble Plate to the Horizontal Vent Termination and secure it to the wall and vent pipe with the provided screws. **(Fig.9)**

6. Vent termination should be installed flush against the Exterior Wall Plate. Position the termination so the air intake slots face downward to prevent rain intrusion. Secure the termination using four screws at the joint connection.
7. Seal the gap between the termination and wall thimble, exposed screw heads, and the edges of the exterior wall thimble plate with water resistant sealant or caulking.

VERTICAL TERMINATIONS

1. Locate a suitable area for the roof penetration where the vent termination will be placed. Measure the intended path of the installation and make sure you have all the necessary components to complete the installation.
2. Cut a 5.5" diameter hole through the roof and frame the penetration. Make sure no debris falls into the appliance intake or outlet. **(Fig.10)**
3. Use either the Flat Roof Flashing or Pitched Roof Flashing to seal the penetration from rain. Nail the flashing to the roof and seal all the way around for flat roofs, or along the top, left, and right side for pitched roofs. The bottom edge of the pitched roof

flashing is left open.

4. Insert the Vertical Termination or next section of pipe through the penetration and attach to the pre-installed venting.
5. Attach the supplied wall clamp around the termination and ensure the Vertical Termination is positioned upright and level before tightening and securing the clamp to a rigid surface. **(Fig.11&12)**

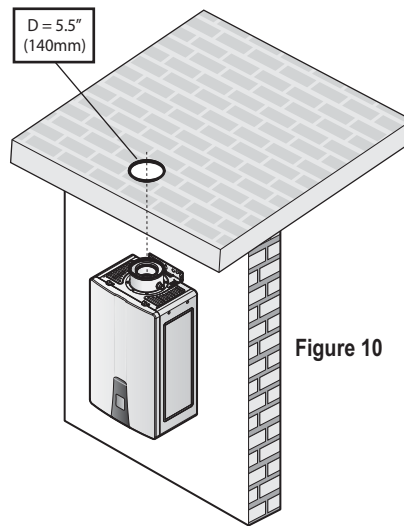


Figure 10

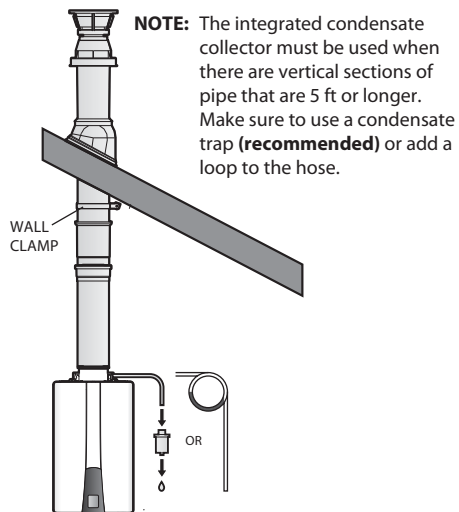


Figure 11

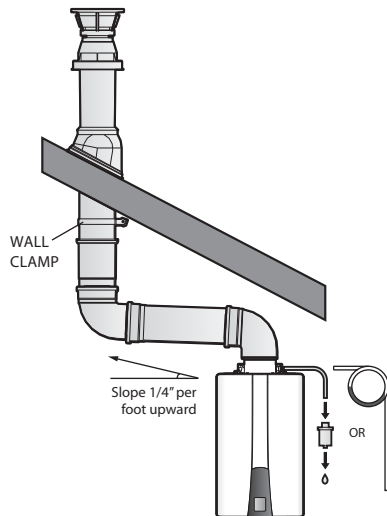


Figure 12

NOTE: The integrated condensate collector must be used when there are vertical sections of pipe that are 5 ft or longer. Make sure to use a condensate trap (**recommended**) or add a loop to the hose. (**Fig. 12**)





Pitch the vent 1/4" per foot upward toward the termination to direct all condensate to the integrated condensate collector.

MAINTENANCE





Inspect your venting system annually by a qualified technician. Recommended areas to inspect are as follows:

- Check areas of the vent system which are exposed to the elements for wear or damage. If damage is found, the components should be replaced immediately.
- Where possible, look into the termination cap to verify that no foreign object or debris are blocking the vent. Remove any foreign material found.
- Check for soot deposits within the venting system and remove any accumulation with a soft brush. Ensure the appliance is operating properly to prevent further soot buildup.
- Where applicable, inspect joints to verify that no pipe sections or fittings have been disturbed, and consequently loosened. Also check mechanical supports such as wall straps, support plates, etc for rigidity.

VENT COMPONENTS

Concentric Sidewall Termination Kit		Vent Pipe Extension	
			
11-1/2" (292mm) Length Navien Part # GXXX001891 UPC #884954220925	21" (533mm) Length Navien Part # GXXX001892 UPC #884954220932	10" (254mm) Length Navien Part # GXXX001896 UPC #884954220970	39" (533mm) Length Navien Part # GXXX001897 UPC #884954220987
* Includes: One Sidewall Termination, One 90° Elbow, Two Wall Plates			

Concentric Elbow		Replacement Gasket	
			
45° Elbow Navien Part # GXXX001894 UPC #884954220956	90° Elbow Navien Part # GXXX001895 UPC #884954220963	Blue Silicone Navien Part # GXXX001898 UPC #884954220994	Black EPDM Navien Part # GXXX001899 UPC #884954221007

Concentric Roof Termination			Metal Wall Strap
			
18" Length Navien Part # GXXX001893 UPC #884954220949	Ø5" Flat Roof Flashing Navien Part # GXXX001900 UPC #884954221014	Ø5" Adjustable Roof Flashing Navien Part # GXXX001901 UPC #884954221021	6 Straps per Box Navien Part # GXXX001902 UPC #884954221038