

## VK4-PVC2SUS Installation Instructions

4" PVC to 4" Single-Wall Stainless Steel Conversion Kit

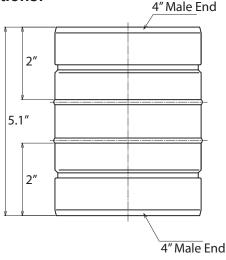


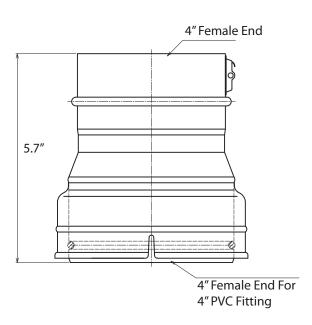
• Failure to follow the installation instructions could cause RISK OF BREAKAGE, RISK OF FIRE, RISK OF CARBON MONOXIDE POISONING, or DEATH.



- This is special stainless steel vent system for Gas fired appliances listed as Category II, III and IV or in Canada, Type BH Gas Venting system as noted in ULC-S636, and this is for use only with special appliances.
- Failure to follow the installation instructions could cause not only the lower performance of appliance but also property damage or personal injury.
- Always wear gloves and appropriate eye, foot and other protection when handling these products.
- Different manufacturers Have Different Joint Systems and Adhesives. Do Not Mix Pipe, Fittings or Joining Methods from Different Manufacturers.
- Examine all components for possible shipping damage prior to installation.
- Proper joint assembly is essential for a safe installation. Follow these instruction exactly as written: Check quality of joints upon completion of assembly.
- The venting system must be free to expand and contract and must be supported in accordance with these instructions. (Check for unrestricted vent movement through walls, ceilings, and roof penetrations)
- Check for unrestricted vent movement through wall, ceiling, and roof penetrations.

## **Specifications:**





## **Description and Usage:**

Adaptor kit part # VK4-PVC2SUS consists of two stainless steel vent pieces, VP4-ADAPT-PVC & VP4-ADAPT-M2M. Features include integrated O-rings, mechanical locking joint, & clamp for secure gas tight seal. The adaptor kit is applicable when conversion from 4" schedule 40 PVC or CPVC pipe to 4" stainless steel Noritz N-Vent is desired. By converting installers can use indoor high efficiency condensing water heaters and terminate venting with high grade stainless steel products. Two kits are recommended for Direct Vent (DV) configuration; one for exhaust vent and one for combustion air vent. One kit is recommended for Single Vent (SV); one for exhaust vent. Please be advised Noritz NRC & NCC series conversion from Direct Vent (DV) to Single Vent (SV) requires PVC conversion kit part #SV-CK-3. See installers guide product catalog for more detail or visit www.Noritz.com or http://Support.Noritz.com.

#### **General Precautions:**

- Vent system must be installed by an experienced professional familiar with the operation and maintenance of gas fired water heating appliances and venting systems. These instructions are a guide to assist a professional installer.
- Refer to Noritz Water Heater installation manual to determine requirements & limitations for venting system
  with respect to installation and use, such as maximum length & number of elbows from water heater, maximum height or the required installation clearances.
- If Noritz N-Vent is already installed, check for punctures, cracks or blockages.
- Do not use this Adaptor Kit with Noritz non-condensing tankless water heaters
- Do not connect VP4-ADAPT-PVC directly to the combustion air or exhaust flue of the tankless water heater.
- Contact local building or fire officials about restrictions and installation inspections in your area.

### General Requirements:

- Use 4" diameter, single wall, Noritz N-Vent system fittings, terminations and accessories. Make sure stainless vent pipe is gas tight and will not leak. Use silicon sealant wherever necessary.
- Do not extend the vent pipe longer than the maximum limits as stated in the installation manual. Vent lengths longer than the stated maximum are dangerous and may cause a fire or explosion
- Make the first vertical PVC run from the top of the heater as short as possible.
- Make sure the PVC or CPVC vent pipe section is sealed gas tight and securely connected.
- Slope the horizontal vent 1/4" upwards for every 12" (300mm) toward the termination.
- Provide vertical support every 12' (3.6 m).
- Except for installation in one and two family dwellings, venting that extends through any zone above that on which the connected appliance is located shall be provided with an enclosure having a fire resistance rating equal to or greater than that of the floor or roof assemblies through which it passes.
- When the vent penetrates a floor or ceiling and is not running in a fire rated shaft, a fire stop and support is required.
- The venting system shall not be routed into, thru, or within any other vent, such as an existing masonry or factory-built chimney flue.
- Do not install insulation in any required clearance space around this venting system.
- Exterior mounted venting systems must be enclosed below the roof line to limit condensation and protect against mechanical damage
- Follow water heater Installation manual or all local and national codes for draining condensate.

#### Clearances:

Maintain stainless steel vent pipe clearance to combustibles as follows:

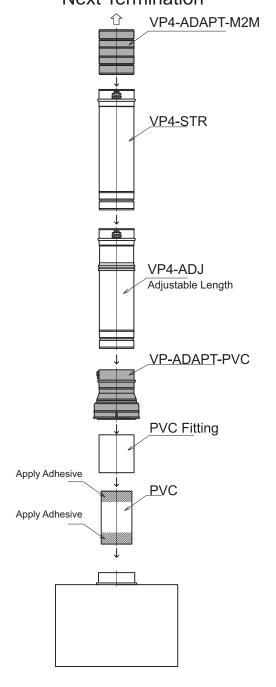
| Manufacturer  | Enclosed  |               | Unenclosed   |              |
|---------------|---|---------------|--------------|--------------|
| and Product   | Hor.  | Vert.         | Hor.         | Vert.        |
| Noritz N-Vent | 10" (250mm) (sides)<br>15" (375mm) (top)<br>6" (150mm) (bottom) | 4"<br>(100mm) | 1"<br>(25mm) | 1"<br>(25mm) |

• Refer to heater install manual regarding clearance requirements from termination to building openings.

# Configuration A

VP4-ADAPT-M2M must be used just below the termination. Vent is reverse orientation; male end of Noritz N-Vent is pointed towards heater. Noritz recommends this venting configuration strongly.

## **Next Termination**

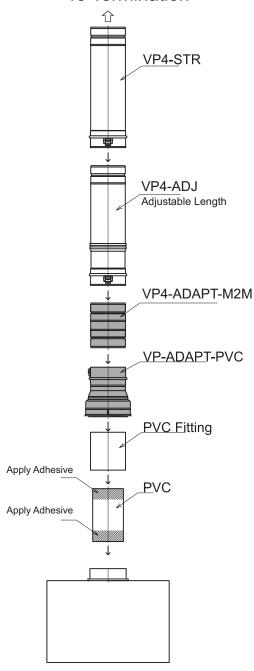


## Configuration B

If stainless steel vent exist and configuration A is difficult, VP4-ADAPT-M2M must be used just above VP4-ADAPT-PVC. Vent is normal orientation; male end of Noritz N-Vent is pointed towards termination.

\*Seal stainless steel Joints with high temperature silicon sealant to prevent possible condensate leakage.

## To Termination



## 1. Applications

- Choose the proper configuration A or B, see figure 1 on previous page. If 4" diameter Noritz N-Vent exisis use "retrofit" table below.
  - a. New construction- 4" diameter Noritz N-Vent does not exist:

|                  | Exhaust Vent    | Combustion Air Vent  |
|------------------|-----------------|----------------------|
| DV (Direct Vent) | Configuration A | Configuration A or B |
| SV (Single Vent) | Configuration A | Use kit # SV-CK-3    |

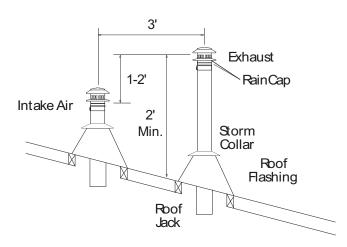
b. Retrofit- 4" diameter Noritz N-Vent exist:

|                  | Exhaust Vent     | Combustion Air Vent  |
|------------------|------------------|----------------------|
| DV (Direct Vent) | Configuration B* | Configuration A or B |
| SV (Single Vent) | Configuration B* | Use kit # SV-CK-3    |

<sup>\*</sup>Waterproof stainless steel joints with high temperature silicon sealant.

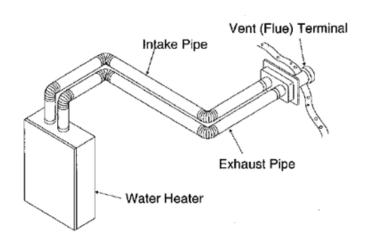
#### 2. Termination

Vertical Vent Termination- Stainless steel Materials

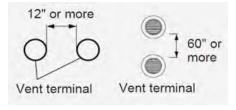


- As illustrated on the left, make sure to keep a distance of 3' or wider between the intake and exhaust when installing the vent piping.
- •Provide vertical support every 12'
- •If using configuration A, Storm Collar Vent Pipe part # SCP4 is not applicable. Instead use Rigid Single-Wall Vent Pipe #VP4-STR and Storm Collar Ring #SCR4-1. See Installers Guide product catalog for more detail.

Horizontal Concentric Vent Termination

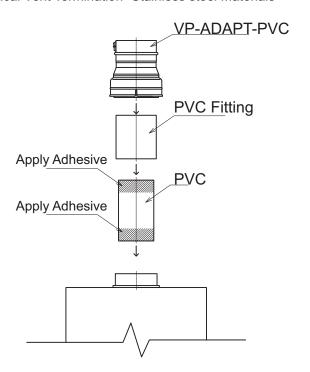


- Follow the installation instructions included with the vent terminal.
- •If multiple units are installed, terminals must be separated by a minimum of either 12" horizontally or 60" vertically
- Vent Terminal Models: VT4-TL (for long vent runs) VT-TS (for termination above water heater)

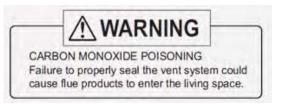


### 3. Appliance Connection

Vertical Vent Termination- Stainless steel Materials

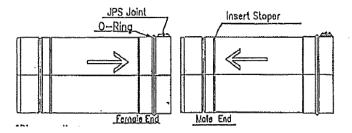


- Use solid 4" schedule 40 PVC or CPVC pipe and fittings
- Keep PVC/CPVC short as possible
- PVC/CPVC Joints must be properlcleaned, primed, and cemented
- Be sure to fully seat PVC/CPVC fitting with VP-ADAPT-PVC and tighten clamp for secure gas tight seal
- Adjustable length Stainless steel vent just above VP-ADAPT-PVC is recommended

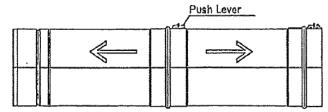


#### 4. N-Vent Stainless Steel Joint Connections

• To connect- Insert the male end fully into the female end till it is seated against the insert stopper on the female section



• To Disconnect - Push the male end fully into the female end. Press the Push Lever on the cover then separate the pieces.



If at any time during the installation and setup of this product you have questions or concerns, please contact Noritz America Engineering & Service at 866-766-7489 or visit http://support.noritz.com