Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 03/10/14

PART 5 – VENTING, COMBUSTION AIR AND CONDENSATE REMOV

⚠ DANGER

The appliance must be vented as detailed in this Venting Section. Ensure exhaust and intake piping complies w regarding vent system. Inspect finished exhaust vent and intake piping thoroughly to ensure all joints are well se comply with all applicable code requirements, as well as with the instructions provided in this manual. Failure to system will result in severe personal injury or death.

A. GENERAL

⚠ DANGER

This appliance is certified as a "Category IV" appliance, and requires a special venting system. The vent system will operate with a positive pressure in the pipe. Exhaust gases must be piped directly outdoors using the vent materials and rules outlined in these instructions. Do not connect vent connectors serving appliances vented by natural draft into any portion of mechanical draft systems operating under positive pressure. Follow the venting instructions below carefully. Failure to do so will result in substantial property damage, severe personal injury, or death.

1. Installation should be made in accordance with the regulations of the Authority Having Jurisdiction, local code authorities, and utility companies which pertain to this type of water heating equipment.

2. Install the venting system in accordance with these instructions and with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, CAN/CGA B149, and/or applicable provisions of local building codes.

3. This water heater must be vented with materials, components, and systems listed and approved for Category IV appliances.

⚠ DANGER

Exhaust vent and intake pipes are to be piped separately. This appliance cannot share a common exhaust or intake with multiple appliances. Failure to follow this instruction will result in substantial property damage, severe personal injury, or death.

NOTE: To avoid contamination often contained in indoor air, it is best to pipe all intake combustion air directly to the outdoors.

NOTE: If exhaust vent pipe system passes through an unheated space, such as an alcove or attic, the space must be heated or the pipe must be insulated. The insulation must have an R value sufficient to prevent freezing of the condensate.

⚠ WARNING

Improper seating of vent pipe gaskets can cause eventual gasket failure and exhaust gas leakage. Ensure the exhaust vent pipe is properly beveled and seated before insertion into the flue adapter. Failure to do so could result in property damage, severe personal injury, or death.

⚠ DANGER

Due to the extreme flammability of most glues, cements, solvents, and primers used to join plastic exhaust vent and intake pipes, explosive solvent vapors must be cleared from all vent piping before start-up. Avoid using excess cement or primer, as this may pool in the vent pipes. Vent assemblies should be allowed to cure for a period of at least 8 hours before powering a connected appliance. Failure to follow these instructions will result in substantial property damage, severe personal injury, or death. It is the installers' responsibility to understand the hazards associated with explosive solvents and take the necessary precautions to avoid these risks.

B. APPROVED MATERIALS FOR EXHAUST VENT AND INTAKE PIPE

APPROVED EXHAUST VENT AND INTAKE PIPE MATERIAL			
Item	**Material**	**Standards for Installation in:**	
		United States	**Canada**
Exhaust vent or Intake pipe and fittings	PVC schedule 40/80	ANSI/ASTM D1785	PP, CPVC, and PVC venting must be ULC-S636 Certified. IPEX is an approved manufacturer in Canada, supplying vent material listed to ULC-S636.
	PVC-DWV*	ANSI/ASTM D2665	
	CPVC schedule 40/80	ANSI/ASTM F441	
	Polypropylene	ULCS636	
	Stainless Steel AL29-4C	Certified for Category IV and direct vent appliance venting	Certified for Category IV and direct vent appliance venting
Pipe cement/primer	PVC	ANSI/ASTM D2564	IPEX System 636 Cements & Primers
	CPVC	ANSI/ASTM F493	

Table 4