- 2. Loosely assemble concentric vent/combustion air termination components together using instructions in kit.
- 3. Slide assembled kit with rain shield REMOVED through hole.

NOTE: Do not allow insulation or other materials to accumulate inside of pipe assembly when installing it through hole.

- Locate assembly through sidewall with rain shield positioned no more than 1-in. (25 mm) from wall as shown in Fig. 49.
- Disassemble loose pipe fittings. Clean and cement using same procedures as used for system piping. DO NOT CE-MENT POLYPROPYLENE FITTINGS.

2-Pipe and 1-Pipe Vent Termination

NOTE: Follow the instructions of the vent terminal manufacturer. These instructions are provided as a reference, only.

NOTICE

RECOMMENDED SUPPORT FOR VENT TERMINATIONS

It is recommended that sidewall vent terminations in excess of 24 inches (0.6 M) in vertical length be supported by **EITHER** the Direct Vent Termination Kit shown in Table 12 or by field-supplied brackets or supports fastened to the structure.

Determine an appropriate location for termination kit using the

guidelines provided in section "Locating The Vent Termination" in this instruction.

- 1. Cut two holes, one for each pipe, of appropriate size for pipe size being used.
- 2. Loosely install elbow in bracket (if used) and place assembly on combustion-air pipe.
- 3. Install bracket as shown in Fig. 49 and 51.

NOTE: For applications using vent pipe option indicated by dashed lines in Fig. 49 and 50, rotate vent elbow 90° from position.

 Disassemble loose pipe fittings. Clean and cement using same procedures as used for system piping. DO NOT CE-MENT POLYPROPYLENE FITTINGS.

(Direct Vent / 2-Pipe System ONLY)

When two or more furnaces are vented near each other, two vent terminations may be installed as shown in Fig. 49, but next vent termination, or pair of vent terminations, must be at least 36 in. (914 mm) away from the first two terminations. It is important that vent terminations be made as shown in Fig. 49 to avoid recirculation of vent gases.

Inducer Outlet Restrictor

To improve efficiency and operation of 40,000 BTUH input models on very short vent systems, an inducer outlet restrictor is required to be installed on the outlet of the inducer assembly. The outlet restrictor is shipped in the loose parts bag.

To determine if the outlet restrictor is required, see Table 15 and Table 17. Failure to use an outlet choke when required may result in flame disturbance or flame sense lockout.

To install the outlet restrictor:

- 1. Remove the vent elbow from the inducer outlet.
- 2. Align the lock tabs on the outlet restrictor with the slots on inside outlet of the inducer assembly.
- 3. Snap the outlet restrictor in place.
- 4. Re-install the vent elbow.
- 5. Torque vent elbow clamp 15-lb-in.

It is recommended that the flashing be installed by a roofer or competent professional prior to installing the concentric vent. The terminations can be installed on a flat or pitched roof.

Concentric Vent

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Single or multiple concentric vent must be installed as shown in Fig. 49. Maintain the required separation distance between vents or pairs of vents as shown in Fig. 49 and all clearance shown in Fig. 47.

WARNING

CARBON MONOXIDE POISONING HAZARD

Failure to follow this warning could result in personal injury or death.

DO NOT use cement to join polypropylene venting systems. Follow the polypropylene venting system manufacturer's instructions for installing polypropylene venting systems.

NOTE: Follow the instructions of the vent terminal manufacturer. These instructions are provided as a reference, only.

Cut one 4-in. (102 mm) diameter hole for 2-in. (50 mm ND) kit, or one 5-in. (127 mm) diameter hole for 3-in. (80 mm ND) kit in the desired location.

Loosely assemble concentric vent/combustion air termination components together using instructions in kit.

Slide assembled kit with rain shield **REMOVED** through hole in wall or roof flashing.

NOTE: Do not allow insulation or other materials to accumulate inside of pipe assembly when installing it through hole.

Disassemble loose pipe fittings. Clean and cement using same procedures as used for system piping. **DO NOT CEMENT POLYPROPYLENE FITTINGS.**

Two-Pipe and Single-Pipe Terminations

Single and two pipe vent must be installed as shown in Fig. 49 and 50. Maintain the required separation distance between vents or pairs of vents as shown in Fig. 49 and 50 and all clearance shown in Fig. 47 and 48.

NOTICE

RECOMMENDED SUPPORT FOR VENT TERMINATIONS

It is recommended that rooftop vent terminations in excess of 36 inches (1 M) in vertical length be supported by **EITHER** the Direct Vent Termination Kit shown in Table 12 or by field-supplied brackets or supports fastened to the structure.

Cut the required number of holes in the roof or sidewall for vent and (when used) combustion air pipes. Sidewall holes for two-pipe vent terminations should be side-by-side, allowing space between the pipes for the elbows to fit on the pipes.

Holes in the roof for direct-vent two-pipe terminations should be spaced no more than 18 in. (457 mm) apart to help avoid vent gas recirculation into combustion air intake.

Termination elbows will be installed after the vent and (if used) combustion air pipe is installed.

Sidewall Terminations

Concentric Vent

NOTE: Follow the instructions of the vent terminal manufacturer. These instructions are provided as a reference only.

Determine an appropriate location for termination kit using the guidelines provided in section "Locating The Vent Termination" in this instruction.

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