Horizontal Vent Kit 2400-009

⚠ WARNING — FOR YOUR SAFETY: This product must be installed and serviced by a professional service technician, qualified in heater installation and maintenance. Improper installation and/or operation could create carbon monoxide gas in flue gases which could cause property damage, serious injury, or death. Improper installation and/or operation will void the warranty.

• Use this kit when the vent terminal is located horizontally 16" to 26" above the top of the unit. Additional sections and fittings may be added to a maximum of 15 linear feet and three elbows

Check contents of kit carton for the following before installation:

1 5" Vent Terminal
1 3"/5" Concentric boiler adapter
1 3"/5" x 11-22" Adjustable Pipe
1 Elbow - 3"/5" stainless steel
1 3" Termination w/ screen
1 3"/5" x 12" Concentric Section
1 Wall Flange, Galv.
1 Wall Flange, Grey Rubber
1 Standard 'New' Kit Installation Instruction
16 Self-Drilling Screws

This kit will permit a vertical run of 16" to 26" feet and a horizontal run of up to 38 inches. The maximum allowable run is 15 linear feet and three elbows. Two configurations are shown in Figures 6 and 7.

LOCATION

Locating Vent Opening in Outside Wall

The center line of the vent opening must be at least 16½" above grade or expected snow level outside, and at least 13½" from any other building openings, such as doors, windows, etc. (see Figure 1).

Vent opening should be well away from shrubbery or other obstructions that would prevent free air flow to and from the vent terminal.

Vent terminals must be at least 3 feet above any forced air inlet located within 10 feet, at least 7 feet above grade when located adjacent to a public walkway and may not terminate in a location where condensate or vapor may be a nuisance, hazard or detriment to other equipment. Vent terminals must have a minimum clearance of 4 feet (1.22m) horizontally, and in no case above or below, unless a 4 foot (1.22m) horizontal distance is maintained, from electric meters, gas meters, regulators and relief equipment. Whenever possible, locations under windows and overhangs should be avoided.

Check to be sure that the location of the boiler has at least 3" of head room above the center line of the vent opening in the exterior wall (see Figure 2). This assures proper pitch of the vent away from the unit.

Cut a 5¾" diameter hole in the exterior wall at the selected location allowing 1/4" per foot pitch drop toward the hole.

Vent Kit Assembly and Installation Instructions

Measure total distance to determine vent length and confirm that the unit location selected is within the approved venting limitation.

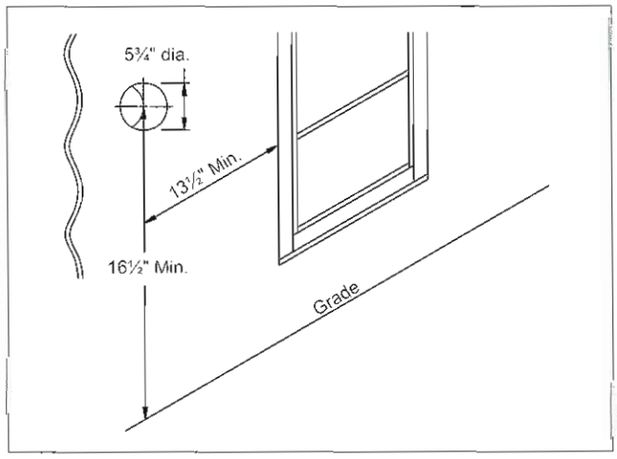

Figure 1. Vent hood placement.

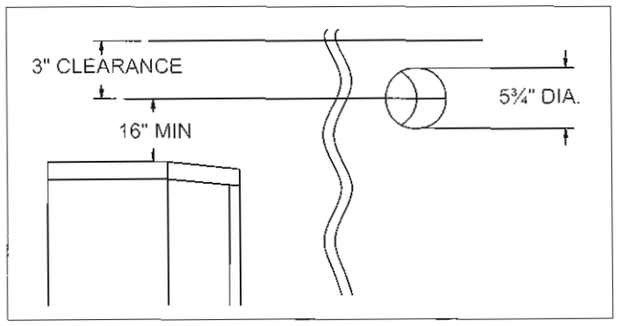

Figure 2. Headroom requirement.

H2302100A

Vertical Length

The minimum vertical height to the horizontal centerline is (16"). The male end of the elbow may be directly connected to the boiler adapter. For additional vertical heights, the 10" and/or additional purchased concentric sections can be **telescoped** into the boiler adapter for adjustable vertical heights up to 7' to the elbow's horizontal centerline (see Figures 6 and 7).

Note: Vertical height **must** allow the horizontal run to pitch down 1/4" per foot toward the vent terminal to drain any condensate. For vertical runs totaling more than 7', install a condensate trap, p/n 2400-421.

Horizontal Length

If using only the boiler adapter connected to the elbow on the vertical, then a maximum horizontal length of 38" to the outside wall can be run from this kit (see Figure 6). The 11" to 22" adjustable telescoping section may be used in combination with any other section to provide length adjustment.

Adjust 3" termination length into last horizontal section to insure its shoulder stop is against the inner face of the 5" termination.

NOTE : Wetting the surfaces of the inner 3" section with lubricant included will provide easier adjustment or removal.

Slide the metal wall flange over the 5" pipe, collar facing the elbow. Position through wall, then slide the rubber wall flange onto the end of the 5" pipe (with flange collar facing the elbow). Secure vent terminal and rubber wall flange to 5" pipe with (3) self-drilling screws (drive screw through rubber wall flange, 5" pipe and into vent term.). Secure all the 5" pipe lengths with (3) (supplied) self-drilling screws.

Center 5" pipe in 5¾" hole and slide the 5" wall flange to the wall and secure to the wall with appropriate hardware. Check and adjust the vertical vent for plumb. Secure the 5" pipe through collar on wall flange using a (supplied) self drilling screw (see Figure 3). Secure 5" vent to the collar on boiler with (3) self-drilling screws to complete installation.

NOTE: Should it be impossible to locate the vent terminal center line 16½" above grade, use the optional vent terminal, p/n 2400-428 (see Figure 5).

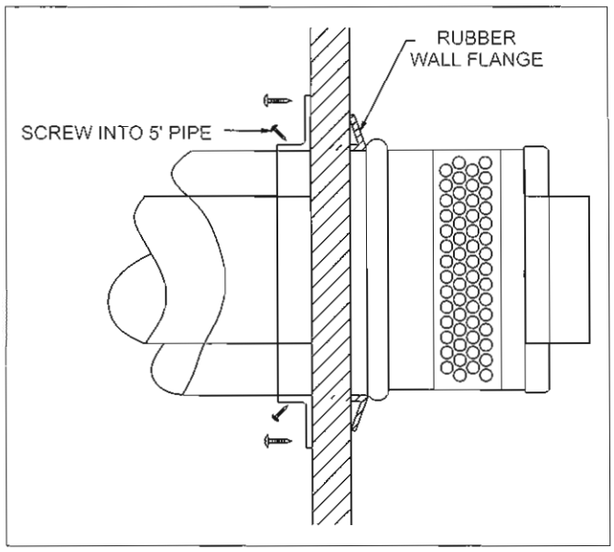

Figure 3. Terminal mounting.

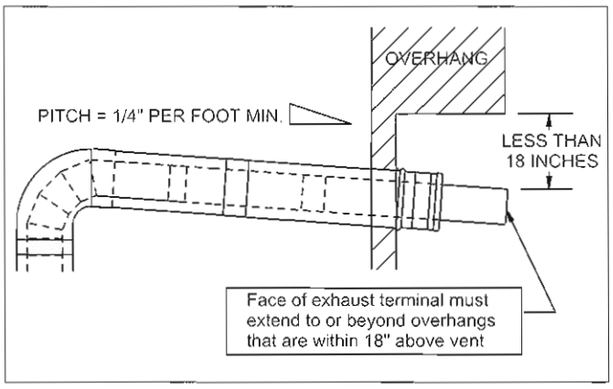

Figure 4. Vent pitch requirement.

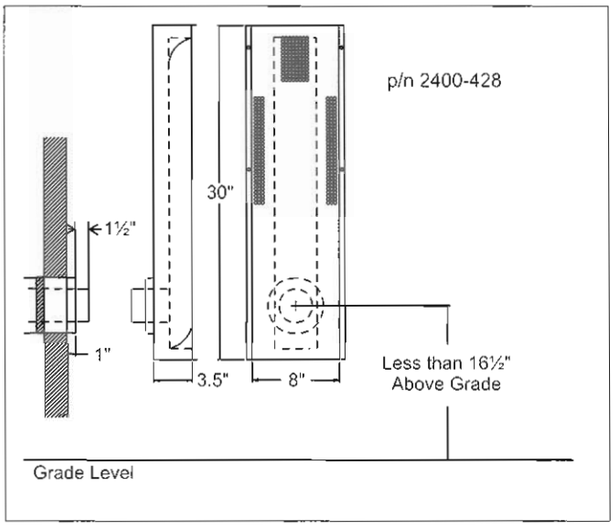

Figure 5. Vent extension.

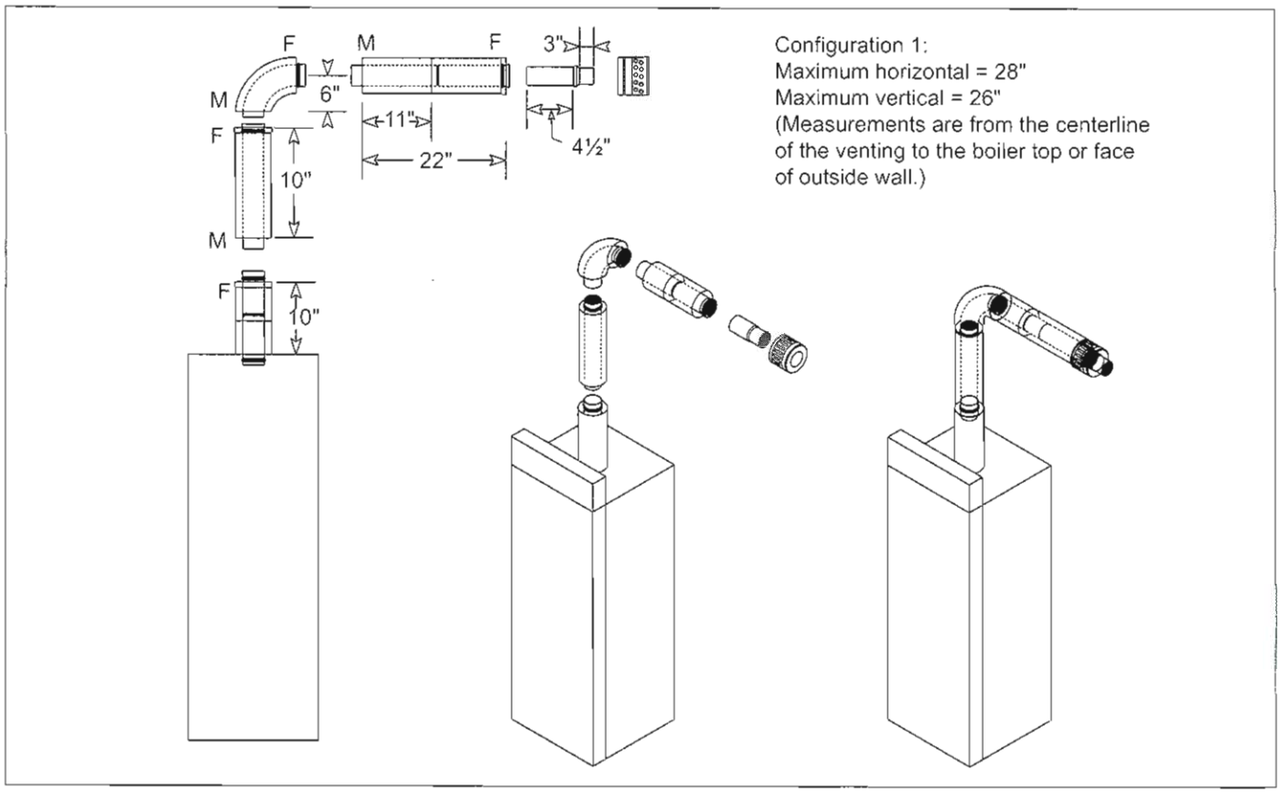

Figure 6. Configuration 1.

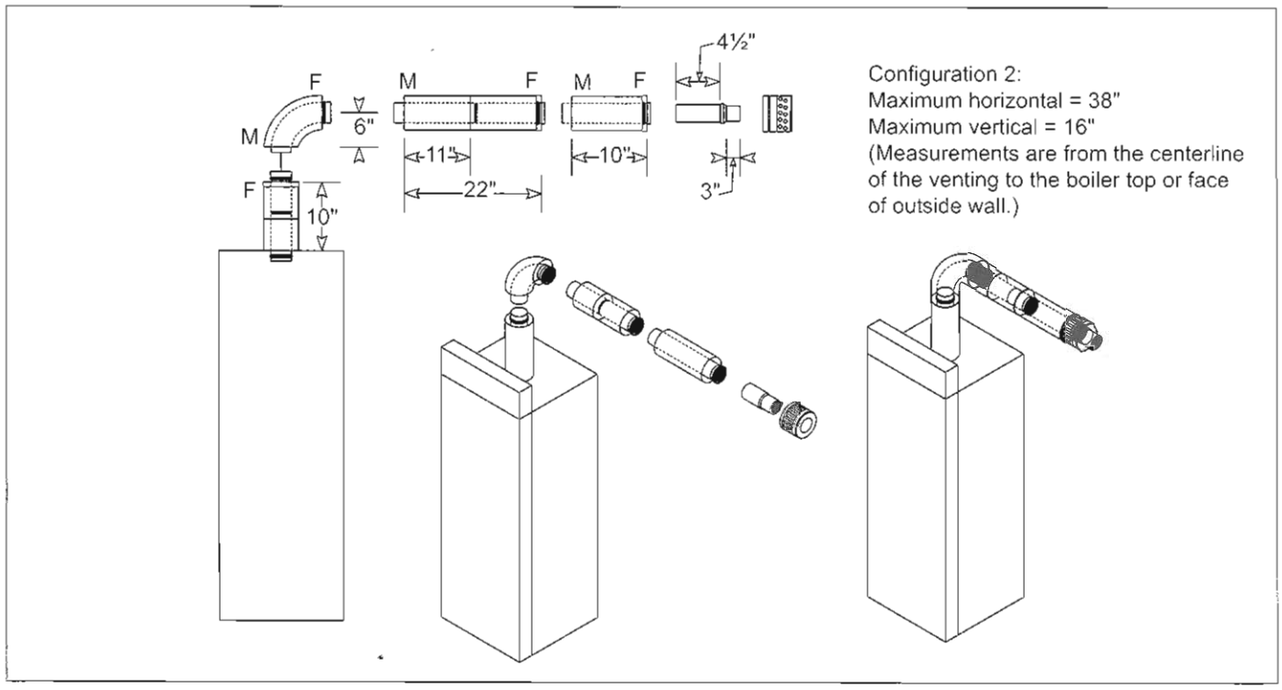

Figure 7. Configuration 2.