PEERLESS® PINNACLE® BOILERS

CONCENTRIC VENT TERMINATION KIT
Installation Instructions

⚠ NOTICE

Read this entire instruction manual and refer to Section 5, "Venting," of the Peerless® Pinnacle® Installation, Operation and Maintenance Manual before starting the installation.

INTRODUCTION

This instruction manual covers installation of the 2″ concentric vent termination kit (91469) and the 3″ concentric vent termination kit (91403) for use on Pinnacle® Boilers.

SAFETY CONSIDERATIONS

Installing and servicing heating equipment can be hazardous, due to gas and electrical components. Only trained personnel should install or service heating equipment. All operations should be performed by trained service personnel. When working on heating equipment, observe all precautions in the literature, on tags, and on all labels attached to the unit. **Follow all safety codes;** wear safety glasses and work gloves; have a fire extinguisher available.

⚠ WARNING

Before beginning any installation or modification, be sure the main electrical disconnect switch is in the "OFF" position. Electrical shock can cause personal injury or death.

⚠ WARNING

This vent kit is to be used only for terminating the Pinnacle™ Boiler. Do not use kit to terminate Category I, II, or III vent furnaces or water heaters. Failure to follow this warning could result in fire, personal injury, or death!

Field supplied pipe and fittings are required to complete the installation. The combustion air and vent pipe fittings must conform to American National Standards Institute (ANSI) and American Society for Testing and Materials (ASTM) standards D1785 (schedule-40 PVC), D2665 (PVC-DWV), D2441 (SDR-21 and and SDR 26 PVC), D2661 (ABS DWV), or F628 (schedule-40 ABS). Pipe cement and primer must conform to ASTM standards D2564 (PVC) or D2235 (ABS).

In Canada, construct all combustion air inlet and exhaust vent pipes for this unit of CSA or ULC certified schedule-40 PVC, PVC-DWV pipe and pipe cement.

PEERLESS®
PINNACLE®
HIGH EFFICIENCY STAINLESS STEEL BOILER

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PI8010 R3 (8/06-5C)
Printed in U.S.A.

A. ROOF TERMINATION

1. Determine the best location for the termination kit.

   Note: A roof termination is less susceptible to damage. Also, the vapor plume will be less visible. Contamination of inlet air is less likely on a roof.

2. Cut a hole (4″ diameter for 2″ concentric vent kit [91469] or 5″ diameter for 3″ concentric vent kit [91403]).

3. Partially assemble concentric vent termination kit.
   a. Cement Y concentric fitting to larger diameter kit pipe (see Figure 1).
   b. Cement rain cap to smaller diameter kit pipe (see Figure 1).

⚠ WARNING

Do not operate the boiler with rain cap removed, or recirculation of combustion products may occur. Water may also collect inside larger combustion air pipe and flow to burner enclosure. Failure to follow this warning could result in product damage, improper operation, personal injury, or death!

4. Insert Y concentric fitting and pipe assembly through the structure's hole and field supplied roof boot/flashing.

   Note: Do not allow insulation or other material to accumulate inside pipe assembly when inserting through hole.

5. Secure assembly to roof structure as shown in Figure 4, using field supplied metal strapping or equivalent support material.

   Note: Ensure termination height is above the roof surface or anticipated snow level (12″ in USA or 18″ in Canada) as shown in Figure 3.

   Note: If assembly is too short to meet height requirements, the two pipes supplied in the kit may be replaced by using same diameter, field supplied SDR-26 PVC (D2241) pipe. Do not extend dimension D more than 60″. (See Figure 2) Do not use couplings to extend pipe.

   If assembly needs to be shortened, the two pipes supplied in the kit may be cut. Do not reduce Dimension D to less than 12″ (See Figure 2).

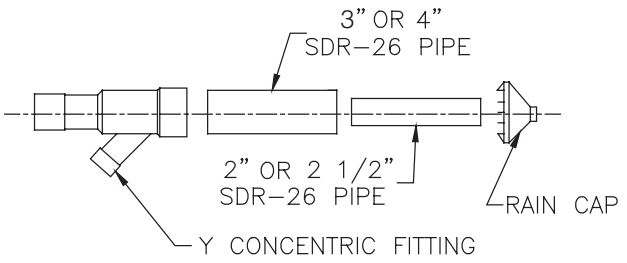


Figure 1: Kit Components

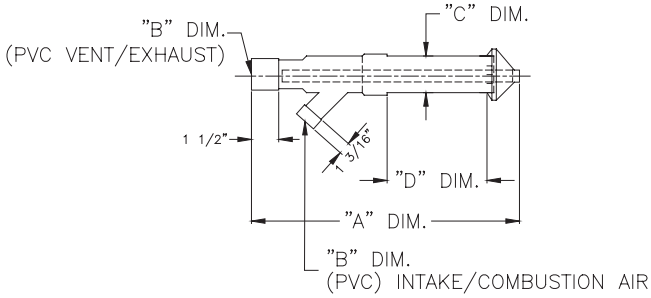


Figure 2: Concentric Vent Dimensional Drawing

Kit Part No.	A** (as supplied)	B	C	D**** (as supplied)
91403	38-7/8″	3	4-1/2″	21-1/8″
91469	33-3/8″	2	3-1/2″	16-5/8″

** **Dimension A will change accordingly as dimension D is lengthened or shortened.**

**** **Dimension D may be lengthened to 60″ maximum. Dimension D may also be shortened to 12″ minimum. See paragraphs A.5 and B.6.**

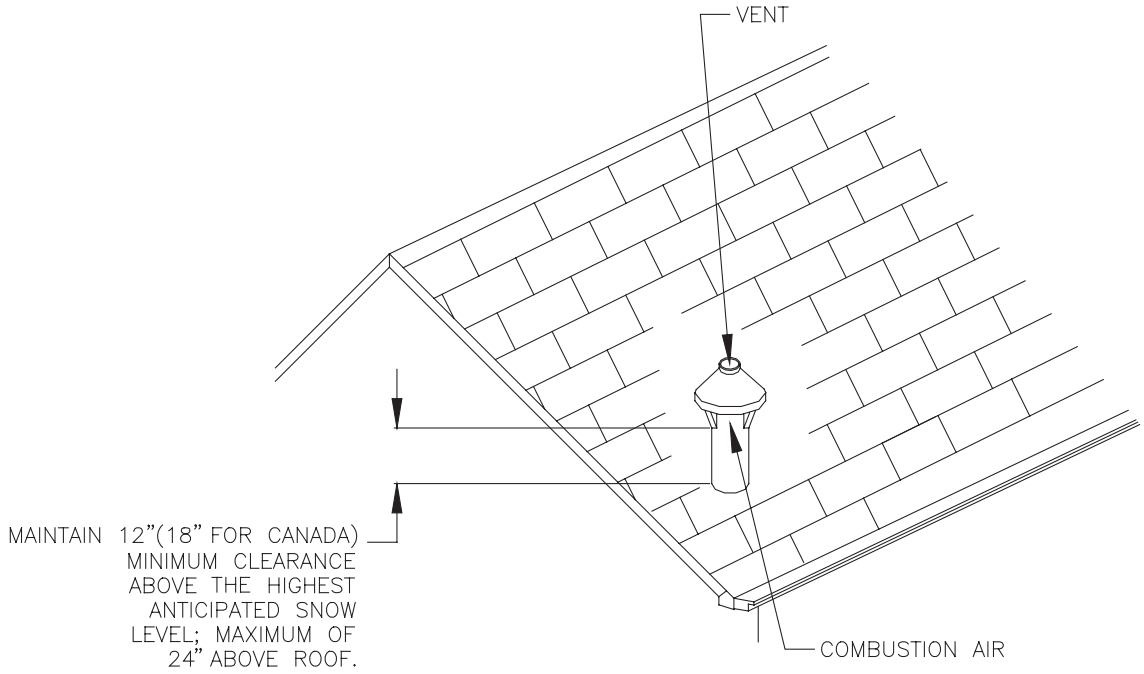
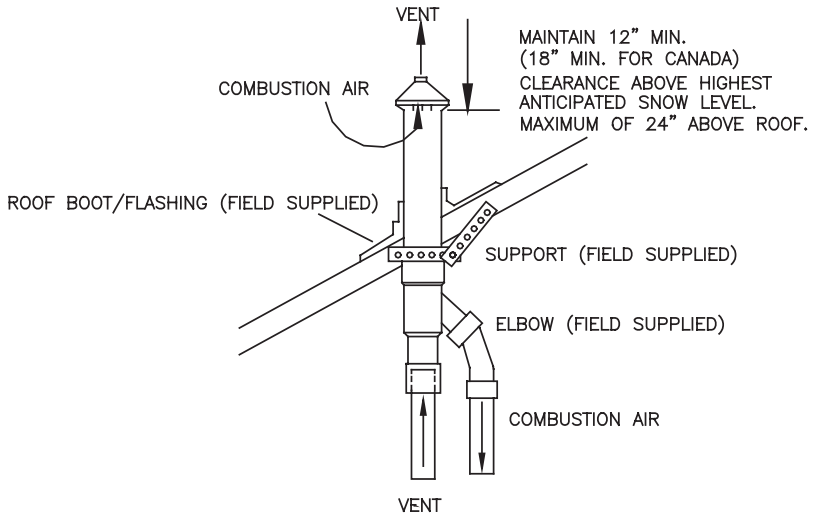


Figure 3: Roof Termination

6. Install rain cap and small diameter pipe assembly in roof penetration assembly. Ensure small diameter pipe is cemented and bottomed in Y concentric fitting.

7. Cement air inlet vent pipe and exhaust vent pipe to concentric vent termination assembly. See Figure 4 for proper pipe attachment.

8. Operate boiler through a heating cycle to ensure air inlet vent pipe and exhaust vent pipe are properly connected to concentric vent termination connections.



NOTE: SUPPORT MUST BE FIELD INSTALLED TO SECURE TERMINATION KIT TO STRUCTURE.

Figure 4: Roof Installation

B. SIDE WALL TERMINATION

1. Determine location for termination kit.
   a. Do not locate termination kit where products of combustion will damage plants, shrubs, or air conditioning equipment.
   b. Do not locate termination kit where wind may cause combustion products, leaves, light snow or fertilizer to be sucked into inlet.
   c. Do not locate termination kit where it will be damaged or subjected to airborne objects such as balls or stones.
   d. Do not locate termination kit where odors or noise will be objectionable.

2. Cut a hole (4″ diameter for 2″ concentric vent kit [91469] or 5″ diameter for 3″ concentric vent kit [91403]).

3. Partially assemble concentric vent termination kit.
   a. Cement the Y concentric fitting to larger diameter kit pipe (See Figure 1).
   b. Cement the rain cap to the smaller diameter kit pipe (See Figure 1).

4. Insert Y concentric fitting and pipe assembly through the hole. Cut in Step 2.

   Note: Do not allow insulation or other materials to accumulate inside pipe assembly when inserting through hole.

5. Install rain cap and small diameter pipe assembly in Y concentric fitting and large pipe assembly. Ensure small diameter pipe is bottomed and cemented in Y concentric fitting.

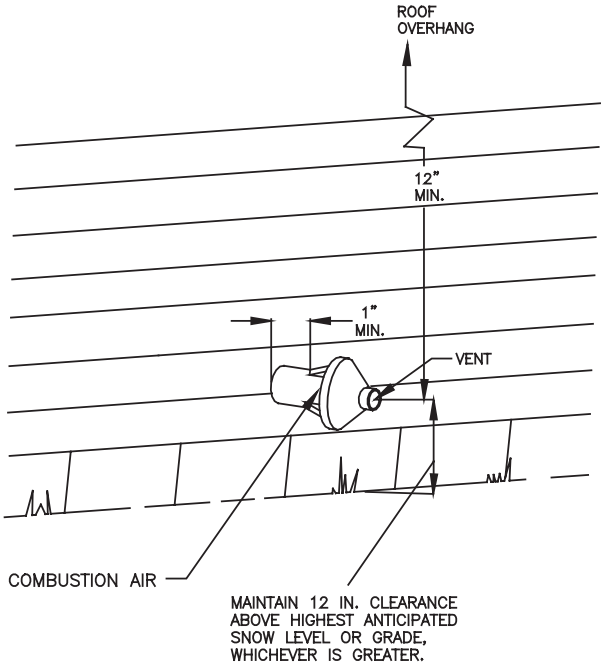


Figure 5: Sidewall Termination

6. Secure assembly to structure as shown in Figure 6, using field supplied metal strapping or equivalent support material.

   Note: Ensure termination location clearance dimensions are as shown in Figure 5.

   Note: If assembly needs to be extended, the two pipes supplied in the kit may be replaced by using the same diameter, field supplied SDR-26 (D2241) pipe. Do not extend dimension D to more than 60″ (see Figure 2). DO NOT USE COUPLINGS TO EXTEND PIPE.

   If assembly needs to be shortened, the two pipes supplied in the kit may be cut. Do not reduce Dimension D to less than 12″ (See Figure 2).

7. Cement air inlet vent pipe and exhaust vent pipe to concentric vent termination assembly. See Figure 6 for proper pipe attachment.

8. Operate boiler through a heating cycle to ensure air inlet vent pipe and exhaust vent pipes are properly connected to concentric vent termination connections.

9. Minimum center-to-center distance between concentric vent terminations is 8″. Terminations must line up horizontally as shown in Figure 7.

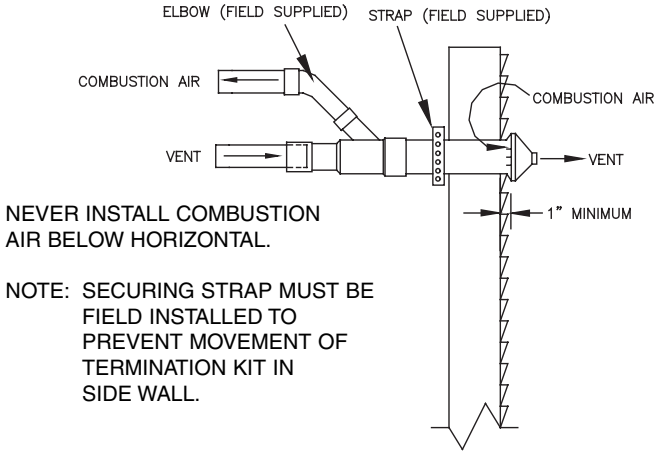


Figure 6: Sidewall Attachment

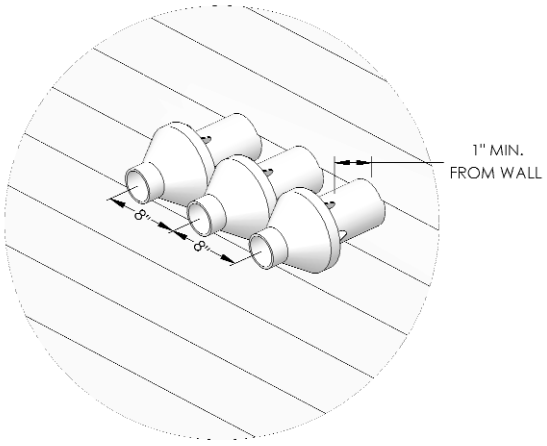


Figure 7: Multiple Boiler Installations