



# ZC Kit – AGP Pellet Insert

(94400157)

## Compatibility

- AGP Pellet Insert
- Lopi AGP Pellet Insert

## Packing List

- ZC Can Rear Panel
- ZC Can Top/Side Panel
- Bottom Panel (Fiber Board with Steel)
- (40) # 8 x 3/8" Type A Screws
- (7) 1-1/4" Drywall Screws
- (2) Rear Stand-Offs

## Overview

This kit allows an installer to build the above pellet heaters into the framing of a home. It is mobile-home approved.

## Installation Overview



**WARNING: The sheet metal edges are sharp.** Use gloves when handling the zc can.

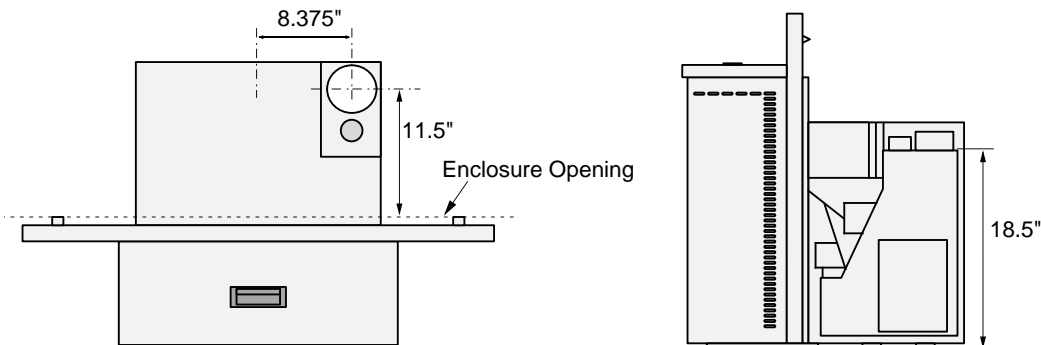


The minimum framing dimensions and clearances listed in this instruction sheet must be maintained. Failure to follow all of the instructions in this instruction sheet, and in the manual, will void the listing and warranty of the pellet heater, and may create a serious fire hazard.

- 1 Determine the vent configuration (see "Vent Requirements" and "Vent Termination Requirements")
- 2 Prepare the enclosure (see "Minimum Enclosure Dimensions").
- 3 Install the floor protection and place the bottom panel in place (see "Minimum Floor Protection").

### If venting to the rear

Install a 90° elbow on the insert starter collar (do not use an appliance adapter when venting to the rear) and measure the center point of the vent (approximately 23.5" from the base of the insert). Use this measurement, along with the floor protection height (typically 1/2" to 3") to determine the center height of the wall thimble behind the insert. NOTE: The vent is located 8.375" right of center of the appliance. Install the thimble into the wall (refer to the directions included with the thimble for details). Attach the elbow to the starter collar (seal with silicone and secure with screws). The ZC Can and insert are then placed into location (steps 3 and 4 below). The horizontal section of vent is then installed from the exterior (vent will be installed through the thimble, through the can, then twist-locked into the elbow). Attach the additional vent components to finalize the vent installation (termination, etc.).



### If venting upwards

When installing with vertical vent, provisions must be made to allow for the vent to be attached/detached from the top of the insert with the insert in place. The two methods for attaching and detaching the vent are below:

- a) If using a built-out chase (doghouse), attach a 3" appliance adapter to the starter collar (seal with silicone and secure with screws). The ZC Can and insert are then placed into location (steps 3 and 4 below). The vertical section of vent is then installed from the exterior (vent will be installed through the flashing/firestop, through the can, then twist-locked into the appliance adapter).
- b) If venting vertically through a ceiling or to a horizontal elbow, you will want to flatten the tabs on the vent connector to allow it to be slid off the insert while it is in place (see the instructions on the final page). The vent is then installed with a vent support or ceiling support holding the vent in place. The support should be a minimum 5' above the insert to allow for vent detachment. Make sure to follow the directions on page 10 to modify the vent connector for disassembly.

- 3 Construct and Install the ZC Can (see "ZC Can Construction and Placement")
- 4 Prepare the insert and place it into the ZC Can (see "Insert Preparation and Placement")



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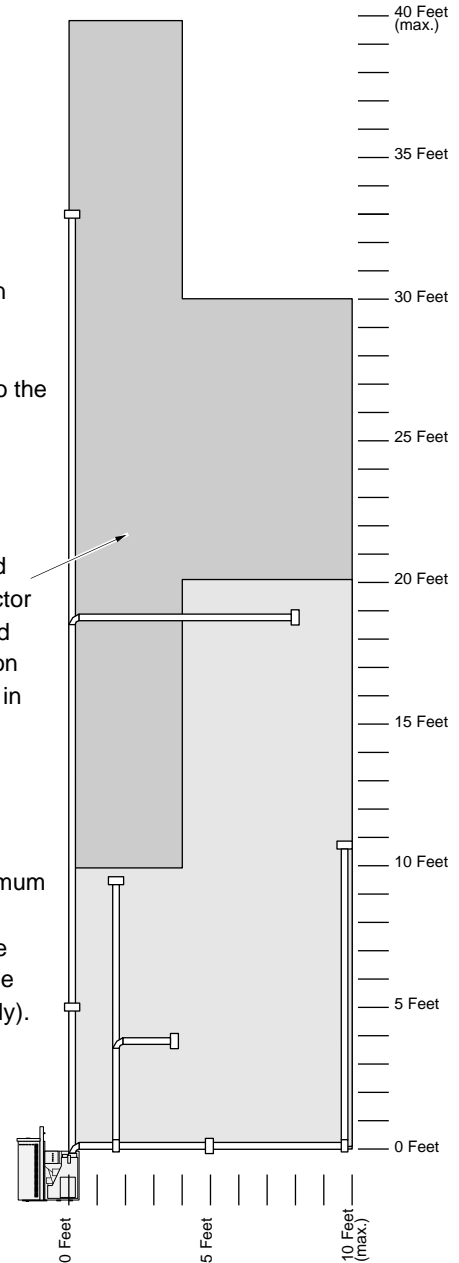
## Vent Requirements

- Must be 3" or 4" diameter Type "L" (except for masonry fireplace installations) - or - connect the vent to a factory built type "A" chimney. All vent joints (including adapters, elbows, etc...) must be sealed with 500° F. RTV silicone.
- Pellet vent must maintain clearances specified by the vent manufacturer.
- Do not connect the pellet vent to a vent serving any other appliance or stove.
- The maximum venting distance is shown in the illustration to the right.
- Do not install a flue damper in the exhaust venting system of this unit.
- Use an approved wall thimble when passing the vent through walls and a ceiling support/fire stop spacer when passing the vent through ceilings.
- No more than 270° of elbows (three 90° elbows, two 90° and two 45° elbows, etc.).
- Pellet vent connections must be sealed airtight with 500° F. RTV silicone and screwed together with at least three sheet metal screws (unless the vent manufacturer's requirements specify otherwise).
- Vent must have a support bracket every 5' of pellet vent when exterior of structure
- Horizontal sections must have a 1/4" rise every 12" of travel.

The vent height and run must not exceed the distance shown in the shaded region shown to the right.

Venting into this shaded area may require restrictor adjustment to the closed position. See the section "Restrictor Adjustment" in the manual for details.

NOTE: To achieve optimum performance, we recommend keeping the vent as short as possible (horizontal run especially).



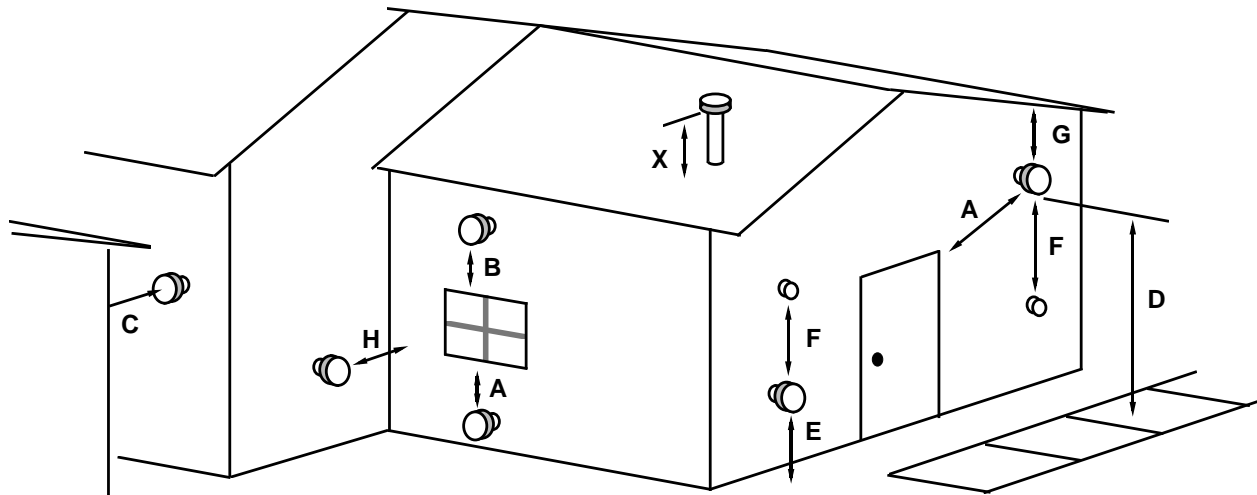


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## Vent Termination Requirements (See the illustration below)

- Must have an approved cap (to prevent water from entering) or a 45° downturn.
- If the termination is located on a windy side of the house, an approved house shield is recommended to prevent soot from building up on the side of the house.
- Must not be located where it will become plugged by snow or other material.
- Horizontal terminations must protrude 12" from the wall, vertical terminations require 24".



**NOTE: Measure clearances to the nearest edge of the exhaust hood.**

- A Minimum 4' clearance below or beside any door or window that opens
- B Minimum 1' clearance above any door or window that opens
- C Minimum 2' clearance from any adjacent building
- D Minimum 7' clearance above any grade when adjacent to public walkways  
**NOTE: Vent may not terminate in covered walkway or breezeway.**
- E Minimum 2' clearance above any grass, plants, or other combustible materials
- F Minimum 3' clearance from any forced air intake of any other appliance
- G Minimum 2' clearance below eaves or overhangs
- H Minimum 1' clearance horizontally from combustible wall
- X Must be a minimum of 2' above the roof



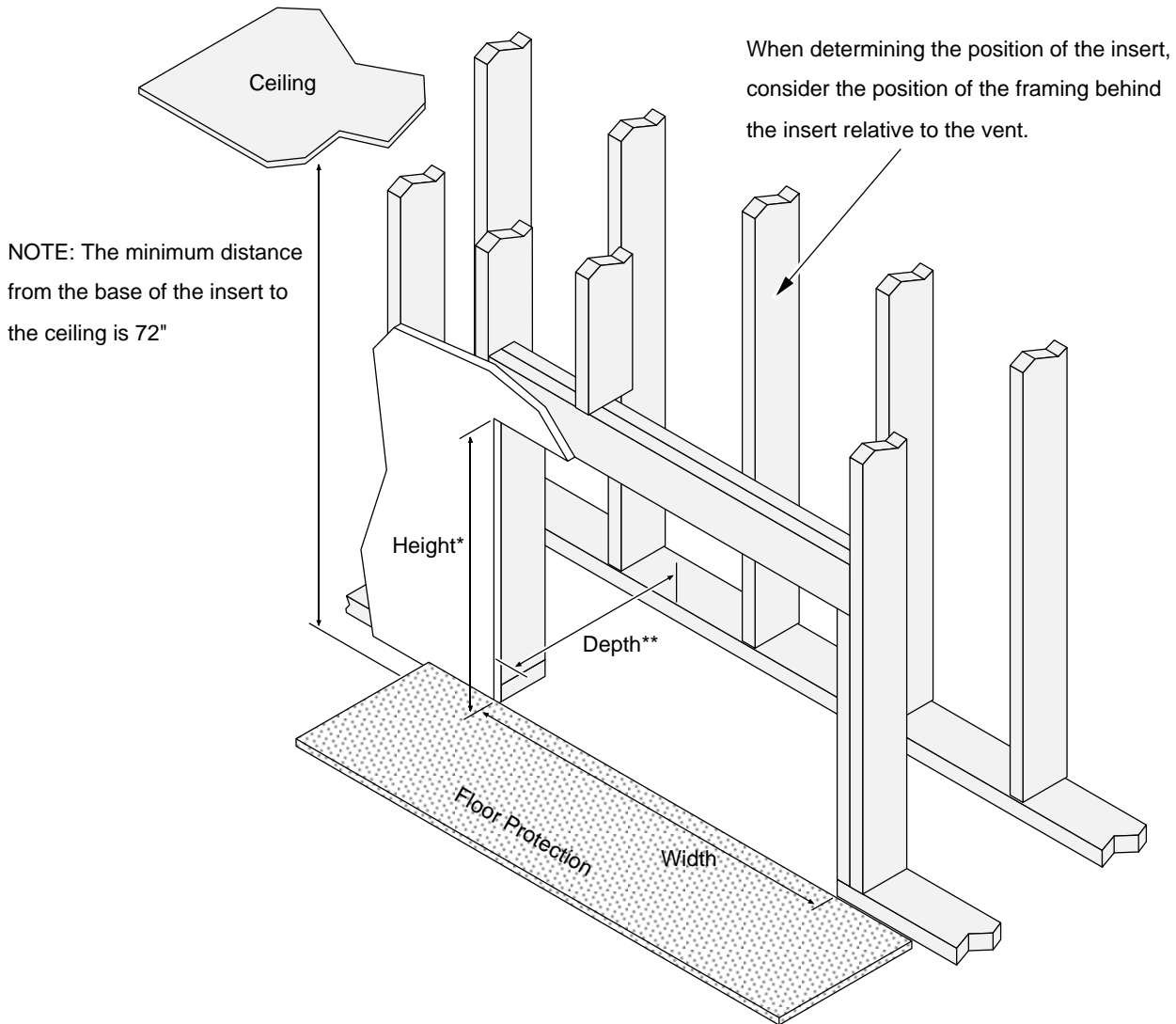
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## Minimum Enclosure Dimensions

|         | Min.   | Max.      | Recommended |
|---------|--------|-----------|-------------|
| Height* | 29.5"  | 30.5" *** | 30"         |
| Width   | 38.25" | 42" ***   | 40"         |
| Depth** | 18.75" |           | 20"         |

- \* Enclosure height is measured from the top of the floor protection (e.g.: if using 1" floor protection, the recommended height is 31" above the sub-floor). For thicker floor protection, a platform may be built inside the enclosure (or the enclosure raised above the sub-floor). If the insert is raised above the floor protection, measure from the base of the enclosure, adding 1/2" for the bottom panel. See "Floor Protection" on the following page for additional details.
- \*\* When determining the depth, include the facing material (drywall, tile, etc.).
- \*\*\* The maximum height and width of the enclosure is limited by the surround panel size (30.5" tall by 42" wide).





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## Minimum Floor Protection

- The insert must be placed on the bottom panel (shipped with the kit).
- The area directly under the insert in front of the bottom panel (10" by 24.75") must have an R value of 1.0 or greater.

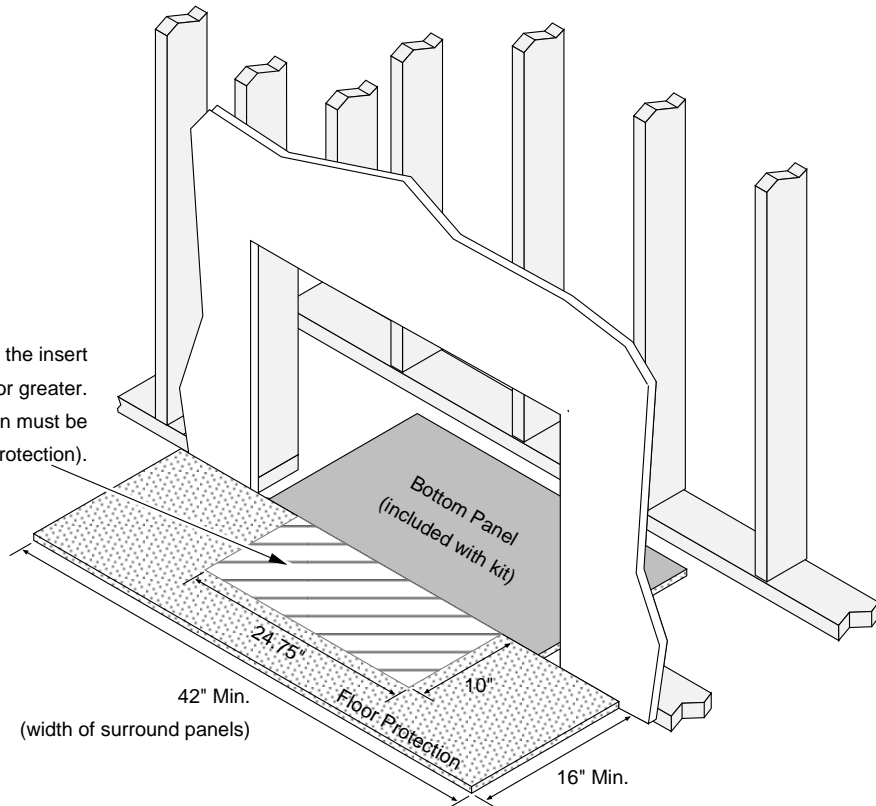


Hearth pads are available with R value protection. Manufacturers of these pads are listed below:

- Hearth Classics -
- Grayson Wood -

- Additional floor protection must extend 6" in front of the door opening (16" from the enclosure opening) and the full width of the surround panel (42" min. width). This floor protection must be non-combustible (no minimum R value – it is used as spark protection).

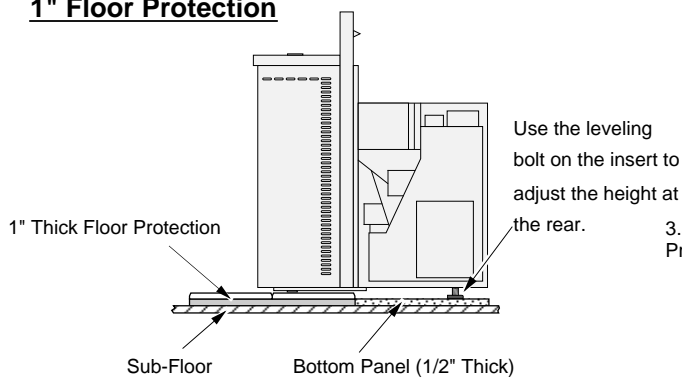
This area directly underneath the insert must have an R value of 1.0 or greater.  
The remaining floor protection must be non-combustible (spark protection).



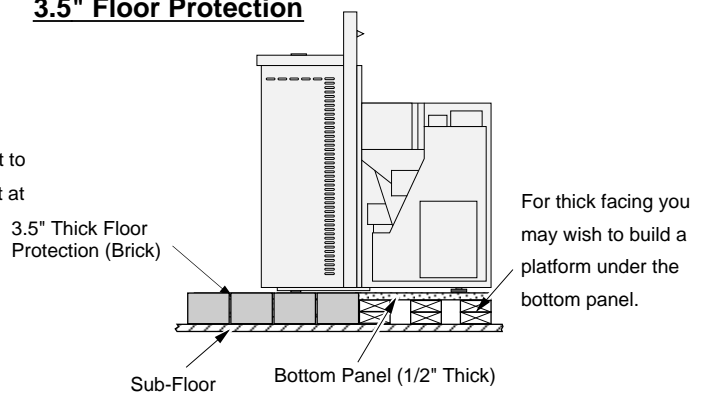
## RAISED HEARTH EXAMPLES

The illustrations below detail two typical hearth installations.

### 1" Floor Protection



### 3.5" Floor Protection





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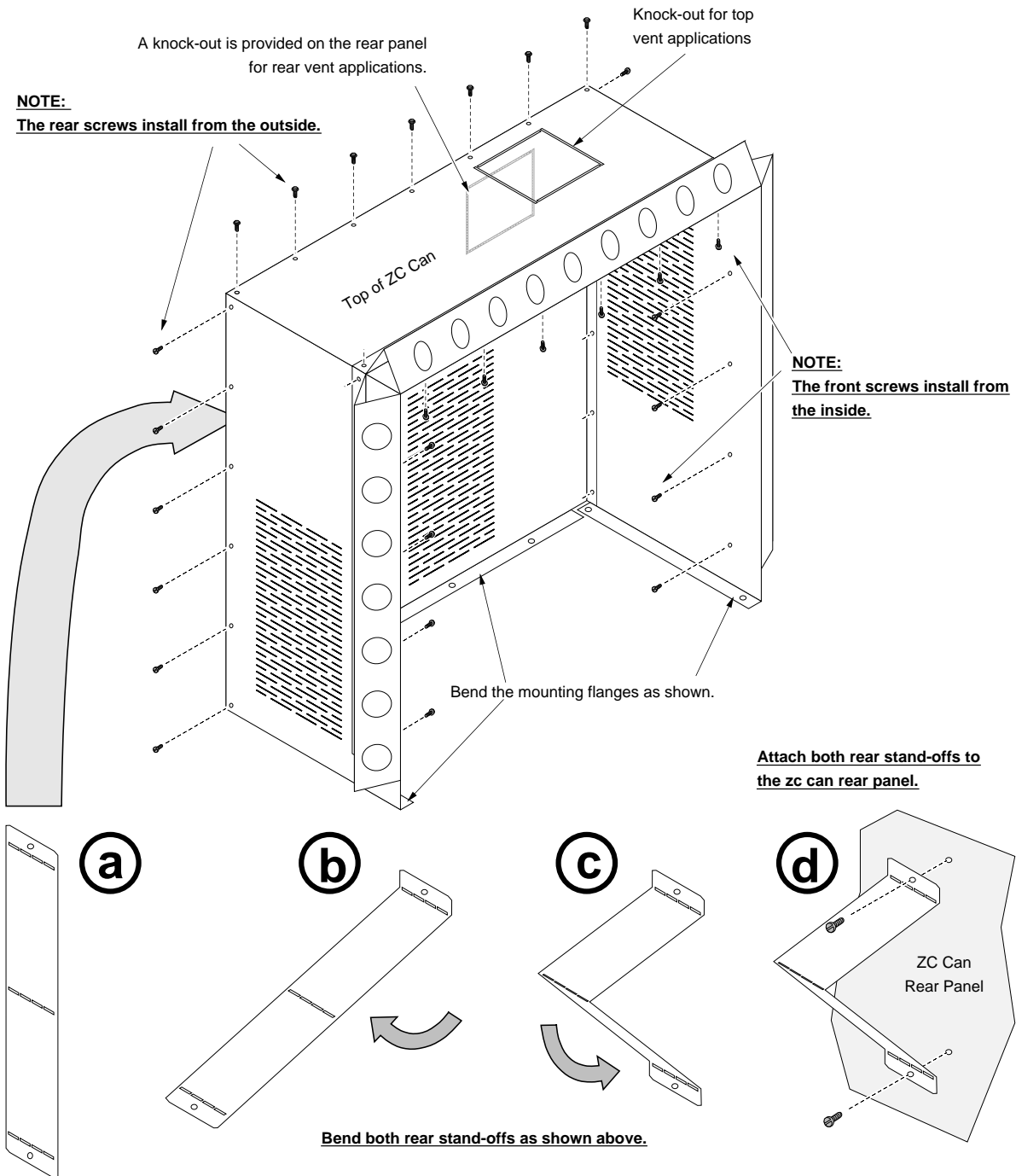
## ZC Can Construction

The zc can is shipped flat. Construct the zc can and stand-offs as shown below. Use the included screws to secure the standoffs and zc can sides/top to the zc can rear panel.

After the zc can is constructed the top or rear knock-out should be removed to allow vent to pass through.



**WARNING: The sheet metal edges are sharp.** Use gloves when handling the zc can.



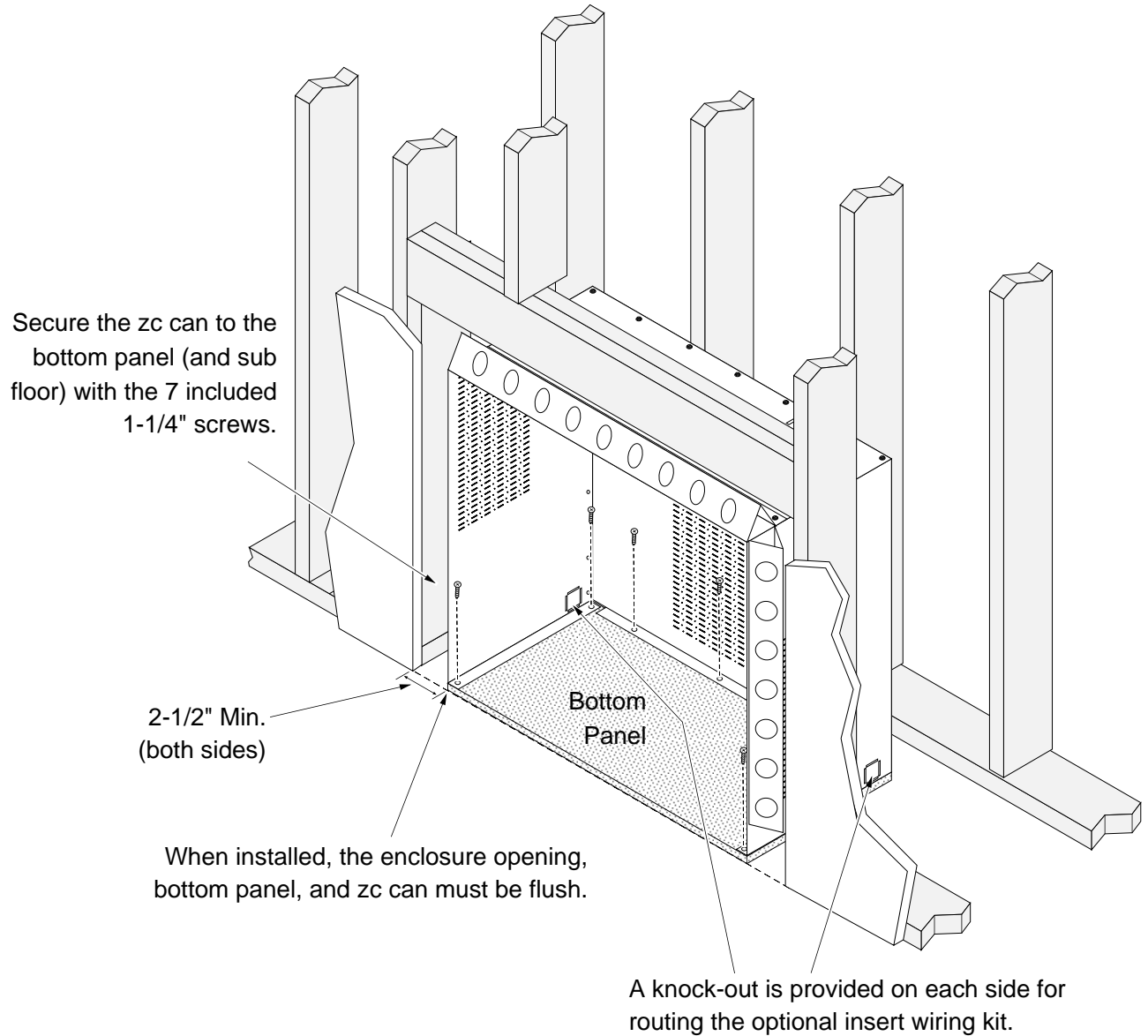


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## ZC Can Placement

- Place the bottom panel inside the enclosure. Place the zc can on top of the bottom panel (the edges of the zc can line up with the edges of the bottom panel). Make sure the front edge of the zc can and bottom panel are flush with the enclosure opening (see illustration below). Secure the zc can to the bottom panel (and sub floor) with the 7 included 1-1/4" screws.





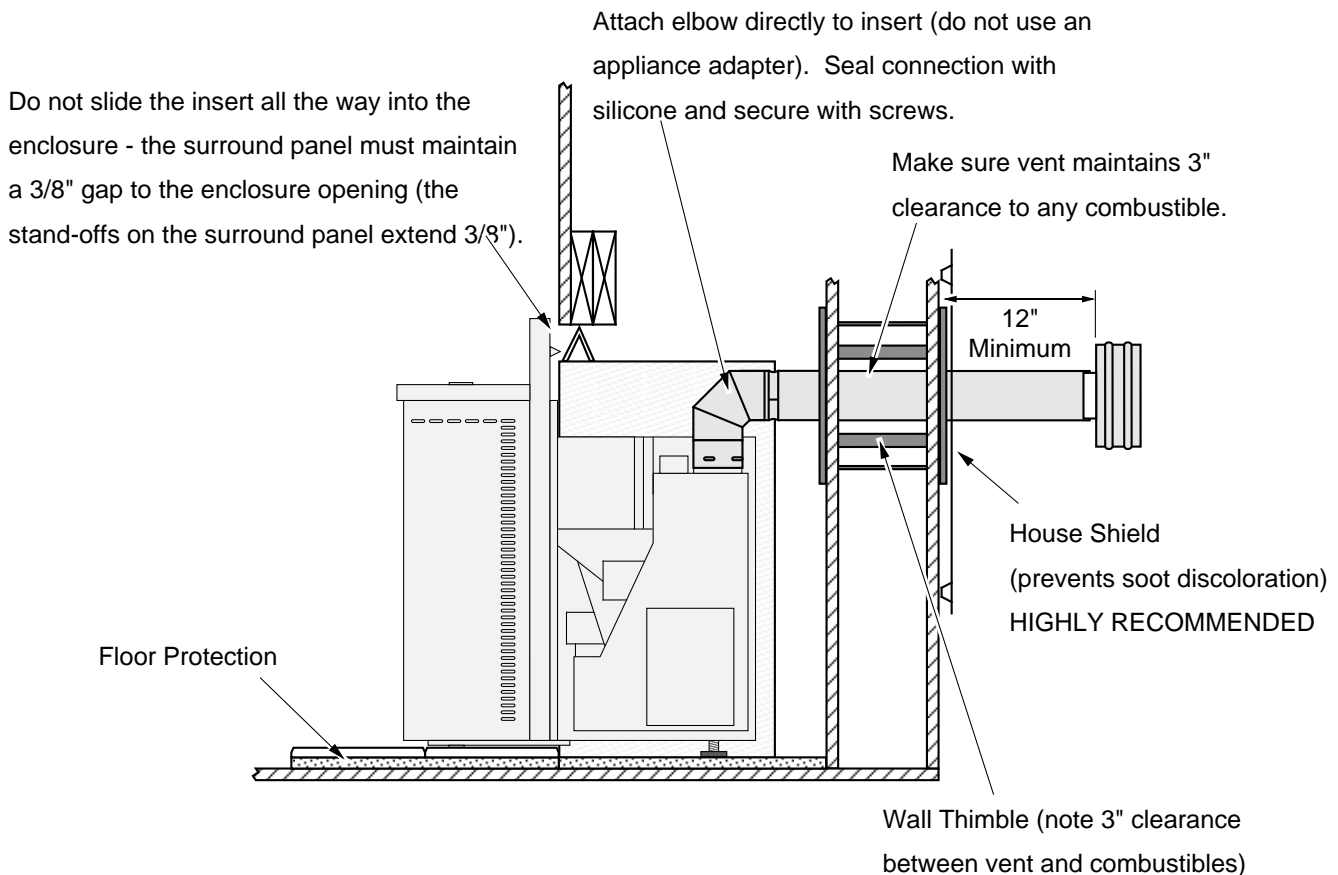
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## Insert Preparation and Placement

- Place the extending hopper into its highest position (see the manual for details). This increases the pellet capacity of the heater.
- Install the surround panel onto the insert and slide it into place. **Do not slide the insert all the way into the enclosure - the surround panel must maintain a 3/8" gap to the enclosure opening** (the stand-offs on the surround panel extend 3/8").
- The leveling bolts may be used to level the insert.
- We recommend the use of the Insert Wiring Kit when installing this kit (SKU 97200315). This kit allows for the power cord to be hard-wired behind the walls, eliminating the need for a visible power cord.

## Horizontal Vent Example



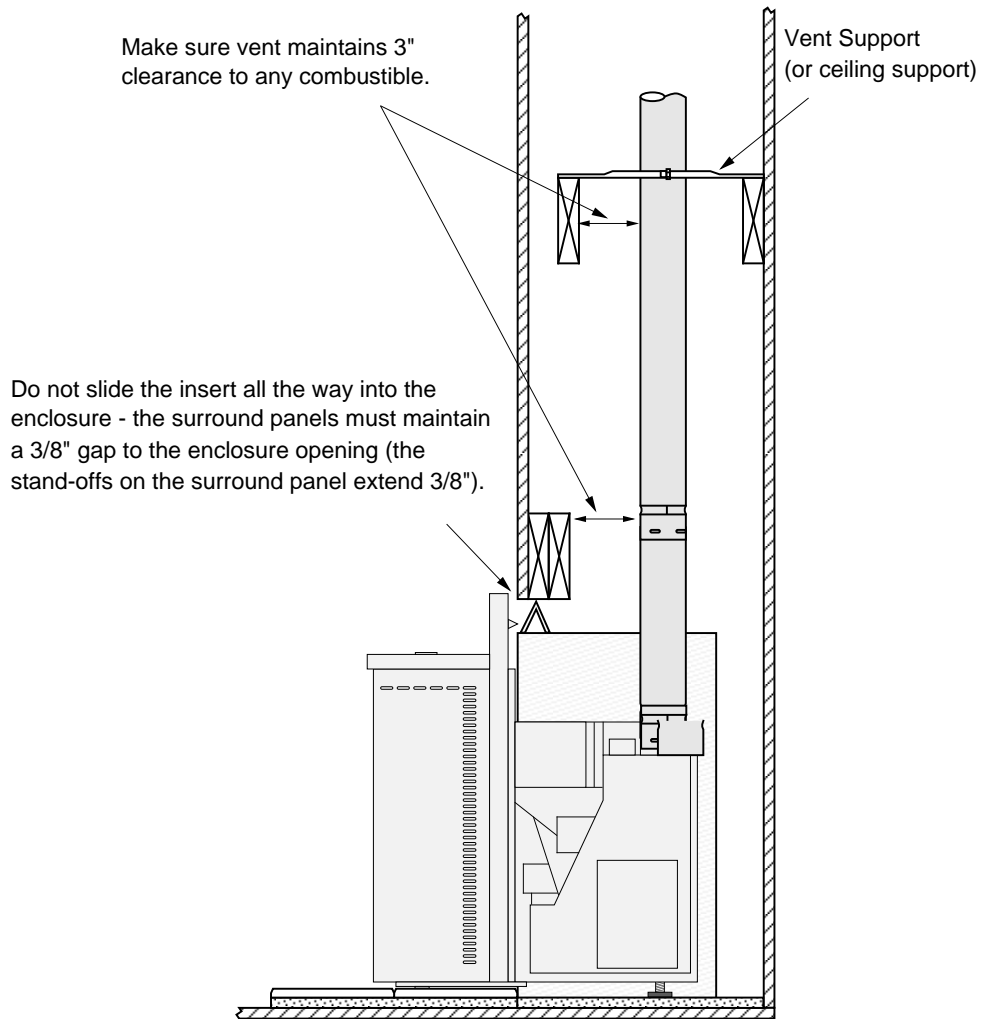




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## Vertical Vent Example





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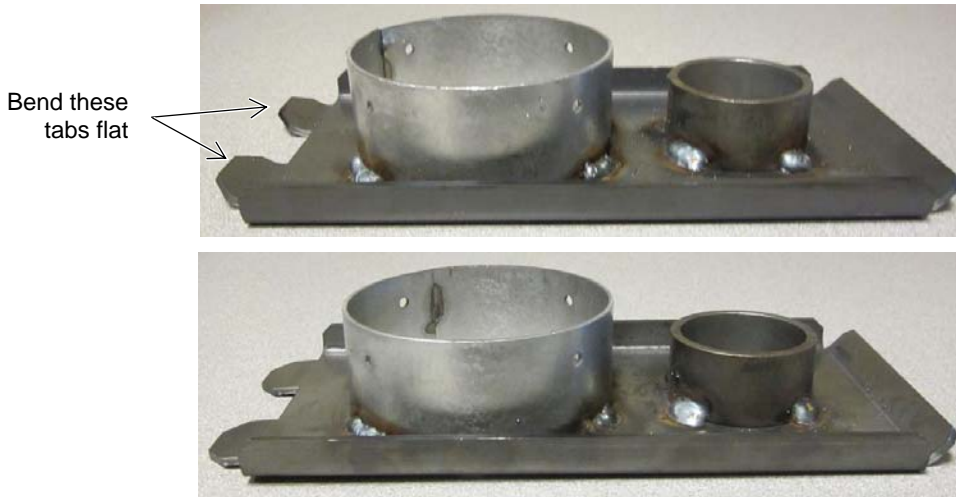
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## Modifying the Vent Connector to Allow for the Vent Detachment

The vent connector is designed for use with flexible vent inside a fireplace. When using the ZC Kit with vertically-routed rigid L-Vent that is not readily detached, you will want to modify the vent connector as shown below.

### *Instructions for Modifying the Vent Connector*

Remove the vent connector from the insert (see manual for full details). The tabs on the vent connector need to be flattened (or bent down approximately 5°). The best method for doing this is to use a bench vice (secure the tabs in the vice and rotate the vent connector until the tabs are flat). An alternative method is to clamp the vent connector to a secure bench and to use a hammer to flatten the tabs.



### *Instructions for Detaching the Vent Connector*



When re-installing the vent connector, make sure the silicone gasket remains in place and forms an air-tight seal to both the exhaust vent and air intake.

