Greenfire GFI55 Freestanding Insert Pellet Stove

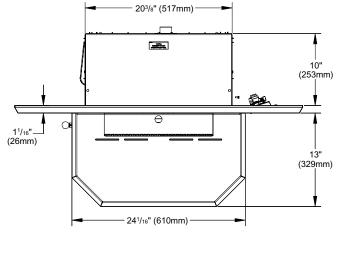
Model	GFI55
Cordwood BTU's	45,000 BTU's
Emissions (grams/hr) EPA Certified	0.89 gram/hr
Efficiency (EPA HHV)*	70%
Efficiency (EPA LHV)	74.5%
Flue Size	3" (76mm)
US Biomass Tax Rebate Eligible	No

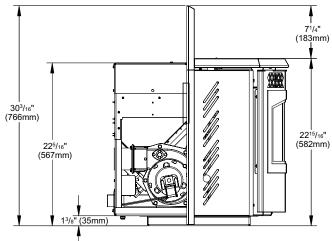
*US Biomass Tax Rebate eligibility is based on the HHV value being greater than or equal to 75%.

GFI55 DIMENSIONS

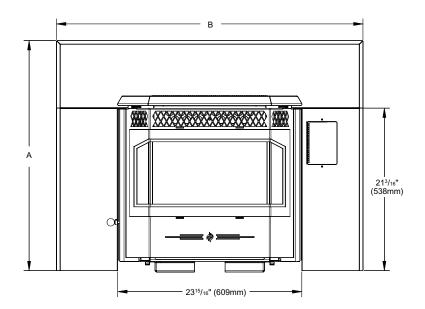


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FACEPLATE DIMENSIONS		
Regular Faceplate		
(A) Height	30" (761mm)	
(B) Width	39-15/16" (1014mm)	
Oversize Faceplate		
(A) Height	33" (838mm)	
(B) Width	45-15/16" (1167mm)	





CLEARANCES

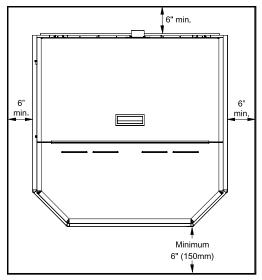
CLEARANCES TO COMBUSTIBLES

These dimensions are minimum clearances to combustibles, however it is highly recommended that you leave sufficient room on each side (20" where possible) for servicing, routine cleaning and maintenance.

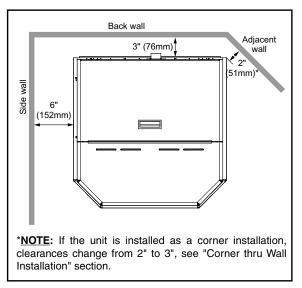
This pellet stove requires floor protection. The floor protection must be non-combustible, extending 6" (150mm) beyond the full width and depth of the unit including 6" (150mm) in front for ember protection.

Floor Protection:

Width 36-7/16" (934mm) Depth 36" (914mm)

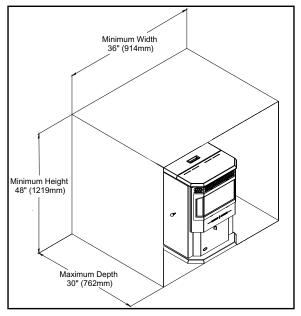


Floor Protection



Minimum Clearances to Combustibles

ALCOVE CLEARANCES



Alcove Clearances

MOBILE HOME INSTALLATION

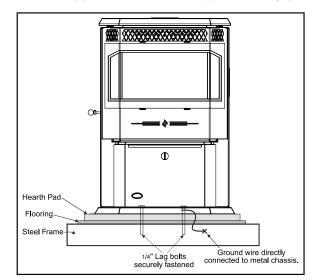
• Secure the heater to the floor using the holes in the pedestal of the appliance.

• Ensure the unit is electrically grounded to the chassis of your home (permanently).

WARNING: Do not install in a room people sleep in.

<u>CAUTION</u>: The structural integrity of the manufactured home floor, wall and ceiling/roof must be maintained

• Outside fresh air is mandatory. Secure outside air connections directly to fresh air intake pipe and secure with three (3) screws evenly spaced.

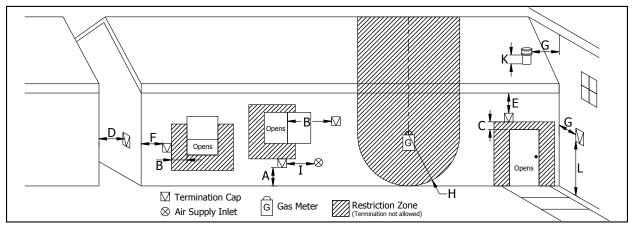


Mobile Home Install Mounting



VENT TERMINATION REQUIREMENTS

Letter	Minimum Clearance	Description
А	24 in (61cm)	Above grass, top of plants, wood, or any other combustible materials.
В	48 in (122cm)	From beside/below any door or window that may be opened. (18" [46cm] if outside fresh air installed).
С	12 in (30cm)	From above any door or window that may be opened. (9" [23cm] if outside fresh air installed).
D	24 in (61cm)	To any adjacent building, fences and protruding parts of the structure.
E	24 in (61cm)	Below any eave or roof overhang
F	12 in (30cm)	To outside corner.
G	12 in (30cm)	To inside corner, combustible wall (vertical and horizontal terminations).
Н	3 ft (91cm) within a height of 15 ft (4.5m) above the meter/regulator assembly	To each side of center line extended above natural gas or propane meter/ regulator assembly or mechanical vent.
I	3 ft (91cm)	From any forced air intake of other appliance.
J	12 in (30cm)	Clearance to non-mechanical air supply inlet to building, or the combustion air inlet to any appliance.
К	24 in (61cm)	Clearance above roof line for vertical terminations.
L	7 ft (2.13m)	Clearance above paved sidewalk or paved driveway located on public property.



Allowable exterior vent termination locations

1. Do not terminate the vent in any enclosed or semi-enclosed areas such as a carport, garage, attic, crawlspace, narrow walkway, closely fenced area, under a sundeck or porch, or any location that can build up a concentration of fumes such as stairwells, covered breezeway, etc.

2. Vent surfaces can become hot enough to cause burns if touched by children. Non-combustible shielding or guards may be required.

3. Termination must exhaust above the inlet elevation. It is recommended that at least five feet of vertical pipe be installed outside when the appliance is vented directly through a wall, to create some natural draft to prevent the possibility of smoke or odor during appliance shut down or power failure. This will keep exhaust from causing a nuisance or hazard from exposing people or shrubs to high temperatures. In any case, the safest and preferred venting method is to extend the vent through the roof vertically.

4. Distance from the bottom of the termination and grade is 12" (30 cm) minimum. This is conditional upon the plants and nature of grade surface. The exhaust gases are hot enough to ignite grass, plants and shrubs located in the vicinity of termination. The grade surface must not be lawn.

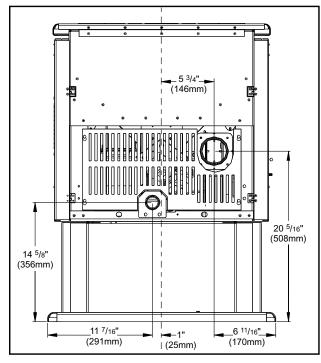
5. If the unit is incorrectly vented or the air to fuel mixture is out of balance, a slight discoloration of the exterior of the house might occur. Since these factors are beyond the control of FPI, we grant no guarantee against such incidents.

NOTE: Venting terminals shall not be recessed into walls or siding.

EXHAUST AND FRESH AIR INTAKE LOCATION

EXHAUST:		
Base of unit to center of flue	20-5/16" (508mm)	
Side of unit to center of flue	6-11/16" (170mm)	
Center of unit to center of flue	5-3/4" (146mm)	
FRESH AIR INTAKE:		
Base of unit to center of intake	14-5/8" (356mm)	
Side of unit to center of intake	11-7/16" (291mm)	
Center of unit to center of intake	1" (25mm)	

INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENTING MANUFACTURER.



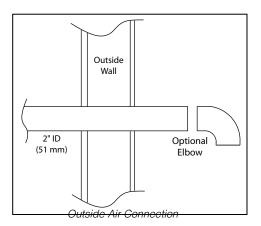
Freestanding Inlet and Outlet Location

Outside Fresh Air Connection:

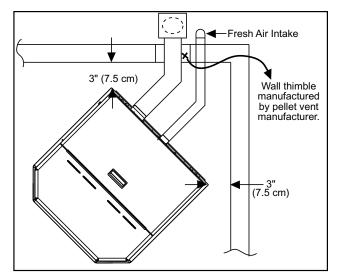
Outside fresh air is mandatory when installing this unit in airtight homes and mobile homes.

A Fresh-air intake is strongly recommended for all installations. Failure to install intake air may result in improper combustion as well as the unit smoking during power failures.

When connecting to an outside fresh air source, do not use plastic or combustible pipe. A 2" minimum (51mm) ID (inside diameter) steel, aluminum or copper pipe should be used. It is recommended, when you are installing a fresh air system, to keep the number of bends in the pipe to a minimum.



CORNER THROUGH WALL INSTALLATION



Corner Installation

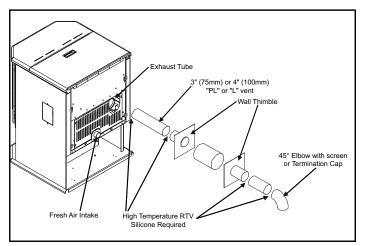


HORIZONTAL EXHAUST THROUGH WALL INSTALLATION

Vent installation: install vent at clearances specified by the vent manufacturer.

A chimney connector shall not pass through an attic or roof space, closet or similar concealed spaces, or a floor, or ceiling. Where passage through a wall or partition of combustible construction is desired, the installation shall conform to CAN/CSA-B365 Installation Code for Solid-Fuel-Burning Appliances and Equipment. Only use venting of L or PL type with an inside diameter of 3 or 4 inches (7.6 or 10.1cm).

- 1. Choose a location for your stove that meets the requirements stated in this manual and allows installation with the least amount of interference to house framing, plumbing, wiring, etc.
- 2. Install a non-combustible hearth pad (where necessary).
- 3. Place the appliance 15" (37.5cm) away from the wall. If the stove is to be set on a hearth pad, set the unit on it.
- Locate the center of the exhaust pipe on the stove. Extend that line to the wall. Once you have located the center point on the wall, refer to pellet vent manufacturer installation instructions for correct hole size and clearance to combustibles.
- Install the wall thimble as per the instructions written on the thimble. Maintain an effective vapour barrier in accordance with local building codes.
- Install a length of 3" (76mm) or 4" (101mm) vent pipe into the wall thimble. The pipe should install easily into the thimble.
- 7. Install the fresh air intake. See "Outside Fresh Air Connection" section.
- 8. Connect the exhaust vent pipe to the exhaust pipe on the stove. Seal the connection with high temperature silicone.
- 9. Push the stove straight back, leaving a minimum of 3" (8cm) clearance from the back of the stove to the wall. Seal the vent pipe to the thimble with high temperature silicone.
- 10. The pipe must extend at least 12" (30 cm) away from the building. If necessary, bring another length of pipe (PL type) to the outside of the home to connect to the first section. Do not forget to place high temperature silicone around the pipe that passes through the thimble.
- 11. Install a vertical pipe, or if all requirements for direct venting are met, install vent termination. The stainless steel cap termination manufactured by the vent manufacturer is recommended. However, when the vent terminates several feet above ground level and there are no trees, plants, etc. within several feet, a 45° elbow can be used as termination. The elbow must be turned down to prevent rain from entering.



Straight through wall Installation

NOTE:

• Some horizontal through wall installations may require a "T" and 3 to 5 feet (91 to 152cm) of vertical pipe outside the building to help naturally draft in the unit.

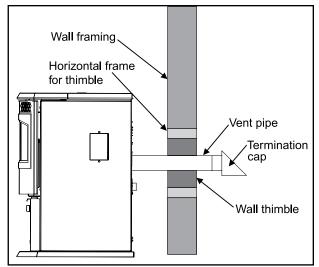
• This may be required if a proper burn cannot be maintained, after the stove has been tested and the airflow set.

• This is due to the back pressure in the exhaust caused by airflow around the structure.

• All sections of pipe must have three (3) screws evenly spaced and all horizontal and vertical vent sections located within the house must have a bead of high temperature silicone installed on the male end of the pipe before installation to create a gas tight seal.

• The termination must be 12 inches (30cm) from the outside wall and 12 inches (30cm) above the ground.

 \bullet A 45° elbow may be used in place of the termination cap (or stainless steel termination hood).

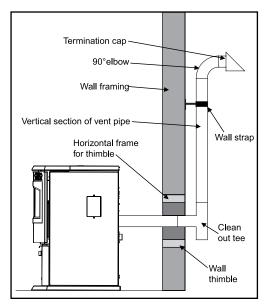


Straight through Wall Installation - Side View



VERTICAL RISE WITH HORIZONTAL TERMINATION INSTALLATION

A 45° elbow may be used in place of the termination cap (or stainless steel termination hood).



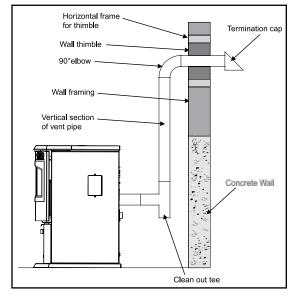
Through Wall with Horizontal Termination

THROUGH CONCRETE WALL WITH VERTICAL RISE INSTALLATION

A 45° elbow may be used in place of the termination cap (or stainless steel termination hood).

This is the recommended installation to use if there is a concrete or retaining wall in line with exhaust vent on pellet stove.

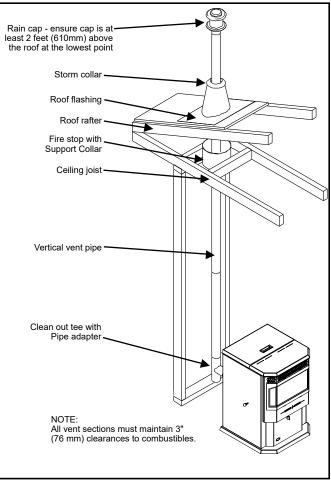
The termination must be 12 inches (30cm) from the outside wall and 12 inches (30cm) above the ground.



Vertical rise with Horizontal Termination

INSIDE VERTICAL INSTALLATIONS

- 1. Choose a stove location that is ideal. Refer to "Locating Your Pellet Appliance" section.
- 2. Place the unit on the hearth pad (if installed on a carpeted surface) and space the unit in a manner so when the pellet vent is installed vertically, it will be 3" (76mm) away from a combustible wall.
- Locate the center of the fresh air intake pipe on the unit. Match that center with the same point on the wall and cut a hole about 2" (51mm) in diameter.
- 4. Install the fresh air intake pipe.
- 5. Install the tee with clean out.
- 6. Install the pellet vent upward from there. When you reach the ceiling, make sure that the vent goes through the ceiling fire stop. Maintain a 3" (76mm) distance to combustibles and keep attic insulation away from the vent pipe. Maintain an effective vapor barrier.
- 7. Finally, extend the pellet vent to go through the roof flashing.
- 8. Ensure that the rain cap is at least 24" (610mm) above the roof at the shortest side of the vent.



Inside Vertical Installation

GFI55 PELLET INSERT CLEARANCES

CLEARANCES TO COMBUSTIBLES

The fireplace insert is certified to be installed into a masonry fireplace only and/or zero clearance wood burning factory built fireplace where allowed by local codes. This model includes a surround faceplate and a pedestal. When installing this unit, ensure that the pedestal is removed from the inside of the hopper and installed on the bottom of the unit.

From the body of the heater to the:	
Side Wall	8" (203mm) minimum
Facing on Masonry Fireplace:	8" (203mm) minimum
8" (203mm) mantle:	8" (203mm) minimum

FIREPLACE SPECIFICATIONS

Your fireplace opening requires the following minimum sizes:

Height 55 lbs hopper (standard) 42 lbs hopper (adjusted)	22.75" (578mm) 19.5" (495mm)
Width	26" (660mm)
Depth	15" (381mm)

INSTALLATION OF PEDESTAL AND LEVELLING LEGS

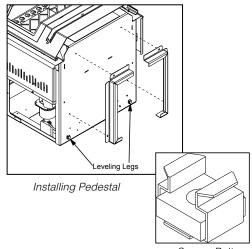
There are two parts to the GFI55 insert pedestal and they can be found inside the hopper. Place unit on its back. Two (2) hex head screws are used on each side of the pedestal (refer to Figure 22). Using a $\frac{5}{16}$ " wrench or socket, secure the pedestal to the bottom of the unit.

OPTIONAL:

There are two (2) leveling legs and they can be found inside the manual bag. Each leveling leg consists of a long bolt, a hex nut, a washer, and a square bolt with clip (see Figure 23). For installation of the leveling legs the unit should be on its back and a $\frac{1}{2}$ wrench is required for adjustments.

Install the square bolts into the square holes in the back corners of the bottom. The square bolt should be inserted from inside the unit so that the clip will be facing up.

Thread hex nut onto the bolt till it is approximately 1" (25mm) from the bolt head, slide washer onto bolt. Thread the bolt into the square nut so length of the bolt shown is the approximately height needed for leveling. When the unit is up right and the bolts can be adjusted to the exact height required. To lock the bolts at a height tighten the hex nut and washer against the square bolt.



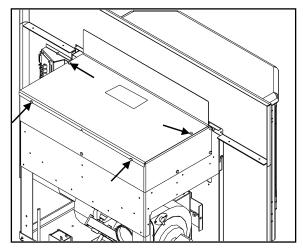
Square Bolt

INSTALLING HOPPER COVER AND ADJUSTING HOPPER HEIGHT

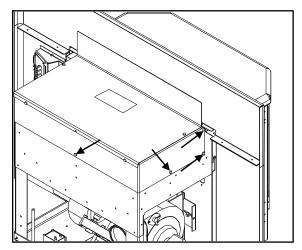
The hopper cover initially comes upside-down on top of the hopper. To install the hopper cover flip the cover over and fasten in place with four T-20 screws (see Figure 24).

The back height of this unit can be set to one (1) of three (3) heights; $19\frac{1}{2}$ " (495mm), 21" (537mm), 22 $\frac{1}{2}$ " (565mm). The hopper should be set to the maximum height that can be used in the installation.

To change the height of the hopper back up or down, remove the seven (7) T-20 screws, three (3) on each side and one (1) on the back. The screw placement is shown Figure 25. Move the hopper assembly to the required setting and replace the screws. When the hopper back is in place it is recommended that silicone is used to seal the bottom lip of the hopper back and sides.



Hopper Cover Screw Placement



Hopper Extension Screw Placement



THROUGH WALL VERTICAL RISE HORIZONTAL TERMINATION INSTALLATION - FREESTANDING

A termination cap is always recommended for this type of install but a stainless steel termination hood or a 45° elbow may be used in place of the cap.

Figure 1 is the recommended installation set up, venting length is negligible.

Figure 2 is the installation to use if there is a concrete or retaining wall in line with exhaust vent on a pellet stove. The termination must be 12" (30cm) from the outside wall and 12" (30cm) above the ground.

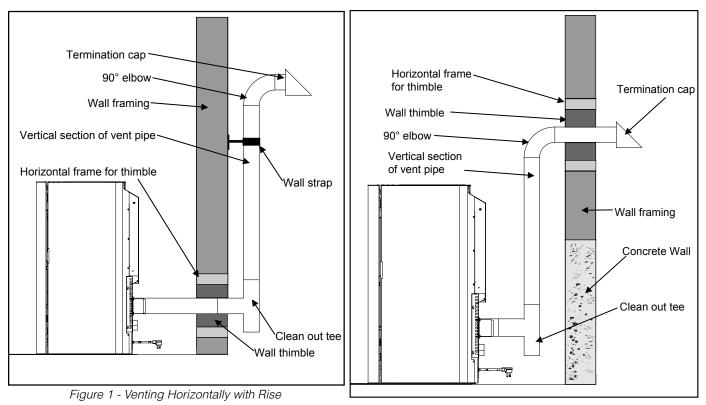


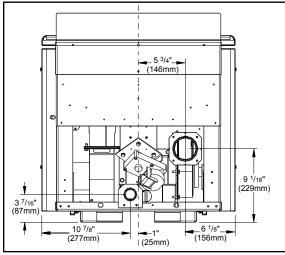
Figure 2 - Venting with Concrete Wall Behind Unit



EXHAUST AND FRESH AIR INTAKE LOCATION

EXHAUST:		
Base of unit to center of flue	9-1/16" (229mm)	
Side of unit to center of flue	6-1/8" (156mm)	
Center of unit to center of flue	5-3/4" (146mm)	
FRESH AIR INTAKE:		
Base of unit to center of intake	3-7/16" (87mm)	
Side of unit to center of intake	10-7/8" (277mm)	
Center of unit to center of intake	1" (25mm)	

INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENTING MANUFACTURER.



Insert Inlet and Outlet Location

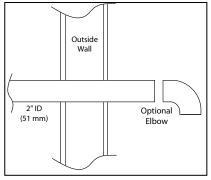
OUTSIDE FRESH AIR CONNECTION

Outside fresh air is mandatory when installing this unit in airtight homes and mobile homes.

A Fresh-air intake is strongly recommended for all installations.

Failure to install intake air may result in improper combustion as well as the unit smoking during power failures.

When connecting to an outside fresh air source, do not use plastic or combustible pipe. A 2" minimum (51mm) ID (inside diameter) steel, aluminum or copper pipe should be used. It is recommended, when you are installing a fresh air system, to keep the number of bends in the pipe to a minimum.



Outside Air Connection

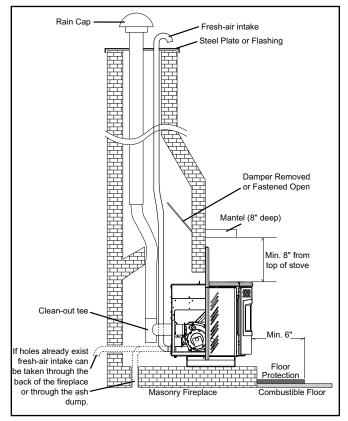
MASONRY FIREPLACE INSERT INSTALLATION

The GFI55 requires a surround faceplate and a pedestal. When installing this unit, ensure that the pedestal is removed from the inside of the hopper and installed on the bottom of the unit. Refer to "Installation of Pedestal and Leveling Legs".

Adjust hopper height - refer to "Installing Hopper Cover and Adjusting Hopper Height" and assemble surround panel. See "Installation and Removal of Control Panel in the Surround Panel" and "Assembly and Installation of Insert Surround Panels" before starting installation.

A non-combustible hearth pad must cover combustible flooring underneath, as well as 6" (150mm) in front of the heater and 6" (150mm) to the side of the heater

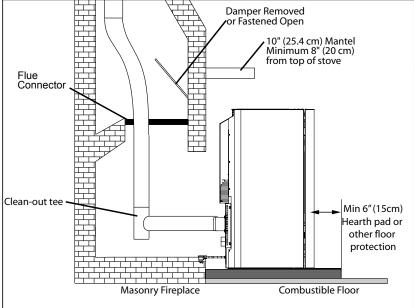
- 1. Install the hearth pad, if required.
- 2. Lock the fireplace damper in the open position.
- 3. Install a positive flue connector at the fireplace damper.
- 4. Connect a tee or 90° elbow to the exhaust pipe.
- 5. This fireplace insert must be installed with a continuous chimney liner of 3 or 4" diameter extending from the fireplace insert to the top of the chimney. The liner must conform to type 3 requirements of CAN/ULC S635. For lengths below 25' use 3" and increase to 4" if longer.
- **6.** (Recommended) Install fresh air intake either through the back of the fireplace or through the positive flue connector.



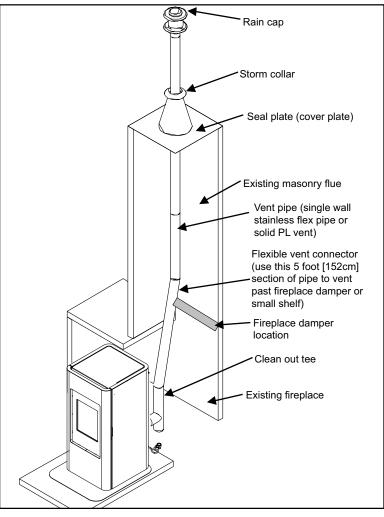
Installation of Fireplace Insert



HEARTH MOUNT INSTALLATION



Freestanding Hearth Mount Installation



Refer to Figures on the left:

- 1. Install the hearth pad.
- 2. Lock the fireplace damper in the open position.
- Install a positive flue connector at the fireplace dampers or seal the chimney at the top.
- 4. Connect a tee to the exhaust pipe.
- Install flexible stainless steel liner or listed pellet vent to the top of the chimney.

Freestanding Hearth Mount Installation Overview