



# Stove Installation

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## **Introduction**

Installation of your pellet or multi-fuel stove is very important for several reasons. Perhaps the most important is the safety of you and your family. However, installation can also have a large impact on the efficiency of your unit, how cleanly it burns, and even the longevity of some of the components on the stove. For all of these reasons we highly encourage you to avoid taking “short cuts” in the installation of your stove.

All of the information you need to properly install your unit is covered in your owner’s manual. However, we have also put together this small brochure in order to provide you with some additional information and detail. This brochure is not intended to be a complete reference for installation, but instead it is to be used in conjunction with the information in your owner’s manual.

In addition you should also check with your local building inspector and municipality to see if there is any additional permitting or installation requirements not covered in this brochure or your owner’s manual. Many municipalities do have more stringent guidelines than ours and you should make sure that you meet all such requirements.

## Overview

The standard installation of our stoves is a simple a straight-forward process that is discussed pretty well in the owner's manual. There you will find information about the minimum clearances and hearth pad requirements for your particular unit. Please be sure to consult the manual for these important guidelines as they are very important for the safety of you and your home.

## Electrical Installation

Breckwell stoves should **NOT** be connected to a GFCI (Ground Fault Circuit Interrupter) socket. A GFCI socket is what is commonly found in bathrooms, kitchens, basements, and exterior outlets. A GFCI socket will frequently cause erratic operation of the stove, and in some cases, the unit will not even function. The stove should be plugged into a standard three prong outlet.

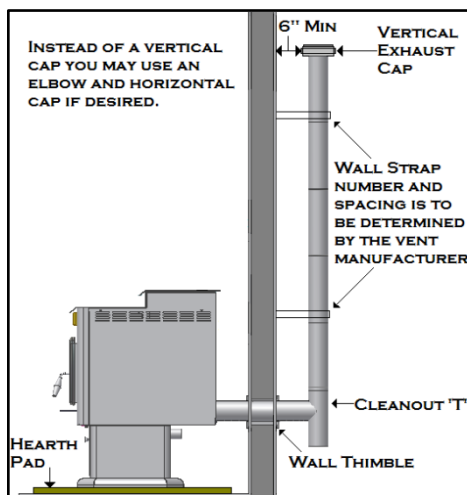
You should also use a quality surge protector. This will help to protect the stove from damaging power surges. There is a fuse on the back of the control panel (5A – 125V), but a surge protector will provide you with valuable added protection.

The average surge protector that you purchase off of the shelf is rated for 330 volts and 18 amps. What this means in practical terms is that the surge protector will only stop the electricity if it is higher than 330 volts or 18 amps. Although this is better than not using any surge protector, you can get added protection by purchasing one that is rated differently. Try and get a surge protector that is rated for 130 volts and 7 amps. The closer to these ratings you can get, the more protection you are providing for your stove.



GFCI Socket – Do NOT use

## Exhaust Flue



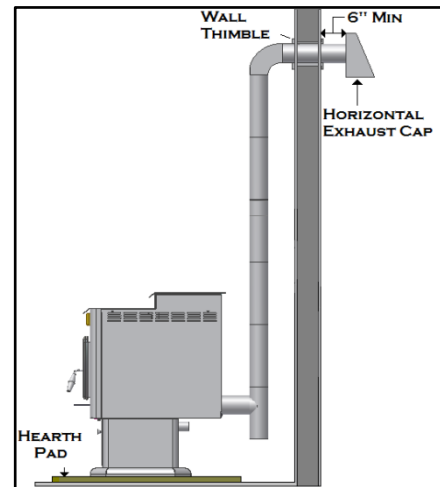
Recommended Installation

The exhaust configuration of your stove is extremely important. It will have a tremendous impact upon how efficiently and cleanly your stove will operate. This can affect how frequently you need to perform routine maintenance on your unit, how efficiently the fuel is burned, and even the longevity of some of your components.

The best installation for all free standing stoves is to simply go straight out the back of the unit and through the wall to a cleanout tee, and then 6' to 8' of vertical pipe. **This is the ideal venting solution and is recommended for all freestanding installations.**

The next best venting solution is to have most of the pipe actually be inside of the house. An example of this is shown to the right. This is also an acceptable venting solution that will help to ensure that your unit runs efficiently, cleanly, and does not negatively impact the longevity of your components.

It is highly recommended that you locate your new stove in a location of your home that allows you to install the unit as shown in either of these two examples. The more you deviate from either example the less efficiently your stove will operate and the more your required maintenance will increase.



Another Good Installation

Notice that with both of these recommended installations you have very little horizontal pipe and only one cleanout tee and perhaps one elbow. It is important to install your unit in such a way that the amount of horizontal pipe and the number of elbows is kept to an absolute minimum.

### Some Additional Concerns

1. If installing the stove in a corner and then running the exhaust flue out a side wall you should ALWAYS use 4" pipe regardless of your actual EVL.
  - a. Have a minimum of 6" of horizontal pipe off the back of the unit before you install an elbow to go out the side wall.
  - b. It is even more important to have 6' to 8' of vertical pipe.
2. You should never have more than 20' of vertical pipe on your exhaust. Having too much vertical pipe can actually cause a different set of problems.
3. It is best to install the unit so that the exhaust termination is protected from the wind. Try to avoid installing the stove on the high pressure side of the house (the side which catches most of the prevailing wind). If possible install on the low pressure side of the house.

### Direct Venting

There are a lot of people who like the idea of direct venting a pellet stove. In a direct venting situation you would simply go straight out the wall of the house and install a horizontal termination cap. The unit will function with this installation in most cases, but it is never recommended for several different reasons. The primary reason we do not recommend only horizontally venting the stove is that you will not have any vertical pipe to generate natural draft. There are circumstances when having some natural draft will improve the performance of your unit; especially with the P2000 and P2700 pellet stoves that have the large bay door.

In addition, if you do not have any natural draft and you were to experience a power outage or combustion blower failure while the unit is in operation, you will get smoke into the home. For these reasons and more we strongly recommend that you have a minimum of 6' of vertical pipe, and actually recommend 8' or more.