

This appliance has been retired.  
 Service parts pages within have been removed.  
 For replacement parts, please refer to the individual  
 service parts list located on the brand websites.

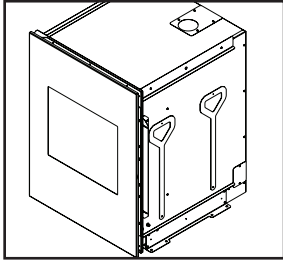
# QUADRA-FIRE®

Model:  
 EDGE60

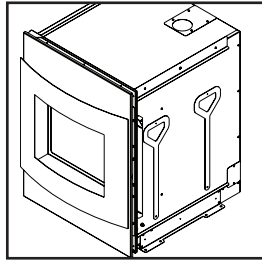
## EDGE™ 60 ZERO CLEARANCE PELLET FIREPLACE

Tested and  
 Listed by  Portland  
 Oregon USA  
 C US  
 OMNI-Test Laboratories, Inc.

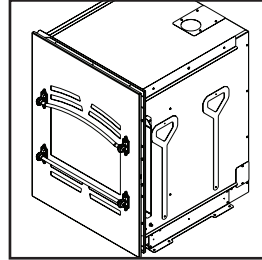
### Owner's Manual - Installation and Operation



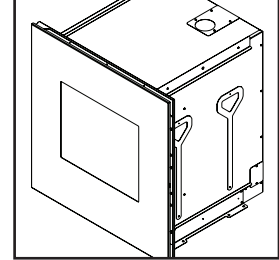
Natural



Curved



Tuscan



Studio

### NOTICE



#### DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.



### WARNING



Please read this entire manual before installation and use of this pellet fuel-burning room heater. Failure to follow these instructions could result in property damage, bodily injury or even death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not overfire - If any external part starts to glow, you are overfiring. Reduce flame height (feed rate). Overfiring will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.

### WARNING



#### HOT SURFACES!

Glass and other surfaces are hot during operation AND cool down.

#### Hot glass will cause burns.

- Do not touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

#### High temperatures may ignite clothing or other flammable materials.

- Keep clothing, furniture, draperies and other flammable materials away.

### CAUTION

Tested and approved for wood pellets, shelled field corn, wheat and black oil sunflower seeds. Burning of any other type of fuel voids your warranty.



Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends NFI certified professionals, or technicians supervised by an NFI certified professional.

*Congratulations* 

and Welcome to the Quadra-Fire Family!

Hearth & Home Technologies welcomes you to our tradition of excellence! In choosing a Quadra-Fire appliance, you have our assurance of commitment to quality, durability, and performance.

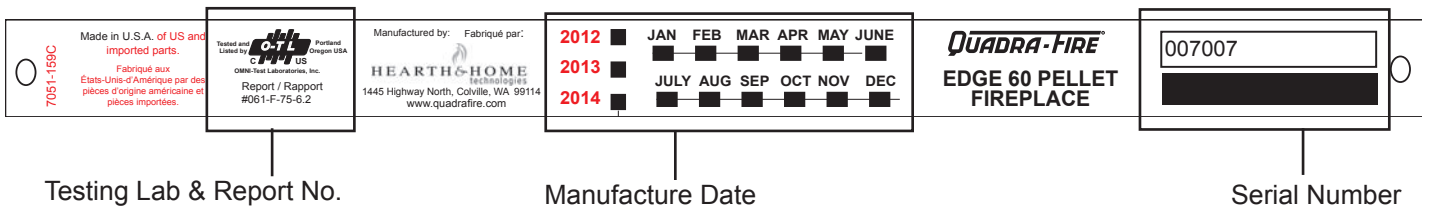
This commitment begins with our research of the market, including 'Voice of the Customer' contacts, ensuring we make products that will satisfy your needs. Our Research and Development facility then employs the world's most advanced technology to achieve the optimum operation of our stoves, inserts

and fireplaces. And yet we are old-fashioned when it comes to craftsmanship. Each unit is meticulously fabricated and surfaces are hand-finished for lasting beauty and enjoyment. Our pledge to quality is completed as each model undergoes a quality control inspection.

We wish you and your family many years of enjoyment in the warmth and comfort of your hearth appliance.

Thank you for choosing Quadra-Fire.

**LOCATION OF SERIAL NUMBER LABEL: Right Inside Edge of Outer Can (Fig. 2)**



**LOCATION OF CLEARANCE TO COMBUSTIBLES LABEL: Left Hand Panel of Hopper (Fig. 3)**

**CAUTION:** HOT WHILE IN OPERATION DO NOT TOUCH. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS. SEE NAMEPLATE AND INSTRUCTIONS. Operate this unit only with the fuel hopper lid closed. Failure to do so may result in emissions of products of combustion from the hopper under certain conditions. Maintain hopper seal in good condition. Do not overfill hopper.

**ATTENTION:** CHAUD LORS DE L'OPÉRATION. NE PAS TOUCHER. GARDEZ LES ENFANTS ET LES VÊTEMENTS LOIN DE L'ESPACE DÉSIGNÉ DE L'INSTALLATION. LE CONTACT PEUT CAUSER DES BRÛLURES À LA PEAU. VOIR L'ÉTIQUETTE ET LES INSTRUCTIONS. Opérez cet appareil avec le couvercle de la trémie fermé. Le défaut de ne pas suivre les instructions peut résulter, sous certaines conditions, en une combustion des émissions des produits venant de la trémie. Ne pas remplir la trémie trop pleine.

**SAFETY LABEL / ÉTIQUETTE DE SÉCURITÉ**  
**QUADRA-FIRE** EDGE 60 PELLET FIREPLACE

**MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS**

A Standoff to Back Wall	0 in. (0mm)
B Standoff to Side Walls	0 in. (0mm)
C Top Standoff to Header	0 in. (0mm)
D Vent Pipe to Combustible	*
E Floor Protection under Fireplace	None Required

\* Use Pipe Manufacturer's Listed Clearances, 1 inch (25mm) Minimum

**ESPACE LIBRES MINIMUM DES MATÉRIEAUX COMBUSTIBLES**

A Surfaces Mur de arrières	0 in. (0mm)
B Surfaces Mur de côté	0 in. (0mm)
C Surfaces supérieures à la hotte	0 in. (0mm)
D Conduits des combustibles	*
E Protection du plancher dessous cheminée. Ne pas requies	

\* NE PAS ENLEVER L'ÉTIQUETTE

**F** Floor Protection Extension From Door Opening 6 in (152mm)  
**G** Floor Protection to the Side of Door Opening 6 in (152mm)

**F** Protection du plancher agrandissement du foyer à ouverture du port: 6 in (152mm)  
**G** Protection du plancher de côté à ouverture du port: 6 in (152mm)

**ALL MATERIAL USED FOR FLOOR PROTECTION MUST BE NON-COMBUSTIBLE**  
**DO NOT REMOVE THIS LABEL. NE PAS ENLEVER L'ÉTIQUETTE.**



Figure 2 - Serial Number Label

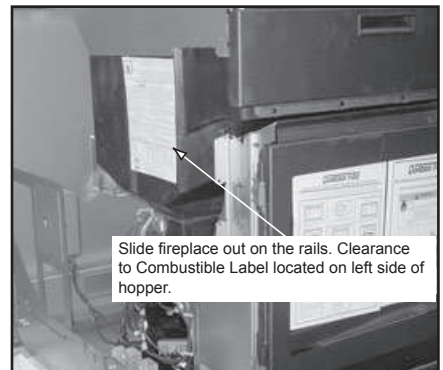


Figure 3 - Clearance to Combustibles Label

**⚠ Safety Alert Key:**

- **DANGER!** Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- **WARNING!** Indicates a hazardous situation which, if not avoided could result in death or serious injury.
- **CAUTION!** Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- **NOTICE:** Indicates practices which may cause damage to the fireplace or to property.

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**Hearth & Home Technologies Inc.  
LIMITED LIFETIME WARRANTY**

Hearth & Home Technologies Inc., on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet, coal and electric hearth appliances that are purchased from an HHT authorized dealer.

**WARRANTY COVERAGE:**

HHT warrants to the original owner of the HHT appliance at the site of installation, and to any transferee taking ownership of the appliance at the site of installation within two years following the date of original purchase, that the HHT appliance will be free from defects in materials and workmanship at the time of manufacture. After installation, if covered components manufactured by HHT are found to be defective in materials or workmanship during the applicable warranty period, HHT will, at its option, repair or replace the covered components. HHT, at its own discretion, may fully discharge all of its obligations under such warranties by replacing the product itself or refunding the verified purchase price of the product itself. The maximum amount recoverable under this warranty is limited to the purchase price of the product. This warranty is subject to conditions, exclusions and limitations as described below.

**WARRANTY PERIOD:**

Warranty coverage begins on the date of installation. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized HHT dealer/ distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from HHT, regardless of the installation or occupancy date. The warranty period for parts and labor for covered components is produced in the following table.

The term "Limited Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood, pellet, and coal appliances. These time periods reflect the minimum expected useful lives of the designated components under normal operating conditions.

Warranty Period		HHT Manufactured Appliances and Venting							Components Covered
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Coal	Electric	Venting	
1 Year		X	X	X	X	X	X	X	All parts and material except as covered by Conditions, Exclusions, and Limitations listed
2 years				X	X	X			Igniters, electronic components, and glass
		X	X	X	X	X			Factory-installed blowers
			X						Molded refractory panels
3 years				X					Firepots and burnpots
5 years	1 year			X	X				Castings and baffles
7 years	3 years		X	X	X				Manifold tubes, HHT chimney and termination
10 years	1 year	X							Burners, logs and refractory
Limited Lifetime	3 years	X	X	X	X	X			Firebox and heat exchanger
90 Days		X	X	X	X	X	X	X	All replacement parts beyond warranty period

See conditions, exclusions, and limitations on next page.

**WARRANTY CONDITIONS:**

- This warranty only covers HHT appliances that are purchased through an HHT authorized dealer or distributor. A list of HHT authorized dealers is available on the HHT branded websites.
- This warranty is only valid while the HHT appliance remains at the site of original installation.
- Contact your installing dealer for warranty service. If the installing dealer is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking warranty service from a dealer other than the dealer from whom you originally purchased the product.
- Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.

**WARRANTY EXCLUSIONS:**

This warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items, or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the warranty period. These parts include: paint, wood, pellet and coal gaskets; firebricks; grates; flame guides; and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the appliance in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the appliance; (2) failure to install the appliance in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operating instructions; (7) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the appliance.
- Non-HHT venting components, hearth components or other accessories used in conjunction with the appliance.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas appliance is installed.
- HHT's obligation under this warranty does not extend to the appliance's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

**This warranty is void if:**

- The appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The appliance is subjected to prolonged periods of dampness or condensation.
- There is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

**LIMITATIONS OF LIABILITY:**

- The owner's exclusive remedy and HHT's sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will HHT be liable for any incidental or consequential damages caused by defects in the appliance. Some states do not allow exclusions or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state. EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE.

# 1 Listing and Code Approvals

## A. Appliance Certification

<b>Model</b>	EDGE™ 60 Pellet Fireplace
<b>Laboratory</b>	OMNI Test Laboratories, Inc.
<b>Report No.</b>	061-F-75-6.2
<b>Type</b>	Solid Fuel Room Heater/Pellet Type
<b>Standard</b>	ASTM E1509-04, ULC S627-00 and ULC/ORD-C1482 Room Heater Pellet Fuel Burning type and (UM) 84-HUD, Mobile Home Approved.
<b>FCC</b>	Complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**NOTICE:** This installation must conform with local codes. In the absence of local codes you must comply with the **ASTM E1509-04, ULC S627-00, (UM) 84-HUD and ULC/ORD-C-1482.**

## B. Mobile Home Approved

This appliance is approved for mobile home installations when not installed in a sleeping room and when an outside combustion air inlet is used.

The structural integrity of the mobile home floor, ceiling, and walls must be maintained.

The appliance must be properly grounded to the frame of the mobile home and use only Listed pellet vent Class “L” or “PL” connector pipe.

A Quadra-Fire Outside Air Kit must be installed in a mobile home installation. You must order the Outside Air Kit separately.

**Note:** The appliance is also approved for installation into a shop.

## C. Glass Specifications

This appliance is equipped with 5mm ceramic glass. Replace glass only with 5mm ceramic glass. Please contact your dealer for replacement glass.

## D. Electrical Rating

115 VAC, 60 Hz, Start 5 Amps, Run 1.25 Amps

## E. Outside Air Kit

Outside Air is **required** on all installations. You must order the Outside Air Kit separately.

## F. BTU & Efficiency Specifications

<b>Emissions Rating:</b>	EPA Compliance
<b>BTU Input*:</b>	14,620 - 52,000 / hr
<b>Efficiency:</b>	83.3%
<b>Heating Capacity:</b>	2,400 - 3,800 square feet depending on climate zone
<b>Hopper Capacity:</b>	120 lbs
<b>Fuels:</b>	Pellets, Shelled Field Corn, Wheat and Black Sunflower Seeds
<b>Shipping Weight:</b>	450 lbs (empty hopper)
<b>Weight with Full Hopper:</b>	add approximately 120 lbs

\*BTU will vary, depending on the type of fuel you use in your fireplace. Consult your Quadra-Fire dealer for best results.

**WARNING! Risk of Fire!** Hearth & Home Technologies disclaims any responsibility for, and the warranty and agency listing will be voided by the below actions.

### DO NOT:

- Install or operate damaged appliance
- Modify appliance
- Install other than as instructed by Hearth & Home Technologies
- Operate the appliance without fully assembling all components
- Overfire
- Install any component not approved by Hearth & Home Technologies
- Install parts or components not Listed or approved.

*Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage.*

*For assistance or additional information, consult a qualified installer, service agency or your dealer.*

**NOTICE:** Hearth & Home Technologies, manufacturer of this appliance, reserves the right to alter its products, their specifications and/or price without notice.

Quadra-Fire is a registered trademark of Hearth & Home Technologies.



# User's Guide

## 2 Operating Instructions

### WARNING



#### **HOT SURFACES!**

Glass and other surfaces are hot during operation AND cool down.

#### **Hot glass will cause burns.**

- Do not touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

#### **High temperatures may ignite clothing or other flammable materials.**

- Keep clothing, furniture, draperies and other flammable materials away.

***WARNING! Do not operate appliance before reading and understanding the operating instructions in both of the Owner's and Thermostat Wall Control manuals. Failure to operate appliance according to operating instructions could cause fire or injury.***

### **CAUTION**

Use only approved fuel. This unit was tested and approved for wood pellets, shelled field corn, wheat and black oil sunflower seeds. Burning of any other type of fuel voids your warranty.

## A. Fire Safety

To provide reasonable fire safety, the following should be given serious consideration:

- Install at least one smoke detector and CO monitor on each floor of your home.
- Locate detectors away from the heating appliance and close to the sleeping areas.
- Follow the detector's manufacturer's placement and installation instructions and maintain regularly.
- Conveniently locate a Class A fire extinguisher to contend with small fires.
- In the event of a hopper fire:
  - Evacuate the house immediately.
  - Notify fire department.

## B. Combustible/Non-Combustible Materials

### • Combustible Material

Material made of or surfaced with wood, compressed paper, plant fibers, plastics, or any material capable of igniting and burning, whether flame-proofed or not, plastered or unplastered.

### • Non-combustible Material

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, slate, glass or plasters, or any combination thereof.

### • Non-combustible Sealant Material

Sealants which will not ignite and burn: Rutland, Inc. Fireplace Mortar #63, Rutland 76R, Nuflex 304, GE RTV106 or GE RTB116 (or equivalent).

## C. Fuel Material and Fuel Storage

Pellet fuel quality can greatly fluctuate. The EDGE 60 appliance has been designed to burn a wide variety of fuels, giving you the choice to use the fuel that is most economical in your region.

Hearth & Home Technologies strongly recommends only using Pellet Fuel Institute (PFI) certified fuel.

### Fuel Material

- Made from sawdust or wood by-products
- Shelled field corn & other biomass fuels
- Depending on the source material it may have a high or low ash content.

### Higher Ash Content Material

- Hardwoods with a high mineral content
- Fuel that contains bark
- Standard grade pellets, high ash pellets, corn and other biomass fuels

### Lower Ash Content Material

- Softwoods
- Fuels with low mineral content
- Premium grade pellets

### Shelled Field Corn

- Must be 15% or less moisture content.
- Must be clean and free from debris
- Never burn corn straight from the field
- Stalk parts, excessive fines and cob remnants, etc. will clog the auger mechanism
- Corn with excessive grain dust must be screened by sifting with 3/16 inch (4.7mm) mesh screening

**CAUTION! Do not burn fuel that contains an additive; (such as soybean oil).**

- May cause hopper fires
- Damage to product may result

*Read the ingredients list on the package. If you are buying corn or wheat the only ingredient that should be listed is corn or wheat.*

### **WARNING! Risk of Chemical Poisoning!**

Do **NOT** burn treated seed corn

- Chemical pesticides are harmful or fatal if swallowed
- Burning treated seed corn will void your warranty

### Clinkers

Minerals and other non-combustible materials such as sand will turn into a hard, glass-like substance called a clinker when heated in the firepot.

Trees from different areas will vary in mineral content. That is why some fuels produce more clinkers than others.

### Moisture

Always burn dry fuel. Burning fuel with high moisture content takes heat from the fuel and tends to cool the appliance, robbing heat from your home. Damp pellet fuel can clog the feed system.

### Size

- Pellets are either 1/4 inch or 5/16 inch (6-8mm) in diameter
- Length should be no more than 1-1/2 inches (38mm)
- Pellet lengths can vary from lot to lot from the same manufacturer
- Due to length variations, the flame height (feed rate) may need adjusting occasionally. See **page 12** for instructions.

### Performance

- Higher ash content requires the ash drawer to be emptied more frequently
- Hardwoods require more air to burn properly
- Set wall control to "Utility Pellet" if the firepot and ash pan are filling quickly. This will cause the auto-clean system to empty the firepot more often.
- Premium wood pellets produce the highest heat output.
- Burning pellets longer than 1-1/2 inches (38mm) can cause an inconsistent fuel feed rate and/or missed ignitions.

We recommend that you buy fuel in multi-ton lots whenever possible. However, we do recommend trying various brands before purchasing multi-ton lots to ensure your satisfaction.



**CAUTION!** Tested and approved for wood pellets, shelled field corn, wheat and black oil sunflower seeds. Burning of any other type of fuel voids your warranty.

Changing to Different Fuel Type

- Empty the hopper of the previous fuel
- Thoroughly vacuum hopper before filling with the new fuel
- Select the appropriate setting on the FUEL SELECTION screen on the thermostat wall control

The burn rate, BTU content and heat output will all vary depending on the fuel selected.

Storage

- Wood pellets should be left in their original sealed bag until using to prevent moisture absorption.
- Shelled corn, wheat or sunflower seeds should be stored in a tight container to prevent it from absorbing moisture from damp or wet floors.
- This will also prevent rodents from becoming a problem.
- Do not store any pellet fuel within the clearance requirements or in an area that would hinder routine cleaning and maintenance.

**D. General Operating Information**

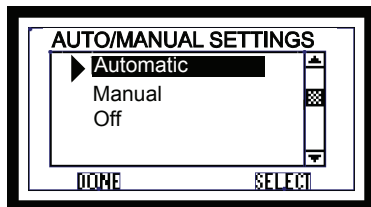
Read and understand the Thermostat Wall Control manual for detailed operating instructions. The wall control is an integral part of how to operate this appliance.

**1. Thermostat Wall Control - Automatic Setting**

The appliance is like most modern furnaces; when the thermostat wall control calls for heat, your appliance will automatically light and deliver heat.

When the room is up to temperature and the wall control is satisfied the appliance will shut down.

In the automatic setting the heat output level is controlled by the wall control. Select "Automatic" on the AUTO/MANUAL screen. **Figure 9.1.**

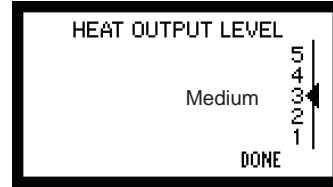


**Figure 9.1**

**2. Thermostat Wall Control - Manual Setting**

When you select "Manual" on the AUTO/MANUAL screen the appliance will still automatically turn on and off according to the temperature setting.

However, you will be able to manually control the heat output levels. Adjust the heat output levels by using the HEAT OUTPUT LEVEL screen. **Figure 9.2.**



**Figure 9.2**

**3. Auto-Clean Firepot System**

Your appliance is equipped with an automatic firepot cleaning system that will change the frequency of cleaning based on the fuel being burned.

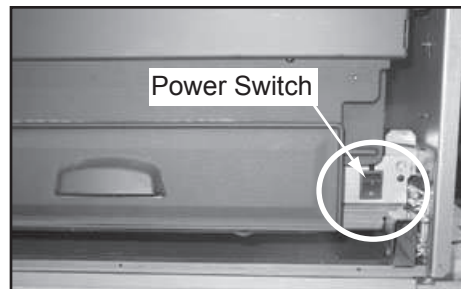
The auto-clean system will clean itself immediately on initial plug in. If there is a power outage, as soon as power is restored it will recycle and clean itself if there is no fire in the firepot.

**NOTE:** User is responsible for removing the ash from the ash drawer.

**E. Power Switch**

The power switch is located at the bottom right hand corner of the fireplace. It turns the power on and off to the fireplace.

Before servicing the fireplace this power switch must be in the off position. When the power switch is OFF there will be no display on the wall control screen.



**Figure 9.3**

**F. Before Your First Fire**

- First, make sure your appliance has been properly installed and that all safety requirements have been met.
- Pay particular attention to the fire protection, venting and thermostat wall control installation instructions.
- Double check that the ash pan, hopper and firebox are empty and then close the firebox door.

**NOTICE:** The tip of thermocouple must be in contact with the inside end of the thermocouple cover or missed ignitions can occur.

**G. Filling the Hopper with Fuel**

- Check the hopper and make sure it is empty before filling with fuel.
- Open the front to expose the hopper door. Pull down on the hopper door to open and fill with fuel. The hopper door can now serve as a shelf to support the bag of fuel
- Do not over fill the hopper. The hopper door must be completely closed to maintain proper vacuum and for the feed motor to operate. An error ICON will appear on the wall control if the hopper door is not properly closed.
- Do not leave any part of the fuel bag on the appliance after filling hopper.

**NOTICE: RAISED PLATFORM INSTALLATIONS**

Consideration must be given for filling the hopper with fuel when determining the height of the raised platform. It must not be so high that it interferes with the safety of filling the hopper with fuel.

**H. Starting Your First Fire**

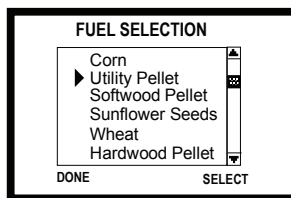
**1. Fuel Selection**

To start your first fire, you must:

- Select the appropriate fuel on the FUEL SELECTION screen on the thermostat wall control to match the fuel you have chosen to burn.
- If the proper fuel is not selected your appliance will not operate properly.
- For example, if you have selected wood pellets and you are burning corn, the appliance may not light, it may go out or overfeed. **Figure 10.1.**

**NOTE:** If you are lighting your appliance for the first time:

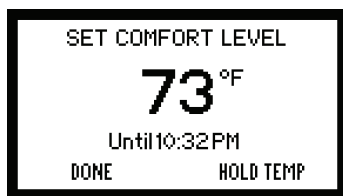
- The feed tube will be empty and it can take some time to fill it with fuel before you will see a fire
- Put a handful of fuel in the firepot (priming) to speed up the process. You can also do this when you have run completely out of fuel.



**Figure 10.1**

**2. Comfort Level Selection**

Once your fuel is selected, select the temperature at the desired setting on the SET COMFORT LEVEL screen. **Figure 10.2.**



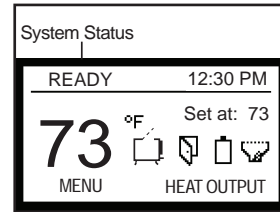
**Figure 10.2**

**3. Automatic or Manual Setting**

The automatic setting will control the heat output based on the comfort level selection. The manual setting allows you to manually control the heat output settings.

**I. Ignition Cycles**

The fireplace engine is controlled by the digital thermostat wall control. The digital display on the wall control will tell you what your appliance is doing in the upper left corner (System Status). **Figure 10.3.**



**Figure 10.3**

Every time the thermostat calls for heat, the appliance steps through five cycles:

1	Start-Up Cycle	4	Shutdown Cycle
2	Soft-Start Cycle	5	Auto-Clean Cycle
3	Heating Cycle		

The duration and characteristics of these cycles may be different with each type of fuel selected.

**WARNING! RISK OF FIRE!**

*Do NOT operate appliance:*

- *With appliance door open*
- *With firepot floor open*
- *With ash pan removed*
- *Without the two slide rail attachment bolts secured to fireplace*

**1. Start-Up Cycle**

During this cycle:

- Igniter turns on for 90 seconds to heat up the air in the firepot
- Combustion blower starts
- Vacuum switch comes on
- Feed motor turns on adding fuel to the firepot and the appliance waits for the fire to start

The duration of start-up depends on the type and quality of fuel used. It is normal to see some smoke during the ignition process as moisture evaporates and the fuel lights. The smoke will stop once the fire starts.

## 2. Soft Start Cycle (SS-Low / SS-Med)

Once the fire is lit:

- The appliance moves into the low soft-start cycle as it continues to build the fire
- More fuel will be added
- As the fire builds, the appliance will change to medium soft-start mode
- The heating cycle begins

## 3. Heating Cycle ( Auto / Man - L, ML, M, MH, H)

There are two choices in the Automatic / Manual menu of how your appliance will operate:

### **Automatic Mode**

- The wall control will turn the heat output level up or down depending on how far the room temperature is from the desired temperature
- The digital display will read AUTO:M, i.e. automatic-medium level
- As the room temperature approaches the desired temperature, the appliance will turn down to lower settings
- When the home reaches your set temperature, the appliance will go into the shutdown cycle

### **Manual Mode**

- Set the heat output setting from the main screen
- The right bottom button will read HEAT OUTPUT
- You can operate the appliance from any of the 5 levels
  - On the lowest level (MAN:L) the appliance will stay on longer, burn less fuel per hour, and will take longer to bring the home up to your desired temperature
  - On the highest setting (MAN:H) the appliance will burn more fuel per hour, and bring your home up to temperature more quickly
- In Manual mode the heat output does not change but will stay at the setting you chose until the comfort level is reached (meaning the thermostat has been satisfied). Turn to OFF to stop operation.

## 4. Shutdown Cycle

Once your home has reached your set temperature:

- Appliance will stop feeding fuel and allow the fire to diminish
- Convection blower will continue to run until the appliance cools to appropriate temperature
- Appliance will begin the auto-clean cycle

## 5. Auto-Clean Cycle

The firepot auto-clean system will cycle:

- When the appliance is first plugged in
- When the house reaches temperature and the appliance shuts down
- At prescribed intervals, depending on the type of fuel selected
- When starting up after an electrical interruption

If your appliance is running and the auto-clean cycle is initiated, the appliance will revert to shutdown cycle.

- The floor of the firepot will open and dump the ash into the ash pan
- It takes approximately 2 minutes to complete the auto-clean cycle
- The floor will then shut, and if the thermostat is still calling for heat, the fire will start again
- During this auto-clean cycle, the convection blower may continue to run. The combustion blower will continue to run.

### **Additional Screen Messages:**

**READY** It is telling you that the home is up to temperature and doesn't need any heat.

**- - - - -** The screen will show 5 dashes when the wall control and the control board are NOT communicating with each other. Check that the wiring on the thermostat is properly connected.

**MAINTENANCE BURN** This indicates the appliance is operating on battery backup, prior to the auto-clean. The maintenance burn will keep the system from shutting down as the appliance will not automatically re-light in battery back-up mode.

**OFF** The AUTO/MANUAL SETTING screen has been set to OFF. Set the appliance to OFF when performing periodic maintenance to prevent an unexpected startup.

**BLANK SCREEN** The ON/OFF switch may in OFF position. Turn to ON position.

## **CAUTION**

Tested and approved for wood pellets, shelled field corn, wheat and black oil sunflower seeds. Burning of any other type of fuel voids your warranty.

## J. Fire Characteristics and Flame Height (Feed Rate) Adjustment

A properly adjusted fire will have an active flame pattern and the flame will rise and fall somewhat. This is normal.

- On HIGH setting, the flame will extend approximately 203mm out of the firepot. If it is not 203mm tall, increase the flame height.
- On MEDIUM or LOW setting the flame will be shorter.
- Reduce the flame height if the fire has tall flames with black tails and seems somewhat lazy. This may also indicate that the firepot and/or heat exchanger needs to be cleaned. Refer to Section 3 for Maintenance and Cleaning Instructions.

### Adjusting the Flame Height (Feed Rate)

- Set your appliance to “MANUAL” mode on the wall control.
- Set the heat output level to HIGH.
- Adjust the flame height using the “FLAME HEIGHT ADJUST” screen on the wall control. **Figure 12.1.**

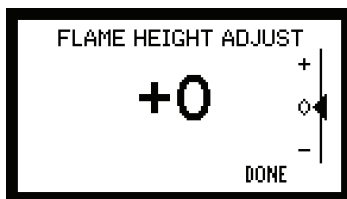


Figure 12.1

## K. Battery Back-up System (Optional)

### CAUTION!

- Hook up to battery terminals BEFORE you plug battery into appliance.
- Damage to internal electronic components may occur.

The appliance has been designed to operate on an optional battery back-up system.

If you have frequent power outages in your region, hook the appliance up to a 12 volt battery and it will automatically switch to battery power in the event of a power failure. The 12 volt power cord, sold as a separate accessory, does not charge the battery.

### WARNING! Risk of Injury!

- Do not operate in the battery back-up mode with the appliance pulled out on the slide rails.
- Blowers may continue to run and would be exposed to human contact.

### Instructions to Hook Up to Battery Back-Up

Open Front to expose battery plug on bottom left side of fireplace. Plug in the battery. **Figure 12.2.** Be sure the bolts securing the unit in place are installed and secured.

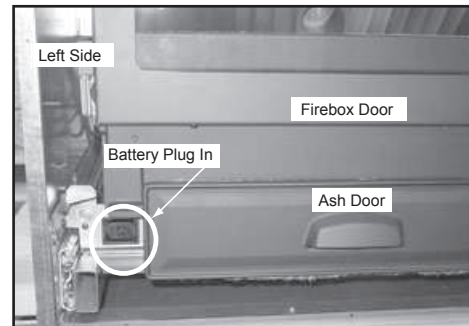


Figure 12.2

### Operating on Battery Back-Up

- A battery icon appears on your wall control to let you know you are now operating on battery power. **Figure 12.3**
- The fire must be manually lit as the appliance will no longer automatically light. Follow the instructions in the Wall Control Manual.
- Use only approved fire starting gel to start the fire.
- The high burn rate is no longer available on battery back-up.
- Each level drops down one level, i.e. the high burn becomes medium-high burn and so on.
- If the battery charge falls below 10 volt it can no longer sustain the appliance operation and the appliance will shut down. You must disconnect and reconnect the battery to start it up again.

### Recommended Battery

- 12 volt deep cycle battery, (i.e., marine or RV type).
- A 12 volt battery cable is available through your local dealer.

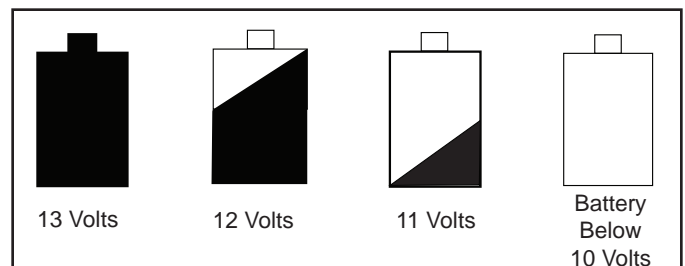
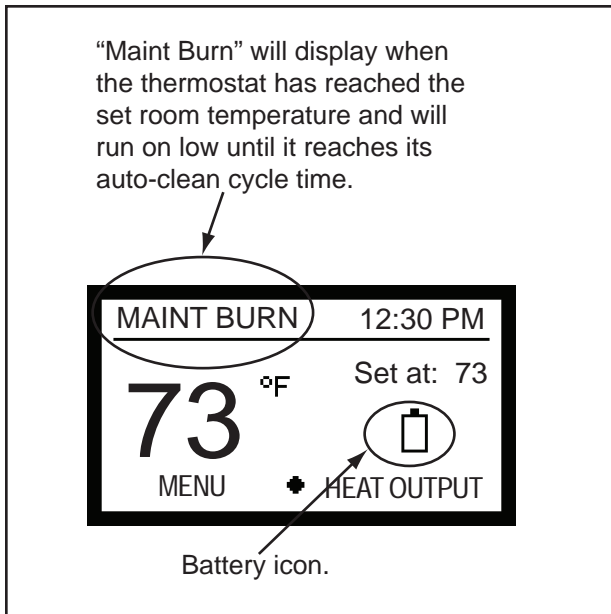


Figure 12.3

**K. Battery Back-up System (Cont'd)**

Wall Control Display

The wall control will display the battery icon when operating in the battery back-up mode. **Figure 13.1.**



**Figure 13.1**

**L. Clear Space**

**WARNING! RISK OF FIRE!** Do NOT place combustible objects in front of the appliance. High temperatures may ignite clothing, furniture or draperies. Maintain a minimum clearance of 3ft in front of appliance.

**Mantel:** Avoid placing candles and other heat-sensitive objects on mantel or hearth. Heat may damage these objects.

**NOTICE:** Clearances may only be reduced by means approved by the regulatory authority having jurisdiction.

**WARNING! RISK OF FIRE!** Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.

- Do **NOT** store flammable materials in the appliance’s vicinity.
- Do **NOT** use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or “freshen up” a fire in this heater.

Keep all such liquids well away from the heater while it is in use as combustible materials may ignite.

# 3 Maintaining & Servicing Your Appliance

## A. Proper Shutdown Procedure

- Set wall control to OFF on AUTOMATIC / MANUAL SETTING screen. **Figure 14.1.**
- Wall control screen will scroll through the following messages after setting to OFF.
  - Shutdown
  - Auto-Clean
  - Off

Approximately 45 minutes after setting the wall control to OFF, the appliance should be cool enough to touch. If so, now you can turn the power switch to OFF and pull the appliance forward on the rails.

There is an interlock switch next to the power switch that as you slide the appliance out it will ensure the auto-clean system and the auger will not run, but the blowers will operate.

After servicing, restart with the AUTO/MANUAL SETTINGS screen. **Figure 14.1.**

## Before Servicing Your Appliance

### CAUTION! SHOCK AND SMOKE HAZARD!

- *Proper Shutdown Procedure must be followed.*
- *Smoke spillage into room can occur if appliance is not cool before turning off power switch.*
- *Risk of shock if appliance is not turned off before servicing appliance.*

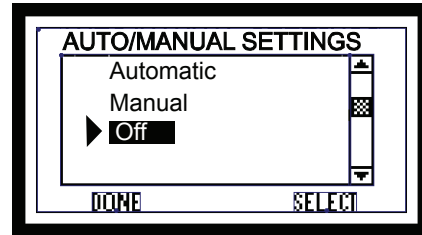


Figure 14.1

**Follow the detailed instructions found in this section for each step listed in the chart below.**

## B. Quick Reference Maintenance Chart

Cleaning or Inspection	Frequency		Daily	Weekly	Every 2 Weeks	Monthly	Yearly
Ash Pan - Burning Wood Pellets	Every 5 bags of fuel	OR		X			
Ash Pan - Burning Alternate Fuels	Every 1 bag of fuel	OR	X				
Ash Removal from Firebox	More frequently depending on the fuel type or ash build-up	OR		X			
Auto-Clean Inspection	More frequently depending on the fuel type	OR				X	
Blower, Combustion (Exhaust)	More frequently depending on the fuel type	OR					X
Blower, Convection	More frequently depending on the operating environment	OR					X
Door Latch Inspection	Prior to heating season	OR				X	
Firebox - Prepare for Non-Burn Season	At end of heating season	OR					X
Firepot - Burning Softwood Pellets	Every 5 bags	OR		X			
Firepot - Burning Hardwood Pellets	Every 3 bags	OR		X			
Firepot - Burning Alternate Fuels	Every 1 bag	OR	X				
Glass	When clear view of firepot becomes obscured	OR		X			
Heat Exchanger & Drop Tube	Every 1 ton of fuel	OR			X		
Hopper	Every 1 ton of fuel or when changing fuel types	OR				X	
Venting System	More frequently depending on the fuel type	OR					X

**NOTICE:** These are recommendations. Clean more frequently if you encounter heavy build-up of ash at the recommended interval or you see soot coming from the vent. Not properly cleaning your appliance on a regular basis will void your warranty.

**C. High Ash Fuel Content Maintenance**

- **Frequency:** When the ash build-up exceeds the half way point in the firepot
- **By:** Homeowner

If the ash build-up exceeds the half way point in the firepot before it automatically cleans, then the firepot is not being cleaned often enough.

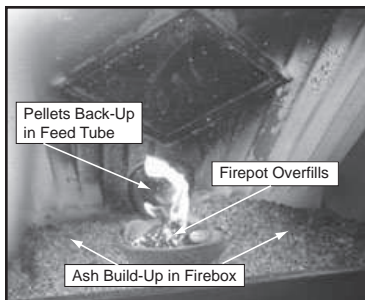
Another symptom is if clinkers are adhering to the sides of the firepot.

Double check the wall control to ensure the proper setting has been selected for the fuel you are burning. If that is correct, change the setting to “Utility Pellet”.

**NOTE:** You will need to empty the ash pan more frequently if using the “Utility Pellet” setting.

**WARNING! Risk of Fire and Smoke!**

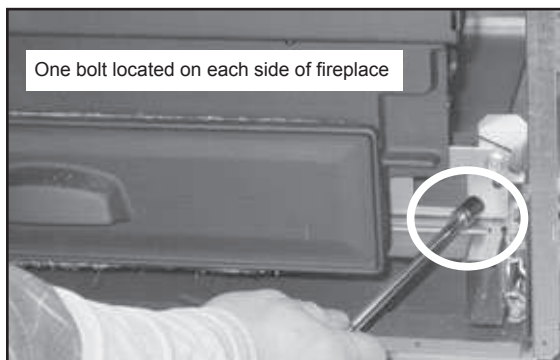
- High ash fuels or lack of maintenance can cause firepot to overflow. Follow proper shutdown procedure if ash buildup exceeds half way point in firepot.
- Failure to do so could result in smoking, sooting and possible hopper fires.



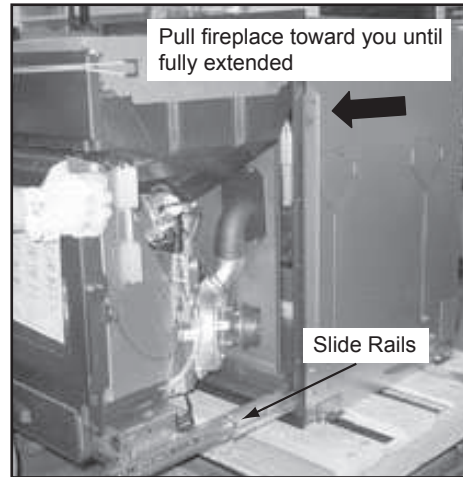
**Figure 15.1**

**D. Accessing Components for Maintenance**

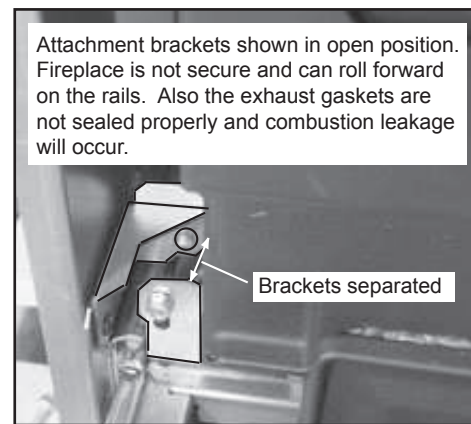
1. Follow the proper shutdown procedure found on page 14.
2. Remove the Front. Lay it on a soft surface to prevent scratching.
3. Remove both bolts located on each lower side of the fireplace with a Phillips head screwdriver or socket wrench and set aside. **Figure 15.2.**
4. Pull the fireplace towards you until fully extended. **Figure 15.3.**



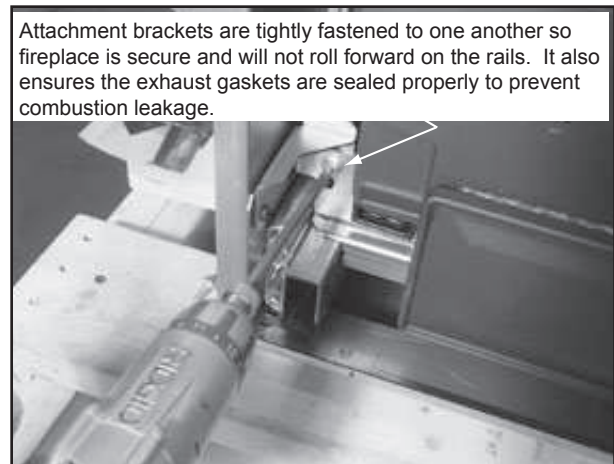
**Figure 15.2**



**Figure 15.3**



**Figure 15.4**



**Figure 15.5**

5. Components are now exposed for service.
6. Slide the fireplace back into the outer can. Re-attach the bolts ensuring that the attachment brackets are securely fastened. This will prevent the fireplace from unexpectedly sliding out on the rail system. **Figures 15.4 and 15.5.**
7. **Double check the bolts and brackets are correctly positioned to ensure the exhaust gaskets are properly sealed to prevent combustion leakage.**

## E. General Maintenance and Cleaning

### 1. Auto-Clean System Inspection & Cleaning

- **Frequency:** Monthly or every ton (aprx. 50 bags) or more frequently depending on the type of fuel
- **By:** Homeowner
  - a. Be sure the wall control screen says OFF, the appliance is allowed to cool and the power switch is in the OFF position.
  - b. Open the Front and firebox door. Inspect the auto-clean springs: (See item #33 on **Figure C on page 57** for the location of the springs).
    - Inspect for any degradation or deformation
    - As the springs heat up and cool down they can lose tension
    - If there is a gap showing above the firepot bottom, approximately 1/16 inch (1.59mm) or more, it means the springs have lost their tension
    - Lost tension can not keep the floor in the proper position causing ignition problems and fuel falling into the ash pan.
    - Call your dealer to replace the springs.
  - c. Inspect the holes in the firepot floor for any debris.
    - The holes must be kept clear.
    - Burning corn will cause the holes to fill with particles and will need to be removed.
  - d. How often the firepot cleans itself depends on:
    - The type of fuel you selected on the thermostat wall control
    - How long the appliance burns before satisfying set point on the the wall control.
    - Burning biomass fuels may require a more thorough cleaning during the burn season.
  - e. Excessive clinkers will eventually jam the auto-clean system and generate an error message on the wall control.

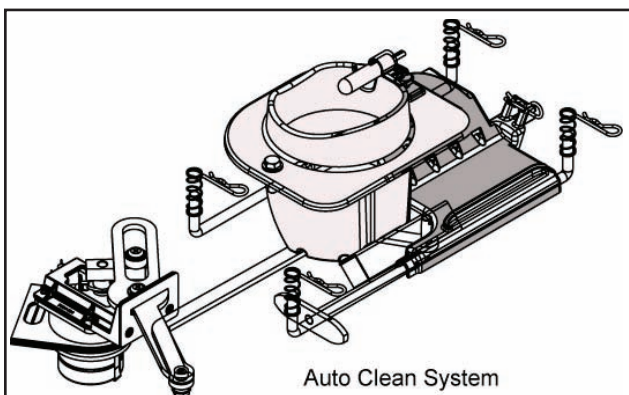


Figure 16.1

### 2. Cleaning Ash Pan

- **Frequency:** Wood Pellets: Weekly or every 3-5 bags  
Alternate Fuel: Daily or every 1 bag
- **By:** Homeowner
  - a. Locate the ash pan underneath the firepot.
  - b. Slide the ash pan straight out.
  - c. Empty into a non-combustible container and re-install ash pan.
  - d. When replacing ash pan push it back until it catches on the 2 side latches.
  - e. Clinkers filling the ash pan will have to be cleaned out more often than ash. **See Disposal of Ashes.**

### 3. Disposal of Ashes

- **Frequency:** As needed
- **By:** Homeowner
  - a. Ashes should be placed in a metal container with a tight-fitting lid.
  - b. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal.
  - c. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have been thoroughly cooled.

**WARNING! RISK OF FIRE!** Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.

- Do **NOT** store flammable materials in the appliance's vicinity.
- Never use gasoline, gasoline-type lantern fuel, kerosene charcoal lighter fluid or similar liquids to start or "freshen up" a fire in this heater.

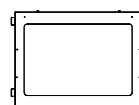
Keep all such liquids well away from the heater while it is in use as combustible materials may ignite.

### **WARNING! RISK OF FIRE!**

Do **NOT** store fuel:

- Closer than required clearances to combustibles to appliance.
- Within space required for loading or ash removal.

### **WARNING**



Handle glass doors with care.

- Inspect the gasket to ensure it is undamaged.
- Do NOT strike, slam or scratch glass.
- Do NOT operate appliance with glass door removed, cracked, broken or scratched.



**4. Cleaning Heat Exchanger, Drop Tube & Exhaust**

- **Frequency:** Monthly or every 1 ton of fuel (aprx. 50 bags).
- **By:** Homeowner

NOTE: There are heavy duty vacuum cleaners specifically designed for solid fuel appliance cleaning.

**WARNING! Hopper Fire Risk!**

For trouble free use of your pellet appliance you must perform cleaning as called for in these instructions. Not doing so will result in:

- Poor operating performance
- Smoke spillage into the home
- Overheating of components

Not properly cleaning your appliance on a regular basis will void your warranty.

**Tools Needed:** A Shop Vac and generic micro cleaning kit; flat head and Phillips screwdriver; 11/32 Nut-driver or wrench.



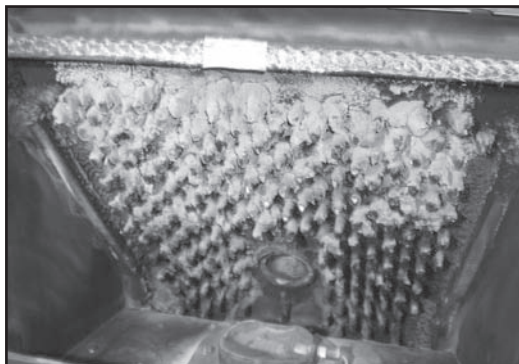
Shop Vac\* Example



Micro Cleaning Kit\* Example

\* Can be purchased at your local hardware store.

1. It is necessary to remove the baffle to gain access to the heat exchanger. Follow instructions for baffle removal on **page 50**.
2. Vacuum the ash from the heat exchanger with an upholstery brush to remove the majority of the ash. Be sure to vacuum the back of the baffle also. Inspect the drop tube and remove any residue build-up in the drop tube. **Figure 17.1**.

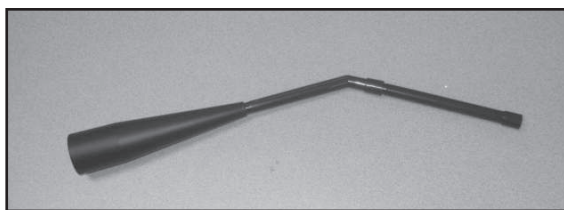


**Figure 17.1 - Example of a dirty heat exchanger**



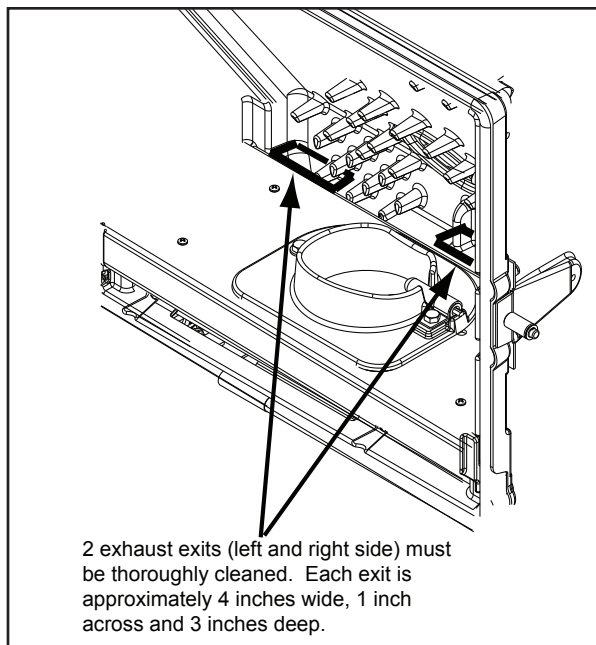
**Figure 17.2**

3. Assemble the crevice tool from the micro cleaning kit to attach to a Shop Vac. **Figure 17.3**.



**Figure 17.3**

4. Use the crevice tool to finish cleaning the heat exchanger fins. It is critical that the 2 exhaust exits at the back of the firebox floor (left and right) be thoroughly cleaned. **Figure 17.4**. There are several ways this can done.
  - a. Use the crevice tool.
  - b. Attach a hose 1/2 inch (12.7mm) in diameter and approximately 2 feet (607mm) in length to your vacuum hose.
  - c. Use a bottle brush and push the ash down to the bottom. Remove the combustion (exhaust) blower and then vacuum out the ash. **Figures 18.1 and 18.2 on page 18**.

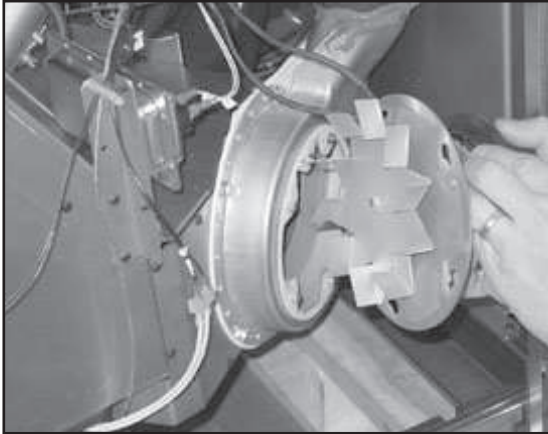


2 exhaust exits (left and right side) must be thoroughly cleaned. Each exit is approximately 4 inches wide, 1 inch across and 3 inches deep.

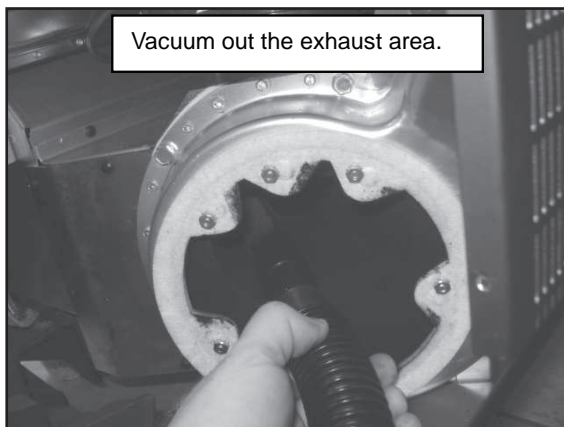
**Figure 17.4**

### Cleaning Heat Exchanger, Drop Tube & Exhaust (Cont'd)

5. The combustion blower must be removed to clean the exhaust path. Follow the instructions on **page 49** however you do not need to disconnect the wires.
- Vacuum out the exhaust area. **Figure 18.2.** You may need to replace the gasket at this time also. See Parts List for part number.
  - Use a brush to clean out the exhaust transition path.



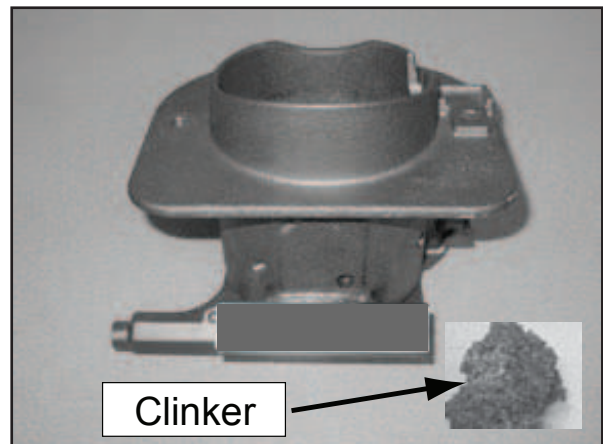
**Figure 18.1**



**Figure 18.2**

### 5. Cleaning Firepot with Firepot Clean-Out Tool

- Frequency:**
    - Softwood Pellets:** Weekly or every **5** bags
    - Hardwood Pellets:** Weekly or every **3** bags
    - Alternate Fuel:** Daily or every 1 bag
  - By:** Homeowner
- Be sure the wall control screen says OFF, the appliance is allowed to cool and the power switch is in the OFF position.
  - It may be necessary to use your firepot clean-out tool to chip away material that has built up on the sides of the firepot and to push out any clinkers.
    - Larger clinkers may have to be removed from the top of the firepot.
    - Corn clinkers can be especially difficult to break up.
    - If the clinker adheres to the sides of the firepot, you will need to manually clean the firepot.
  - After power is restored, the auto-clean system will recycle and then clean itself.
  - The firepot floor plate must be fully closed when finished.



**Figure 18.3 - Large Clinker**

### 6. Ash Removal from Firebox

- Frequency:** Weekly or more frequently depending on ash build-up
- By:** Homeowner

Be sure the wall control screen says OFF, the appliance is allowed to cool and power switch is in the OFF position.

There must not be any hot ashes in the firebox during cleaning.

Frequent cleaning of the ash in the firebox with a vacuum cleaner will help slow down the build-up of ash in the exhaust blower and vent system.

**7. Cleaning the Hopper**

- **Frequency:** Monthly or after burning 1 ton of fuel (aprx. 50 bags) or when changing fuel types
  - **By:** Homeowner
- a. Be sure the wall control screen says OFF, the appliance is allowed to cool and the power switch is in the OFF position.
  - b. After burning approximately 1 ton of fuel you will need to clean the hopper to prevent sawdust and/or fines build-up.
  - b. A combination of sawdust/fines and pellets on the auger reduces the amount of fuel supply to the firepot.
  - c. This can result in nuisance shut downs and mis-starts.
    - Empty the hopper of any remaining pellets.
    - Vacuum the hopper and feed tube.

**8. Cleaning the Glass**

- **Frequency:** When clear view of firepot becomes obscure
  - **By:** Homeowner
- a. Be sure the wall control screen says OFF, the appliance is allowed to cool and the power switch is in the OFF position.
  - b. Clean glass with a non-abrasive commercially available cleaner. Wipe down with dry towel.

**Caution! Handle glass assembly with care. Glass is breakable.**

- *Avoid striking, scratching or slamming glass*
- *Avoid abrasive cleaners*
- *Do not clean glass while it is hot*

**9. Door Latch Inspection**

- **Frequency:** Prior to heating season
- **By:** Homeowner

The door latch is non-adjustable but the gasketing between the glass and firebox should be inspected periodically to make sure there is a good seal.

If the gasket is frayed or damaged, replace with a new one.

**10. Cleaning Exhaust Blower - Do Not Use Lubrication**

- **Frequency:** Yearly or as needed
  - **By:** Homeowner
- a. Be sure the wall control screen says OFF, the appliance is allowed to cool and the power switch is in the OFF position.
  - b. Use a soft brush and vacuum to clean the propellers.

**11. Cleaning Convection Blower - Do Not Use Lubrication**

- **Frequency:** Yearly or as needed
  - **By:** Homeowner
- a. Be sure the wall control screen says OFF, the appliance is allowed to cool and the power switch is in the OFF position.
  - b. Use a soft brush and vacuum to clean the propellers.

**12. Preparing Firebox for Non-Burn Season**

- **Frequency:** Yearly
  - **By:** Homeowner
- a. Be sure the wall control screen says OFF, the appliance is allowed to cool and the power switch is in the OFF position.
  - b. Remove all ash from the firebox and vacuum thoroughly.
  - c. Paint all exposed steel, including cast-iron.
    - Use the Touch-Up paint supplied with the appliance; or,
    - Purchase paint from your local dealer
    - Must use a high-temperature paint made specifically for heating appliances
  - d. Cleaning the flue at the end of the burn season will prevent corrosives to build-up and damage the flue.
  - e. Outside temperatures should have no affect on the performance of the appliance under freezing conditions.

**13. Soot and Fly Ash: Formation & Need for Removal in Exhaust Venting System.**

- **Frequency:** Prior to each burn season and after prolonged shut down.
- **By:** Qualified Service Technician/Homeowner

The products of combustion will contain small particles of flyash. The flyash will collect in the exhaust venting system and restrict the flow of the flue gases. Incomplete combustion, such as occurs during startup, shut-down, or incorrect operation of the room heater will lead to some soot formation which will collect in the exhaust venting system. The exhaust venting system should be inspected at least once every year to determine if cleaning is necessary.

The venting system may need to be cleaned at least once a year or more often depending upon the quality of your fuel or if there is a lot of horizontal pipe sections. Ash will build up more quickly in the horizontal sections.

**14. Chimney Inspection and Cleaning..**

- **Frequency:** Prior to each burn season and after prolonged shut down.
- **By:** Qualified Service Technician/Homeowner

In order to properly clean your chimney you will need the following items. Make sure you have a Correctly sized chimney brush, chimney brush rods or rope and pull rings (depending on method used), fireplace cover (for use with an ash vacuum or to contain dust), protective covering for furniture and rugs, tape, metal bucket, small shovel and broom, vacuum cleaner, and a powerful flashlight.

There are four common methods used to control the brush for effective cleaning.

1. Flexible Rod Method, Top Down (Preferred Method): Seal off fireplace or stove opening to prevent soot from entering the home. For fireplaces a Fireplace Cover is a great way to seal off the opening and allow a vacuum cleaner to attach to keep the dust out of your home. Attach the brush securely to the flexible rod and lower into the top of the chimney, add more rods as necessary to reach the flue bottom. Work the brush up and down several times until the chimney is clean. Use a powerful flashlight to look into the chimney to be sure you have cleaned it completely.

2. Flexible Rod Method, Bottom-up: Insert brush and rod up through the fireplace damper or chimney clean-out door. Add more rods as necessary to reach the top of the chimney. This method is often messy since sealing the opening cannot be done during cleaning. Cover area around opening to prevent staining rugs, furniture, etc. Use a powerful flashlight to look into the chimney to be sure you have cleaned it completely. Work the brush up and down several times until the chimney is clean.

3. Line and Weight Method: Seal off fireplace or stove opening to prevent soot from entering the home. Securely attach a compact 20-pound (minimum) weight to one end of the brush with one accessory pull ring and attach a rope that is more than long enough to reach the bottom of the flue, to the other brush end. Lower the brush into the chimney and up again until the chimney is clean. Use a powerful flashlight to look into the chimney to be sure you have cleaned it completely.

4. Dual Line Method: This method requires two people, one on the roof and one below at the clean-out or fireplace opening. Attach one rope to each end of the brush. Drop one rope down the chimney to the person below. Cleaning is done by alternately pulling the ropes to vigorously move the brush up and down in the flue. This method is often messy since sealing off the opening cannot be done during cleaning.

Cover area around opening to prevent staining of rugs, furniture, etc... Work the brush up and down several times until the chimney is clean. Use a powerful flashlight to look into the chimney to be sure you have cleaned it completely. Follow clean-up directions below.

For All Methods: Sweep or vacuum up all residues prior to using stove or fireplace. Be especially careful to check the debris behind the damper and smoke shelf area, in elbows or "T" connections. Special hand held chimney cleaning brushes are available to reach hard-to-clean areas. Clean a wire bristle chimney brush after use and coat with a rust preservative. During the burning season we highly recommend the use of Anti-Creo-Soot or another creosote remover product to reduce the build-up of creosote deposits.

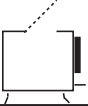


# 4 Troubleshooting for Homeowner

## A. Frequently Asked Questions

ISSUES	SOLUTIONS
1. Metallic noise	1. Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of your appliance.
2. Ash buildup on glass	2. This is normal. Clean the glass.
3. Glass has turned dirty	3. Excessive build up of ash. The lower burn settings will produce more ash, the higher burn settings produce less. The more it burns on low the more frequent cleaning of the glass is required.
4. Fire has tall flames with black tails and is lazy	4. The flame height adjustment needs to be reduced or the firepot needs cleaning. Heat exchanger & combustion blower needs cleaning.
5. Excessive smokey start-up	5. Either the firepot is dirty or there is too much fuel at start-up and not enough air.
6. Large flame at start-up	6. This is normal. Flame will settle down once the fire is established. Some smoke is normal.
7. Mechanical Noise	7. The floor of the firepot in the auto-clean system may make some noise as it scrapes the ash into the ash pan.

**NOTICE:** *Odors and vapors are released during initial operation due to the curing of high temperature paint. Open windows for air circulation. Odors may be irritating to sensitive individuals.*

## B. Wall Control Error Codes

Error Message	Possible Cause	Corrective Action
SNAP DISC TRIPPED	Overheat sensor (snap disc) has tripped  Convection blower may need cleaning	Turn power off to appliance and manually reset snap disc then turn back on. If that doesn't work, call your dealer.  Clean convection blower if needed.
AUGER JAMMED	Auger jammed, feed motor bad	Use clean-out tool to clear jam.  Empty hopper and look for foreign objects and remove  Turn the power switch OFF and then back ON to clear error code
MISSED IGNITION	Out of fuel or fuel has clumped together to form a dam in hopper	Break up pellets that have clumped together Refill hopper if fuel level is low
MIN FIREPOT TEMP	Out of fuel	Refill hopper Add handful of pellets to firepot
MAX DROP TUBE TEMP	Wrong fuel table setting Flame height set too high Components may need cleaning	Confirm setting matches burning fuel Adjust flame height Clean the firebox, heat exchanger, convection blower, firepot and ash pan. If problem persists, call your dealer.
CHECK ASHPAN	Auto-clean jammed	Turn the power switch OFF and then back ON to clear error code.  If ash pan is empty, check for a jam. Use the clean-out tool and firmly push in the firepot floor holes and flex spring and push toward home (closed position) to release jam. If problem persists, call your dealer.
SCREEN GOES BLANK	Static discharge or nearby lightening or Electric Fast Transients at the input mains  Power switch in OFF position	Wait 25 seconds and press any key. If the screen does not come back on, call your dealer.  Turned to ON position.
	Hopper lid not closed all the way.	Close the lid. If that didn't work the switch is out, call your dealer.
	Firebox door is not latched properly  Fireplace may not be rolled in completely  Slide Rail bolts may not be installed	Check the latch, if OK the door switch may be out, call your dealer.  If fireplace is completely rolled in, interlock switch may be out, call your dealer.  Install bolts
	Out of fuel	Check fuel level, if OK the switch may be out, call your dealer.

# Installer's Guide

## 5 Getting Started

### A. Design, Installation & Location Considerations

#### 1. Appliance Location

**NOTICE:** Contact local building or fire officials about restrictions and installation inspection requirements in your area.

- Installation MUST comply with local, regional, state and national codes and regulations.
- Consult insurance carrier, local building inspector, fire officials or authorities having jurisdiction over restrictions, installation inspection and permits.

It is a good idea to plan your installation on paper, using exact measurements for clearances and floor protection, before actually beginning the installation. Location of the appliance and chimney will affect performance.

Consideration must be given to:

- Safety, convenience, traffic flow
- Placement of the chimney and chimney connector and to minimize the use of chimney offsets.
- Place the appliance where there will be a clear passage for a Listed chimney through the ceiling and roof (vertical) or through exterior wall (horizontal).
- Installing the required outside air kit will affect the location of the vent termination.

When locating vent and venting termination, the ideal loca-

tion is to vent above roof line when possible. This minimizes the affects of wind loading.

Since pellet exhaust can contain ash, soot or sparks, you must consider the location of:

- Windows
- Air Intakes
- Air Conditioner
- Overhang, soffits, porch roofs, adjacent walls
- Landscaping, vegetation
- Horizontal or vertical vent termination

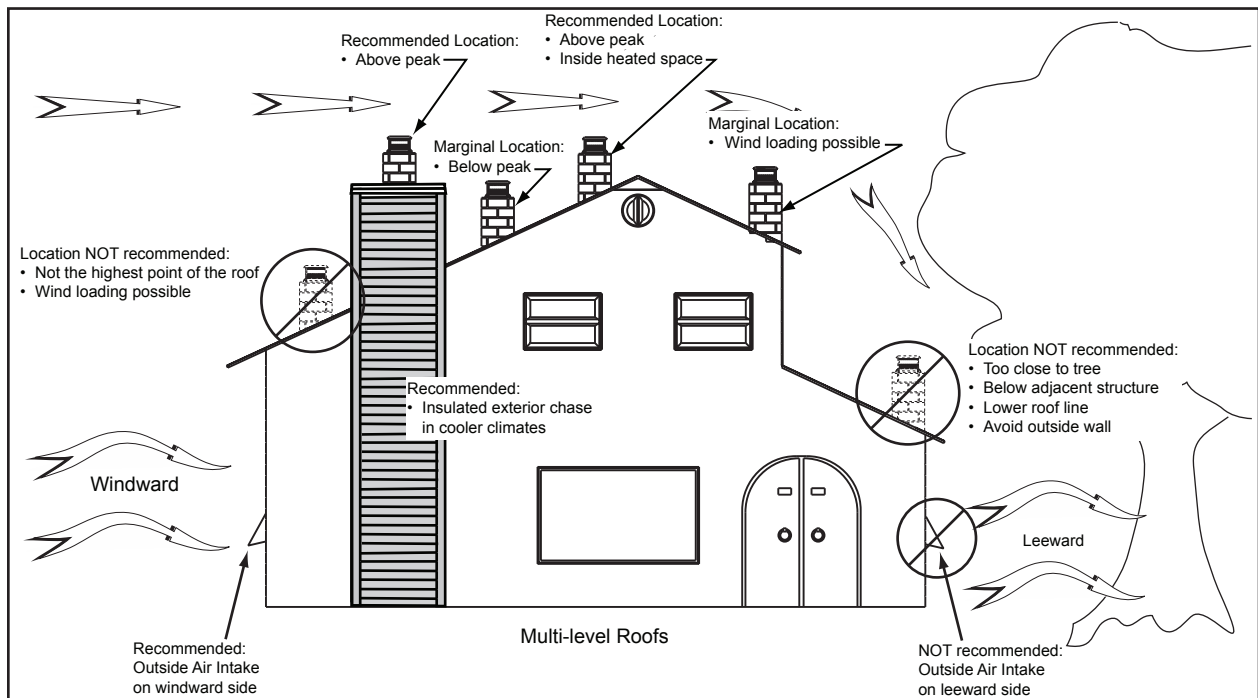
#### 2. Floor Support

The supporting floor under the appliance must be able to handle the weight of the fireplace, fuel load and the weight of the chimney.

Ensure that your floor will support these weights prior to installation. Add sufficient additional support to meet this weight requirement prior to installation. The weight of the fireplace is 450 lbs and with a full hopper of fuel weighing 120 lbs, the total for the fireplace and fuel is 570 lbs.

**WARNING! Risk of Fire** Damaged parts could impair safe operation. Do NOT install damaged, incomplete or substitute components.

**CAUTION!** If burning shelled field corn, you must use approved venting specifically designed for corn to prevent corrosion or degradation. Follow the instructions from the venting manufacturer.



**Figure 22.1**

**B. Thermostat Wall Control Location**

The thermostat wall control's location will have some affect on the appliance's operation.

- Maximum wire length from appliance is 100 feet (30.48m) continuous unspliced wire. Recommended 20 gauge wire, solid copper .
- When located close to the appliance, it may require a slightly higher temperature setting to keep the rest of the house comfortable.
- When located in an adjacent room or on a different floor level, you will notice higher temperatures near the appliance.

**CAUTION!** *The wall control is an integral part of the appliance. No other wall control or thermostat can be substituted.*

**C. Tools And Supplies Needed**


Tools and building supplies normally required for installation.	
Reciprocating Saw	Wire Nuts
Hammer	7/16 inch Socket Wrench
Phillips Screwdriver	Framing Square
Tape Measure	Electric Drill & Bits
Plumb Line	Self-Tapping Screws
Level	Outside Air Required
Framing Material	Class L or PL Pellet Vent
Hi-temp Caulking Material	
Gloves	<u>May also need:</u>
Safety Glasses	Vent Support Straps

**D. Inspect Appliance and Components**


**WARNING! Risk of Fire!** *Damaged parts could impair safe operation. Do NOT install damaged, incomplete or substitute components.*

- Open the appliance and remove all the parts and articles packed inside the Component Pack. Inspect all the parts and glass for shipping damage.
- Report to your dealer any parts damaged in shipment.
- All labels have been removed from the glass door.
- Plated surfaces have been wiped clean with a soft cloth, if applicable.
- **Read all the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**
- **Follow pipe manufacturer instructions for installation and air clearance requirements.**

**E. Checklist to Help Determine Location**



	Description
	Vent termination location - vertical or horizontal
	Venting clearances
	Outside air location (3 options)
	Electrical connection
	Location of thermostat wall control
	Clearance to combustibles
	Mantel projection fuel loading clearances
	Sidewalls, surrounds and trim clearances
	Hearth extension floor protection
	Height for loading fuel into hopper if installed on a raised platform
	Allow enough clearance to open front when installing finishing material that protrudes beyond the mounting frame.
	Thickness of finishing material
	Service space clearances

	WARNING
DO NOT INSTALL IN SLEEPING ROOM	



**F. Recommended Sequence of Installation**

**NOTICE:**



- Read and understand Sections 6 through 10 for detailed information before installing the fireplace.
- Follow all clearances as specified.
- The choice of finishing material and decorative front must be determined before installation can begin as it will determine the placement of the fireplace.
- Outside air is required on all installations and the Outside Air Kit must be ordered separately.

**Recommended Sequence**

1.	Identify the exhaust vent and outside air locations and install necessary venting components including wall thimble, fire stop or roof flashing for a vertical termination. <b>NOTE: Outside Air Kit must be ordered separately.</b>
2.	Complete the framing.
3.	Install the electrical junction box near the electrical opening on the left side of the appliance. Maximum distance of 9 inches (229mm) from appliance.
4.	Identify the location of the wall control and run the wire (25 ft [7.62 meters] in length) to the left side of the appliance.
5.	Prepare the fireplace for the exhaust vent adapter. Install adapter, seal with high temp silicone and screws and install all cover plates.
6.	Preset the nailing flanges depending on the thickness of your finishing material.
7.	Ensure that fireplace is level before securing in place. If not level the decorative front will not swing out properly.
8.	<b>IT IS CRUCIAL FIREPLACE IS ROBUSTLY SECURED.</b> Slide the fireplace into place and secure to the floor with the securing brackets and to the wall. See <b>page 33</b> for detailed instructions.
9.	Attach the exhaust and outside air venting to the appliance.
10.	Hook up power and the wall control.
11.	Slide the fireplace out on the rail system to validate that it is secure and there is no deflection in the outer can.
12.	Slide the fireplace back into the outer can. Re-attach the bolts and brackets. Double check they are correctly positioned to <u>ensure the exhaust gaskets are properly sealed to prevent combustion leakage.</u>
13.	A burn test must be performed <b><u>before finishing material is installed.</u></b> (See Item "G").
14.	Install the finishing material.
15.	Install the decorative front.

**G. Items to Verify During Test Burn**

- Check for leaks in the exhaust venting system. Do you see any smoke?  
Remember on a first burn odors and vapors are released due to the curing of the high temperature paint. The focus is on the venting system.
- Check overall operation, are there any error codes on the Wall Control?
- Confirm that outside air is hooked up and properly sealed. Is there cold air infiltration?

	<b>WARNING</b>
	<b>Crush Hazard!</b> To avoid tipping over, this appliance must be securely fastened to the floor.

- *The fireplace must be secured in place as outlined in Section 6 and 7.*
- *When servicing the fireplace, the fireplace slides forward on the rail system.*
- *Tipping can occur if fireplace is not properly secured to the floor.*

# 6 Framing Dimensions & Clearances

## A. Recommended Locations

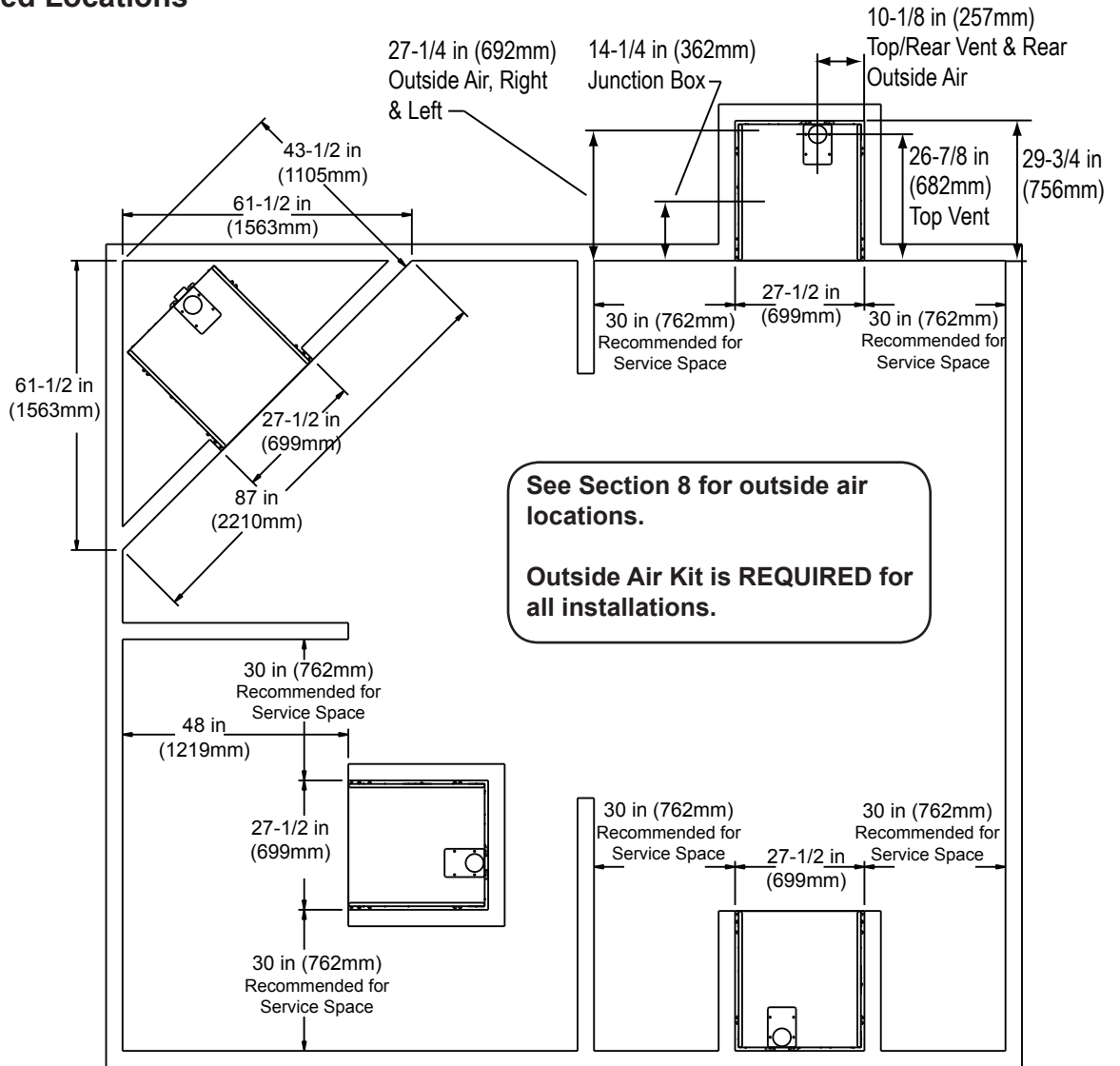


Figure 25.1

## B. Hearth Extension

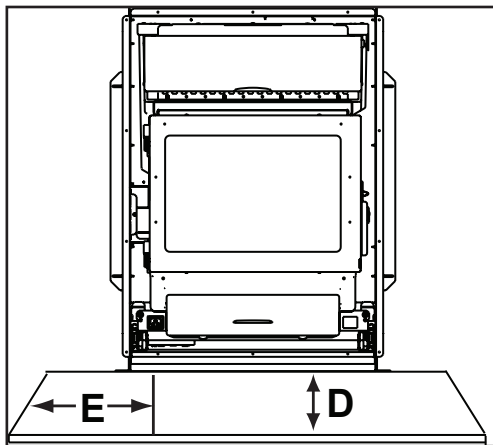


Figure 25.2

**WARNING**

- Any hearth extension is to be installed as illustrated in Figure 25.2
- If employing a hearth extension, any parts or materials used in construction must be non-combustible.

	Location	Inches	Millimeters
D	Floor protection hearth extension from door opening	6	152
E	Floor protection to the side of door opening	6	152

**NOTE**

- It is necessary to use sealing strips of non-combustible materials between the fireplace hearth and factory-built hearth extension.
- The use of a sand-cement grout between the hearth and an on-site constructed hearth extension is also necessary.

**C. Sealing at the Penetration of Building Envelope**

The first step for successfully creating an air barrier system is to seal all of the holes in the building envelope. Too often, builders concentrate on air leakage through windows, doors, and walls, and ignore areas of much greater importance. A key source of leakage—called a bypass—is hidden from view behind chases for flues and ductwork. It is important to make sure these areas are sealed to prevent leakage. A common way to seal areas behind chases for flues and ductwork is to attach and caulk a piece of plywood or foam sheathing material that covers the entire opening. Seal penetrations. If a flue requires a noncombustible clearance, use a noncombustible metal collar, sealed in place to span the gap.

Sealing these bypasses is critical to reducing air leakage in a home and maintaining the performance of insulation materials.

**D. Frame the Fireplace**

Figure 26.1 shows typical framing using combustible materials (2x4 lumber shown).

- Framing across the top of fireplace must be above top standoffs.
- See **page 33** for detailed information regarding sub-floor material requirements.

**See Section 8 for outside air locations.**

**Outside Air is REQUIRED for all installations.**

	<b>A</b>	<b>B*</b>	<b>C**</b>	<b>D</b>
<i>inches</i>	27-1/2	30	38-1/4	7
<i>mm</i>	699	762	972	178

\* If interior of chase will be drywalled, add the thickness to this measurement.

\*\* Adjust header height for a raised platform under fireplace, Taking into consideration the maximum height allowed for loading fuel into the hopper.

**Figure 26.1 - Framing the Fireplace**

## E. Construct the Chase

You may enclose the vent system in a chase. See Figures 27.1 & 27.2.

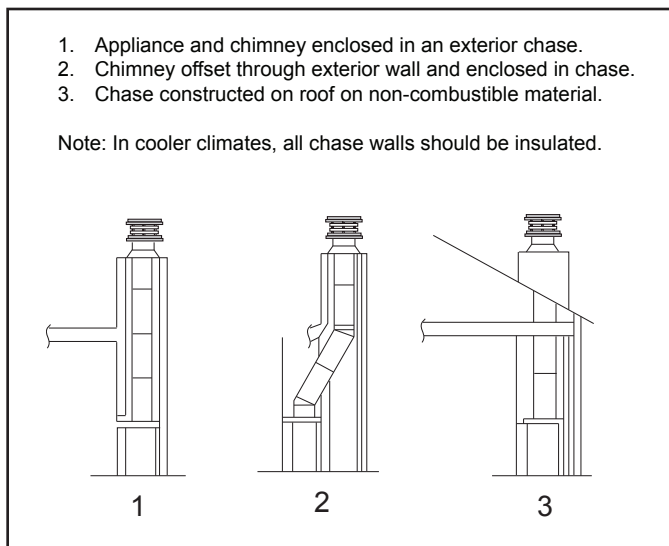


Figure 27.1- Chase Constructions

- Check local/regional building codes for compliance.
- Construct outside wall of chase as you would the outside walls of the building to prevent cold air drafting problems. The chase should not break the outside building envelope in any manner. All outer walls need to be insulated.
- Install vapor and air infiltration barriers per local/regional building codes.
- Holes and other openings should be caulked with high temperature caulk or filled with unfaced fiber glass insulation.

### COOLER CLIMATES

- In cooler climates, Hearth & Home Technologies Inc. recommends you insulate walls, ceiling, base plate, cantilever floor. Use batt type insulation between the joists.
- Place a sheet of plywood or a raised platform on cement slab under appliance only. You need to secure the appliance to the cement slab so do not extend the plywood so as to interfere with the attachment.
- A firestop spacer should be installed in an insulated false ceiling at the 8 ft. (2.4m) level above the fireplace assembly. This reduces heat loss through the chase. It is required that firestops be installed every 10 ft (3.05m) to control spread of fire, but 8 ft is recommended to prevent heat loss.

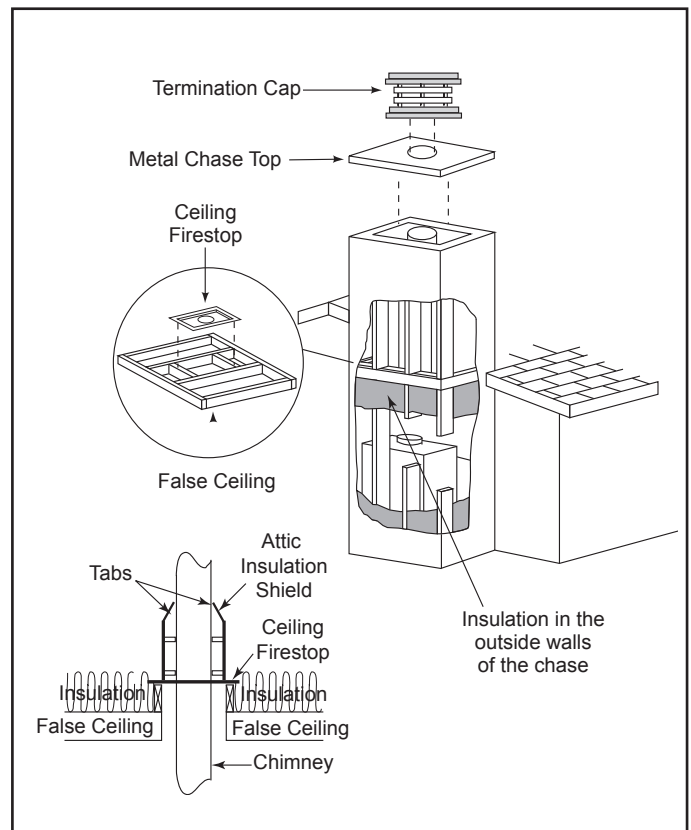


Figure 27.2 - Chase Assembly

**WARNING! You must install false ceilings and ceiling firestops at each floor of the chase or every 10 ft (3.05 m) to control spread of fire.**

- Hearth & Home Technologies Inc. suggests you sheetrock and tape (or use an equivalent method) all inside surfaces of first level for maximum air tightness.

**WARNING! Risk of Fire! You must maintain the pellet pipe manufacturer's minimum air space clearance to insulation and other materials surrounding the chimney system.**

- Insulation and other materials must be firmly secured to prevent accidental contact with chimney system.
- Failure to prevent contact between insulation or other materials and chimney system may cause overheating and fire.

**F. Finishing Material**

**NOTICE:** Non-combustible material is not needed to finish this appliance.

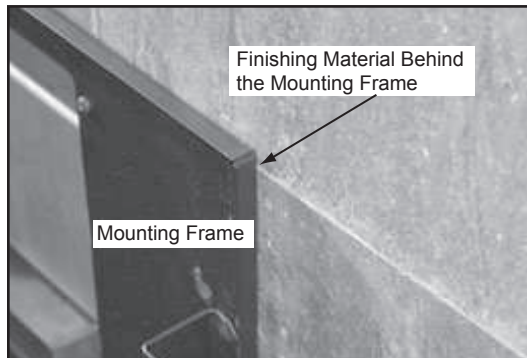
It is important that the finishing material is determined before the appliance is secured to the floor. Depending on the finishing material and installation method, the appliance may need to be positioned further in or out of the wall.

There are three ways finishing material can be applied:

1. Behind the mounting frame
2. Flush with the mounting frame
3. Protrudes beyond the mounting frame

**1. Behind the Mounting Frame**

The mounting frame is designed to have a 1/2 inch (13mm) overlap on the sides and the top of the framing opening. **Figure 28.1.**



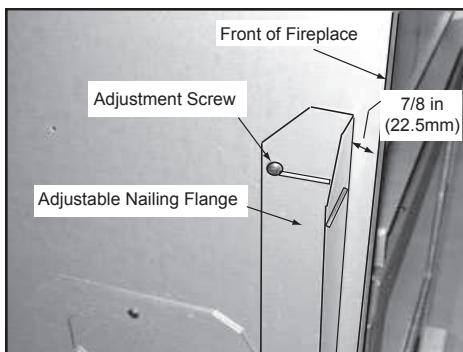
**Figure 28.1.**

Positioning the nailing flanges:

- Slide the nailing flanges all the way to the front and this will set the appliance for 1/2 inch (13mm) sheet rock.
- If tile, marble or other flat surface finish material is desired and you want the mounting frame to cover the cut edge, set the nailing flanges at a dimension of the sheet rock thickness plus the finishing material thickness.

**Figure 28.2.**

**Example: Sheetrock = 1/2 inch (13mm)**  
**Finish Material = 3/8 inch (9.5mm)**  
**Move flange: 7/8 inch (22.5mm)**

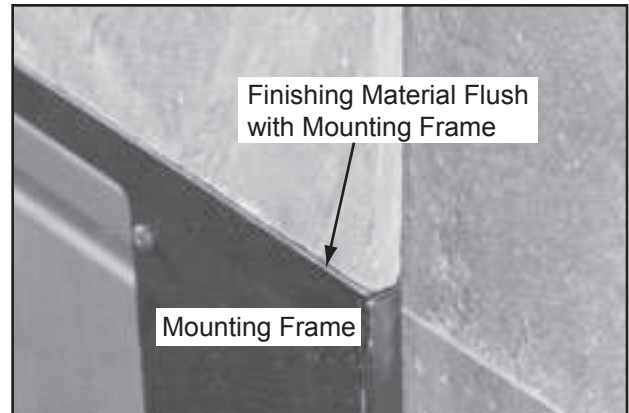


**Figure 28.2**

**2. Flush with the Mounting Frame**

The finish material can not be thicker than 1-1/2 inches (38mm) to use this method. **Figure 28.3.**

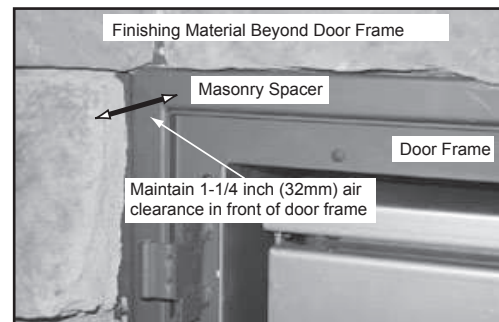
- Set the nailing flanges for sheet rock thickness and install the appliance.
- Install the mounting frame.
- Install the finishing material to edge of the mounting frame.



**Figure 28.3.**

**3. Protrudes Beyond the Mounting Frame**

This method is mainly used for a brick or stone installation. When finishing material protrudes of the mounting frame and front, there must be a 1-1/4 inch (32mm) airflow clearance in front of the mounting frame. **Figure 28.4.**

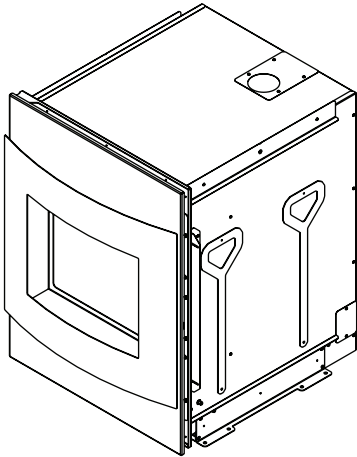


**Figure 28.4.**

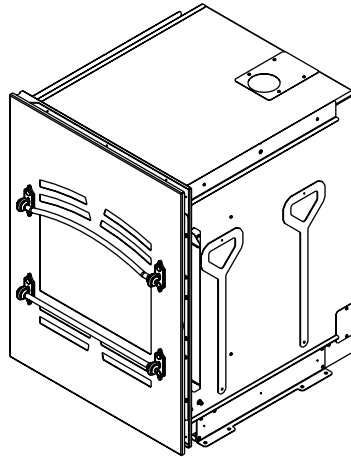
Use the masonry spacer supplied with the Front to position the finishing material at the proper dimension. Remember to keep the Front opening clearances in mind when finishing material protrudes of the Front. **(See pages 29-30)** .

- Set the nailing flanges for sheet rock thickness and install the appliance.
- Install the mounting frame.
- Install the finishing material to edge of the mounting frame.
- Complete the installation following all specified clearances to combustibles.

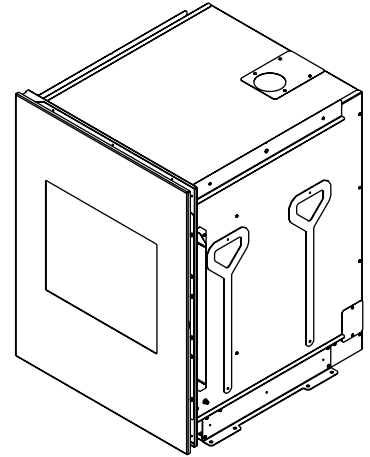
**G. Front Opening Clearance**



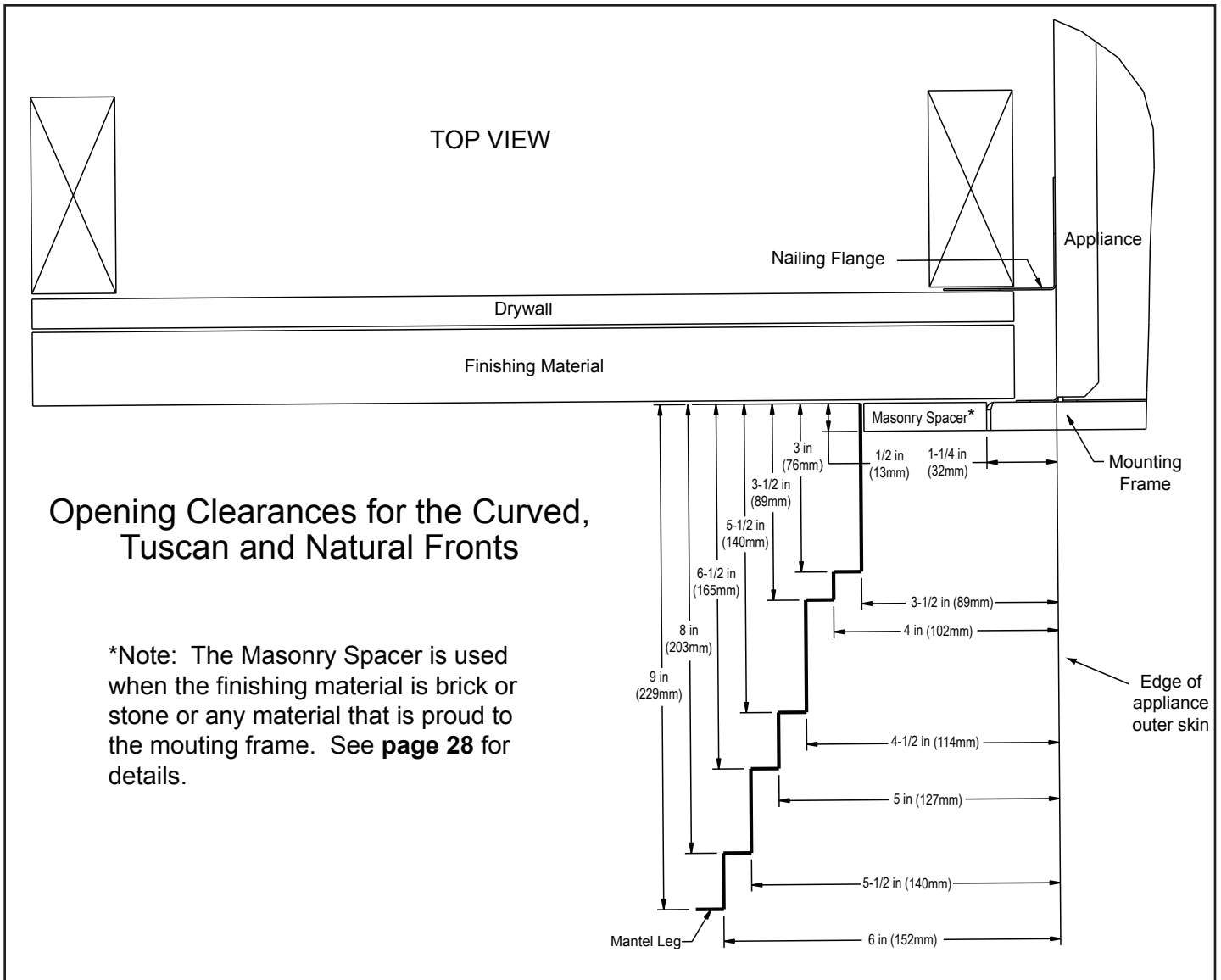
**Curved Front**



**Tuscan Front**

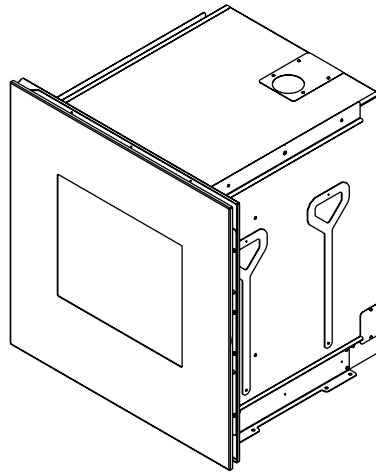


**Natural Front**

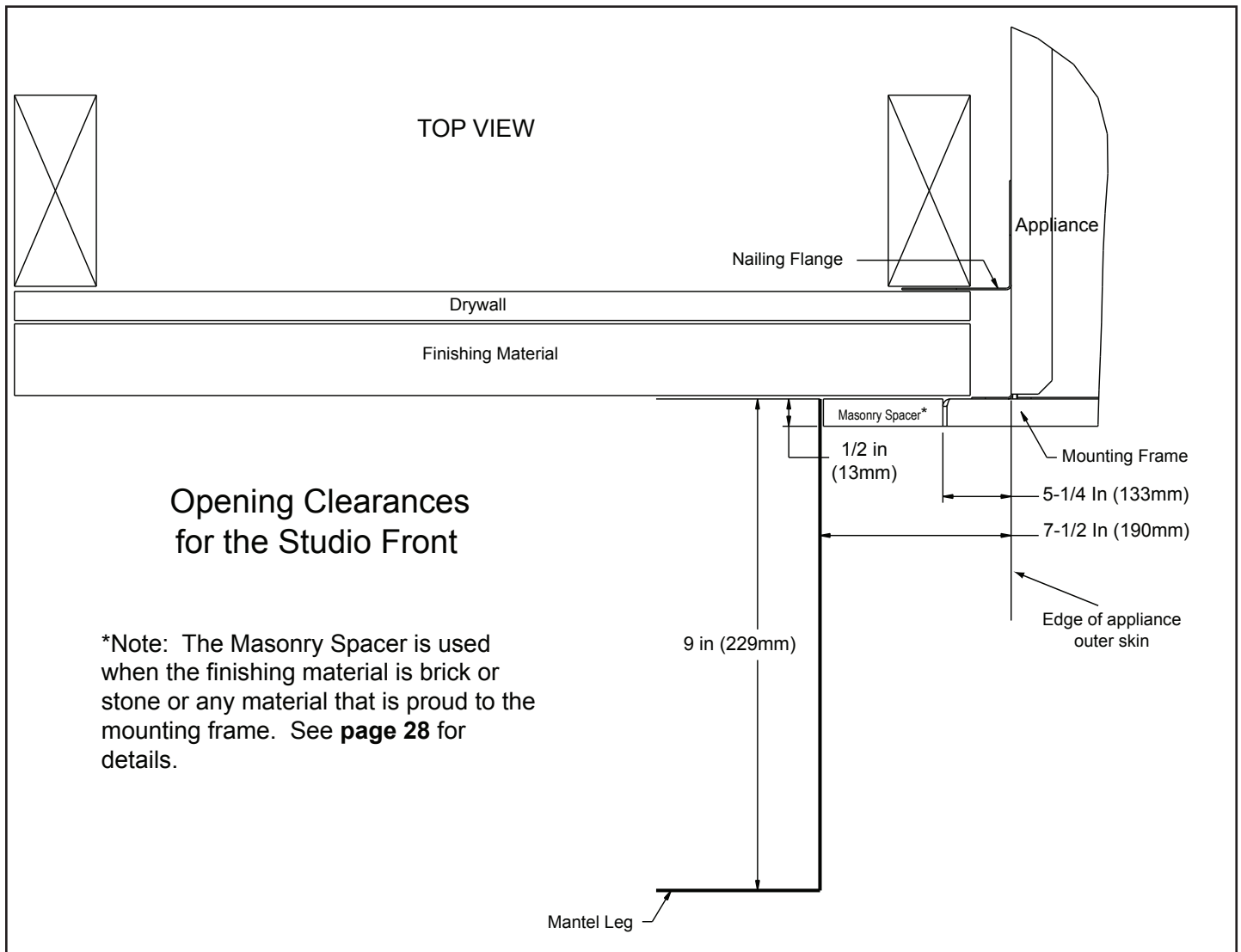


**Figure 29.1**

**G. Front Opening Clearance (Cont'd)**



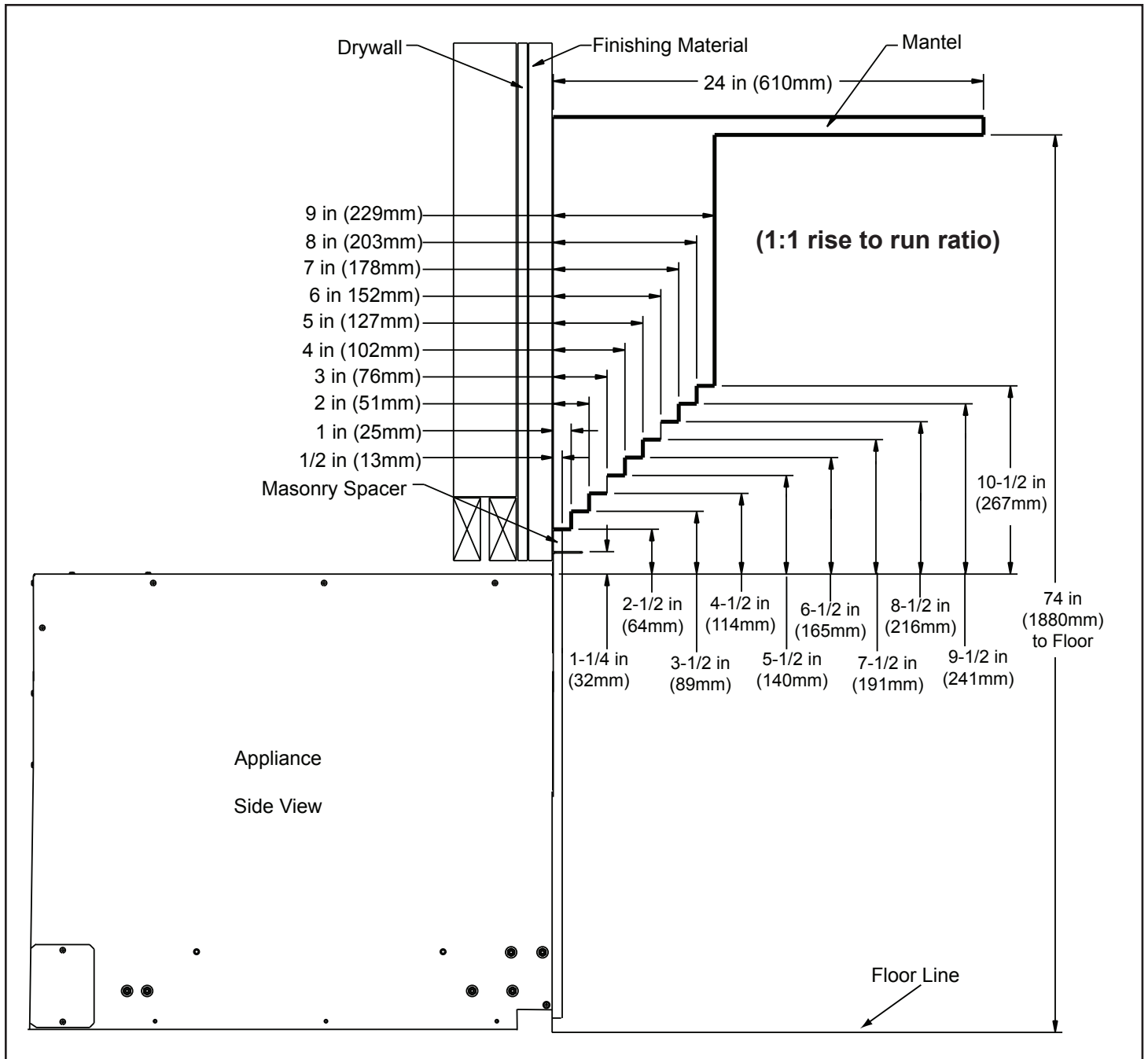
**Studio Front**



**Figure 30.1**

**H. Mantel Fuel Loading Clearances**

**NOTE:** Be sure to consider the process of loading fuel when choosing and locating a mantel.



**Figure 31.1**



**I. Non-Combustible Materials**

- Materials which will not ignite and burn, composed of any combination of the following:
  - Steel
  - Iron
  - Brick
  - Tile
  - Concrete
  - Slate
  - Glass
  - Plasters
- Materials reported as passing **ASTM E 136, Standard Test Method for Behavior of Metals, in a Vertical Tube Furnace at 750° C.**
- **Non-Combustible Sealant Material**
  - Sealants which will not ignite and burn:
  - Rutland, Inc. Fireplace Mortar #63,
  - Rutland 76R,
  - Nuflex 304,
  - GE RTV106 or GE RTB116 (or equivalent).

**J. Combustible Materials**

- Materials made of or surfaced with any of the following materials:
  - Wood
  - Plant fibers
  - Plastic
  - Compressed paper
- Any material that can ignite and burn; flame proofed or not, plastered or un-plastered

***WARNING! Risk of Fire! You must maintain clearances.***

- *Do **NOT** cover metal fireplace front with combustible materials.*
- *Install combustible materials only to specified clearances on top front, sides and back edges.*

# 7 Installation of Fireplace

**Caution! Risk of Cuts/Abrasions. Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.**

## A. Position the Fireplace

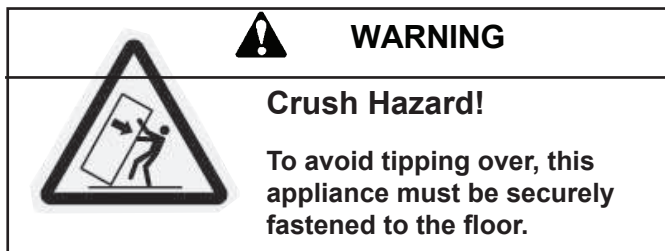
- Place the fireplace on a continuous flat surface or install on a raised platform.
- Follow framing instructions in Section 6.

**WARNING! Risk of Fire! Prevent contact with sagging, loose insulation.**

- DO NOT** install against vapor barriers or exposed insulation.
- Secure insulation and vapor barriers.
- Provide minimum air space clearances at the sides, top and back of the fireplace assembly as outlined in Section 6.

## B. Sub-Floor Material & Securing Fireplace

**NOTE:** Finish material and installation method must be selected before securing the fireplace to the floor.



### Flooring Material Under Appliance:

Concrete subflooring is the most secure method. Follow the manufacturing instructions that come with the concrete anchor bolts for properly securing fireplace to the concrete. In cooler climates place a sheet of plywood or a raised platform on cement slab under appliance only. You need to secure the appliance to the cement slab so do not extend the plywood so as to interfere with the attachment.

#### Wood Flooring

##### Non-Raised Hearth

- Minimum 19mm thickness plywood of C-C plugged grade or better exterior glue plywood.

##### Raised Hearth

- Minimum of 2 layers of 19mm thickness plywood of C-C plugged grade or better exterior glue plywood.
- The raised base must be firmly secured to the house framing members.

CDX or OSB plywood or particle board are not acceptable in either installation.

## Securing Fireplace

**NOTE:** Fireplace **MUST** be level before securing in place.

The fireplace is secured to the pallet with 4 brackets, 2 on each side. Re-use these same brackets to secure the fireplace to the floor.

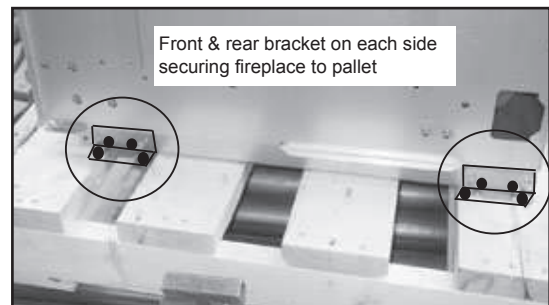
The brackets are attached with the short flange attached to the pallet and the long flange attached to the fireplace. These may

be turned around so the longer flange attaches to the floor. We recommend that the brackets are turned around for a concrete attachment. **Figure 33.1.**

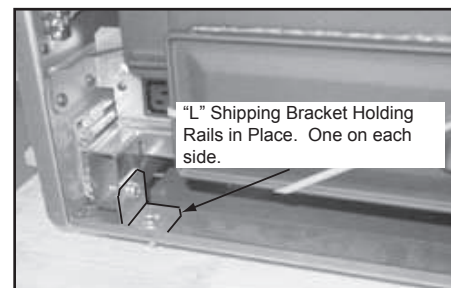
There are 4 holes on each flange. Secure each flange with 2 bolts. Choose the holes that best secures the fireplace to the floor. Please note that you always want to include the washer on the bolts that attach to the floor.

You can re-use the same bolts and washers that attach the fireplace to the pallet. However, there is also a full set of bolts and washers included in the component pack.

After properly securing the fireplace to the floor, the 2 slide rail "L" brackets that hold the rails in place for shipping may be removed and discarded. **Figure 33.2.**



**Figure 33.1**



**Figure 33.2**

## Testing for Deflection & Removing Handles

Remove the 2 bolts from each lower side of the fireplace and slowly roll out the fireplace on the rail system.

Inspect attachment of brackets to the floor and fireplace to ensure there is zero deflection in the outer can when it is rolled out on the rails.

### CAUTION!



- If there is any deflection, this could cause damage to the finishing material such as tile, mortar, etc.
- If fireplace is not properly secured, finishing materials will not be covered under warranty.

Remove the lift handles as they could rattle if left in place. Re-install the bolts in the firebox sides to prevent leaks after removing the handles.

Slide the fireplace back into the outer can. Re-attach the bolts and brackets. Double check they are correctly positioned to **ensure the exhaust gaskets are properly sealed to prevent combustion leakage.**

**C. Junction Box & Wiring Diagram**

**Caution!** The fireplace should be securely attached to the floor prior to making final electrical connections.

	 <p><b>WARNING</b></p> <p><b>Shock Hazard</b></p> <ul style="list-style-type: none"> <li>• A grounded metal outlet power supply box is required for all installations.</li> <li>• Provides a positive ground path to earth for outer can of the fireplace.</li> <li>• Protects against possible electrical shock.</li> </ul>
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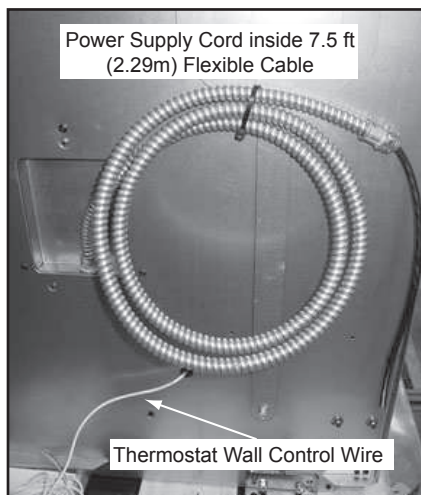
1. Disconnect power supply providing power to the outlet box you intend to use.
2. The power supply cord is inside a 7-1/2 foot (2.29m) long 3/8 inch (9.5mm) flexible conduit cable located and attached to the left side of the outer can. **Figure 34.1.** The cable comes with an insulated snap-in connection.
3. Locate the metal outlet box within 7-1/2 feet (2.29m) of the fireplace. (Note: Metal outlet box not supplied).
4. Feed the power cord into the 1/2 inch (12.7mm) standard knockout of the outlet box and then press the connection into the metal outlet box.
5. The power supply cord has black, white and green wires to connect to the outlet box.
  - Black wire: Connects to 120V AC 15-20 amp circuit
  - White wire: Connects to neutral wire
  - Green wire: Connects to ground wire and outlet box
6. Ensure the 2 green grounding wires are securely attached to the grounding screw. **Figure 34.2.**

**D. Connecting Wall Control To Fireplace**

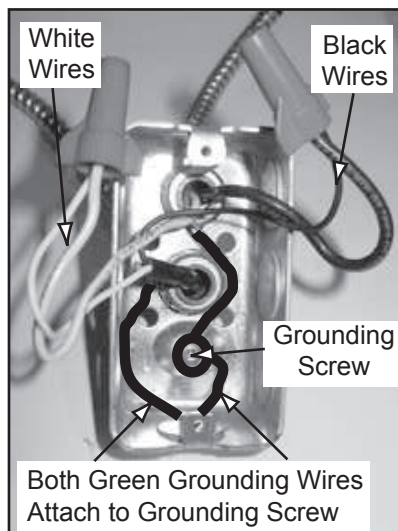
1. There is a 5 screw terminal connection bar that is located in the lower left side of the fireplace above the slide rails. **Figure 34.3.**
2. Route the 25 foot (7.62m) long white wall control wire that is supplied in the component pack through the rubber grommet in the left side of the fireplace outer can. **Figure 34.1**
3. The center 3 screws are for the thermostat wall control wires and the 2 outer screws are mounting screws and should not have wires attached to them.

The thermostat wires are color coded. The green wire is on the top, the white in the middle and the red on the bottom.

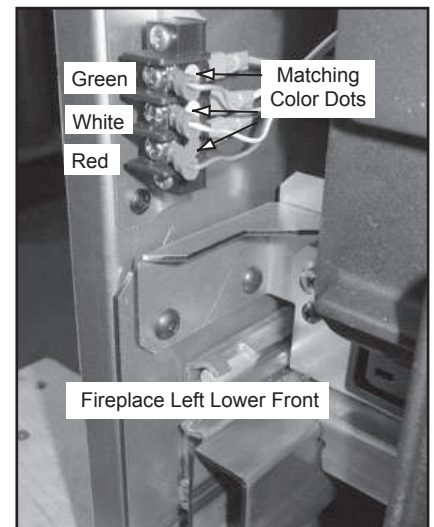
5. Attach the wall control wire to the thermostat wall control. Follow the directions on **page 35**. Do not pinch the control wires with any staples between the fireplace and wall control. **Figure 35.1 on page 35.**
6. Bend back the 3 red spade connectors towards inside of outer can and away from the fireplace. Wires should not be in the way when the fireplace is rolled out on the rail system.



**Figure 34.1 - Power Supply Cord and Wall Control Wire**



**Figure 34.2 - Metal Outlet Box**



**Figure 34.3 - Terminal Connection Bar**

## E. Thermostat Wall Control Installation

**NOTICE:** The thermostat wall control should be mounted on an inside wall and not in direct line with the appliance convection air.

**NOTICE:** If the thermostat wall control is located too close to the appliance, you may need to set the temperature setting slightly higher to maintain the desired temperature in your home.

Consideration should be given to the mounting material when installing the wall control.

If mounting the wall control to a sheet rock surface you should use the provided anchors for mounting.

If mounting the wall control to a wood surface or an electrical outlet box then the fasteners provided will suffice and the anchors need not be used.

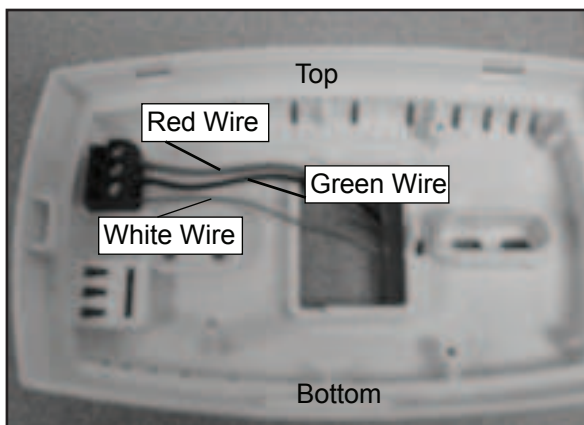
1. Remove the front cover of the wall control by prying the cover off with a small screwdriver or your fingernail. Place the front side to the packaging to protect it from damage while installing the sub base.

2. Route the wires into the wall control leaving only the amount necessary to make the connection to the terminal block in the upper left hand corner remaining. The wires are routed to the terminal block according to the letters printed in the thermostat sub base.

Red at the top  
Green in the middle  
White at the bottom

3. Push as much extra wire as possible back into the wall and seal the hole in the wall with putty or insulation.

4. When re-installing the cover make sure that the wire routing does not interfere with any of the components. Make adjustments as needed and snap cover back into place making sure that all locking tabs snap into place.



**Figure 35.1- Back Side of Wall Control with Cover Off**

## F. Installing Flue Collar, Vertical or Horizontal

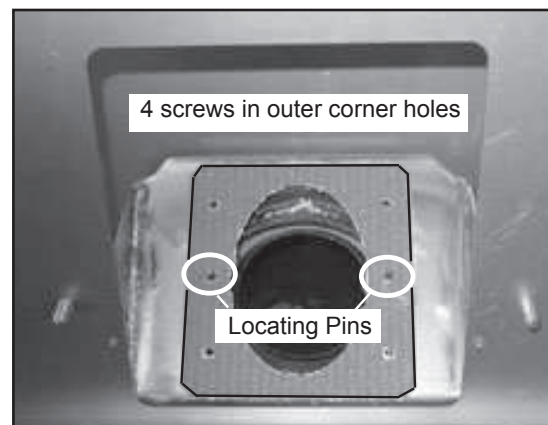
The fireplace ships from the factory without the flue collar and gasket attached. They are located in the component pack inside the firebox. Follow the steps below for a vertical or horizontal installation.

### Vertical Installation

1. Remove the flue collar and gasket from the component pack. Push out the 6 slugs in the gasket.
2. Remove both the top and rear cover plates. Save screws and plates for later re-attachment.
3. Place the orange flue gasket over the locating pins on the exhaust flue transition on the back of the fireplace. **Figure 35.2.**
4. Insert the flue pipe through the top cover plate.
5. Before inserting the flue collar into the pipe, liberally silicone the end of the flue collar with Hi-Temp silicone about 1-1/2 inches (38mm) wide. **Figure 36.1 on page 36.**

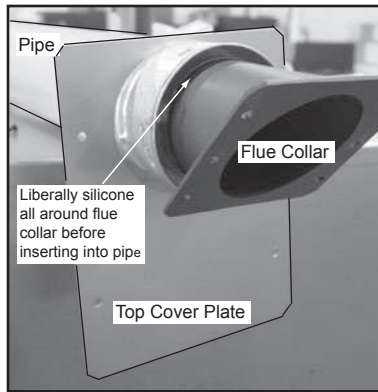
**NOTE:** You will need to install one section of 3 inch (76mm) diameter vent pipe to clear the outer can cover plate before installing a 3 to 4 inch (76-102mm) pellet pipe adapter for the balance of the venting.

6. Lay the first section of pipe on its side for screw attachment. The 2 screws need to be directly above the locating pins, 180 degrees apart. **Figure 36.2 on page 36.**
7. Drill holes through the pipe walls directly into the flue collar. Attach screws through pipe into flue collar.
8. Carefully feed the flue collar and pipe through the outer can top flue opening and guide the flue collar base plate over the 2 locating pins. Secure with 4 screws provided in component pack.
9. Re-attach the top cover plate to the top of the fireplace and the rear cover to the back of the outer can. **Figure 36.4 on page 36.**

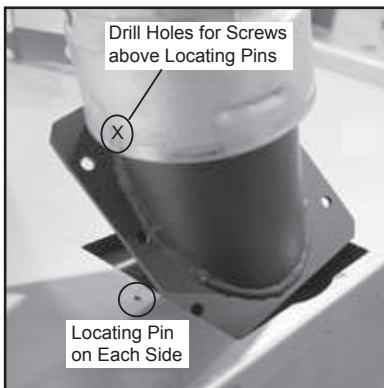


**Figure 35.2- Install Orange Flue Gasket**

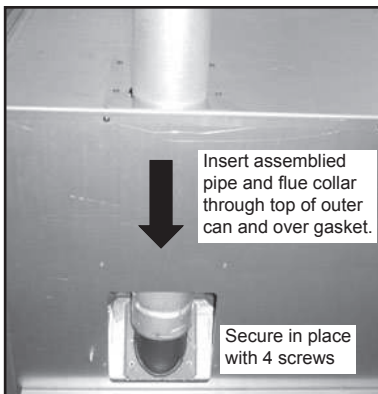
**Vertical Installation (Cont'd)**



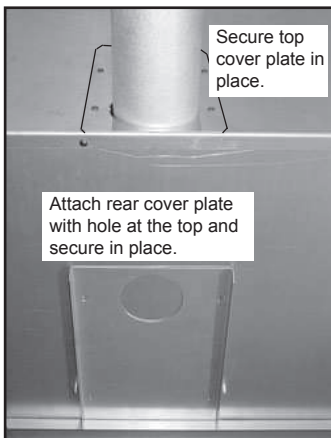
**Figure 36.1**



**Figure 36.2**



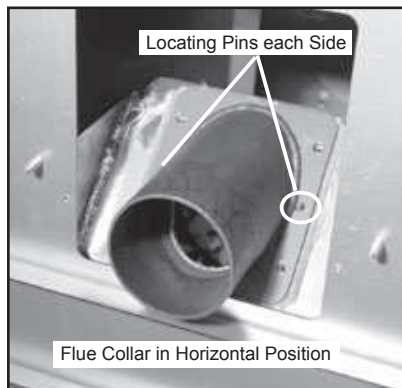
**Figure 36.3**



**Figure 36.4**

**Horizontal Installation**

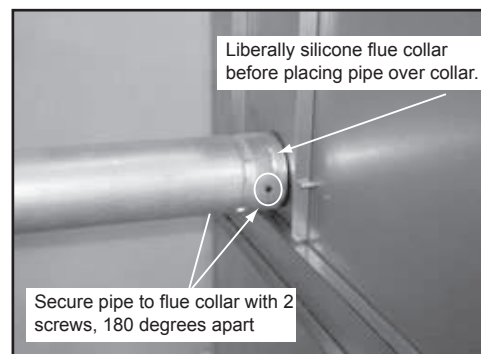
1. Remove the flue collar and orange gasket from the component pack. Push out the 6 slugs in the gasket.
2. Remove the rear cover plate. Save screws and plate for later re-attachment.
3. Place the orange flue gasket over the locating pins on the exhaust flue transition on the back of the fireplace. **Figure 35.2 on page 35.**
4. Position the flue collar over the gasket and secure in place. **Figure 36.5.**
5. Position the rear cover plate, secure in place. **Figure 36.6.**
6. Before placing the pipe over the flue collar, liberally silicone the end of the flue collar with Hi-Temp silicone about 1-1/2 inches (38mm) wide.
7. Drill holes through the pipe walls directly into the flue collar one on each side, 180 degrees apart. Screw the pipe to the flue collar with 2 screws. **Figure 36.7.**



**Figure 36.5**



**Figure 36.6**



**Figure 36.7**

# 8 Vent Information

## A. Venting Termination Minimum Requirements

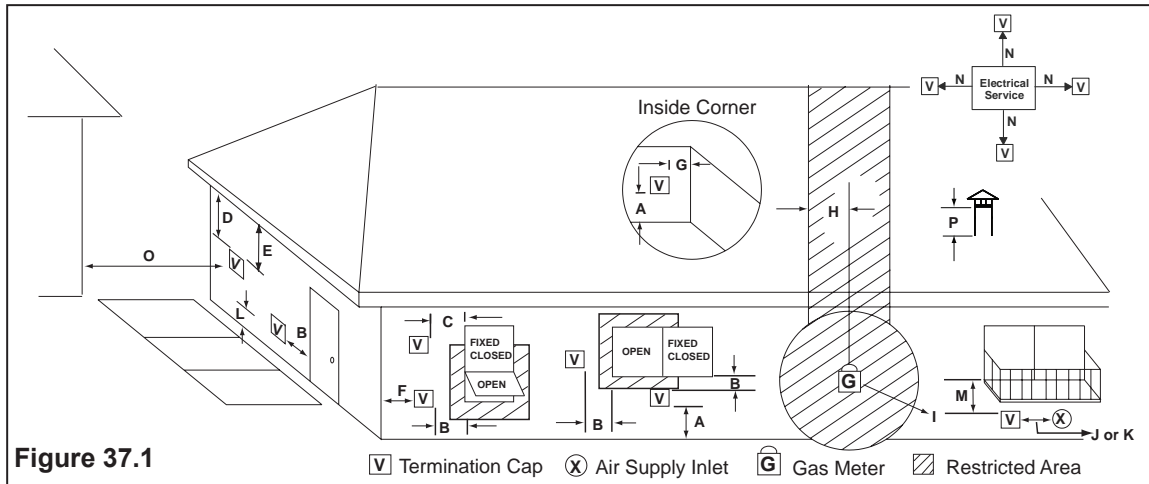


Figure 37.1

V Termination Cap X Air Supply Inlet G Gas Meter Restricted Area

**An Outside Air Kit is required on all installations. Outside Air Kit must be ordered separately.**

A	12 in.	Above Finish Grade (the grade surface must be a non-combustible material)
B	12 in.	Open door or window: below or to the side
B	12 in.	Open door or window: above
C	6 in.	Permanently closed window: above, below or to the side
D	18 in.	Vertical clearance to a ventilated soffit located above the terminal within a horizontal distance of 2 ft from the center-line of the terminal
E	12 in.	Clearance to unventilated soffit
F	12 in.	Clearance to outside corner
G	12 in.	Clearance to inside corner
H	36 in.	Above gas meter/regulator measured from horizontal center-line of regulator
I	36 in. USA 72 in. Canada	Clearance to service regulator vent outlet
J	12 in.	Clearance to non-mechanical air supply inlet to the building or the combustion air inlet to any other appliance
K	10 ft horizontal 3 ft vertical	Clearance to mechanical air supply
L	7 ft.	Above paved sidewalk, paved driveway located on <b>public</b> property
M	12 in.	Under an open veranda, porch, deck or balcony
N	See Note below*	Electric service: above, below or to the side (location must not obstruct or interfere with access)
O	24 in.	Adjacent building, fences and protruding parts of the structure
P	12 in.	Clearance above roof line for vertical terminations

24 in.	Above grass, top of plants, wood or any other combustible
12 in.	Clearance from any forced air intake of other appliance
12 in.	Clearance horizontally from combustible wall
15 in.	Vented directly through a wall, minimum length of horizontal pipe
12 in. horizontal 12 in. vertical	Minimum horizontal or vertical terminations must protrude from wall

**NOTICE:**

**Do NOT Terminate Vent:**

- In any location that will allow flue gases or soot to enter or stain the building.
- In any location which could create a nuisance or hazard.
- In any enclosed or semi-enclosed area such as a carport, garage, attic, crawl space, under a sun deck or porch, narrow walkway.
- Closely fenced area, or any location that can build up a concentration of fumes such as a stairwell, covered breezeway, etc.

**NOTICE:**

**Termination must exhaust above air inlet elevation.**

- It is recommended that at least 60 inches (1.52m) of vertical pipe be installed when appliance is vented directly through a wall. This will create a natural draft, which will help prevent the possibility of smoke or odor venting into the home during a power outage.
- It will also keep exhaust from causing a nuisance or hazard by exposing people or shrubs to high temperatures.
- The safest and preferred venting method is to extend the vent vertically through the roof or above the roof.

\*NOTE: Consult local building, fire officials or authorities having jurisdiction. Local codes or regulations may require different clearances.

**B. Avoiding Smoke and Odors**

**Negative Pressure, Shut-Down and Electrical Power Failure**

To reduce the probability of back-drafting or burn-back in the pellet appliance during power failure or shut down conditions, it must be able to draft naturally without exhaust blower operation.

Negative pressure in the house will resist this natural draft if not accounted for in the pellet appliance installation.

Heat rises in the house and leaks out at upper levels. This air must be replaced with cold air from outdoors which flows into lower levels of the house.

Vents and chimneys into basements and lower levels of the house can become the conduit for air supply and reverse under these conditions.

**Outside Air**

An outside air kit is required in **ALL** installations. The Outside Air Kit must be ordered separately.

Per national building codes, consideration must be given to combustion air supply to all combustion appliances. Failure to supply adequate combustion air for all appliance demands may lead to backdrafting of those and other appliances.

When the appliance is roof vented (strongly recommended):

The air intake is best located on the exterior wall oriented towards the prevailing wind direction during the heating season.

When the appliance is side-wall vented:

The air intake is best located on the same exterior wall as the exhaust vent outlet and located lower on the wall than the exhaust vent outlet.

The outside air supply kit can supply most of the demands of the pellet appliance, but consideration must be given to the total house demand.

House demand may consume the air needed for the appliance. It may be necessary to add additional ventilation to the space in which the pellet appliance is located.

Consult with your local HVAC professional to determine the ventilation demands for your house.

**Vent Configurations**

To reduce probability of reverse drafting during shut-down conditions Hearth & Home Technologies strongly recommends:

- Installing the pellet vent with a minimum vertical run of 5 feet (1.52m). Preferably terminating above the roof line.
- Installing the outside air kit at least 4 feet (1.22m) below the vent termination.

To prevent soot damage to exterior walls of the house and to prevent re-entry of soot or ash into the house:

- Maintain specified clearances to windows, doors and air inlets, including air conditioners.
- Vents should not be placed below ventilated soffits. Run the vent above the roof.
- Avoid venting into alcove locations.
- Vents should not terminate under overhangs, decks or onto covered porches.
- Maintain minimum clearance of 12 inches (305mm) from the vent termination to the exterior wall. If you see deposits developing on the wall, you may need to extend this distance to accommodate your installation conditions.

**Optional Battery Back-Up**

Hearth & Home Technologies supplies an optional battery back-up system that operates the fireplace during power failure conditions to prevent smoking. In shutdown mode, the battery back-up will not prevent smoking. **See Section 2 for details.**

Hearth & Home Technologies assumes no responsibility for, nor does the warranty extend to, smoke damage caused by reverse drafting of pellet appliances under shut down or power failure conditions.

### C. Negative Pressure

**WARNING! Risk of Asphyxiation!** Negative pressure can cause spillage of combustion fumes and soot.

Negative pressure results from the imbalance of air available for the fireplace to operate properly. It can be strongest in lower levels of the house.

Causes include:

- Exhaust fans (kitchen, bath, etc.)
- Range hoods
- Combustion air requirements for furnaces, water heaters and other combustion appliances
- Clothes dryers
- Location of return-air vents to furnace or air conditioning
- Imbalances of the HVAC air handling system
- Upper level air leaks such as:
  - Recessed lighting
  - Attic hatch
  - Duct leaks

To minimize the effects of negative air pressure:

- Install the outside air kit with the intake facing prevailing winds during the heating season
- Ensure adequate outdoor air for all combustion appliances and exhaust equipment
- Ensure furnace and air conditioning return vents are not located in the immediate vicinity of the fireplace
- Avoid installing the appliance near doors, walkways or small isolated spaces
- Recessed lighting should be a “sealed can” design
- Attic hatches weather stripped or sealed
- Attic mounted duct work and air handler joints and seams taped or sealed

### D. Draft

Draft is the pressure difference needed to vent fireplaces successfully. When a fireplace is drafting successfully, all combustion byproducts are exiting the home through the chimney.

Install through the warm airspace enclosed by the building envelope. This helps to produce more draft, especially during lighting and die-down of the fire.

Considerations for successful draft include:

- Preventing negative pressure
- Location of fireplace and chimney

**NOTICE:** *Hearth & Home Technologies assumes no responsibility for the improper performance of the chimney system caused by:*

- *Inadequate draft due to environmental conditions*
- *Downdrafts*
- *Tight sealing construction of the structure*
- *Mechanical exhausting devices*



**E. Chimney and Exhaust Connection**

**CAUTION!**

- **DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.**
- **DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.**

1. **Chimney & Connector:** Use 3 or 4 inch (76-102mm) diameter type "L" or "PL" venting system. It can be vented vertically or horizontally.
2. **Mobile Home:** Approved for all Listed pellet vent. As with all installations a Quadra-Fire Outside Air Kit must be used with manufactured home installations.
3. **INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENT MANUFACTURER.**
4. **Exhaust Venting System:** Secure to the appliance with at least 2 screws 180 degrees apart. Also secure all connector pipe joints with at least 3 screws through each joint.


**NOTE: All pipe must be welded seam pipe whenever possible. Seal pipe joints with high temperature silicone (500°F [260°C] minimum rated only).**

**NOTE: If burning shelled field corn, you must use approved venting specifically designed for corn. Follow the instructions from the venting manufacturer.**

**WARNING! RISK OF FIRE!**

- Only LISTED venting components may be used.
- NO OTHER vent components may be used.
- Substitute or damaged vent components may impair safe operation.

**⚠ WARNING**



Vent surfaces get HOT, can cause burns if touched. Non-combustible shielding or guards may be required.

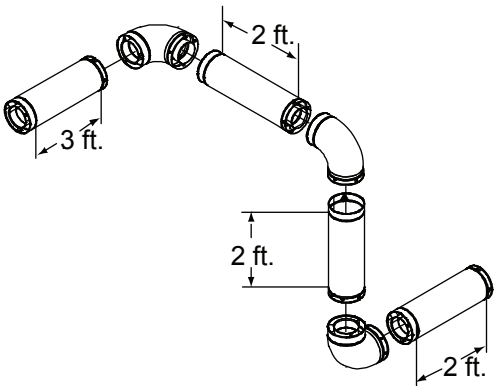
**WARNING! RISK OF INJURY OR PROPERTY DAMAGE!**

- Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage.
- Refer to the owner's information manual provided with this appliance.
- For assistance or additional information consult a qualified installer, service agency or your dealer.

**F. Equivalent Feet of Pipe**

The table below can help you calculate the equivalent feet of pipe which is a method used to determine pellet vent size. **Figure 40.1.**

**Example of 3 Elbow-Rear Vent Termination Calculation**



Pellet Venting Component	# of Elbows	Feet of Pipe	Multiplied By	Equivalent Feet	Components Equivalent Feet
90° Elbow or Tee	3		X	5	15
45° Elbow			X	3	
Horizontal Pipe		7	X	1	7
Vertical Pipe		2	X	0.5	1
<b>Total Equivalent Feet</b>					<b>23</b>

Note: This is a generic example and is not intended to represent any specific fuel type.

**Figure 40.1**

## G. Pipe Selection Chart

The chart will help you in determining proper venting size according to the equivalent feet of pipe calculated previously and the altitude above sea level of this installation.

### Figure 41.1.

- Locate the calculated equivalent feet of pipe on the vertical left side of the chart.
- Move to the right horizontally on the chart until you reach your altitude above sea level.
- If you fall below the diagonal line, 3 or 4 inch (76 to 102mm) pipe may be used.
- If it is anywhere above the diagonal line, a 4 inch (102mm) diameter pipe is required.

### NOTICE:

- A 90° elbow is 5 times as restrictive to the flow of exhaust gases under positive pressure as 1 foot (305mm) of horizontal pipe.
- A foot of horizontal pipe is twice as restrictive as a foot of vertical pipe.

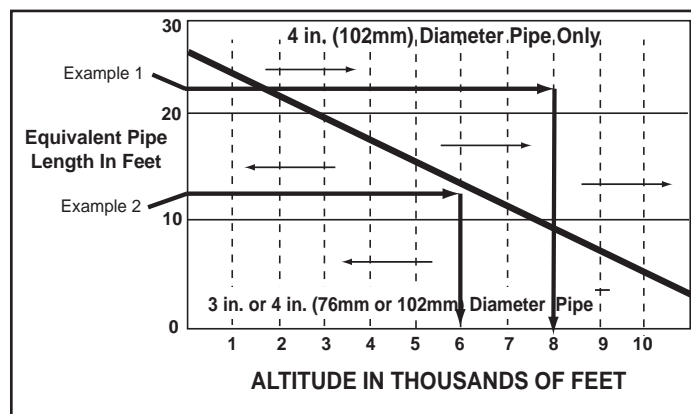


Figure 41.1

**Example 1:** If the equivalent length of pipe is 23 feet (7m) with altitude of 8,000 feet (2438m) you must use 4 inch (102mm) diameter type “L” or “PL” vent.

**Example 2:** If the equivalent length of pipe is 12 feet (3.7m) with altitude of 6,000 feet (1829m) you may use 3 or 4 inch (76 to 102mm) diameter type “L” or “PL” vent.

### WARNING! RISK OF FIRE!

Do NOT pack insulation or other combustibles between firestops.

- ALWAYS maintain specified clearances around venting and firestop systems.
- Install firestops as specified.

Failure to keep insulation or other material away from vent pipe may cause fire.

### WARNING

**It is critical to have a working smoke detector installed in the home of unit operation.**

- Smoke alarms that are properly installed and maintained play a vital role in reducing fire deaths and injuries. Having a working smoke alarm reduces the chance of fire related injuries..

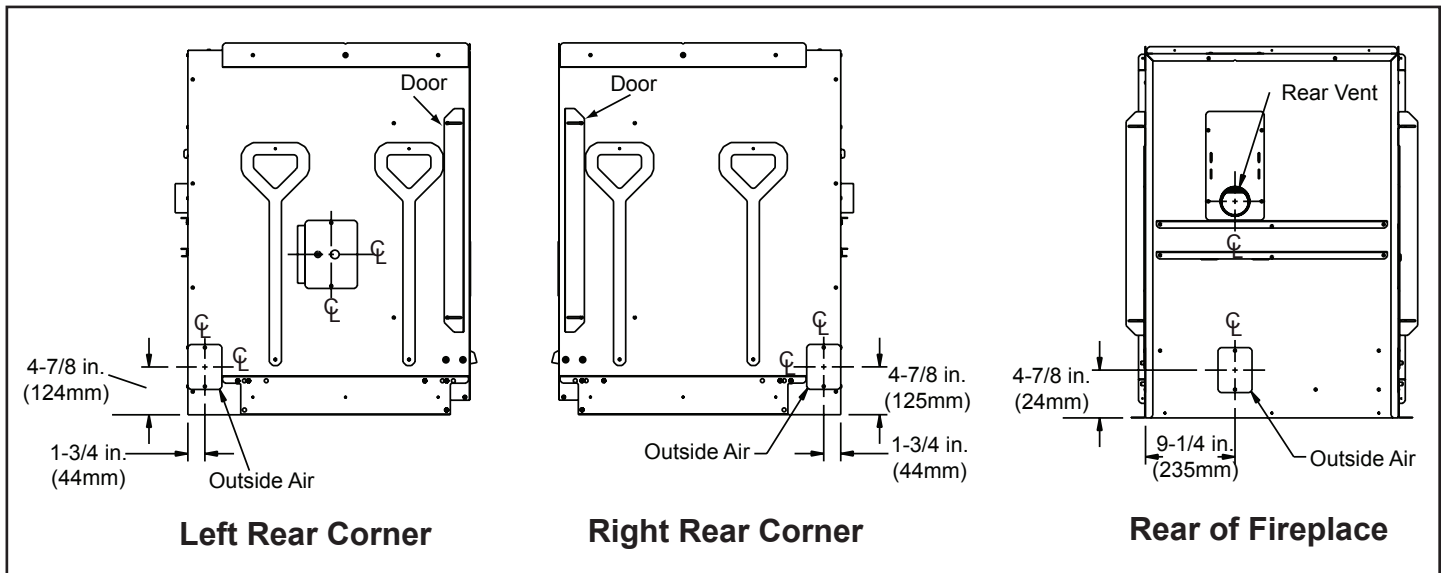
### WARNING

Products of combustion generate carbon monoxide and different fuels generate different levels. Carbon monoxide

- Only use approved fuels in this appliance.
- Always keep door shut during operation. Operating this unit with doors open can allow CO to leak into the home.

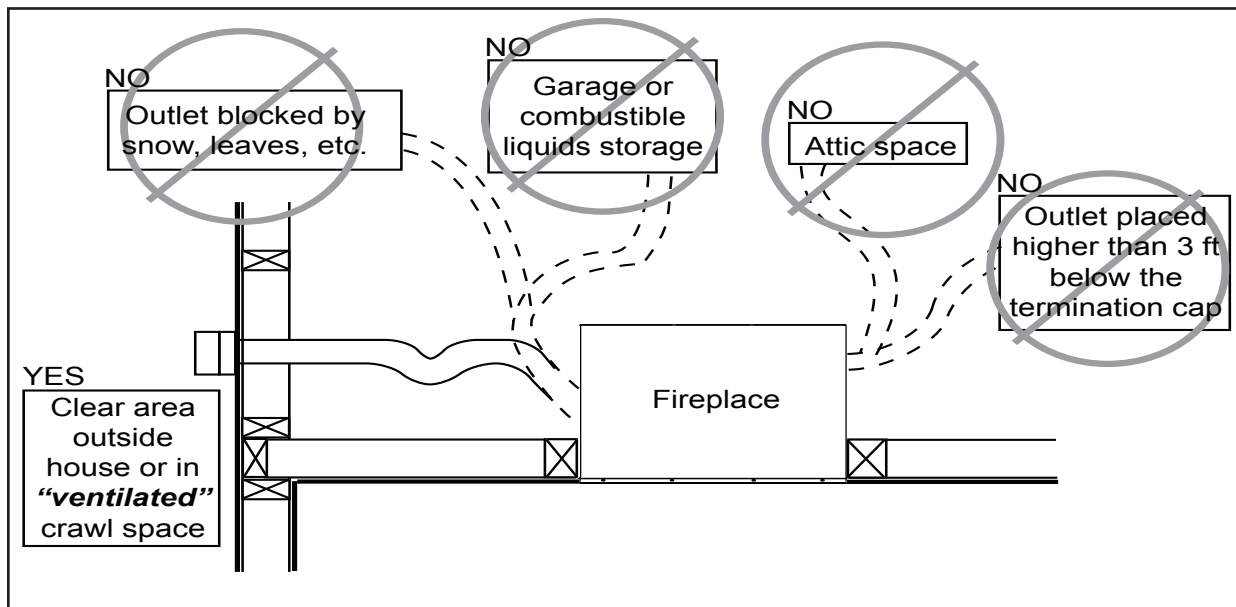
CO can kill you before you are aware it is in your home. At lower levels of exposure, CO causes mild effects that are often mistaken for the flu. These symptoms include headaches, dizziness, disorientation, nausea and fatigue. The effects of CO exposure can vary greatly from person to person depending on age, overall health and the concentration and length of exposure.

**H. Outside Air Locations & Considerations**



**Figure 42.1 - Outside Air Inlet Locations**

**NOTE:** The fireplace ships from the factory with the left and right outside air covers installed. Once the location for the outside air inlet has been chosen, install the outside air covers over the two unused air inlets.



**Figure 42.2 - Outside Combustion Air Placement**

## I. Outside Air Kit Installation

Outside air is required on **ALL** installations. The Outside Air Kit must be ordered separately.

**CAUTION! Risk of Fire or Asphyxiation!** Do not draw outside combustion air from wall, floor or ceiling cavity, or enclosed spaces such as an attic or garage.

- Do not place outside air inlet close to exhaust vents or chimneys. Fumes or odors could be drawn into the room.
- Locate outside air inlet to prevent blockage from leaves, snow/ice, or other debris. Blockages could cause combustion air starvation.

### Install Outside Air Kit

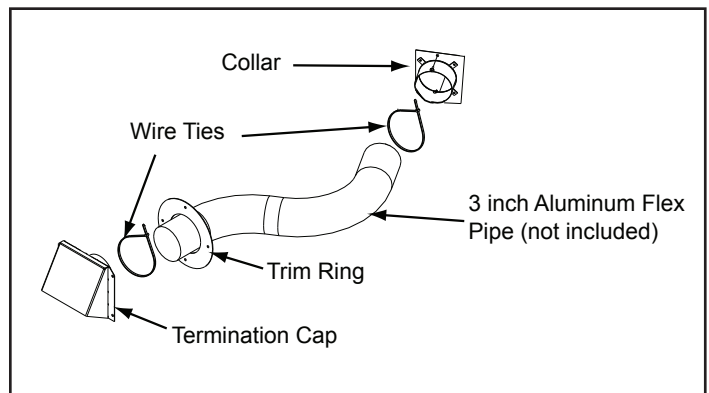
- Keep duct runs short and straight to minimize restriction.
- The outside air kit can be installed in three different locations - the left or right side or from the back of the fireplace. **Figure 42.1 on page 42.**
- Locate the air inlet in a clear area, preferably into prevailing wind during the heating season. **Figure 42.2 on page 42.**
- Install as shown in **Figure 43.1.**
- The air duct may be run vertically.

**Included in Kit:** 2 wire ties, 1 collar assembly, 1 termination cap assembly, 1 trim ring, fasteners.

**NOTE:** 3 Inch (75mm) Aluminum Flex Pipe Not Supplied.

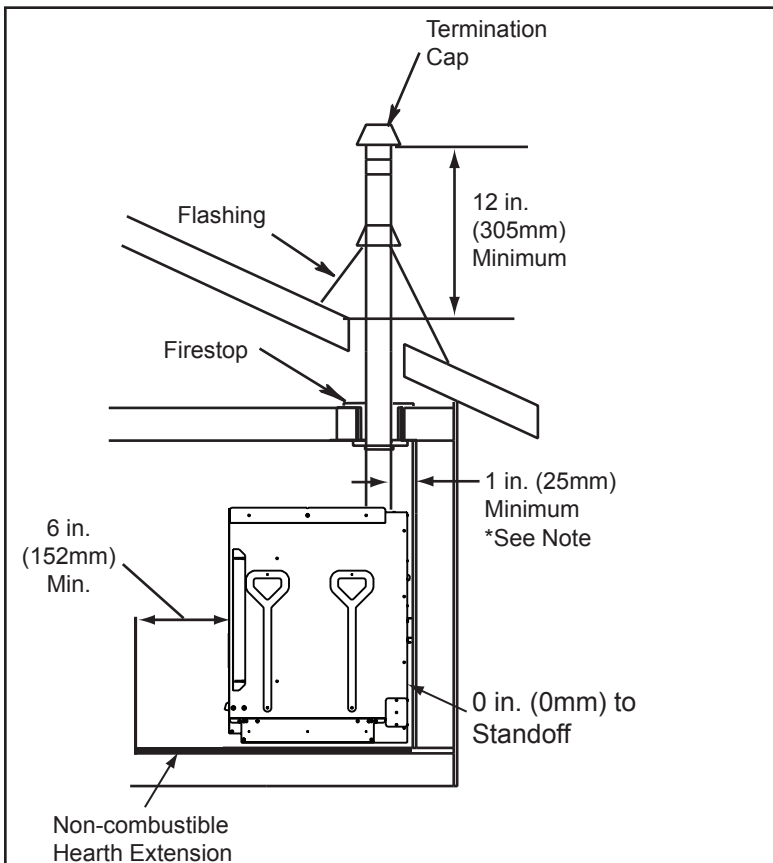
**Tools Needed:** Phillips Head screwdriver; wire cutters; hole saw or jig saw.

1. Measure distance from floor to air vent opening in appliance and mark location on wall.  
Use saw to cut opening in wall.
  - Cut a 3-1/2 to 4 inches (89-102mm) opening on inside wall.
  - \* Cut a 4 to 4-1/2 inches (102-114mm) opening on outside of house.
2. Use wire tie to secure flex pipe to collar assembly.
3. Slide trim ring over flex pipe and run pipe through wall.
4. Attach flex pipe (not supplied) to outside termination cap with second wire tie.
5. Secure termination cap to outside surface.
6. Secure trim ring to the wall.



**Figure 43.1 - Outside Air Installation**

**J. Vertical - Interior - Typical Installation**



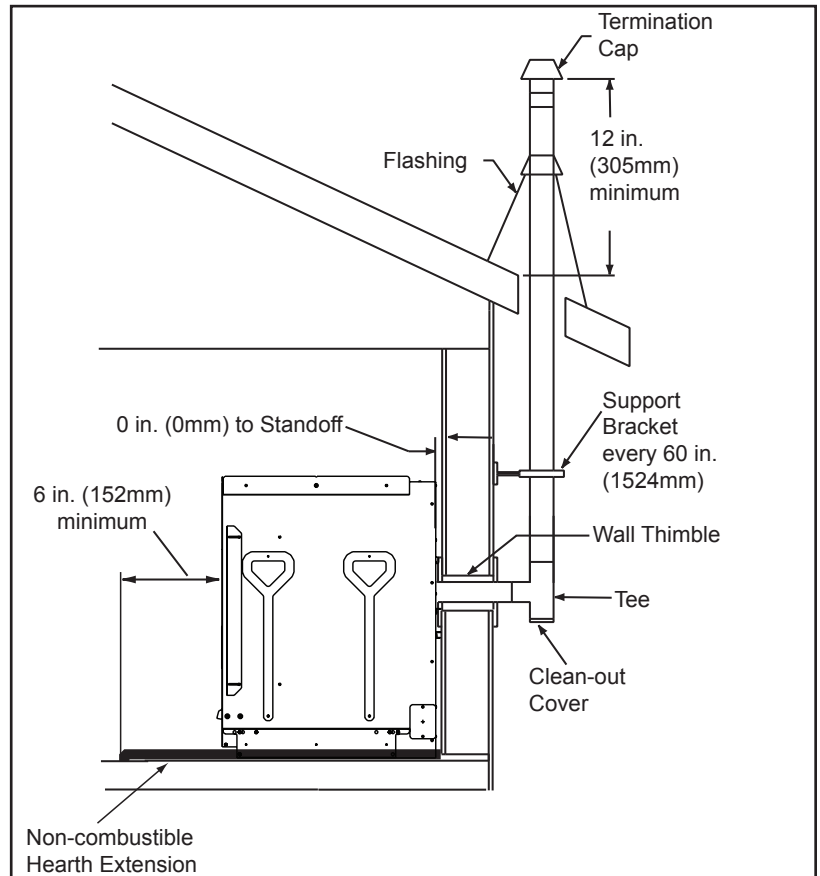
**Figure 44.1**

We recommend a minimum of 60 inches (1.52m) vertical, however above the eave is preferred.

Both installations are approved for mobile home installations. Must use 3 or 4 inch (76mm to 102mm) "L" or "PL" Listed pellet venting or Listed double wall pipe and Quadra-Fire Outside Air Kit in all installations. Single wall pipe is approved for residential installations only.

**\*NOTE:** Clearance to combustibles are for 1 inch (25mm) clearance approved pellet pipe. If pellet pipe has a 2 inch or 3 inch (51mm or 76mm) air clearance to combustibles, increase the clearance from rear standoff accordingly to meet pipe manufacturer clearance requirements

**K. Through the Wall & Vertical - Exterior**

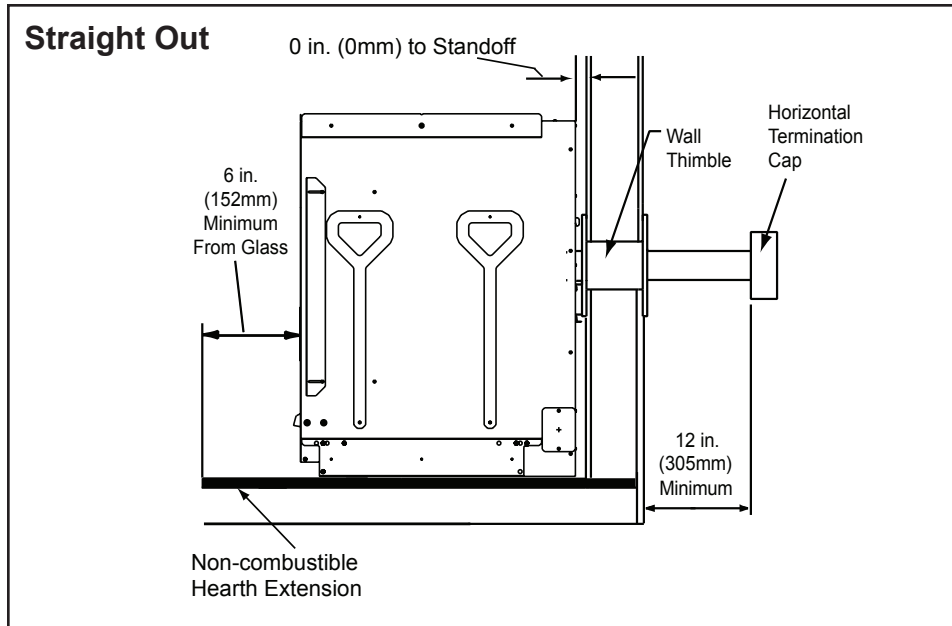


**Figure 44.2**

**L. Through the Wall**

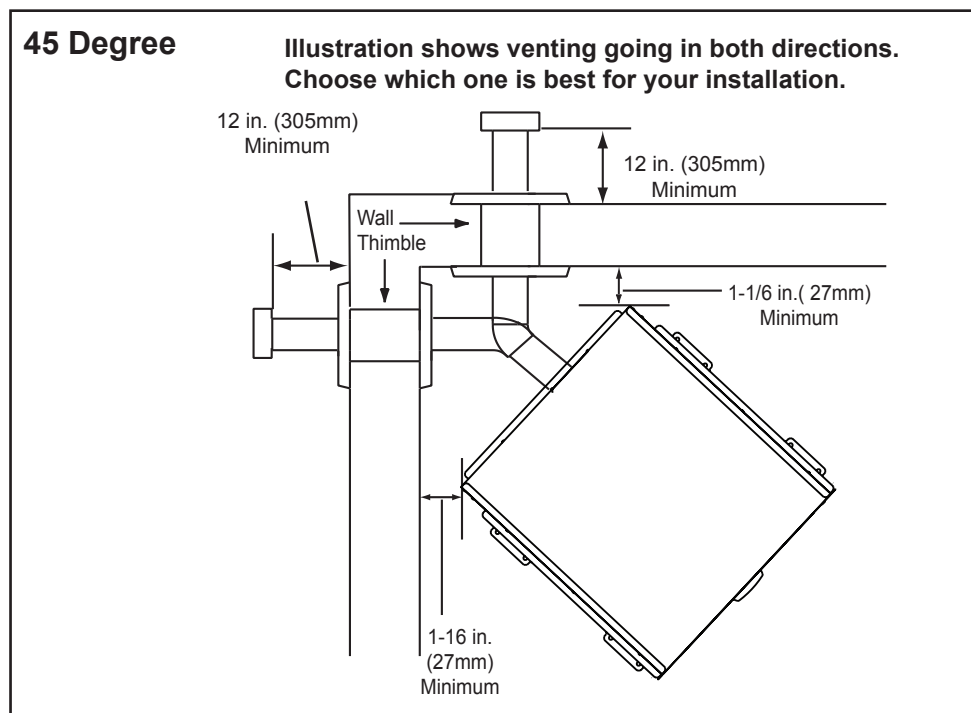
Horizontal termination cap must be a minimum of 12 inches (305mm) from the wall. Approved for mobile home installations. Must use 3 or 4 inch (76mm-102mm) "L" or "PL" Listed pellet venting and a Quadra-Fire Outside Air Kit in **ALL** installations.

**NOTE:**  
In Canada, where passage through a wall or partition of combustible construction is desired, the installation shall conform to CAN/CSA-B365



**Figure 45.1**

**NOTICE!** See Section 8 "Avoiding Smoke and Odors" to minimize soot damage to exterior walls of the house and to prevent re-entry of soot or ash into the house for horizontal vent configuration



**Figure 45.2**

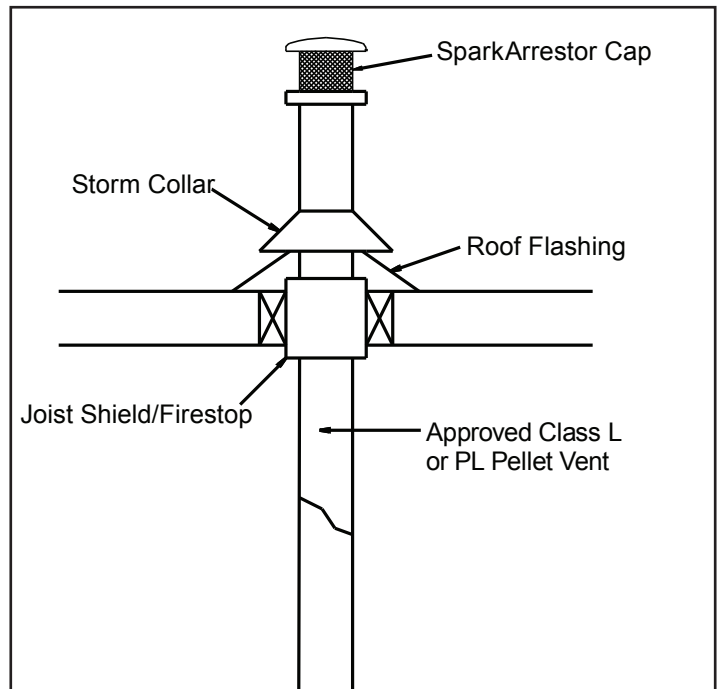
# 9 Mobile Home Installation

**WARNING! Risk of Asphyxiation!**

- Never install in a sleeping room.
- Consumes oxygen in the room.

1. An outside air intake must be provided for the combustion air and must:
  - Remain clear of leaves, debris, ice and/or snow.
  - Be unrestricted while the appliance is in use to prevent room air starvation which causes smoke spillage.
  - Smoke spillage can also set off smoke alarms.
2. The combustion air duct system must be made of metal and it must:
  - Permit zero clearance to combustible construction.
  - Prevent material from dropping into the inlet or into the area beneath the dwelling.
  - Must contain a rodent screen.
3. The appliance must be secured to the mobile home structure by bolting it to the floor. See **page 33** for detailed instructions on securing fireplace to the floor.
4. The appliance must be grounded with #8 solid copper grounding wire or equivalent, terminated at each end with an NEC approved grounding device.
5. Refer to Clearances to Combustibles and floor protection requirements in **Section 6** for listings to combustibles and appropriate chimney systems.
6. Use silicone to create an effective vapor barrier at the location where the chimney or other component penetrates to the exterior of the structure.
7. Follow the chimney manufacturer's instructions when installing the vent system for use in a mobile home.
8. Installation shall be in accordance with the Manufacturers Home & Safety Standard (HUD) CFR 3280, Part 24.

<b>CAUTION</b>
<p>THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL AND CEILING/ROOF MUST BE MAINTAINED</p> <p>Do NOT cut through:</p> <ul style="list-style-type: none"> <li>• Floor joist, wall, studs or ceiling trusses.</li> <li>• Any supporting material that would affect the structural integrity.</li> </ul> <p>This unit is to be connected to a factory-built chimney conforming to CAN/ULC-S629, Standard for 650°C Factory-Built Chimneys.</p> <p>For removal of the chimney for mobile home transportation, contact the proper transportation officials.</p>



**Figure 46.1**

# 10 Appliance Set-Up

## A. Optional Log Set Placement Instructions

### 2 PIECE LOG SET INSTALLATION

1. Place the left log as shown. There are 2 indentations in the bottom of the log to fit over the screw heads in the firebox. **Figures 47.1 and 47.2.**
2. Place the right log in front of the 2 screw heads in the firebox. **Figures 47.3 and 47.4.**

**CAUTION!** Logs are *FRAGILE*. Use extreme care when handling or cleaning logs.

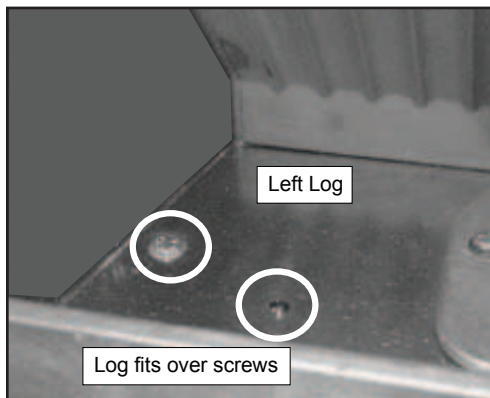


Figure 47.1

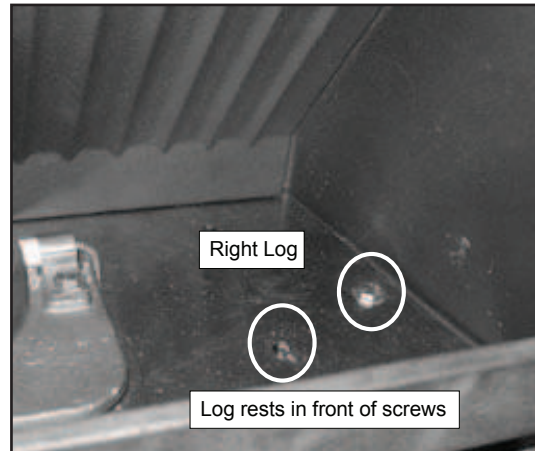


Figure 47.3



Figure 47.4

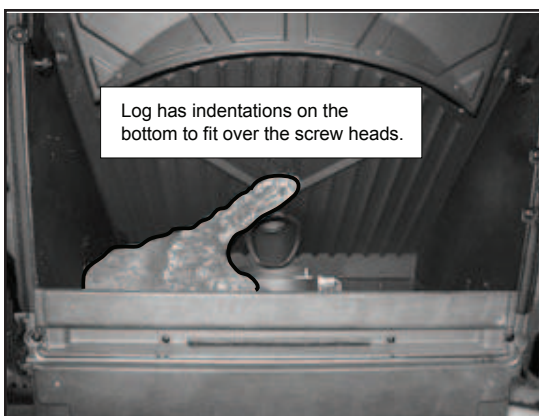


Figure 47.2

### NOTICE:

*Due to the abrasive nature of a pellet appliance fire, the logs are not covered under warranty.*

*Any placement variation other than shown here can cause excessive heat and shall void the appliance warranty.*



**B. Front - Installation**

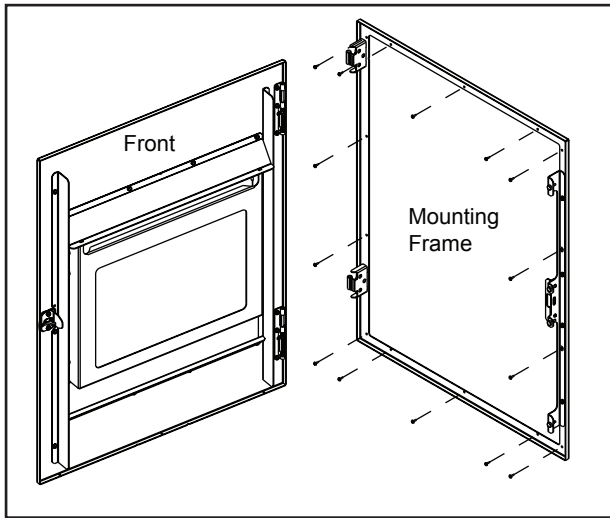
**Included in Kit:** Front, mounting frame, masonry spacer, fasteners and glove

**Tools Required:** Phillips Head screwdriver

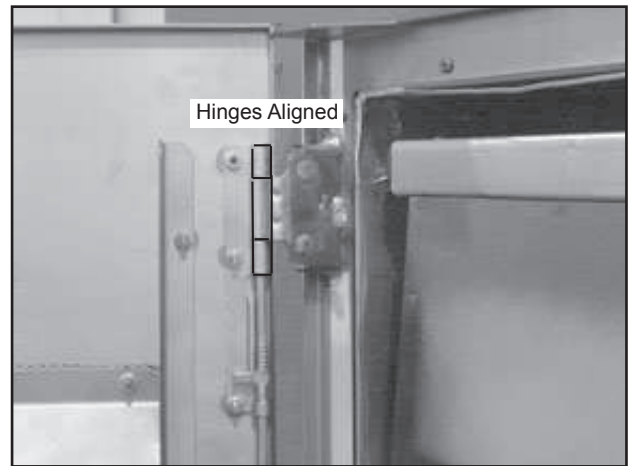
**CAUTION! BURN HAZARD.** Allow the front to cool before touching. Do NOT touch without wearing protective glove.

**Installing Mounting Bracket on Fireplace**

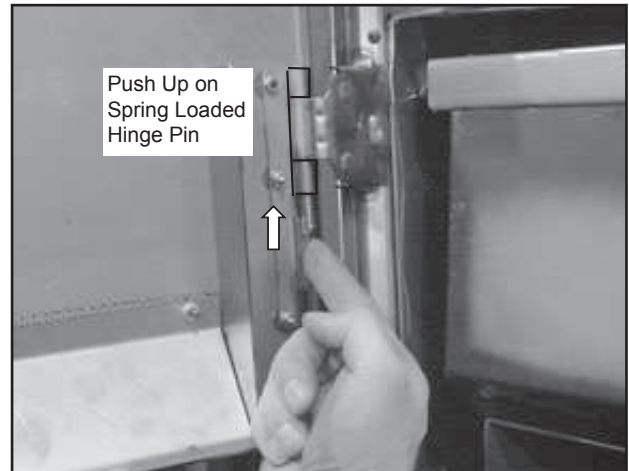
1. Use a Phillips Head screwdriver and attach the mounting frame to the face of the fireplace with 5 screws on the top and bottom and 4 on each side. **Figure 48.1**
2. The front is attached to the mounting frame via the hinges.
3. All 4 fronts are mounted the same way.



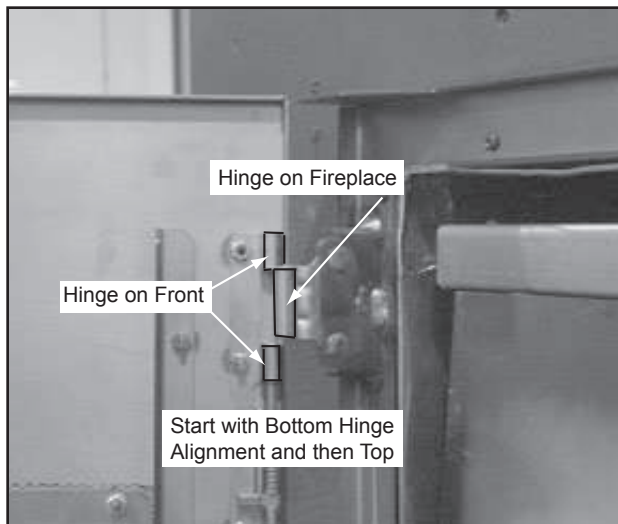
**Figure 48.1**



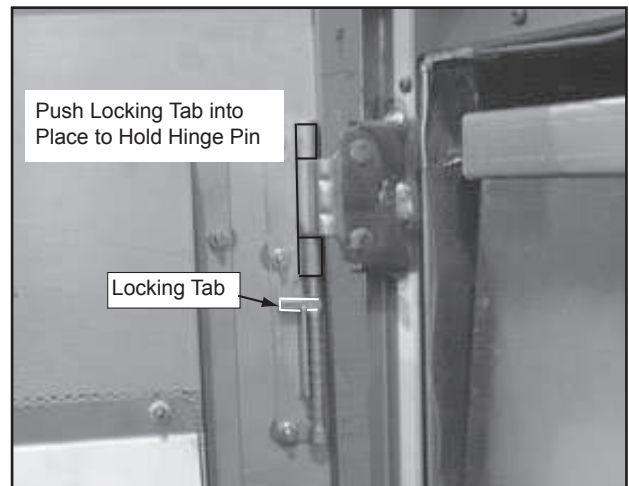
**Figure 48.3**



**Figure 48.4**



**Figure 48.2**



**Figure 48.5**

# 11 Replacement Parts

## A. Glass Replacement

### WARNING! Risk of Injury!

- Glass is 5mm thick high temperature heat-resistant ceramic glass.
- DO NOT REPLACE with any other material.
- Alternate material may shatter and cause injury

- To remove the door:
  - Swing open the front.
  - Remove the door by lifting it off the hinge pins.
  - Lay on a flat surface face down.
- Using a Phillips head screwdriver, remove 4 screws, 2 on the top and 2 on the bottom. **Figure 49.1.**
- Remove metal bracket.
- Remove the glass.
- Replace with new glass with gasket.
- Re-attach metal bracket with 4 screws.
- Re-install door over hinge pins and close front.

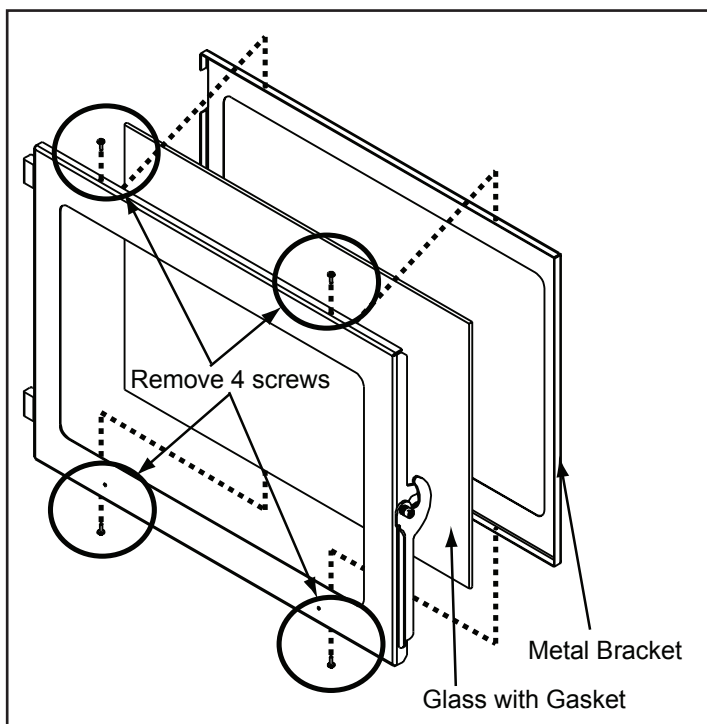


Figure 49.1

## B. Combustion (Exhaust) Blower Replacement

- Follow the proper shut down procedures as outlined on **page 14, Section 3.A**
- The combustion blower is mounted in the lower right rear of the appliance. **Figure 49.2.**
- Use an 11/32 nut driver to loosen all six nuts, but do not remove. Rotate the blower and remove from the housing. **Figure 49.3.**
- Disconnect the wires.
- You will also need to replace the gasket, see Parts List for part number.
- Install replacement blower in reverse order and re-connect the wires.



Figure 49.2

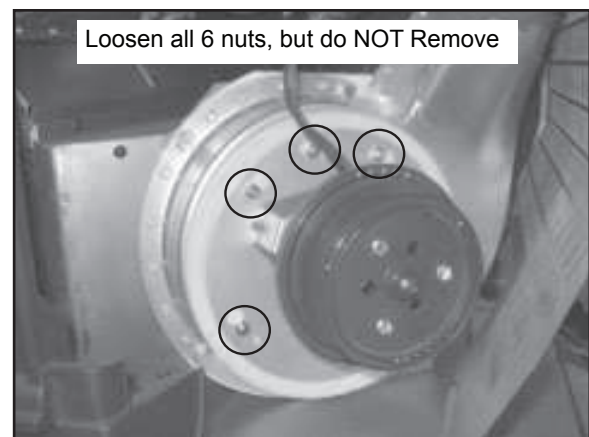


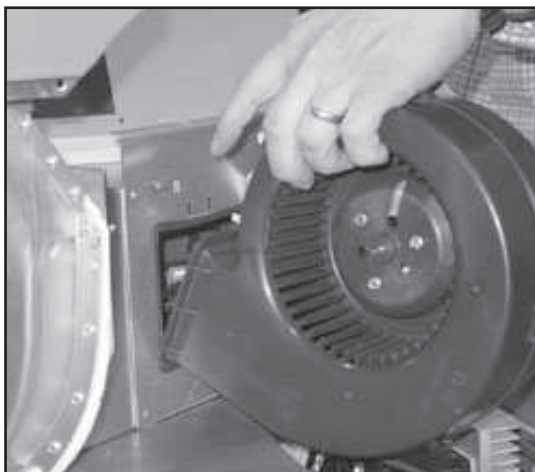
Figure 49.3

**C. Convection Blower Replacement**

1. Follow the proper shut down procedures as outlined on **page 14, Section 3.A.**
2. Remove the 2 bolts from the bottom left and right side of the fireplace and slide the fireplace out.
3. Locate the convection blower on the bottom left rear of the fireplace. Reach behind the blower and release the latch by pushing the top of the latch towards the blower. **Figure 50.1.**
4. Rock the top of the blower slightly and lift up and out. The blower will pass around the control board and out the side of the fireplace.
5. Disconnect the wire harness from the bottom of the blower by depressing the tabs on the sides of the connector and then pulling to remove.
6. Re-connect wire harness to the new replacement blower. Install the blower by placing the bottom flange into the opening first then rotate blower up into position.
7. When the blower is properly positioned the latch will engage the notch to hold the blower in place. **Figure 50.2.**
8. Slide appliance back in position and re-install bolts.



**Figure 50.1**



**Figure 50.2**

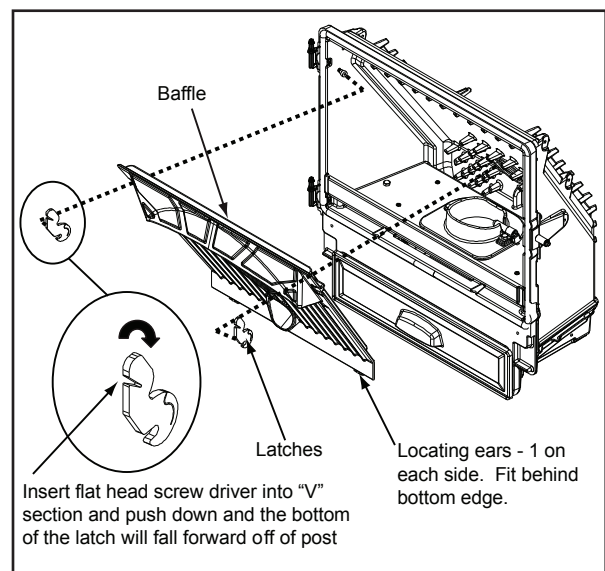
**D. Baffle Removal & Replacement**

**WARNING! Risk of Injury! Cast iron is a very heavy material. The baffle is made of cast iron and therefore is heavy and awkward at times to maneuver. Clear and prepare your work area before you begin.**

1. Follow the proper shut down procedures as outlined on **page 14, Section 3.A.**
2. Open front and open firebox door.
3. The baffle is located at the top inside of firebox.
4. To remove the baffle:
  - a. Place a flat head screwdriver into the slot of the latches located in the upper corners. **Figure 50.3.**
  - b. Push down and the bottom of the latch will fall forward off of the post.
  - c. Lift the baffle up and then out toward you.
5. To replace the baffle:
  - a. Place the 2 locating ears behind the bottom edge.
  - b. Tilt the baffle up and into place.

**The baffle must be centered in the firebox before latching it in place.**

- c. If it is not centered the latch is trapped between the baffle and side of the firebox instead of latching properly.
- d. The bottom of the latches will fit over the posts.
- e. Push the top of the latch forward to lock latch into place.



**Figure 50.3**

With proper installation, operation, and maintenance your appliance will provide years of trouble-free service. ***This troubleshooting guide shall be used by a qualified service technician only.***

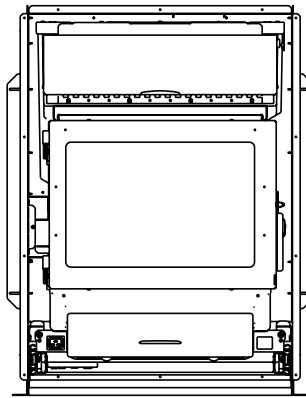
# 12 Troubleshooting For Installers

Error Message	Possible Cause	Corrective Action
	Bad wall control or control board 3 wires have loose connections or installed wrong	Replace wall control or control board Check connections
BAD TC DROP TUBE (TC = Thermocouple)	Drop tube thermocouple is broken or leads are reversed	Check connections Replace thermocouple
BAD TC FIREPOT (TC = Thermocouple)	Firepot thermocouple is broken or leads are reversed	Check connections Replace thermocouple
SNAP DISC TRIPPED	Overheat sensor (snap disc) has tripped  Convection blower may need cleaning	Turn power off to appliance and manually reset snap disc then turn power back on Clean convection blower if needed
VACUUM SW ERROR (SW = Switch)	Vacuum switch is bad  Vacuum hose is plugged/disconnected	Check connections. Bypass vacuum with jumper wire, if runs, switch is bad. Replace switch Check vacuum hose
COMB BLOWER JAMMED	Combustion blower is blocked/jammed	Remove blockage Replace blower if necessary Turn the power switch OFF and then back ON to clear the error
AUGER JAMMED	Auger jammed, feed motor bad	Pull the feed system and inspect Clear jam and Press Retry
MISSED IGNITION	Igniter bad or poor harness connection Out of fuel or fuel is bridging in hopper Faulty firepot thermocouple connection has shorted.	Check connections, if OK replace igniter Break up bridging pellets. Refill hopper Replace the thermocouple Press Retry
MIN FIREPOT TEMP	Out of fuel	Refill hopper Add handful of pellets to firepot to prime it Press Retry
MAX DROP TUBE TEMP	Stove in over-heat condition Flame height set too high Components may need cleaning	Confirm setting matches burning fuel Adjust flame height Clean the firebox, heat exchanger, convection blower, firepot and ash pan
CONV BLOWER JAMMED	Convection blower blocked/jammed	Remove blockage Replace blower if necessary Turn the power switch OFF and then back ON to clear the error
CHECK ASHPAN	Auto-clean jammed  Auto-clean switch is bad Linkage has become disconnected	If ashpan is empty, check for a jam. Use a screw driver and firmly push in the firepot floor holes and flex spring and push toward home to release jam Replace switch Reconnect linkage
SCREEN GOES BLANK	Static discharge or nearby lightning or Electric fast transients at the input mains Power switch in OFF position	Wait 25 seconds and press any key to refresh the screen. Turn to ON position
	Hopper lid not closed all the way Switch is out of adjustment (auger will not function)	Close the lid. If that didn't work replace the switch Adjust or replace switch
	Firebox door is not latched properly Fireplace not rolled in completely Slide rail bolts not installed	Adjust or replace door switch Replace interlock switch or magnet Install bolts
	Out of fuel	Check fuel level, if OK the switch may be out, replace switch

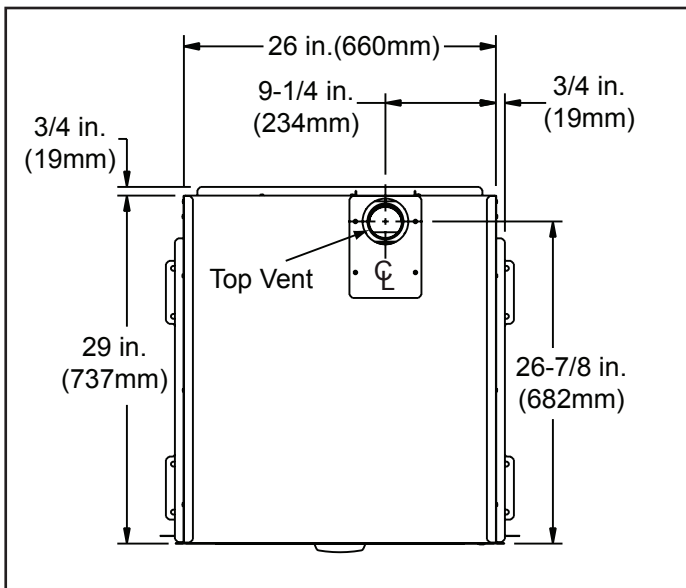
# 13 Reference Materials

## A. Fireplace Dimensions

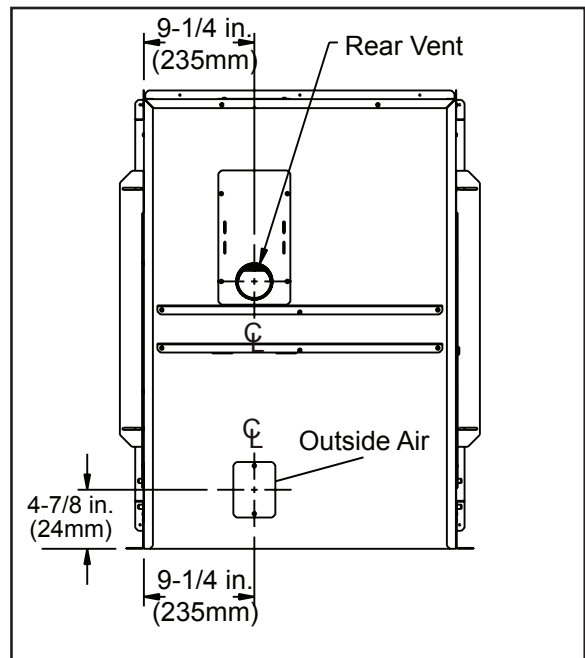
**Front View**  
(shown without a Front)



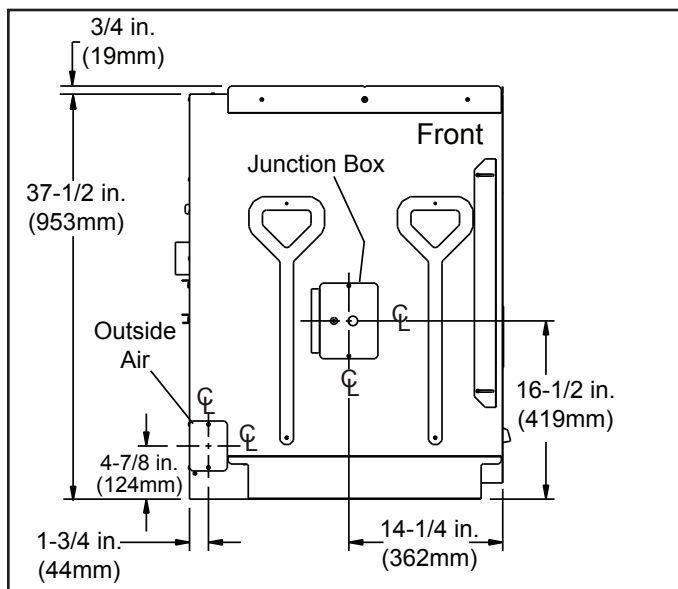
**Top View**



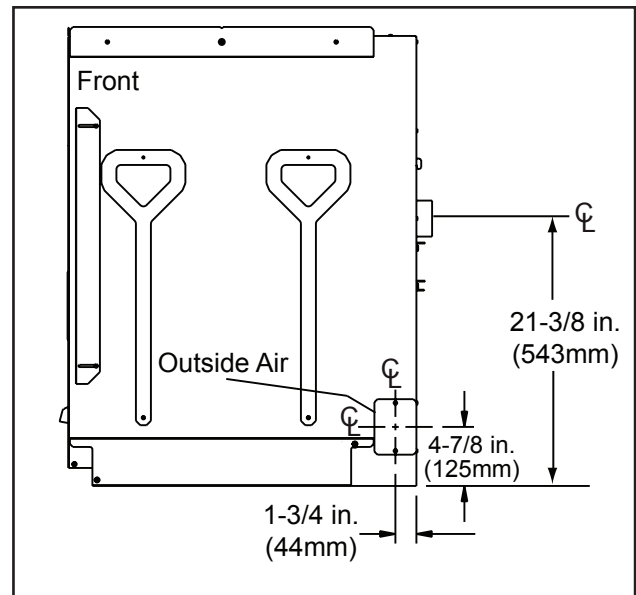
**Rear View**



**Left Side View**



**Right Side View**



## B. Component Functions



**When describing the location of a component, it is always AS YOU FACE THE FRONT OF THE APPLIANCE.**

### 1. Auto-Clean Motor

*Location:* Behind and under the firepot on the left side, inside the convection air chamber

*Function:* It automatically opens and closes the firepot floor so ashes can fall into the ash pan.

### 2. Auto-Clean Switch

*Location:* On top of the auto-clean motor

*Function:* Communicates to the control board when the firepot floor is open and when the auto-clean system has completed its cycle and is back in the home (closed) position.

### 3. 12 Volt Battery Back-Up Cable (Optional Accessory)

*Location:* Plugs into the appliance at the lower left front of the appliance.

*Function:* An icon will display on the wall control when the appliance has lost main power and is running on battery back-up.

### 4. Combustion (Exhaust) Blower

*Location:* Mounted in the bottom right rear of appliance.

*Function:* Pulls the exhaust from the appliance and pushes it out through the venting system.

### 5. Control Board

*Location:* Lower left side of appliance.

*Function:* Controls the functioning of the appliance and communicates with the wall control. The control board can only be opened by an authorized dealer.

### 6. Convection Blower

*Location:* Mounted at the bottom left rear of the appliance

*Function:* Pushes heated air through the heat exchange system into the room.

### 7. Door Switch

*Location:* Mounted on the right side of the firebox behind the door handle

*Function:* Senses when the door is open and will display an icon on the wall control and will turn off the auto-clean system and feed motor for safety.

### 8. Feed System

*Location:* On the right side of the appliance and can be removed as an entire assembly. The assembly includes the feed motor, mounting bracket, bearing and feed spring (auger).

*Function:* The hollow feed spring (auger) pulls pellets up the feed tube from the hopper area and drops them down the feed chute into the firepot

### 9. Firepot

*Location:* Inside firebox and is made of high quality ductile iron.

*Function:* The floor of the firepot automatically opens for cleaning and is operated by the auto-clean firepot system. The floor needs to return to a completely closed position or the appliance will not operate properly.

### 10. Fuses

*Location:* One AC fuse and one DC fuse is located on the inside of the control board and a third fuse is located in the power supply. **Figures 54.1 & 54.2 on page 54.**

*Function:* The AC fuse operates the igniter and the DC fuse operates all of the other components. The third fuse protects the components in the power supply. A fuse will blow should a short occur and shut off power to the appliance. The fuses can only be replaced by an authorized dealer.

### 11. Heat Exchanger

*Location:* Behind the baffle. Remove the cast iron baffle to access the heat exchanger.

*Function:* Transfers heat from the exhaust system into the convection air chamber.

### 12. Hopper Lid Switch

*Location:* Lower front right side of appliance on the power switch cover.

*Function:* Senses whether the hopper lid is open and displays an icon on the wall control and will turn off the feed motor.

### 13. Interlock Switch

*Location:* Lower front right side of appliance behind power switch.

*Function:* Causes the auger to stop functioning and will be opened when the appliances slides are extended.

### 14. Igniter (Heating Element)

*Location:* Mounted on the base of the firepot.

*Function:* Combustion air travels over the red hot igniter creating super heated air that ignites the pellets or other fuels.

### 15. Power Receptacle

*Location:* Lower rear of the appliance

*Function:* Check the wall receptacle for 120 volt, 60 Hz (standard current). Make sure the outlet is grounded and has the correct polarity.

**16. Power Supply**

*Location:* At the rear of the appliance

*Function:* Converts 120 volt AC current to 15 volt DC current to power the appliance.

**17. Power Switch**

*Location:* Lower front right side of appliance

*Function:* Turns the power on and off to the appliance

**18. Overheat Sensor (Snap Disc)**

*Location:* Mounted on the back of the drop tube in the center of the appliance and has a reset button. Remove the right side panel to access.

*Function:* If the fire tries to burn back into the feed system or push exhaust up the feed tube, this sensor will shut the appliance down, however the wall control will still display messages. This sensor must be manually re-set. Disconnect power before resetting.

**19. Thermocouple - Firepot**

*Location:* On top of the firepot inside the thermocouple cover (ceramic protection tube)

*Function:* Sends a millivolt signal to the control board telling the control board there is a fire in the firepot.

**20. Thermocouple - Drop Tube**

*Location:* Bottom of the drop tube on the right side and attached with a wing nut

*Function:* Turns the convection blower on and off, varies the speed of the convection blower and will shut down appliance if internal heat exceeds set temperature.

**21. Vacuum Switch**

*Location:* Right side of the appliance under the feed motor behind right side panel and connects to the drop tube with a hose

*Function:* Turns the feed system on when vacuum is present in the firebox. The vacuum switch is a safety device to shut off the feed motor if the exhaust or the heat exchanger system is dirty, plugged or if the firebox door is open.

**22. Wall Control, Thermostat**

*Location:* Interior wall of the home

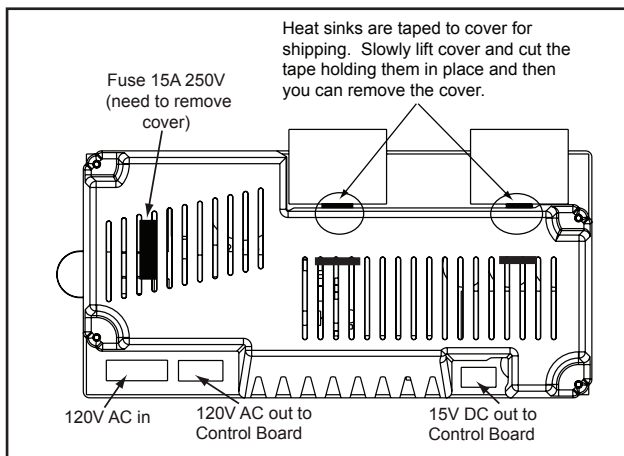
*Function:* The appliance is designed to run on a custom designed 3.3 volt DC thermostat wall control. It will not operate on any other wall control. Refer to the instructions supplied with the appliance, located in the component pack.

**23. Wiring Schematic for Power Supply**

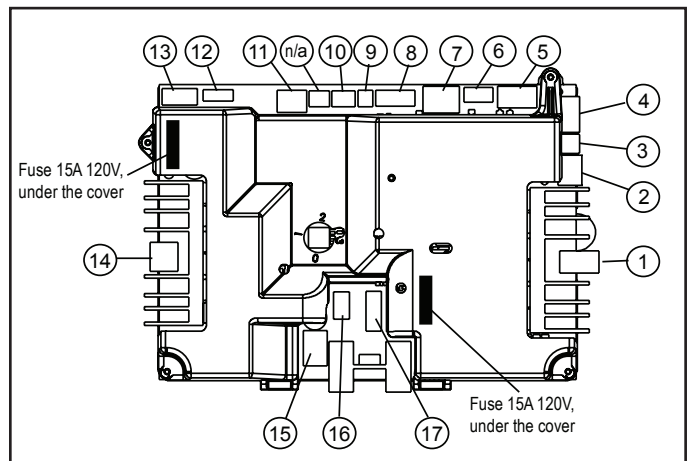
See Figure 54.1 below.

**24. Wiring Schematic for Control Board**

See Figure 54.2 below.



**Figure 54.1 - Power Supply**



**Figure 54.2 - Control Board**

Control Board Schematic					
#	Description	#	Description	#	Description
1	Combustion Blower	7	Thermostat Wall Control	12	Igniter
2	Auto-Clean System	8	Combustion Blower (feedback)	13	AC Power In for Igniter
3	Feed/Auger Motors	9	Firepot Thermocouple	14	Convection Blower Power
4	Hopper/Door Switches	10	Drop Tube Thermocouple	15	Overheat Sensor (Snap Disc)
5	Auger/Auto Clean/Vacuum Switches	n/a	Not Used	16	DC Power In from Power Supply
6	Low Fuel	11	Convection Blower (feedback)	17	12 Volt Battery Back-up

C. Component Locations

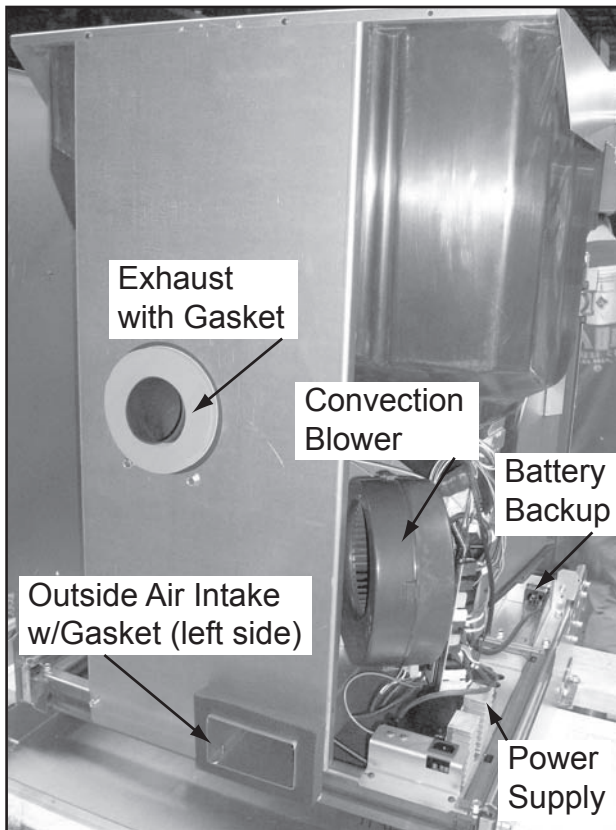


Figure 55.1 - View of Left Rear

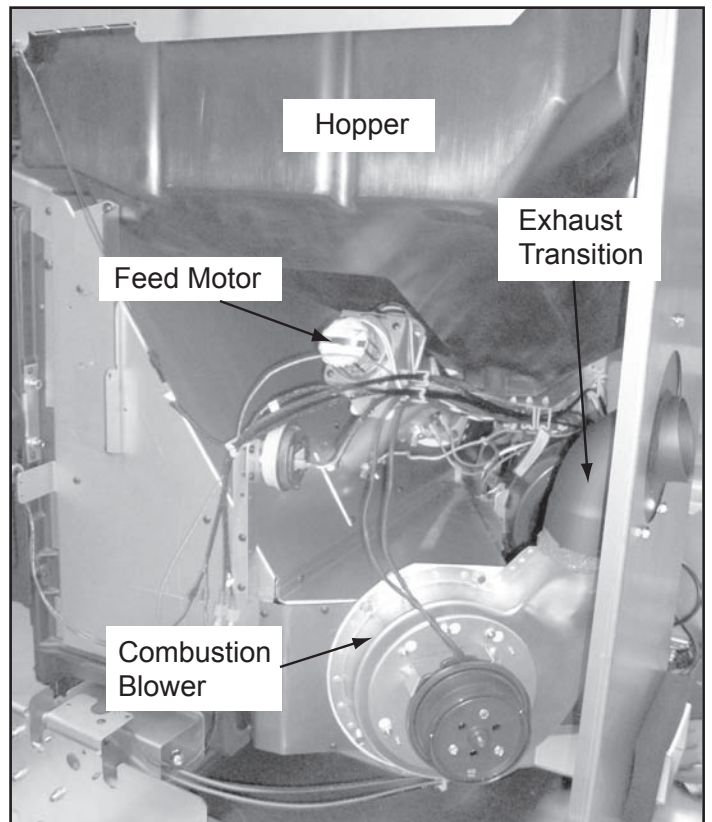


Figure 55.2 - View of Right Rear

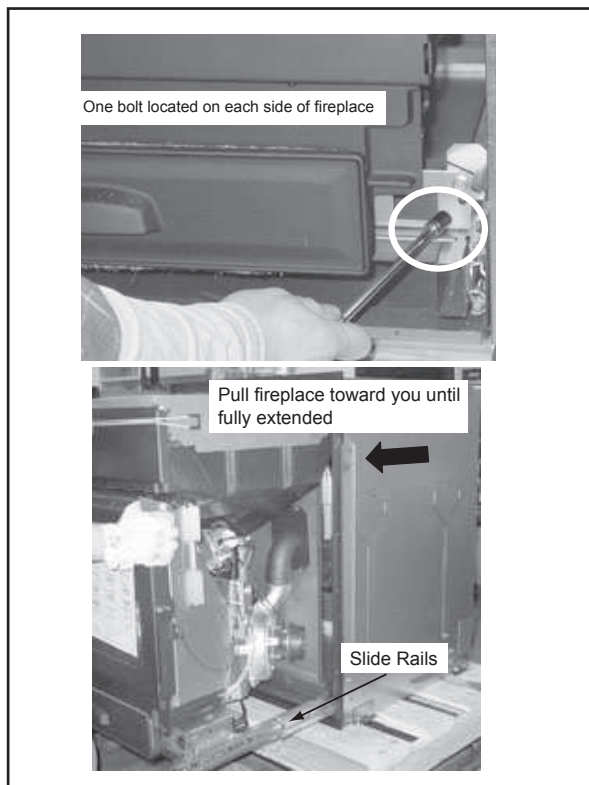


Figure 55.3 - Rail System

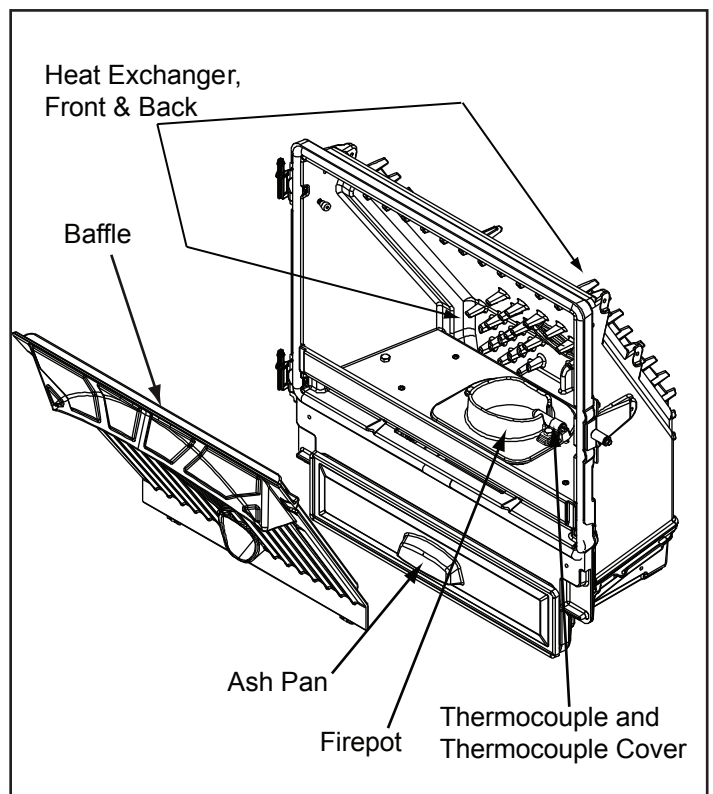


Figure 55.4





# QUADRA-FIRE®

## CONTACT INFORMATION:

Hearth & Home Technologies  
1445 North Highway  
Colville, WA 99114  
Division of HNI INDUSTRIES

Please contact your Quadra-Fire dealer with any questions or concerns.  
For the number of your nearest Quadra-Fire dealer  
visit our web site at [www.quadrafire.com](http://www.quadrafire.com)

### NOTICE



- DO NOT DISCARD THIS MANUAL**
- Important operating and maintenance instructions included.
  - Read, understand and follow these instructions for safe installation and operation.
  - Leave this manual with party responsible for use and operation.



**We recommend that you record the following pertinent information for your EDGE 60 PELLET FIREPLACE**

Date purchased/installed: \_\_\_\_\_

Serial Number: \_\_\_\_\_ Location on appliance: \_\_\_\_\_

Dealership purchased from: \_\_\_\_\_ Dealer phone: \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

This product may be covered by one or more of the following patents: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.

