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PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

Enviro

PELLET STOVE

EF3

Freestanding, Fireplace Insert, and Built-In Heater

TECHNICAL MANUAL





Sherwood Industries Ltd.
Saanichton, Canada

DIN 18 891
P–BWU 10/00016

IBP
Fraunhofer Institut bauphysik

PLEASE READ THIS ENTIRE MANUAL BEFORE INSTALLATION AND USE OF THIS PELLET BURNING ROOM HEATER. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.

CE 2004

Contact your building or fire officials about restrictions and installation inspection requirements in your area.

50-1071

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Introduction

Rating Label Location:

Freestanding: The rating label is located on the inside of the hopper lid.
Insert: The rating label is located on the hopper cover.

Important Safety Data:

Please read this entire Owner's Manual before installing or operating this ENVIRO Pellet Stove. Failure to follow these instructions may result in property damage, bodily injury or even death. Contact your local building or fire official to obtain a permit and any information on installation restrictions and inspection requirements for your area.

To prevent the possibility of a fire, ensure that the appliance is properly installed by adhering to the installation instructions. An ENVIRO dealer will be happy to assist you in obtaining information with regards to your local building codes and installation restrictions.

Be sure to maintain the structural integrity of the home when passing a vent through walls, ceilings, or roofs.

The stove's exhaust system works with negative combustion chamber pressure and a slightly positive chimney pressure. It is very important to ensure that the exhaust system be sealed and airtight. The ash pan and viewing door must be locked securely for proper and safe operation of the pellet stove.

Do not burn with insufficient combustion air. A periodic check is recommended to ensure proper combustion air is admitted to the combustion chamber. Setting the proper combustion air is achieved by adjusting the slider damper located on the left side of the stove.

When installing the stove in a mobile home, it must be electrically grounded to the steel chassis of the home and bolted to the floor. Make sure that the structural integrity of the home is maintained and all construction meets local building codes.

Minor soot or creosote may accumulate when the stove is operated under incorrect conditions such as an extremely rich burn (black tipped, lazy orange flames).

If you have any questions with regard to your stove or the above-mentioned information, please feel free to contact your local dealer for further clarification and comments.

Safety Warnings And Recommendations:

Caution: Do not connect to any air distribution duct or system.
Do not burn garbage or flammable fluids such as gasoline, naptha or engine oil.
Unit hot while in operation. Keep children, clothing and furniture away. Contact may cause skin burns.

SOOT: Operation of the stove with insufficient combustion air will result in the formation of soot which will collect on the glass, the heat exchanger, the exhaust vent system, and may stain the outside of the house. This is a dangerous situation and is inefficient. Frequently check your stove and adjust the slider/damper as needed to ensure proper combustion. **See: "Installation Slider/Damper Setting".**

Introduction

ELECTRICAL: The use of a surge protected power bar is recommended. The unit must be grounded. The grounded electrical cord should be connected to a standard 220-240 volts (2.26-2.46 Amps), 50 hertz electrical outlet and also must be accessible. If this power cord should become damaged, a replacement power cord must be purchased from the manufacturer or a qualified ENVIRO dealer. Be careful that the electrical cord is not trapped under the appliance and that it is clear of any hot surfaces or sharp edges. This unit's maximum power requirement is 520 watts.

GLASS: Do not abuse the glass by striking or slamming the door. Do not attempt to operate the stove with broken glass. The stove uses ceramic glass. Replacement glass must be purchased from an ENVIRO dealer. Do not attempt to open the door and clean the glass while the unit is in operation or if glass is hot. To clean the glass, use a soft cotton cloth and mild window cleaner, gas or wood stove glass cleaner, or take a damp paper towel and dip into the fly ash. This is a very mild abrasive and will not damage the glass.

FLAMMABLE LIQUIDS: Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire in the heater. Keep all such liquids well away from the heater while it is in use.

SMOKE DETECTOR: Smoke detectors should be installed and maintained in the structure when installing and operating a pellet burning appliance.

OPERATION: The ash pan and door must be closed securely for proper and safe operation of the pellet stove. Also ensure all gaskets on the door are checked and replaced when necessary.

INSTALLATION: Be sure to maintain the structural integrity of your home when passing a vent through walls, ceilings, or roofs. It is recommended that the unit be secured into its position in order to avoid any displacement.

DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.

DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.

FRESH AIR: Outside Fresh Air connection is optional. Must be connected to all units installed in Mobile and "Air Tight Homes" (R2000) or where required by local codes. Consider all large air moving devices when installing your unit and provide room air accordingly. Limited air for combustion may result in poor performance, smoking and other side effects of poor combustion.

If you have any questions with regards to your stove or the above-mentioned information, please feel free to contact your local dealer for further clarification and comments.

SINCE SHERWOOD INDUSTRIES LTD. HAS NO CONTROL OVER THE INSTALLATION OF YOUR STOVE, SHERWOOD INDUSTRIES LTD. GRANTS NO WARRANTY IMPLIED OR STATED FOR THE INSTALLATION OR MAINTENANCE OF YOUR STOVE. THEREFORE, SHERWOOD INDUSTRIES LTD. ASSUMES NO RESPONSIBILITY FOR ANY CONSEQUENTIAL DAMAGE(S).

SAVE THIS INSTRUCTION MANUAL FOR FUTURE REFERENCE

Installation

Deciding Where to Locate your Pellet Appliance:

1. Check clearances to combustibles.
2. Do not obtain combustion air from an attic, garage or any unventilated space. Combustion air may be obtained from a ventilated crawlspace.
3. Do not install the stove in a bedroom.
4. You can vent the stove through an exterior wall behind the unit or connect it to an existing masonry or metal chimney (must be lined if the chimney is over 6" (15 cm) diameter, or over 28 inches² (180 cm²) cross sectional area). An interior vent can be used with approved pipe passing through the ceiling and roof.
5. Locate the stove in a large and open room that is centrally located in the house. This will optimize heat circulation.
6. The power cord is 8 feet (2.43 m) long and may require a grounded extension cord to reach the nearest electrical outlet.

Removing Pellet Stove From Pallet:

To remove your new stove from its pallet, open the left and right side panels. To open the side panels remove the ash pan cover from the magnets located below the door. Remove the two (2) T-20 screws located at the bottom corners of the left and right side panels. Remove the two (2) T-20 screws located between the hopper side rails and the side panels at the front edge of the side panel.
There are two (2) wood screws that are holding the bottom of the stove to the pallet. Remove the screws. Close the side panels. See "Pedestal Installation" to install the pedestal.

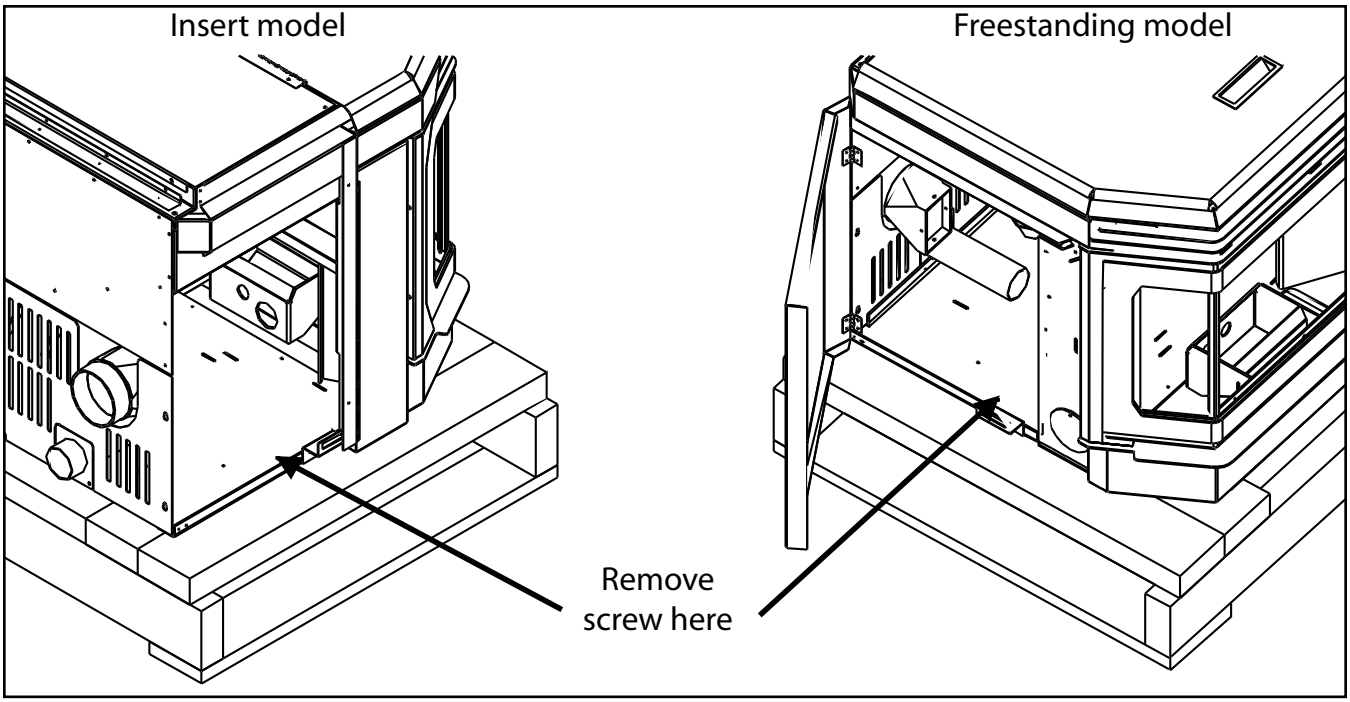


Figure 1: Screws to take out to remove stove from pallet.

Dimensions - Freestanding:

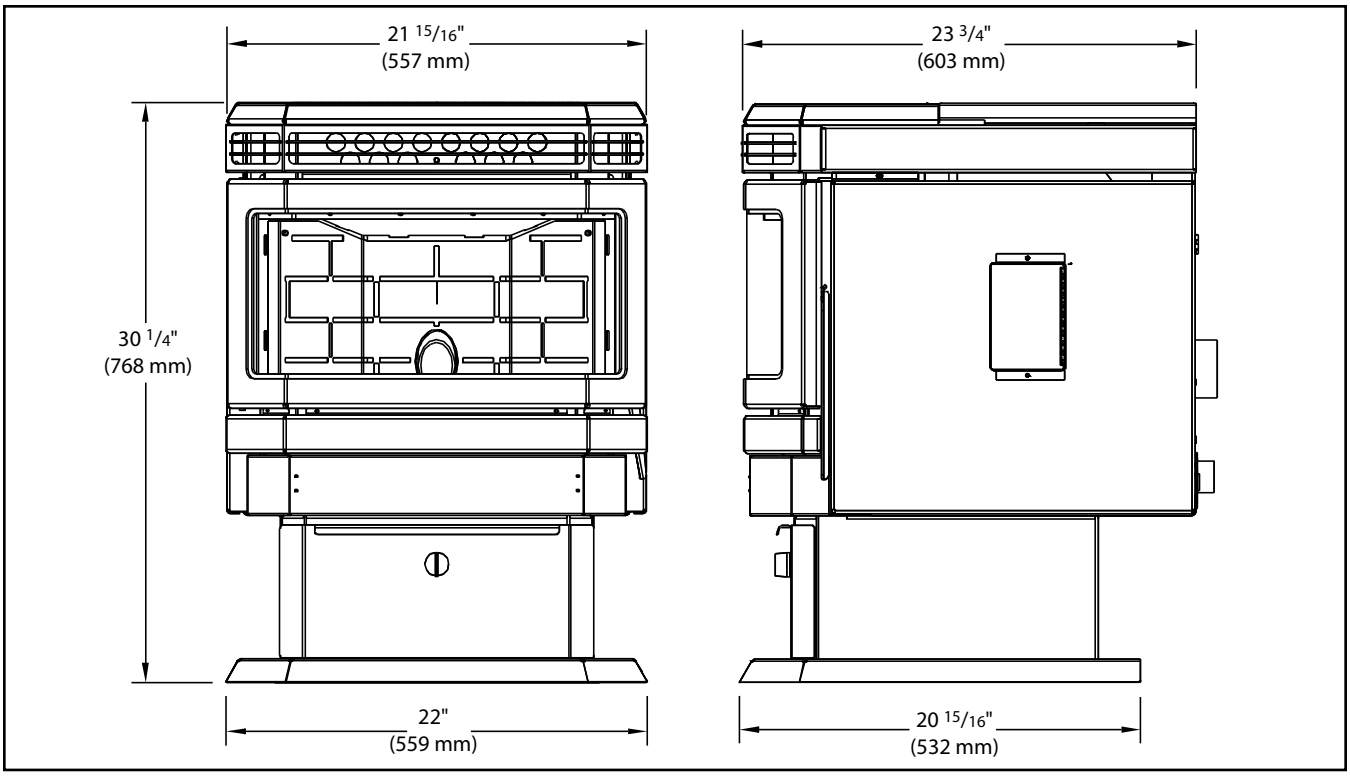


Figure 2: Dimensions of EF3 Freestanding.

Dimensions - Fireplace Insert and Built-In Heater:

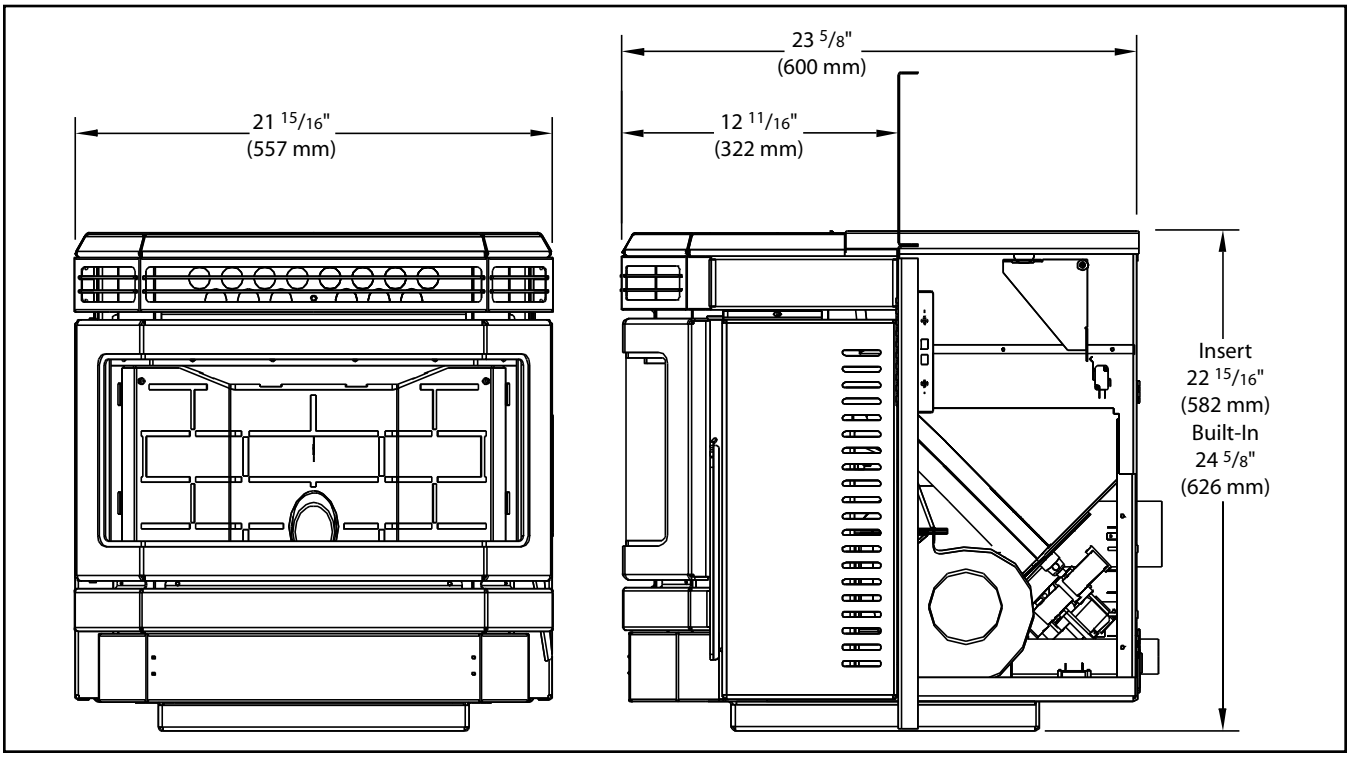


Figure 3: Dimensions of EF3 Fireplace Insert.

Installation

Clearances to Combustibles - Freestanding:

When installing this unit on a combustible floor (for example linoleum, hardwood flooring) a non-combustible hearth pad must be under the unit. The pad must extend at least the width of the appliance [22” (558 mm)] and at least the depth of the appliance plus 6” (153 mm) in front of the appliance [29 ¾” (756 mm)].

Side wall to unit - 6 inches (15 cm)
Back wall to unit - 1 inches (2.5 cm)
Corner to unit - 1 inches (2.5 cm)
Door front to edge of floor protection - 6 inches (15 cm)

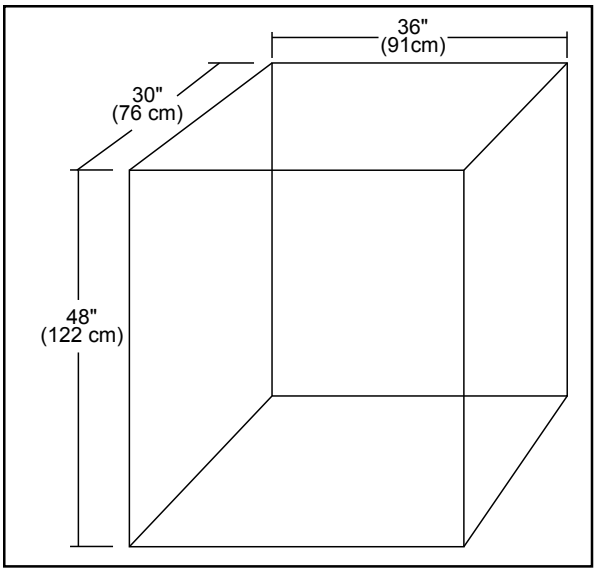


Figure 5: EF3 Freestanding Minimum Alcove Size.

These dimensions are minimum clearances but it is recommended that you ensure sufficient room for servicing, routine cleaning and maintenance.

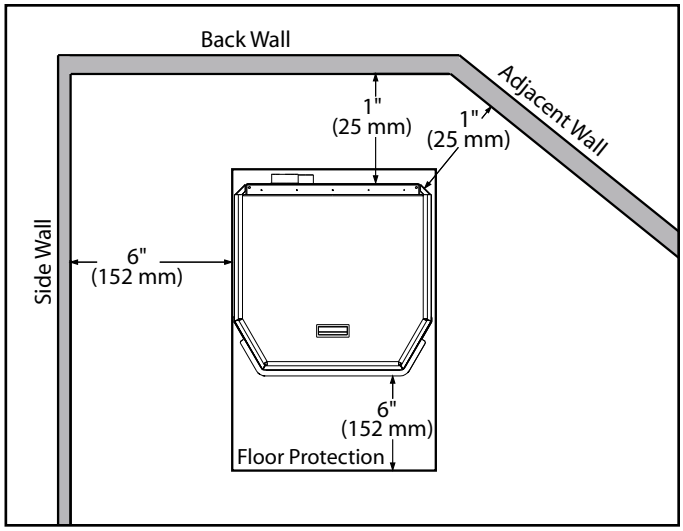


Figure 4: EF3 Freestanding Clearance to Combustibles.

Minimum Alcove width - 36 inches (91 cm)
Minimum Alcove height - 48 inches (122 cm)
Minimum Alcove depth - 30 inches (76 cm)

Clearances to Combustibles - Fireplace Insert:

Refer to Figure 6.

Side wall to unit - 8 inches (20.3 cm)
Mantel projection - 10 inches (25.4 cm)
Mantel to top of unit - 8 inches (20.3 cm)
Top facing to unit - 8 inches (20.3 cm)
Side facing to unit - 6 inches (15.2 cm)
Floor protection - 6 inches (15.2 cm) on either side and to the front must be protected by non-combustible material.

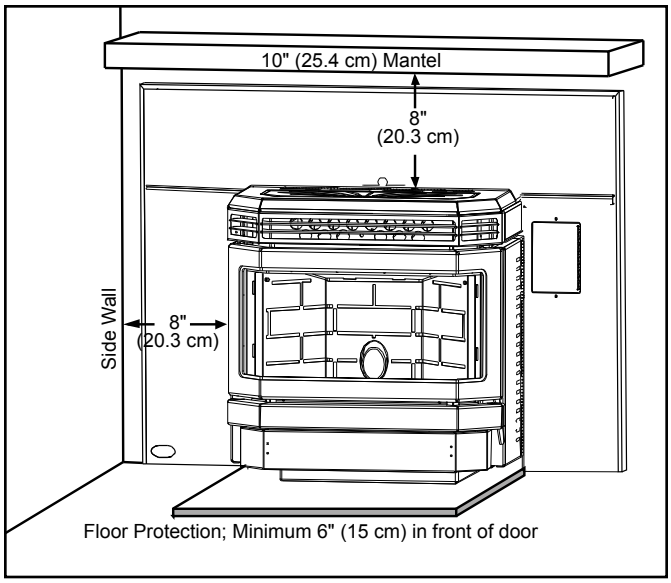


Figure 6: EF3 Fireplace Insert Clearance to Combustibles.

Installation

Clearances to Combustibles - Built-In Heater:

Refer to Figures 6 and 7.

Side wall to unit	- 8 inches	(20.3 cm)
Mantel projection	- 10 inches	(25.4 cm)
Mantel to top of unit	- 8 inches	(20.3 cm)
Top facing to unit	- 8 inches	(20.3 cm)
Side facing to unit	- 6 inches	(15.2 cm)
Floor protection	- 6 inches	(15.2 cm)
(on either side and to the front must be protected by non-combustible material)		
Sides and rear walls to standoffs:	- 0 inches	(0 cm)
Recess depth:	- 11 inches	(30 cm)

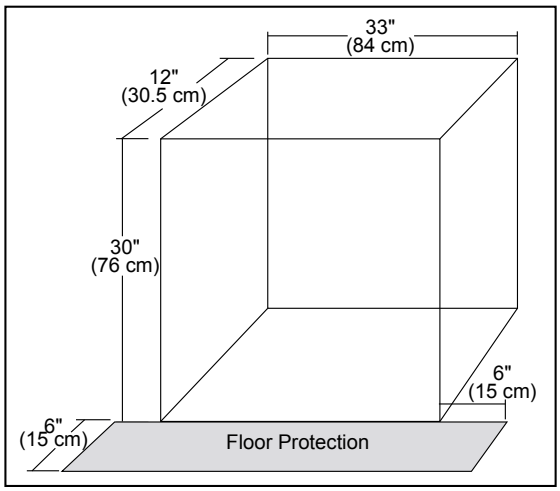


Figure 7: EF3 Built-In Heater recommended framing.

Pedestal Installation:

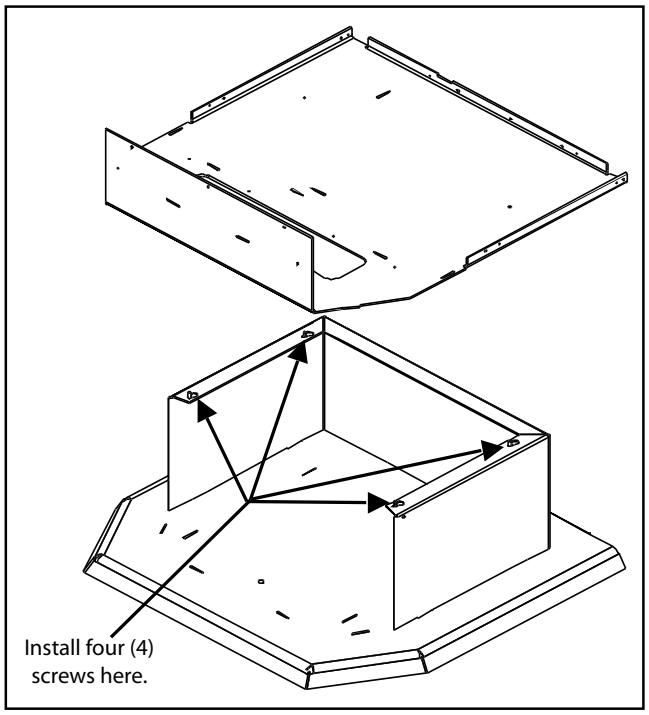


Figure 8: Freestanding Pedestal.

The all models comes with a pedestal that has to be attached prior to installation:

- Remove the unit from the box
- Remove the freestanding pedestal from the box. Remove the FPI or BIH pedestal from the hopper

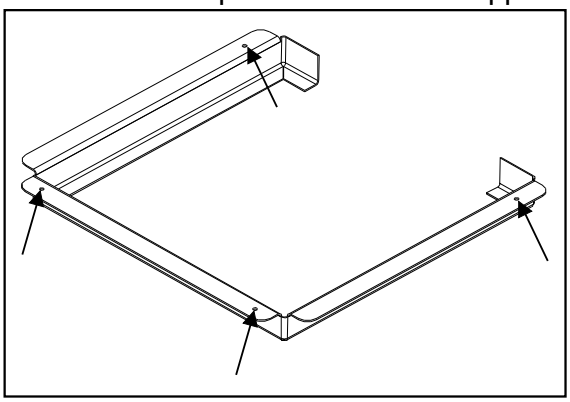


Figure 9: Fireplace Insert Pedestal.

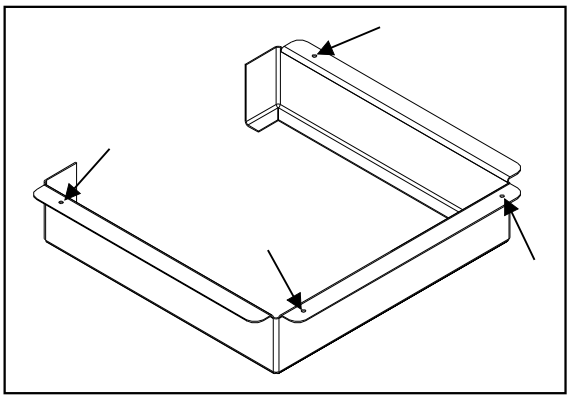


Figure 10: Built-In Heater Pedestal.

- Place the unit on its back on the pallet.
- Back the four (4) 5/16" hex head screws in the base off three (3) to four (4) full turns.
- Align the keyholes in the pedestal with the screws, lock into place.
- Secure the two (2) pieces by tightening the four (4) screws from the inside of the pedestal for the freestanding or from the outside of the pedestal for the FPI or BIH.

Vent Termination Requirements:

IT IS RECOMMENDED THAT YOUR PELLET STOVE BE INSTALLED BY AN AUTHORIZED DEALER/INSTALLER.

Table 1: Use in conjunction with Figure 11 for allowable exterior vent termination locations.

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

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

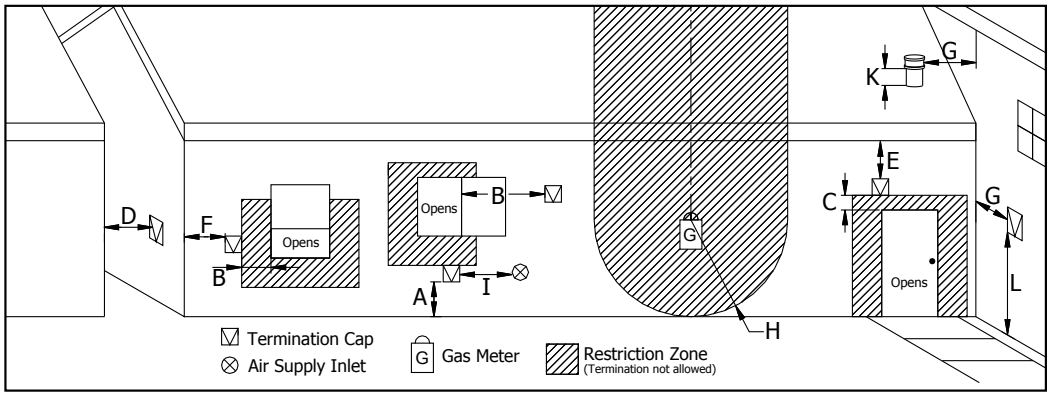


Figure 11: Use in conjunction with Table 1 for allowable exterior vent termination locations.

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

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

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

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

6. When installing an FPI the chimney must be fully lined. Unless the chimney's inside diameter is less than 6" (15 cm) around or has a cross section area of 28 inches² (180.6 cm²), we strongly recommend lining all masonry chimneys.

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

Installation

Outside Fresh-Air Connection:

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

When connecting to an outside fresh air source, do not use plastic or combustible pipe. A 1⅝" minimum (42 mm) ID (inside diameter) steel, aluminum or copper pipe should be used. It is recommended, when you are installing a fresh air system, to keep the number of bends in the pipe to a minimum.

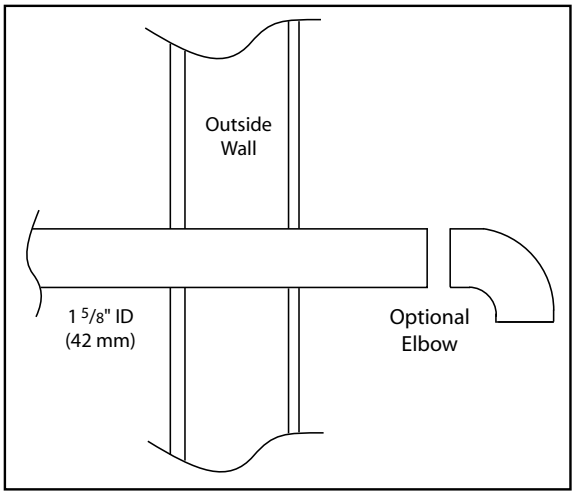


Figure 12: Outside Air Connection.

Exhaust And Fresh Air Intake Locations:

EXHAUST	**Freestanding**		**Fireplace Insert**		**Built-In Heater**	
Base of unit to center of flue	16 ⅜"	(41.5 cm)	9"	(22.8 cm)	10 ¾"	(27.3 cm)
Side of unit to center of flue	5 3/16"	(13.2 cm)	5 3/16"	(13.2 cm)	5 3/16"	(13.2 cm)
Center of unit to center of flue	5 ¾"	(14.6 cm)	5 ¾"	(14.6 cm)	5 ¾"	(14.6 cm)
FRESH AIR INTAKE.						
Base of unit to center of intake	10 ¾"	(27.3 cm)	3 ⅜"	(7.4 cm)	5 ⅛"	(8.6 cm)
Side of unit to center of intake	12"	(30.4 cm)	12"	(30.4 cm)	12"	(30.4 cm)
Center of unit to center of intake	1"	(2.5 cm)	1"	(2.5 cm)	1"	(2.5 cm)

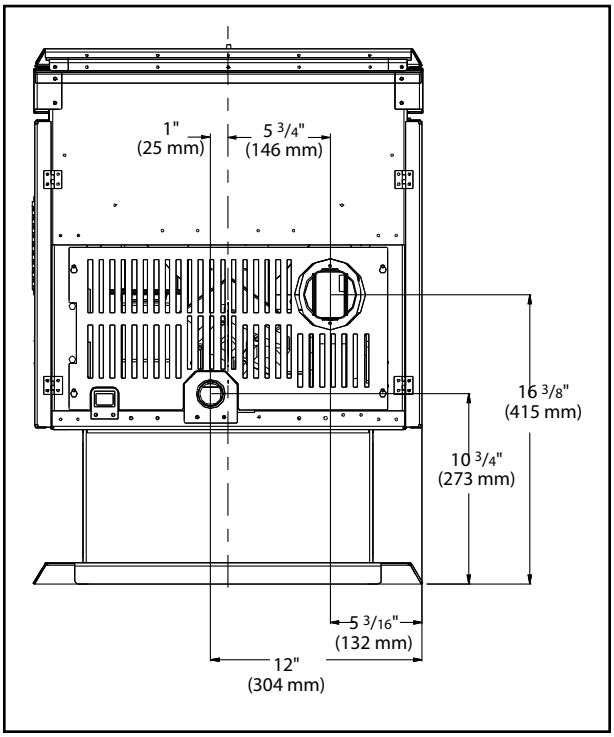


Figure 13: EF3 Freestanding Inlet and Outlet Location.

INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENTING MANUFACTURER

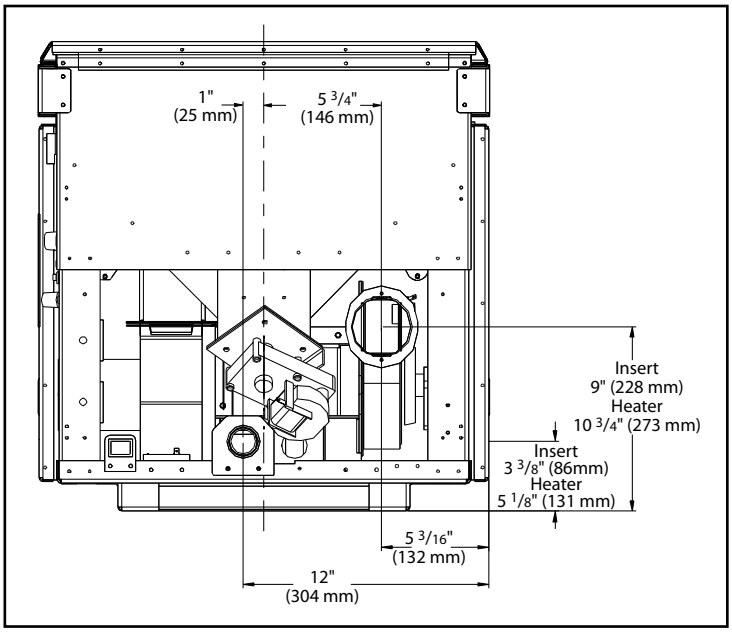


Figure 14: EF3 Fireplace Insert Inlet and Outlet Location.

Mobile Home Installation - Freestanding:

- Secure the heater to the floor using the two holes in the pedestal.
- Ensure the unit is electrically grounded to the chassis of your home (permanently).
- Do not install in a room people sleep in.
- Outside fresh air is mandatory. Secure outside air connections directly to fresh air intake pipe and secure with three (3) screws evenly spaced.

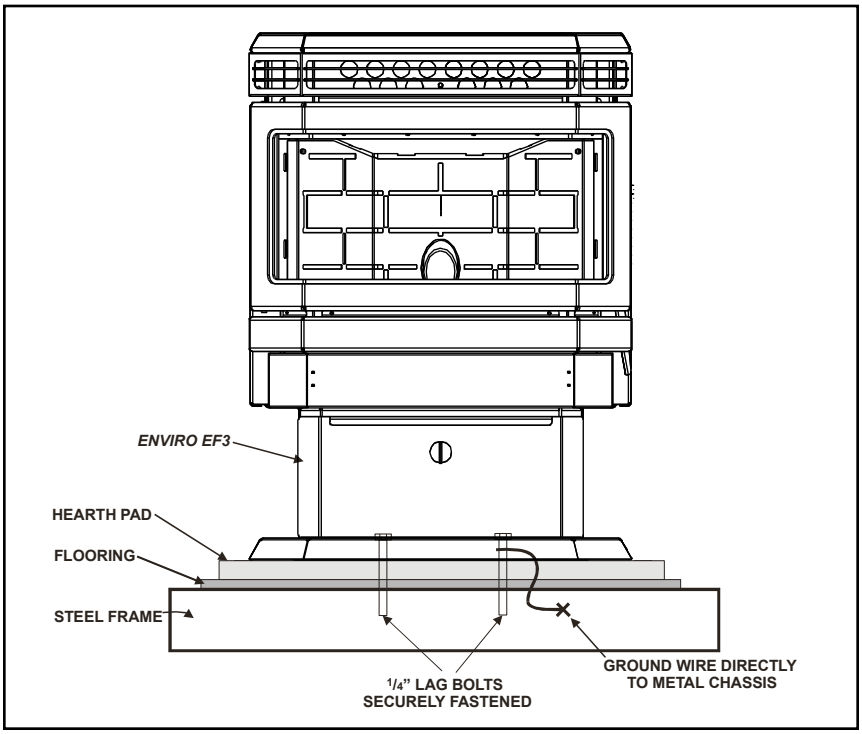


Figure 15: Mobile home installation.

<u>CAUTION</u>: THE STRUCTURAL INTEGRITY OF THE MANUFACTURED HOME FLOOR, WALL AND CEILING/ROOF MUST BE MAINTAINED.

Corner Through Wall Installation - Freestanding:

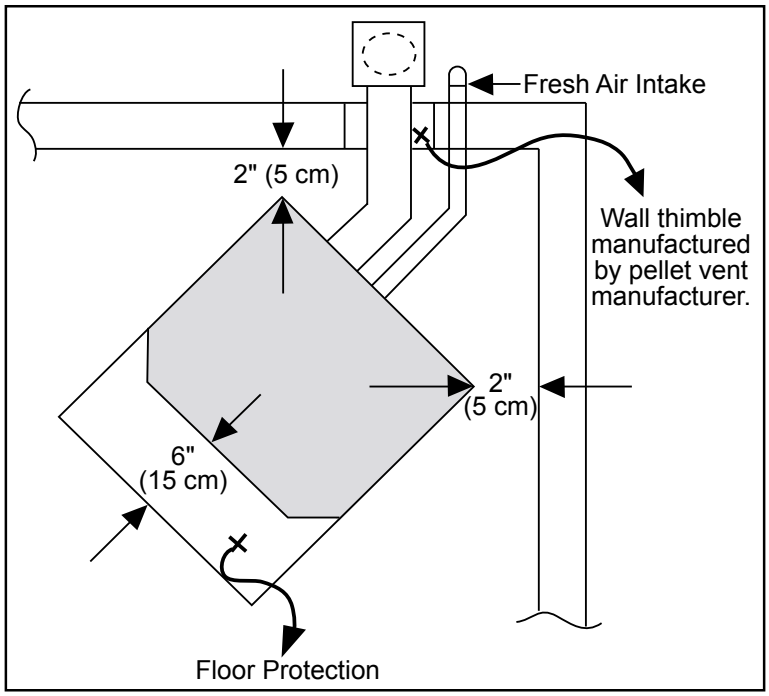


Figure 16: Corner Installation.

Horizontal Exhaust Through Wall Installation - Freestanding:

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

1. Choose a location for your stove that meets the requirements stated in this manual and allows installation with the least amount of interference to house framing, plumbing, wiring, etc.
2. Install a non-combustible hearth pad (where necessary).
3. Place the appliance 15″ (37.5 cm) away from the wall. If the stove is to be set on a hearth pad, set the unit on it.
4. Locate the center of the exhaust pipe on the stove. Extend that line to the wall. Once you have located the center point on the wall, refer to pellet vent manufacturer installation instructions for correct hole size and clearance to combustibles.
5. Install the wall thimble as per the instructions written on the thimble. Maintain an effective vapour barrier in accordance with local building codes.
6. Install a length of 3″ (76 mm) or 4″ (101 mm) vent pipe into the wall thimble. The pipe should install easily into the thimble.
7. Install the fresh air intake (see Outside Fresh Air Connection).
8. Connect the exhaust vent pipe to the exhaust pipe on the stove. Seal the connection with high temperature silicone.
9. Push the stove straight back, leaving a minimum of 2″ (5 cm) clearance from the back of the stove to the wall. Seal the vent pipe to the thimble with high temperature silicone.

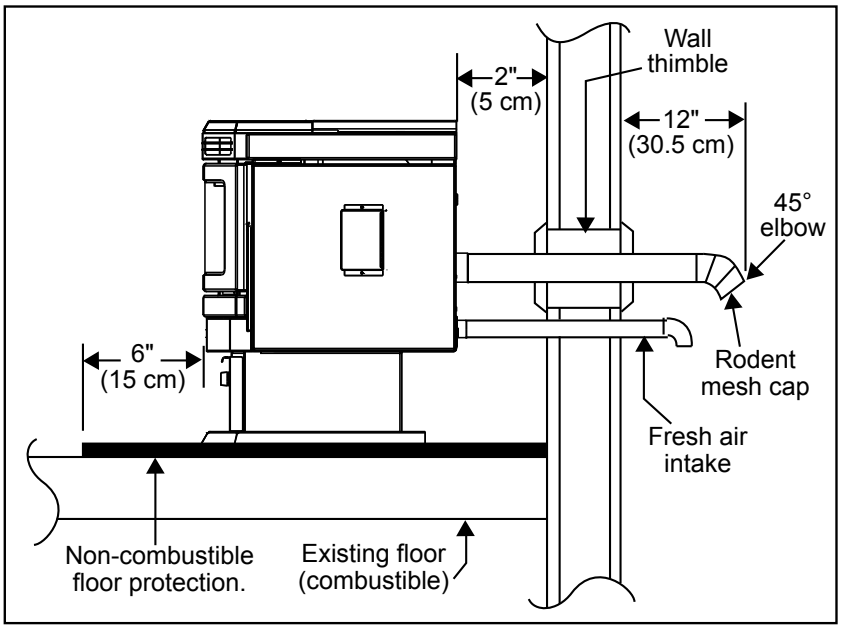


Figure 17: Straight through wall Installation.

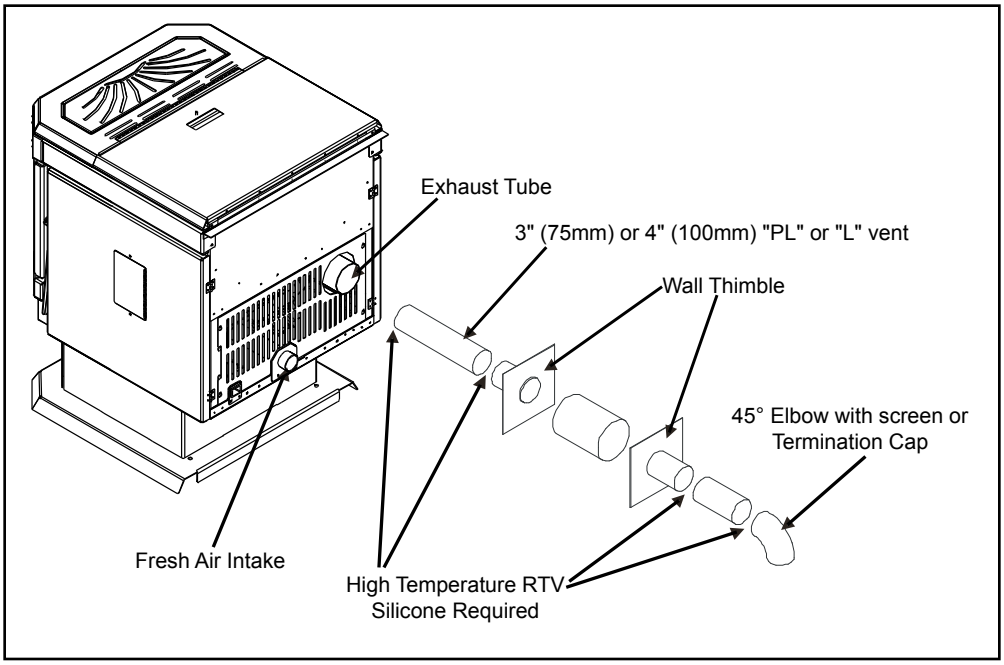


Figure 18: Venting to use with straight through wall Installation.

10. The pipe must extend at least 12" (30 cm) away from the building. If necessary, bring another length of pipe (PL type) to the outside of the home to connect to the first section. Do not forget to place high temperature silicone around the pipe that passes through the thimble.
11. Install a vertical pipe, or if all requirements for direct venting are met, install vent termination. The stainless steel cap termination manufactured by the vent manufacturer is recommended. However, when the vent terminates several feet above ground level and there are no trees, plants, etc. within several feet, a 45° elbow can be used as termination. The elbow must be turned down to prevent rain from entering.

NOTE:

- Some horizontal through wall installations may require a "T" and 3 to 5 feet (91 to 152 cm) of vertical pipe outside the building to help naturally draft in the unit.
- This may be required if a proper burn cannot be maintained, after the stove has been tested and the airflow set.
- This is due to the back pressure in the exhaust caused by airflow around the structure.
- All sections of pipe must have three (3) screws evenly spaced and all horizontal and vertical vent sections located within the house must have a bead of high temperature silicone installed on the male end of the pipe before installation to create a gas tight seal.

Through Wall With Vertical Rise and Horizontal Termination Installation - Freestanding:

A 45° elbow with a rodent screen may be used in place of the termination cap (or stainless steel termination hood).
Figure 19 is the recommended installation set up.
Figure 20 is the installation to use if there is a concrete or retaining wall in line with exhaust vent on a pellet stove. The termination must be 12" (30 cm) from the outside wall and 12" (30 cm) above the ground.

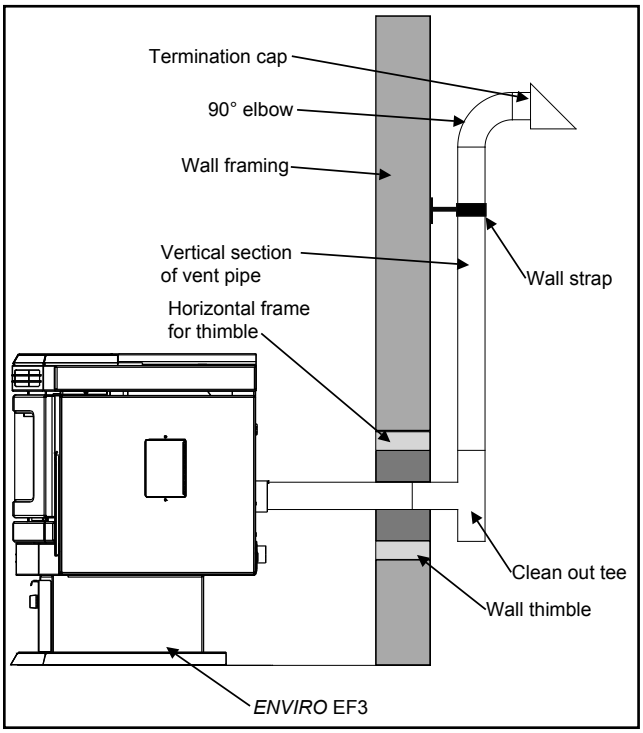


Figure 19: Venting horizontally with rise.

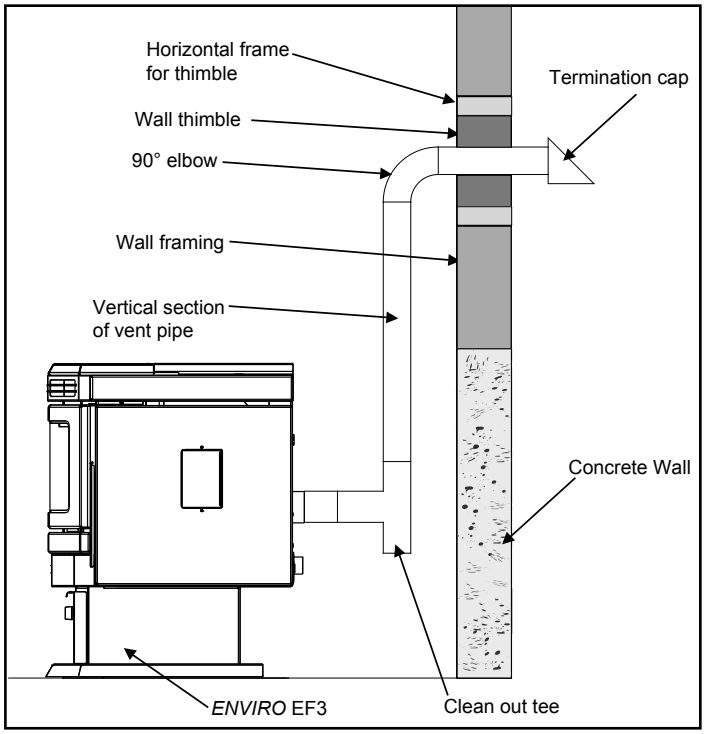


Figure 20: Venting with concrete wall behind unit .

Installation

Inside Vertical Installations - Freestanding:

1. Choose a stove location that is ideal. See the section "Deciding Where to Locate your Pellet Appliance."
2. Place a non-combustible hearth pad where necessary.
3. Place the unit on the hearth pad (if installed on a carpeted surface) and space the unit in a manner so when the pellet vent is installed vertically, it will be 3" (7.6 cm) away from a combustible wall.
4. Locate the center of the fresh air intake pipe on the unit. Match that center with the same point on the wall and cut a hole about 1 ⅝" (41 mm) in diameter.
5. Install the fresh air intake pipe.
6. Install the tee with clean out.
7. Install the pellet vent upward from there. When you reach the ceiling, make sure that the vent goes through the ceiling fire stop. Maintain a 3" (7.6 cm) distance to combustibles and keep attic insulation away from the vent pipe. Maintain an effective vapor barrier.
8. Finally, extend the pellet vent to go through the roof flashing.
9. Ensure that the rain cap is approximately 36" (900 mm) above the roof.

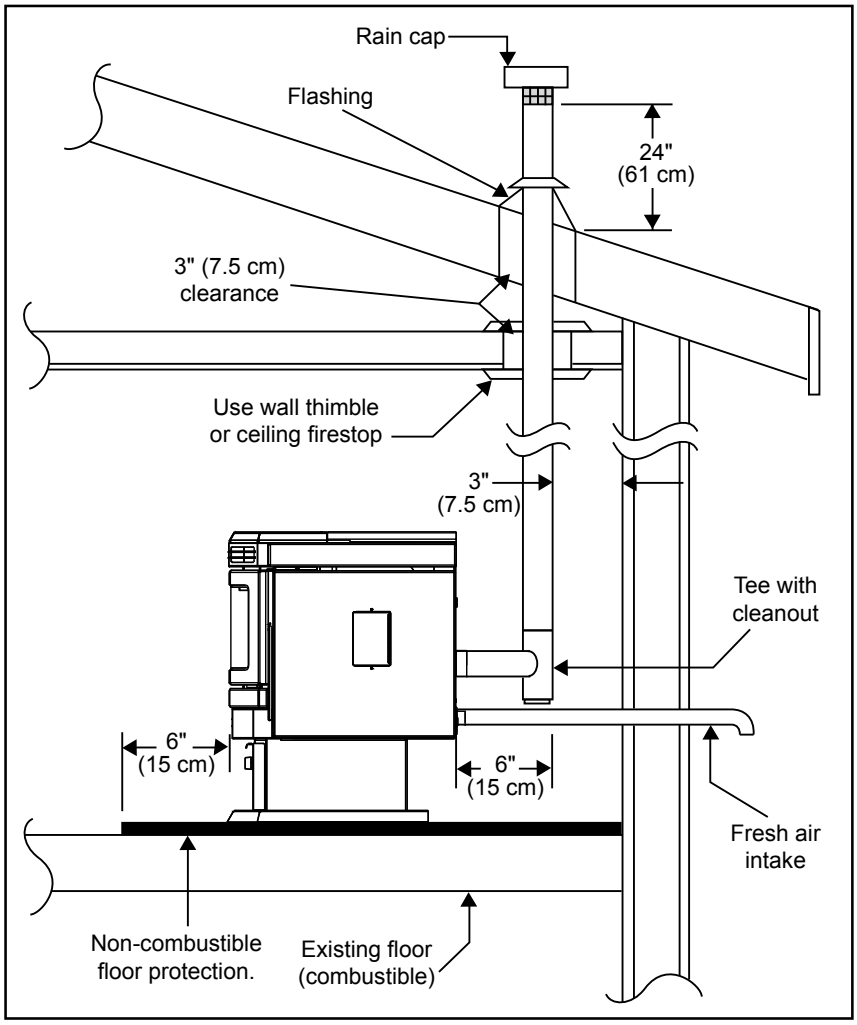


Figure 21: Inside Vertical Installation.

Outside Vertical Installations - Freestanding:

To accomplish a outside vertical pipe installation, follow steps 1 through 5 in the "Inside Vertical Installations - Freestanding" section and then finish it by performing the following (refer to Figure 22).

1. Install a tee with clean out on the outside of the house.
2. Install PL vent upward from the tee. Make sure that you install support brackets to keep the vent straight and secure.
3. Install ceiling thimble and secure the flashing as you go through the roof.
4. Ensure that the rain cap is approximately 36" (91.5 cm) above the roof.

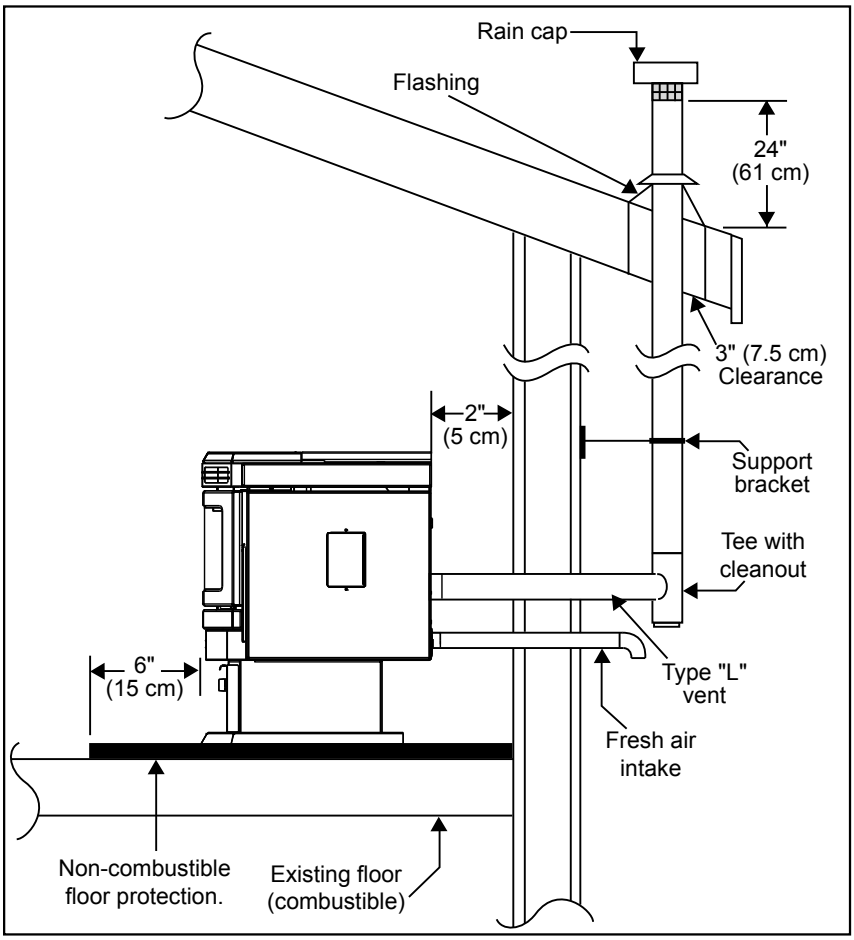


Figure 22: Outside Vertical Installation.

Hearth Mount Installation - Freestanding:

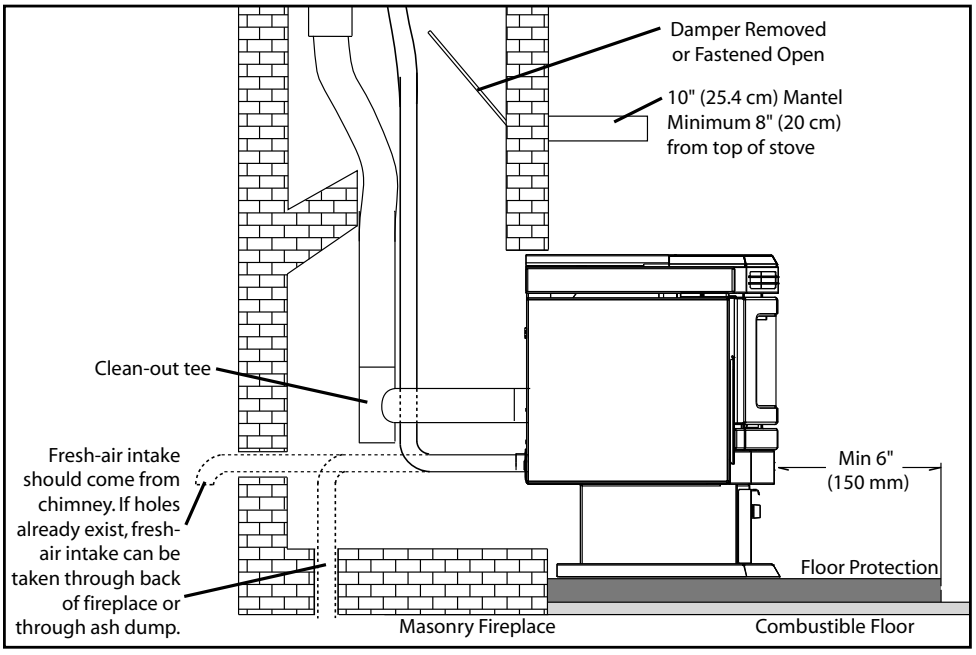


Figure 23: Freestanding hearth mount installation.

Refer to Figures 23 and 24.

1. Install the hearth pad.
2. Lock fireplace damper in the open position.
3. Install a positive flue connector at the fireplace dampers.
4. Connect a tee or a 90° elbow to the exhaust pipe.
5. Install flexible stainless steel liner or listed pellet vent to the top of the chimney.

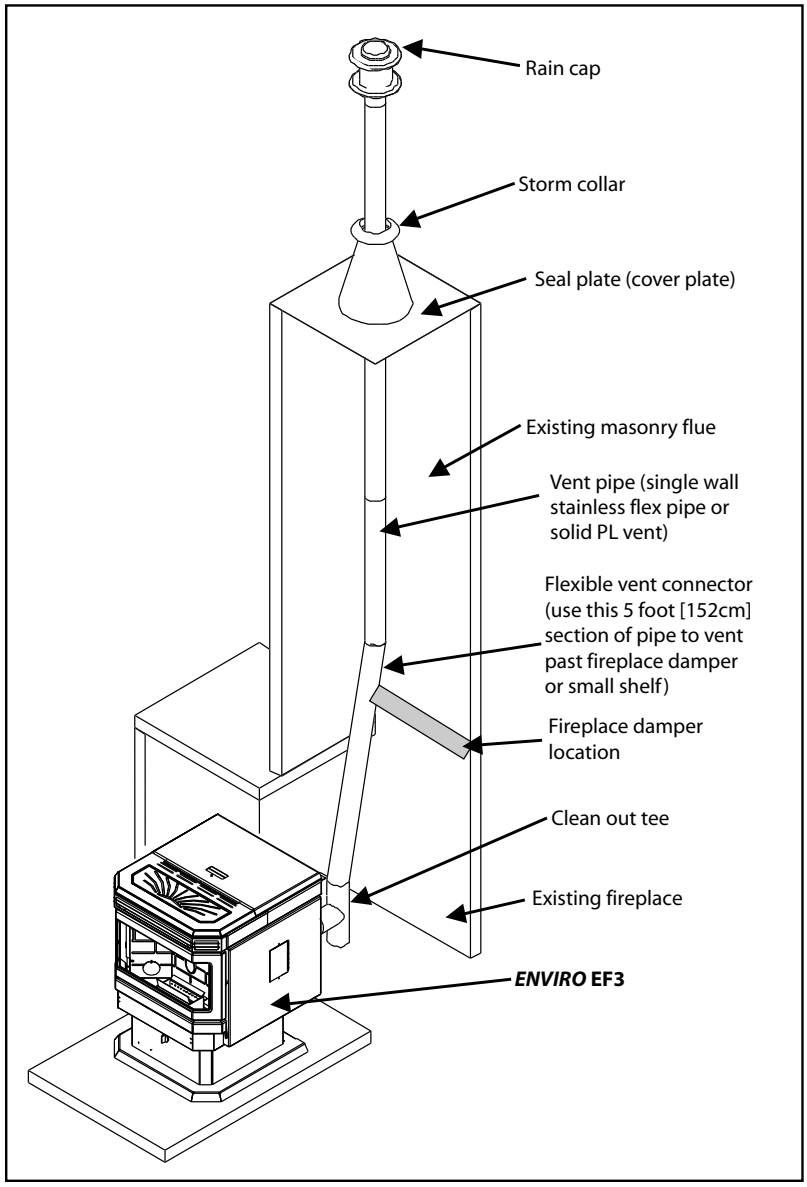


Figure 24: Freestanding hearth mount installation overview.

Masonry Fireplace Installation - Fireplace Insert:

The fireplace insert model requires a surround panel and a pedestal. When installing this unit, ensure that the pedestal is removed from the inside of the hopper and installed on the bottom of the unit (see "Pedestal Installation").

Assemble surround panel (see "Assembling The Surround Panel - Fireplace Insert") before starting installation.

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

1. Install the hearth pad.
2. Lock the fireplace damper in the open position.
3. Install a positive flue connector at the fireplace damper.

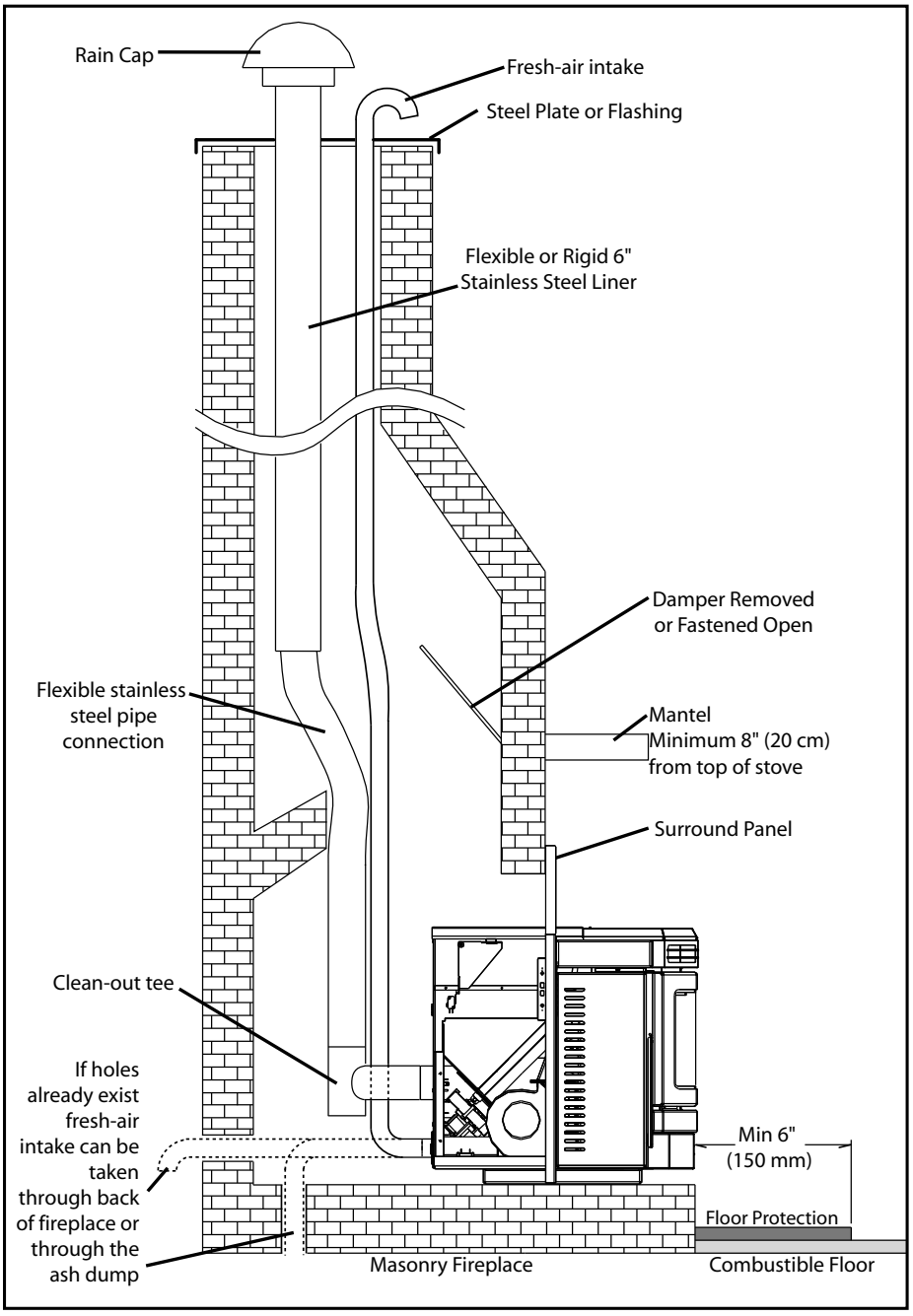


Figure 25: Masonry fireplace installation.

4. Connect a tee or 90° degree elbow to the exhaust pipe.
5. This fireplace insert must be installed with a continuous chimney liner of 3″ or 4″ diameter extending from the fireplace insert to the top of the chimney. The liner must conform to type 3 requirements of CAN/ULC S635.
6. (Recommended) Install fresh air intake either through the back of the fireplace or through the positive flue connector.

When installing the insert into a masonry fireplace, DO NOT remove any bricks or masonry, with the following exception: masonry or steel, including the damper plate, may be removed from the smoke shelf and adjacent damper frame, if necessary, to accommodate a chimney liner. Do this only if their removal will not weaken the structure of the fireplace and chimney, and will not reduce protection for combustible materials to less than that required by the national building code.

When installing the fireplace insert into a zero clearance fireplace, **DO NOT** cut or modify any factory firebox parts. If the fireplace insert does not fit into a zero clearance fireplace, we recommend you use an ENVIRO freestanding model and install as a hearth mounted unit. Install a 3″ (76 mm) flex pipe from the stove to the top of the chimney (see "Hearth Mount Installation - Freestanding:").

INSTALLATION FOR A BUILT-IN HEATER:

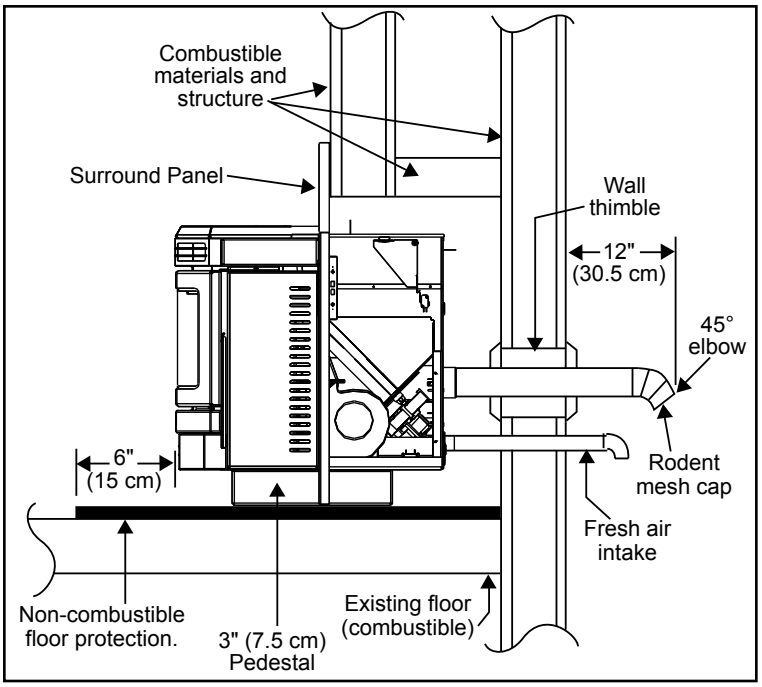


Figure 26: Built-in heater installation.

This unit includes a 3" (75 mm) pedestal and surrounding faceplates. The part of the unit behind the faceplate can be enclosed with combustible material. It has 1" (25 mm) standoffs to establish clearances to combustibles to the back, top and sides.

Refer to "CLEARANCES TO COMBUSTIBLES - BUILT-IN HEATER" and Figure 6 and 7 for the size and placement of the alcove to be built for the unit.

For the venting refer to "HORIZONTAL EXHAUST THROUGH WALL INSTALLATION - FREESTANDING".

INSTALLATION OF CONTROL PANEL INTO SURROUND PANEL - FPI AND BIH:

When installing the control panel into the surround panel, the surround does not need to be assembled. The control board will be found in behind the firebox.

Place the control panel on the backside of the right surround panel so the hinge is on the outside and the top and bottom holes on the control panel line up with those on the surround. Attach using two (2) T-20 screws through the front of the surround into the circuit board control panel.

After the surround has been assembled and is ready to be installed on the unit, plug the wiring harness into the control panel (see Figure 28 or 29).

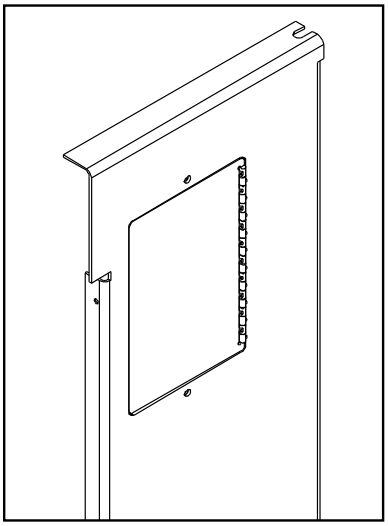


Figure 27: Control Panel Cover.

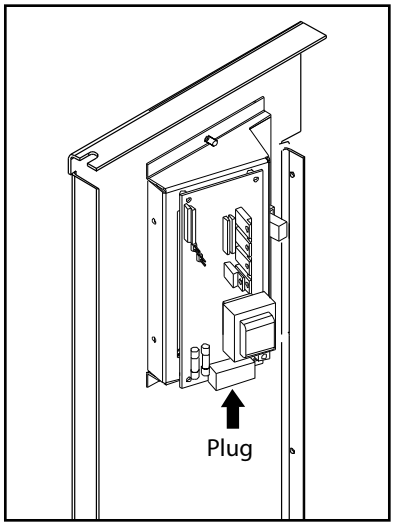


Figure 28: Control Panel Back - Circuit Board.

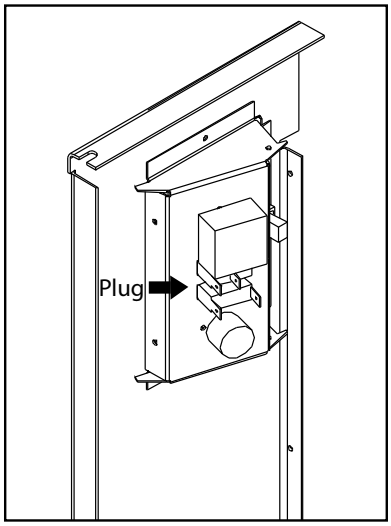


Figure 29: Control Panel Back - Timer.

Installation and Removal of The Surround Panels - FPI and BIH:

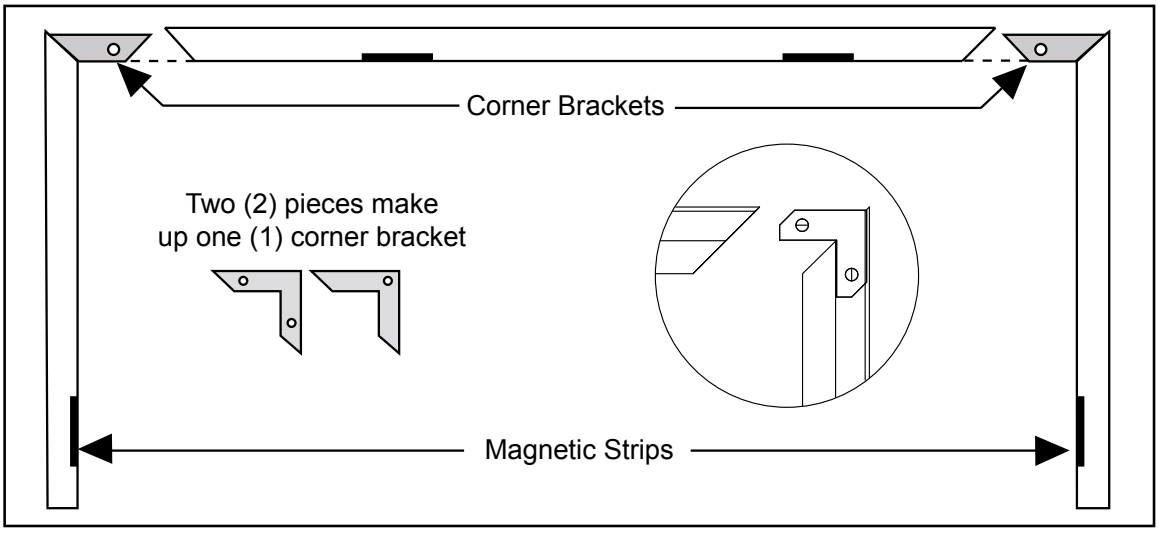


Figure 30: Assembling Trim for Surround Panel.

1. Assemble the trim set using the corner hardware and screws supplied in the surround panel packaging. Install corner hardware into the side trim pieces, then push them into the top trim. Do not over-tighten the corners or the side trim cannot be removed during servicing. See Figure 30.
2. Using three (3) T-20 screws on each side attach the hinges on the side surround panels to the unit's side panels (refer to Figure 31).
3. Plug the wiring harness into the control panel (see Figure 28 or 29).
4. Loosen the front hopper lid screws and center the top surround panel under the hopper lid., tighten screws.
5. Insert each side panel anchor bolt through the top panel into the corresponding side panel holes and tighten using a $^{7}/_{16}$" wench or socket (refer to Figure 32).
6. Place assembled trim over the surround assembly.

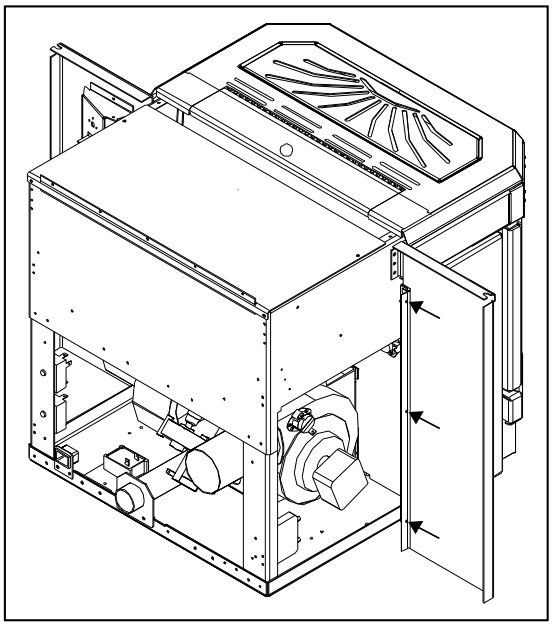


Figure 31: Panel placed on unit.

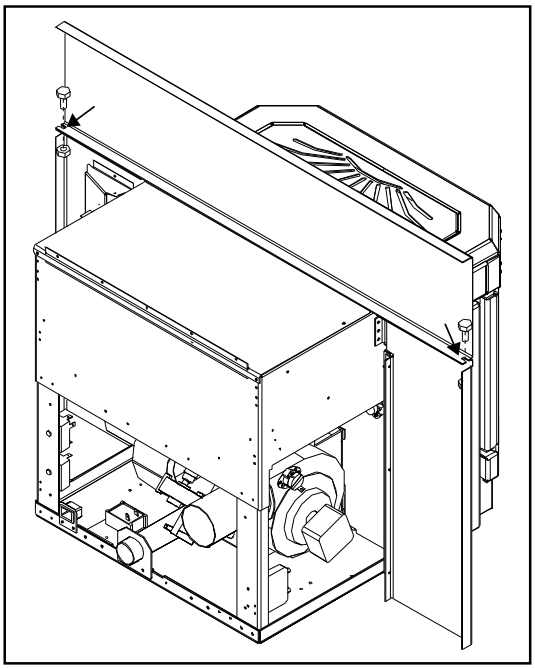


Figure 32: Assembling the Surround Panel, back view.

REMOVAL:

When maintenance is required on the unit the surround must be removed. Follow steps 3 through 6 in reverse order.

The side panel can remain attached because they swing forward for easy access (refer to Figure 33).

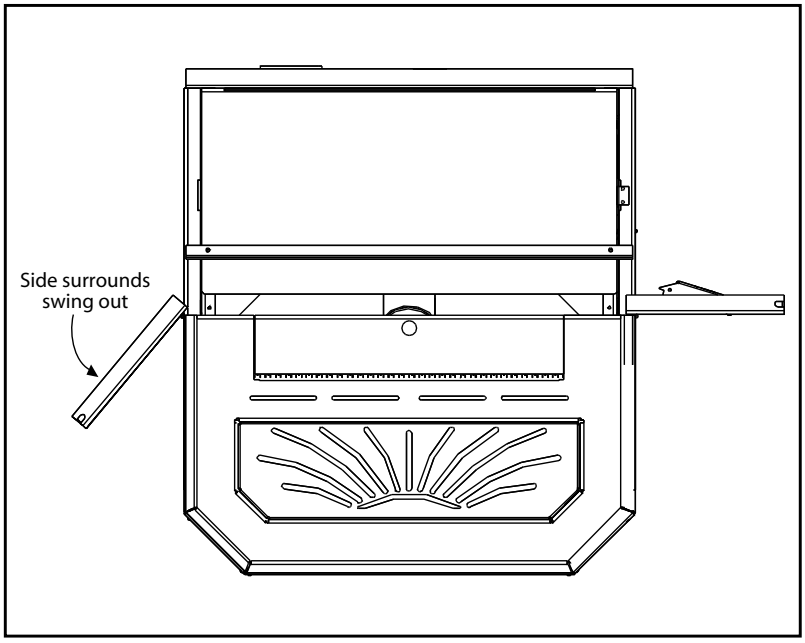


Figure 33: Side surround panel swings forward.

Thermostat Installation - Circuit Board Model Only:

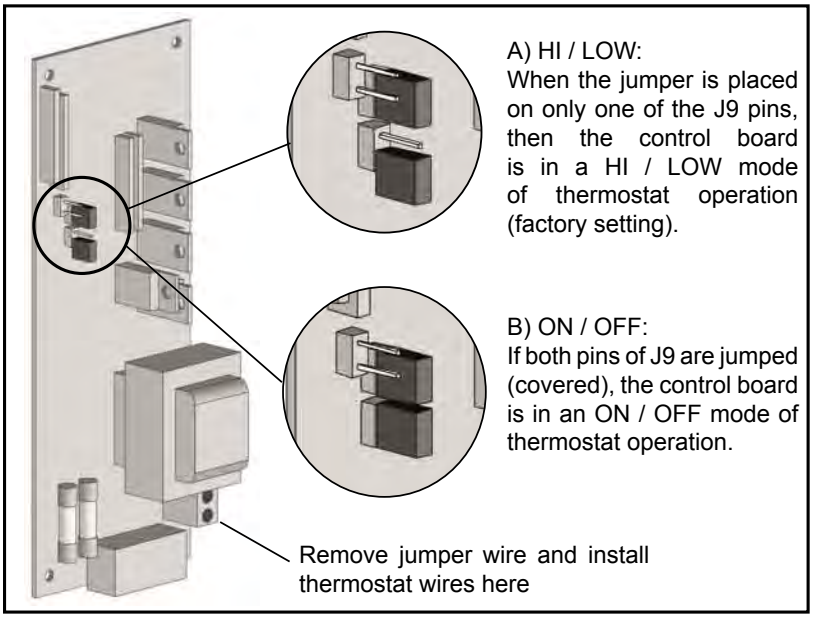


Figure 34: Circuit Board.

This control board can be placed into two different modes: When the jumper J9 is not jumped then the control board is in a HI / LOW mode operation. If the control board is placed with J9 jumped then the control board is in a ON / OFF mode of operation. In the ON /OFF thermostat mode, the unit will shut OFF when the thermostat is not calling for heat. When the thermostat calls for heat, the unit will go through an ignition sequence once again and relight.

1. Install the wall thermostat in a location that is not to close too the unit but will effectively heat the desired area.
2. Install a 12 or 24 Volt Thermostat using an 18 x 2 gauge wire from the unit to the thermostat.

If the unit has been placed in the HI / LOW mode, the unit will be taken to a low or idle setting when the thermostat is not calling for heat. When the thermostat calls for heat, the unit will go to the setting that is displayed on the control board Heat Indicator. If the heating load is not great enough when the stove is on low, the high limit switch will turn the stove off and the switch will have to be manually reset. To reset the high limit switch, remove the right cabinet side. The switch is found behind the control panel. Avoid setting off the high limit switch.

Installation

Slider/Damper Installation - Timer Controlled Model Only:

Not for installation in Germany.

This is used to regulate the airflow through the pellet stove.

1. Remove the slider rod (short rod with knob and nuts) from their package and open the left side panel.
2. Remove the knob and outer nut from the knob. Push the rod through the hole in the slider. Place the lock nut on the rod and tighten, leaving a 1/32" (1 mm) gap between the slider and the other nut.
3. Make sure the slider moves freely. Close the side panel and tighten screws after placing the rod through the panel. Screw the knob onto the slider.

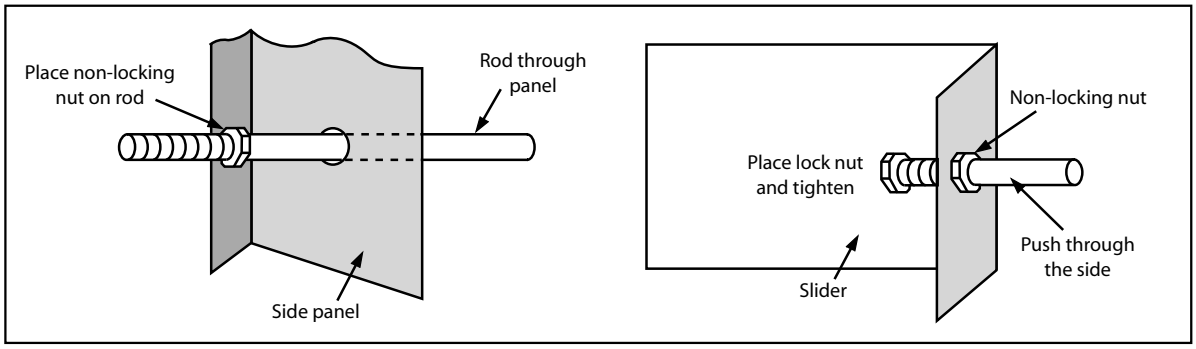


Figure 35: Slider / damper assembly.

Slider/Damper Setting:

This is used to regulate the airflow through the pellet stove.

A Qualified Service Technician or Installer should mark the slider rod in the current settings.

The slider damper is located behind the left side panel. To open the left side panel, undo the one screw located in the upper front corner of the cabinet side

SPECIAL NOTES:

Pellet quality is a major factor in how the Pellet stove will operate. If the pellets have a high moisture content or ash content the fire will be less efficient and has a higher possibility of the fire building up and creating clinkers (hard ash build-up).

If the fire should happen to go out and the Dial-A-Fire has been set on the lowest setting, the Slider Damper should be pushed in slightly, decreasing the air in the firebox or the Dial-A-Fire can be turned up slightly.

If, after long periods of burning, the fire builds up and overflows the burn pot or there is a build up of clinkers, this would be a sign that the pellet quality is poor, this requires more primary air, the slider damper must be pulled out to compensate. Pulling the slider damper out gives the fire more air.

The easiest way to make sure that an efficient flame is achieved is to understand the characteristics of the fire.

- A tall, lazy flame with dark orange tips requires more air – Open slider (pull out) slightly.
- A short, brisk flame, like a blowtorch, has too much air – Close slider (push in) slightly.
- If the flame is in the middle of these two characteristics with a bright yellow/orange, active flame with no black tips then the air is set for proper operation.

Taking a reading of vacuum pressure inside the firebox with a magnehelic gauge can be used to set the slider for best combustion. **The best settings are a reading of 0.12 to 0.13 inches of water column (30 Pa) on the high fire setting. Some fuels may require higher or lower settings.** The reading can be taken from the ⅛" (3 mm) hole located on the front of the unit below the door and behind the magnetic ash lip.

Circuit Board Only: The slider should be set on high output as per pervious page.
The combustion blower determines the adjustment of air from high fire to low fire. The combustion exhaust blower is a variable speed blower controlled by the heat output. When the heat output is turned down the blower speed will slow, decreasing the airflow through the firebox. As the heat output knob is turned up, the blower speed increases drawing more air through the firebox

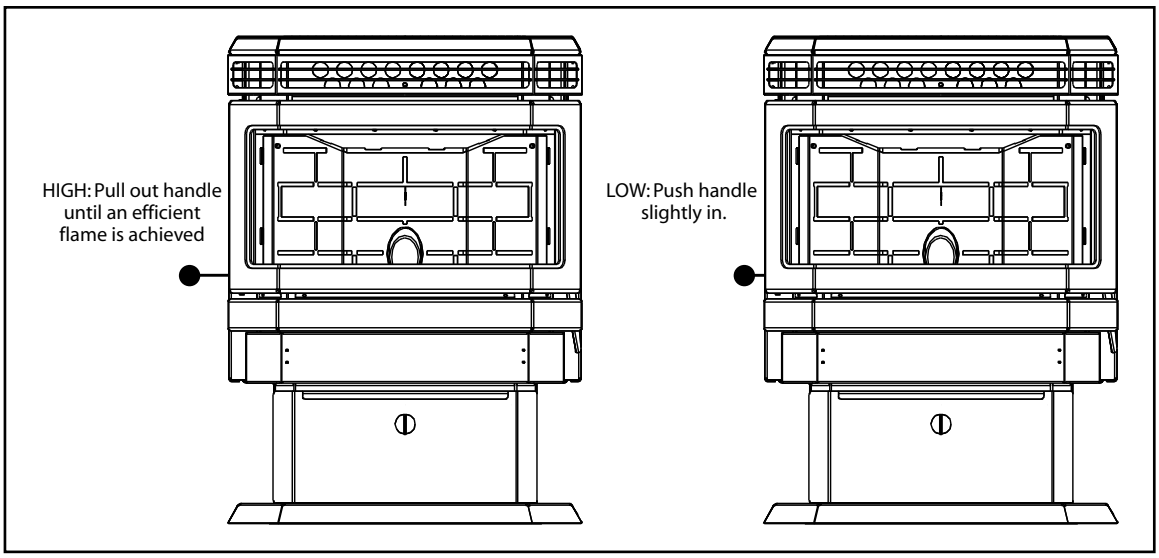


Figure 36: Slider / damper positions.

The Tube Scraper Rod:

Put the stainless steel rod through the hole in the heat exchanger located behind the top louvers. Thread the rod into the scraper plate, which is visible from inside the firebox by removing the top baffle.

Troubleshooting

This troubleshooting is for both Timer Control and Circuit Board style EF3. It will be stated if the troubleshooting relates only to one model.

DO NOT:

- Hold the ON / OFF BUTTON down for circuit board model or hold the start-up switch down for timer control. This is a momentary contact switch and can be damaged if held down too long.
- Service the stove with wet hands. The stove is an electrical appliance, which may pose a shock hazard if handled improperly. Only qualified technicians should deal with possible internal electrical failures.
- Remove any screws in the firebox without first lubricating them with penetrating oil.

WHAT TO DO IF:

1. The stove will not start.
2. The stove will not operate when hot.
3. The exhaust blower will not function normally.
4. The convection blower will not function normally.
5. Ignitor - Everything else in the stove operates but the ignitor will not light the pellets.
6. The auger motor does not function normally.
7. Control settings (heat level) have no effect on fire (Circuit Board).
8. The Dial-A-Fire has no effect on the fire (Timer Control).
9. The stove will not shut off.
10. The stove keeps going out.
11. Light # 2 on Heat output bar flashing (Circuit Board).

***NOTE: All troubleshooting procedures should be carried out by qualified technicians or installers.**

1. The stove will not start.

General

★ Make sure the stove is plugged in and the wall outlet is supplying power.

Timer Control

- Push the Start-up switch. If the stove fails to start, unplug the unit and open the hinged side panels (held tight with two screws).
- With the stove unplugged, examine all connections. Make sure they are firmly connected and that there are no exposed wires touching the stove (except the chassis ground wire).
- Check the continuity and placement of connections against the Wiring Diagram in this manual.
- Ensure that the connections to the fifteen (15) minute start-up timer are correct.
- Attempt to bypass the switch by inserting a jumper wire between the red and white wires that attach to the switch. Plug the stove back in. If the stove starts, replace the switch.
- If this fails, replace the fifteen (15) minute start-up timer.

  Caution: Installation of a new start-up timer without checking the ignitor resistance may cause another failure to the new start-up timer due to a short in the ignitor. The proper resistance through the ignitor should be 138Ω to 250Ω.

Troubleshooting

Circuit Board

- ✓ If the Control Board has been placed in the ON /OFF thermostat mode, then turn the thermostat up to call for heat.
- ✓ Check the Heat Level Indicator. - If the # 2 light is flashing (see the # 2 light is flashing)
- ✓ Check the fuses on the circuit board (see "Troubleshooting - Fuses").
- ✓ If the unit still does not start, contact your local dealer for service.

2. The stove will not operate when hot.

General

- ★ Check the hopper for fuel.
- ★ Incorrect air damper setting - Excessive air may consume the fire too quickly before the next drop of fuel, leaving completely unburned fuel in the burn pot liner. Insufficient air will cause build up, further restricting the air flow through the Burn Pot Liner. This in turn will cause the fuel to burn cold and very slowly. Fuel may build up and smother the fire. **(NOTE: Unit may require a change to the vent system or installation of fresh air to correct Air to Fuel ratio problems).**
- ★ Combustion Blower failure - The Combustion Blower is not turning fast enough to generate the proper vacuum in the fire box. Visual Check – is the blower motor turning?
- ★ Check Vacuum levels in the exhaust channel by bypassing the Vacuum Switch, then remove the Vacuum hose from Vacuum Switch. Check exhaust vacuum readings by placing the open end of the Vacuum Hose on a Magnahelic Gauge (readings must be above 0.10" W.C. on low fire).
  Note: If the motor fails to reach a 0.10" W.C. reading, then replace the Combustion Blower.
- ★ Poor Quality Fuel – Insufficient energy in the fuel to produce enough heat to keep the stove burning or operational.
- ★ Exhaust Temperature Sensor failure – Bypass sensor located on Exhaust Blower. If stove now operates properly, the unit may require cleaning or a new sensor. Contact your local dealer for service.
- ★ The unit may require cleaning. Contact your local dealer for service.

Timer Control

- ◆ Unplug the stove, open the left side panel. Jump the two (2) brown leads that are attached to the 140°F (60°C) temperature sensor. If the stove operates replace the 140°F (60°C) sensor.

Circuit Board

- ✓ Check the Heat Level Indicator if a fire is not detected, or if the fire has gone out **the #3 light will flash** because the Exhaust Temperature Sensor's contacts have opened.
- ✓ Check the Exhaust Blower voltage across the blower wires (>=220V on #5 setting and >= 165V on #1 setting). – Replace the Circuit Board if the Voltage reading is less than 82 V. with a line voltage >115 VAC.
- ✓ Exhaust Temperature Sensor failure. – Bypass sensor located on Exhaust Blower if stove now operates properly, the unit may require cleaning or a new sensor. Contact your local dealer for service.
- ✓ Check the fuses on the circuit board (see "Troubleshooting - Fuses").

3. The exhaust motor will not function normally.

General

- ★ Open the left side access panel; check all connections against the wiring diagram.
- ★ See "2. The stove will not operate when hot." section.
- ★ Contact your local dealer for service.

Timer Control

- If all the connections are verified and the exhaust blower does not function at all, tap lightly on the exhaust blower's motor end cap, this may loosen a tight motor.
- Apply 220 V AC directly to the exhaust blower. If the motor does not run, replace the blower.
- If the motor runs, have your dealer check the harness.

4. The convection blower will not function normally.

Timer Control

- Check all the connections between the controller, switch, and the convection blower against the wiring diagram.
- If the convection motor will not run, apply 220 V AC to the motor directly. If the motor runs, replace the fan controller. If the motor does not run, the convection blower has failed. Replace the blower.
- If the convection blower runs on high at all times (no control with the fan controller), check the connections from the 160°F (71°C) sensor (located on the upper left side of the firewall) and convection fan controller to the blower. Disconnect one of the wires from the sensor; if control of the convection blower returns to the fan controller, replace the sensor.
- If the motor is still on high, re-connect the sensor and replace the convection fan controller.

Circuit Board

✓ Clean all grill openings at the back and below unit.

✓ Press the fan button. Does the fan come on? Press again to verify that the blower turns on. If no, contact your local dealer for service.

5. Ignitor - Everything else in the stove operates but the ignitor will not light the pellets.

General

★ Check the burn pot liner placement.

Timer Control

- Check all the electrical connections on the 120°F (49°C) temperature sensor located on the exhaust channel.
- Check the connections at the ignitor socket.
- Place a jumper wire between the two leads on the 120°F (49°C) temperature sensor. If the ignitor works, replace the sensor.
- If the ignitor does not work, replace it.

Circuit Board

✓ Make sure the burn pot liner is up tight and square to the ignitor tube (by pushing the burn pot back against the ignitor tube).

✓ Check the fuses on the circuit board (see "Troubleshooting - Fuses").

✓ Check to see if the exhaust blower is operating. If not, contact your local dealer for service.

NOTE: The ignitor should be bright orange in color. If not, replace the ignitor.

6. The auger motor will not function normally.

General

★ If the Auger gear box does not turn but the motor's armature does try to spin then the auger is jammed. – Try to break apart jam by poking at the jam through the drop tube. If this fails then empty the hopper and remove the Auger Cover **Remember to re-seal the cover after installation**

Troubleshooting

Timer Control

- Make sure the exhaust blower is operating.
- Make sure the dial-a-fire is turned on.
- Unplug the stove and open the side and back panels.
- Check all the connections to the auger motor, auger dial-a-fire, vacuum sensor, 200°F (93°C) temperature sensor and the timing control module against the wiring diagram in this manual.
- Check the condition of the vacuum hose (located on the left side of the stove). It should not be cracked or torn and should be installed on the top air inlet tube on the vacuum sensor.
- Check the manual reset button on the 200°F (93°C) temperature sensor. If this sensor has been tripped, check for the cause of the over-heating before pushing the red button in. Check auger for movement.
- If the auger still does not work, then apply 220 V AC directly to the auger motor. If the auger motor does not work, replace it.
- By pass the 200°F (93°C) temperature sensor with a jumper wire; check the auger. If the auger works, replace the sensor.
- Check the voltage across the load pins of the timing module. It should be around 1 V to 2 V, cycling to line voltage during an auger pulse. If not, replace the timing control module.
- Check the vacuum sensor by placing a jumper wire between the blue wire and the black wire that are attached to the sensor. If the auger works, test to see if the exhaust blower is producing enough vacuum.
- To test the exhaust vacuum, place a magnehelic gauge in the sensor end of the vacuum tube. It should read 0.5" W.C. If the reading is good, replace the vacuum sensor.
- If the auger motor still does not work, then attempt to by-pass the auger dial-a-fire control by removing the leads from the timing control module's second delay pins and placing a jumper across the pins. If the auger now cycles very quickly, test the dial-a-fire potentiometer. If the auger did not cycle, replace the timing control module.
- To test the dial-a-fire potentiometer, the potentiometer should have a range of 68KΩ to approximately 850 KΩ (± 10%). If the range is not close, replace the potentiometer.
- Call your local dealer for service.

Circuit Board

✓ Check the fuses on the circuit board (see "Troubleshooting - Fuses").

✓ Call your local dealer for service.

7. Control settings (Heat Level) have no effect on the fire (Circuit Board).

✓ If the system light is flashing, the Control Board has complete control of the unit. When the unit's system light becomes solid, then control of the unit is given back to the operator.

✓ If there is no control of the Heat Level button, make sure the thermostat is calling for heat.

✓ Call your local dealer for service.

8. The dial-a-fire has no effect on the fire (Timer Control).

- Make sure all connections to the timer control module are secure.
- Perform a resistance test to the dial-a-fire potentiometer by placing the two (2) test leads from a multimeter into the leads of the potentiometer. The potentiometer should have a range of 68KΩ to approximately 850 KΩ (± 10%).

Potentiometer Readings: If the range is not close or does not vary then replace the potentiometer.
Full counter-clockwise (switched off) = open circuit, overload or infinite resistance
Low fire .....800 KΩ to 900 KΩ
High fire.....68 KΩ to 82 KΩ

9.The stove will not shut off.

Timer Control

- Check the connections to the 140°F (60°C) temperature sensor, start-up switch and the start-up timer against the wiring diagram.
- Check the 140°F (60°C) temperature sensor by removing one of the brown wires from the sensor. The unit should shut down right away as long as the start button was not pressed within 15 minutes of this test. If the stove shuts down within fifteen (15) minutes, replace the 140°F (60°C) sensor. If the stove does not shut down within fifteen (15) minutes, test the switch.
- To test the switch, the stove must be cold. Pull the plug, then plug the stove back in. If it fails to start, replace the switch.

Circuit Board

- ✓ If the unit will not shut off, ensure that the thermostat (if equipped) is turned down below the room temperature (thermostat mode in the ON / OFF position).
- ✓ If the unit is in the HI/LOW mode the unit will not shut off but will go to an idle setting (LOW). Press the ON/OFF button to turn the unit off.
- ✓ Disconnect one of the brown wires from the exhaust temperature sensor. If the unit continues to operate, contact your local dealer for service.

10.The stove keeps going out

If the stove goes out and leaves fresh unburned pellets or cigarette-like ashes in the burn pot liner, the fire is going out before the stove shuts off.

General

- ★ Check to see that the Slider / Damper is in the correct position.

Timer Control

- Turn the Dial-a-Fire up slightly (poor quality pellets will require slightly higher settings).

Circuit Board

- ✓ Turn the Heat Level up slightly (poor quality pellets will require slightly higher settings).
- ✓ Set the auger trim till the #1 and #5 lights are illuminated.

If the stove goes out and there are partially burned pellets left in the burn pot liner, the stove has shut down due to a lack of air, exhaust temperature, or power failure.

General

- ★ Adjust the Slider / Damper.
- ★ Check to see if the stove needs a more complete cleaning.
- ★ Did the power go out?
- ★ Contact your local Dealer for service.

Timer Control

- Turn the Dial-a-Fire up slightly (poor quality pellets will require slightly higher settings).

Circuit Board

- ✓ Turn the Heat Level up slightly (poor quality pellets will require slightly higher settings).

If the stove goes out and there are no pellets in the liner, the auger is stopping.

General

- ★ See "The auger motor will not function normally" and "The exhaust blower will not function normally."

11. Light # 2 on Heat output bar flashing (Circuit Board).

(The Vacuum Switch contacts have opened for more than 15 sec.)

✓Pinch, break or blockage in Vacuum Hose - Check hose for pinch points or damage, replace or re-route as required. Blow out Vacuum Hose

✓Blocked Hose Barb on Exhaust Channel - Use a paper clip to clean out Hose Barb or remove the Vacuum Hose from the Vacuum Switch and blow into the hose to remove blockage.

✓Blocked exhaust / venting system - Have stove and venting cleaned and inspected.

✓Severe negative pressure in area where unit is installed - Check the operation by opening a window, does this solve the problem? If it does, install fresh air intake to unit or room. Venting system may require vertical section to move termination into a low pressure zone.

✓Vacuum Switch failure - Bypass the vacuum switch, if this corrects the problem check for above problems before replacing the Vacuum Switch.

✓Damage to gray wires between Circuit Board and Vacuum Switch - Inspect wires and connectors

✓Combustion Blower failure - The Combustion Blower is not turning fast enough to generate the proper vacuum in the Exhaust Channel. Visual Check; is the blower motor turning? Check the Exhaust Blower voltage across the blower wires (>=220V on #5 setting and >= 165V on #1 setting). – Replace the Circuit Board if the Voltage reading is less than 165 V. with a line voltage >220 V AC.

✓Check Vacuum levels in the exhaust channel by bypassing the vacuum switch, then remove the Vacuum hose from Vacuum Switch. Check exhaust vacuum readings by placing the open end of the Vacuum Hose on a Magnahelic Gauge. (readings must be above .10" W.C. on low fire).

If the motor fails to reach a 0.10" W.C. readings, then replace the Combustion Blower

To reset Circuit Board after a trouble code - push the ON/OFF button

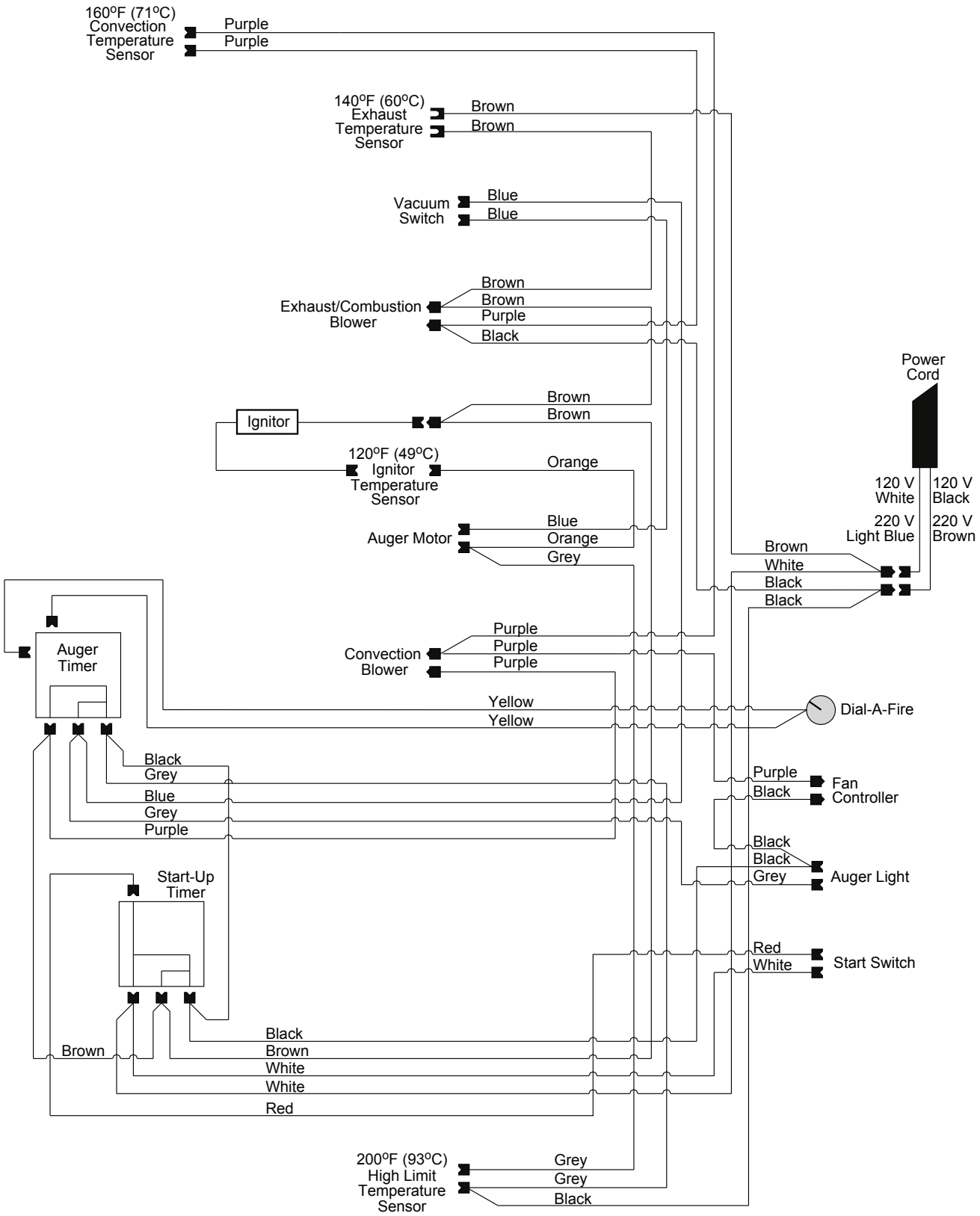
Fuses:

F1 is the fuse to the inside of the circuit board controls. If F1 has blown there may have been an input power overload or a short in the convection fan.

F2 fuse closest fuse to the outside edge of the circuit board controls. If fuse F2 has blown then there was a electrical overload problem with one of the following parts: ignitor, auger motor, high limit switch, or exhaust blower.

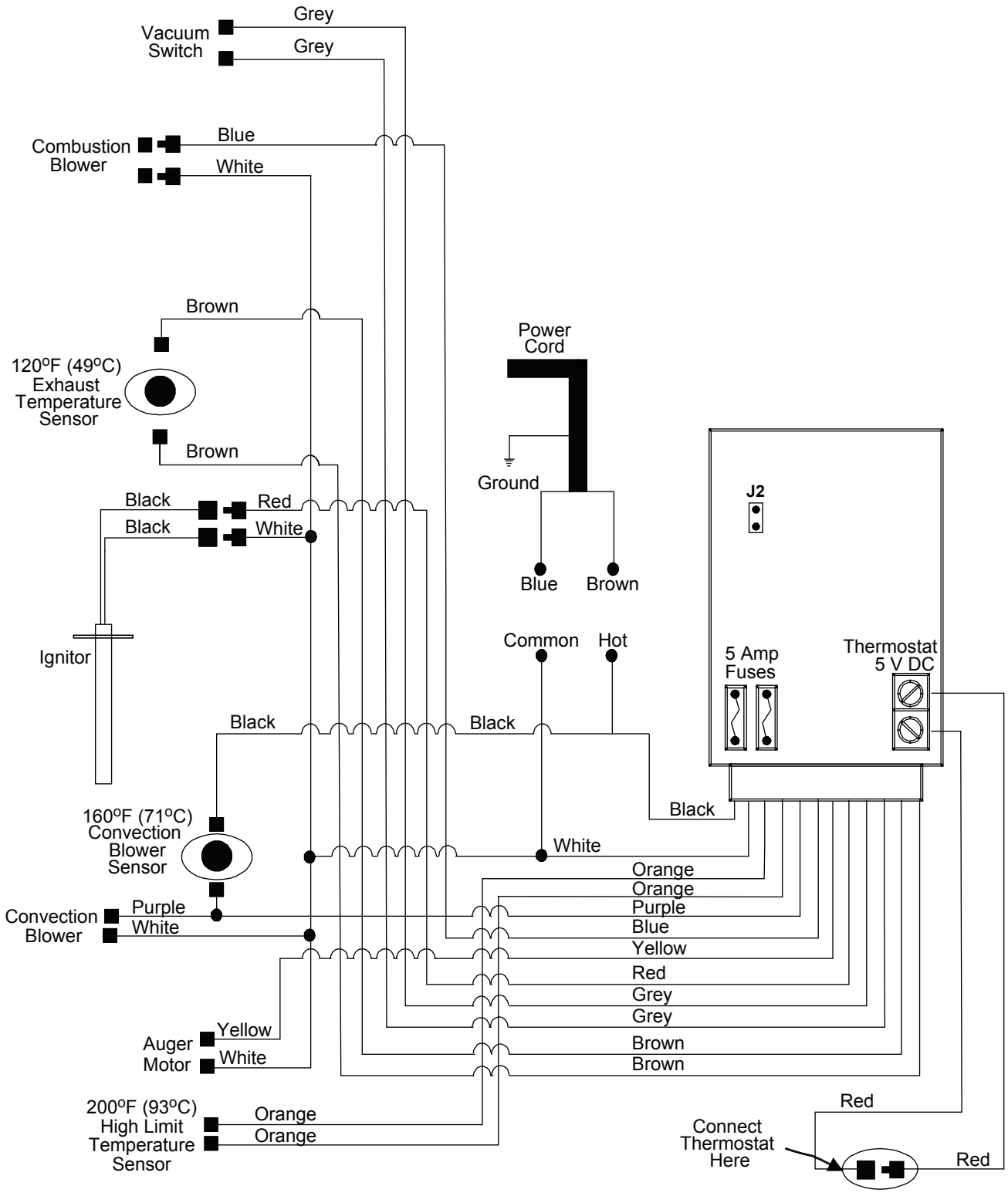
Wiring Diagram

Timer Control:



Wiring Diagram

Circuit Board:



Parts List

Reference Number	Description	Part Number
	Freestanding Fan Controller Knob	EC-040
1	Auger Motor - 220V	EF-001-220V
2	Convection Blower - 220V	EF-002-220V
	Convection Blower Impeller	EF-004
	Convection Blower Insulator (Gasket)	EF-006
	Combustion Main Impeller	EF-008
	Combustion Cooling Impeller	EF-009
3	Exhaust Temperature Sensor 140°F (60°C) Ceramic (Timer)	EF-010
3	120°F (49°C) Ceramic Fan Temp Sensor (Circuit Board)	EC-001
	Combustion Blower Mounting Gasket	EF-011
	Combustion Blower Housing Gasket	EF-012
4	Fan Temperature Sensor 160°F (71°C)	EF-013
5	Ignition Temperature Sensor 120°F (49°C) Ceramic (Timer)	EF-015
6	High Limit Temperature Sensor 200°F (93°C) Manual Reset	EF-016
7	Vacuum Switch - 220V	EF-017-220V
	Silicone Hose	EF-018
	Aluminum Hose Barb	EF-019
8	Ignition Burn Pot	EF-021
9	Auger	EF-025
10	Auger Brass Bushing & Plate	EF-026
11	Door Handle Complete	EF-028
	Door Handle Hardware Only	EF-029
12	Power Up Timer Control - 220V (Timer)	EF-037-220V
13	Green Light - 220V (Timer)	EF-041-220V
14	Start Up Switch (Timer)	EF-043
15	Dial-a-Fire - 220V (Timer)	EF-044-220V
16	Fan Controller With Knob - 220V (Timer)	EF-045-220V
17	Firebox Liner With Insulation	EF-047
	Slider Damper Rod With Knob	EF-050
	Heat Exchanger Rod With Knob	EF-051
	⅝" Door Gasket 7' (2.1 m)	EF-056
	Window Channel Tape 60" (1.5 m)	EF-058

Parts List

Reference Number	Description	Part Number
18	FPI & BIH Hopper Lid Knob & Stud Only	EF-059
19	FPI & BIH Ash Pan Latch	EF-060
	Glass Set With Tape	EF-062
	Slider Damper Plate	EF-064
20	Auger Brass Bushings (Set of 2)	EF-065
	Firebox Liner Top Plate	EF-066
	Dial-a-Fire Knob	EF-067
	Knob 1 Inch Round	EF-068
	¾" ID Auger Collar with Set Screw	EF-069
	Wiring Harness	EF-071
	Fireplace Insert Pedestal Complete	EF-074
	Built-In Heater Pedestal	EF-074A
21	Freestanding Back Grill	EF-097
	Freestanding Ash Pan Cover	EF-099
	Built-In Heater Kit	EF-102
22	Freestanding Hopper Lid With Handle	EF-104
23	Fireplace Insert Ash Pan Drawer With Latch	EF-105
24	Freestanding Stove Top	EF-111
25	Fireplace Insert Stove Top	EF-114
26	Ash Sill	EF-121
27	FPI & BIH Hopper Cover	EF-122
28	Front Grill	EF-123
	Shoulder Bolt, Hardened Bush & Nut (Set of 2)	EF-124
	Firebox Ceramic Wool Insulation	EF-126
29	Steel Brick Lining	EF-129
30	Freestanding Right Cabinet Side	EF-133
31	Freestanding Left Cabinet Side	EF-134
32	Freestanding Pedestal Complete	EF-139
	Ignitor Tube Only	EF-140
33	Freestanding Hopper Lid Hinge	EF-141
34	Freestanding Hopper Side Rail (Left & Right)	EF-143
35	FPI & BIH Hopper Side Rail (Left & Right)	EF-145

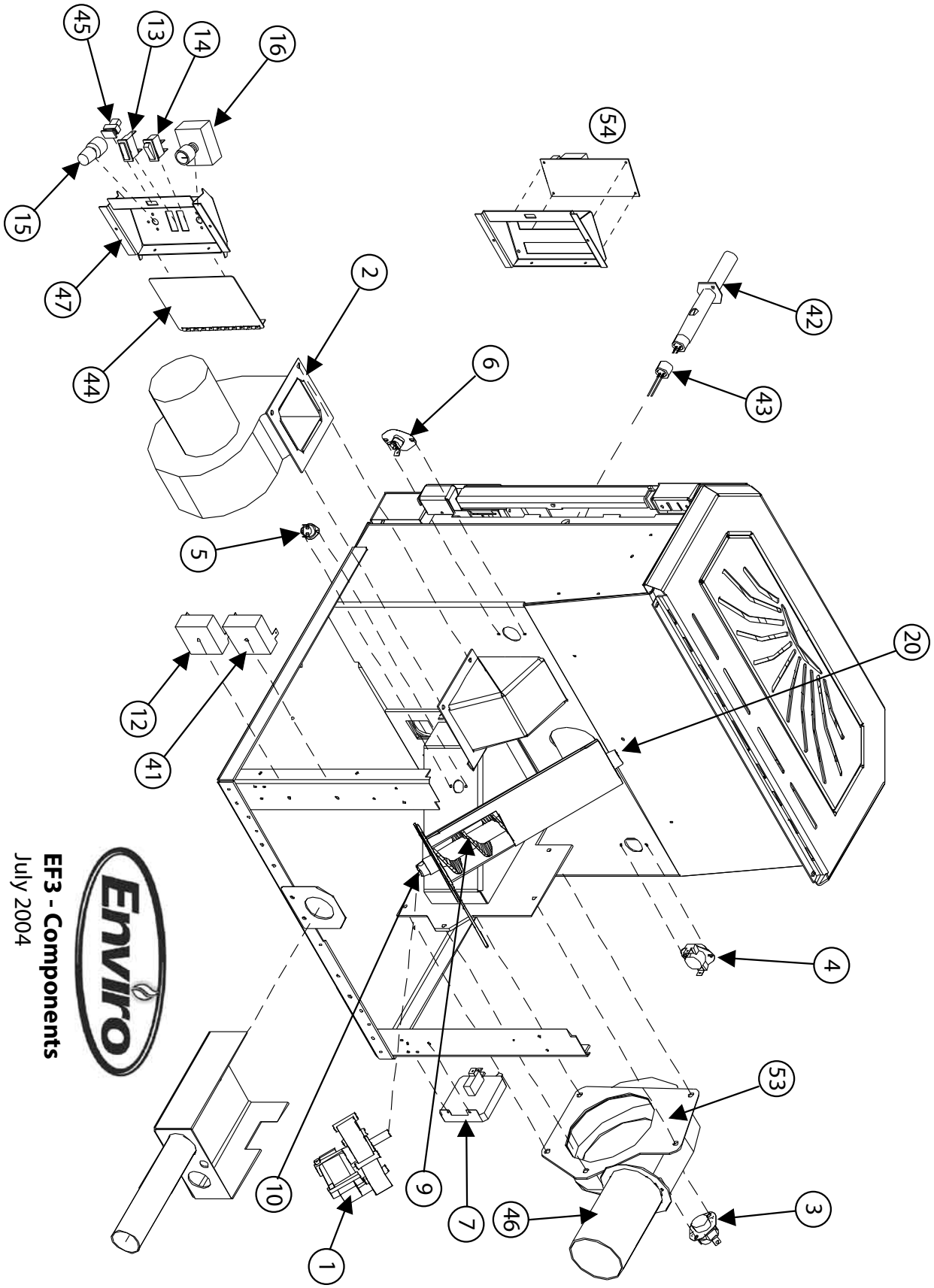
Parts List

Reference Number	Description	Part Number
	Pellet Stove Cleaning Brush	EF-156
	EMI Filter - 220V	EF-158
36	Freestanding Ash Drawer	EF-160
37	Freestanding Ash Pan Latch	EF-178
38	FPI & BIH Ash Pan Cover Magnet Set	EF-188
39	Firebox Cleaning Port Covers	EF-194A
40	FPI & BIH Hopper Lid With Knob, Stud, and Hinge	EF-202
	Pedestal & Ash Pan Gasket 10’ (3 m)	EF-208
41	Auger Timer Control (1 second) - 220V	20-007-220V
	CE Power Cord - 220V	20-010-220V
42	Pin Ignitor - 220V	20-016-220V
43	Halogen Cycle	20-034
44	Control Panel Door	20-040
	Built-In Heater Standoffs (Set of 2)	50-160
	Enviro Logo Gel Decal	50-322
45	Control Panel Touch Latch	50-323
46	Combustion Blower Exhaust Tube	50-327
	Circuit Board Control Panel (Circuit Board)	50-330
47	Freestanding Phase Control Panel Complete - 220V (Timer)	50-486
47	FPI & BIH Phase Control Panel Complete - 220V (Timer)	50-494
	Convection Blower Mount	50-524
48	Stainless Steel Burn Pot Liner - High Ash	50-587
	Firebox Liner Top Rod	50-591
49	Door Assembly	50-602
50	Door Hinge Bracket	50-604
51	Fireplace Insert Cabinet Side Right	50-751
52	Fireplace Insert Cabinet Side Left	50-752
	Glass Extrusions (Set of 2)	50-767
	Circuit Board 5 Amp Fuse (Pair) - 220V (Circuit Board)	50-834
53	Exhaust Blower Assembly - 220V	50-900
54	Circuit Board With Decal - 220V (Circuit Board)	50-963
	EF3 DIN Owner’s Manual	50-1070
	EF3 DIN Technical Manual	50-1071

Parts List - Options

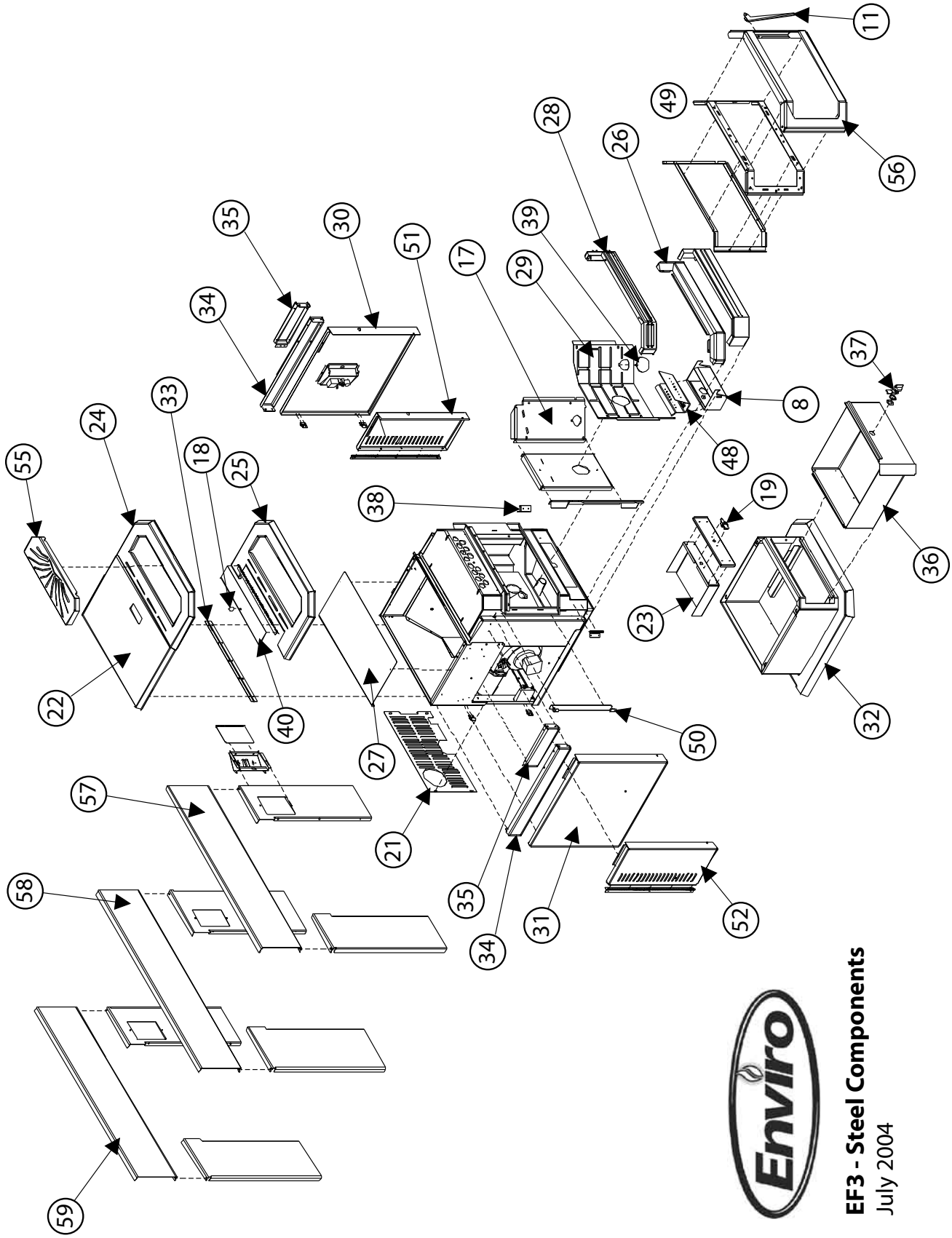
Reference Number	Description	Part Number
	Log Set	20-036
55	Decorative Trivet - Painted	EF-150
55	Decorative Trivet - Gold	EF-151
	Louvre Trim - Brass	50-340
	Louvre Trim - Nickel	50-342
56	Door Cover (No Louvre Trim) - Gold	50-469
56	Door Cover With Louvre Trim - Nickel	50-470
56	Door Cover (No Louvre Trim) - Painted	50-600
57	Regular Surround Panel - Black Trim	50-100
	Regular Trim Only - Black	50-117
	Regular Trim Only - Brass	EF-091
	Regular Trim Only - Nickel	50-129
58	Oversized Surround Panel - Black Trim	50-101
	Oversized Trim Only - Black	50-119
	Oversized Trim Only - Brass	EC-052
	Oversized Trim Only - Nickel	50-131
59	Built-In Heater Surround Panel - Black Trim	EF-077A
	Built-In Heater Trim Only - Black	50-118
	Built-In Heater Trim Only - Brass	EF-153
	Built-In Heater Trim Only - Nickel	50-130
	Tapped Corner Bracket	EC-053

Parts Diagram - Components



EF3 - Components
July 2004

Parts Diagram - Steel



EF3 - Steel Components
July 2004

Warranty

Sherwood Industries Ltd. gives a five year limited warranty on all steel manufactured parts. A one-year warranty is provided on all electrical components. The above limited warranties are extended only to the original purchaser.

There is no warranty on the following parts:

- Fiberglass rope baskets
- refractory material
- burn pot liner
- paint
- enamel finish or plating where it applies
- vacuum hose.

****NOTE:** The paint on the brick firebox lining may peel. This is due to the extreme conditions applied to the paint and is in no way covered under warranty.

WHEN FILING A WARRANTY CLAIM PLEASE COMPLETE THE FOLLOWING INFORMATION ON AN OFFICIAL WARRANTY CLAIM FORM:

TO THE DEALER:

- Name, Address and Telephone Number of purchaser and date of purchase.
- Date of Installation. Name of the installer and dealer. Serial Number of the appliance. Nature of the complaint, defects or malfunction, description and part # of any parts replaced.

TO THE DISTRIBUTOR:

- Sign and verify that work and information are correct.

ENSURE THAT YOU SPECIFY THE NATURE OF THE COMPLAINT, DEFECT, PERIODICAL MALFUNCTION, ETC.

The limited warranty covers defects in materials and workmanship as long as the products has been installed according to the manual's instruction. If the product is damaged or broken as a result of mishandling or misuse, the warranty does not apply. Removal and re-installation costs are not covered under this warranty.

It is the manufacturer's option whether to repair or replace the appliance. The shipping cost to and from the factory is paid by the consumer. All warranties by the manufacturer are set forth herein and no claim shall be made against the manufacturer on any oral warranty or representation.

Sherwood Industries Ltd. assumes no responsibility for damage caused by household power fluctuations or power surges.

Under Warranty

For the do-it-yourself Individual

The consumer should be aware that the pellet appliance needs setting using tools that he/she might not have. Consult an ENVIRO dealer. It is recommended than only an authorized ENVIRO dealer installs an ENVIRO unit. There will be no warranty coverage on parts destroyed or burnt out as a result of a consumer installation error or defect.

Sherwood Industries Ltd. reserves the right to make changes without any notice.

Installation Data Sheet

The following information must be recorded by the installer for warranty purposes and future reference.

NAME OF OWNER:

_____

ADDRESS:

_____

_____

_____

PHONE:_____

NAME OF DEALER:

_____

ADDRESS:

_____

_____

_____

PHONE:_____

MODEL:_____

SERIAL NUMBER:_____

DATE OF PURCHASE: _____ (dd/mm/yyyy)

DATE OF INSTALLATION:_____(dd/mm/yyyy)

MAGNEHELIC AT INSTALL:_____

INSTALLER'S SIGNATURE:

_____

NAME OF INSTALLER:

_____

ADDRESS:

_____

_____

_____

PHONE:_____

MANUFACTURED BY:
SHERWOOD INDUSTRIES LTD.
6782 OLDFIELD RD. SAANICHTON, BC, CANADA V8M 2A3
www.envirofire.biz
September 2, 2004
C-10538