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PELLET STOVE

# EF2 Classic

## Freestanding, Fireplace Insert & Built-In Heater TECHNICAL MANUAL



**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.**



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

**50-1733**

# TABLE OF CONTENTS

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|   |    |
|---|----|
| Safety Warnings & Recommendations.....  | 3  |
| Specifications.....   | 6  |
| Rating Label Location.....  | 6  |
| Specifications.....   | 6  |
| Dimensions - Freestanding.....  | 7  |
| Dimensions - Fireplace Insert and Built-In Heater.....                                      | 7  |
| Installation.....   | 8  |
| Deciding Where to Locate your Pellet Appliance.....   | 8  |
| Removing Pellet Stove From Pallet.....  | 8  |
| Clearances to Combustibles - Freestanding.....  | 9  |
| Clearances to Combustibles - Fireplace Insert.....  | 9  |
| Clearances to Combustibles - Built-In Heater.....   | 10 |
| Pedestal Installation.....  | 10 |
| Vent Termination Requirements.....  | 11 |
| Outside Fresh-Air Connection.....   | 12 |
| Exhaust And Fresh Air Intake Locations.....   | 12 |
| Mobile Home Installation - Freestanding.....  | 13 |
| Corner Through Wall Installation - Freestanding.....  | 13 |
| Horizontal Exhaust Through Wall Installation - Freestanding.....                            | 14 |
| Through Wall With Vertical Rise and Horizontal Termination Installation - Freestanding..... | 15 |
| Inside Vertical Installations - Freestanding.....   | 16 |
| Outside Vertical Installations - Freestanding.....  | 16 |
| Hearth Mount Installation - Freestanding.....   | 17 |
| Masonry Fireplace Installation - Fireplace Insert.....                                      | 18 |
| Installation For A Built-In Heater.....   | 20 |
| Installation of Control Panel into Surround Panel - FPI and BIH.....                        | 20 |
| Installation and Removal of The Surround Panels - FPI and BIH.....                          | 21 |
| Thermostat Installation.....  | 22 |
| The Tube Scraper Rod.....   | 22 |
| Slider/Damper Setting.....  | 23 |
| Troubleshooting.....  | 24 |
| Wiring Diagram.....   | 27 |
| Parts List.....   | 28 |
| Parts List - Options.....   | 31 |
| Parts Diagram - Components.....   | 32 |
| Parts Diagram - Steel.....  | 33 |
| Installation Data Sheet.....  | 34 |

# **SAFETY WARNINGS & RECOMMENDATIONS**

\* This manual is designed for the technician in conjunction with the owner's manual. \*

**Please read this entire Owner's Manual before installing or operating your Nature's Flame Pellet Stove. Failure to follow these instructions may result in property damage, bodily injury or even death. Any unauthorized modification of the appliance or use of replacement parts not recommended by the manufacturer is prohibited. All national and local regulations and European Standards shall be complied with when installing this appliance.**

**Caution: Do not connect to any air distribution duct or system.**

**Warning: Parts of the appliance, especially the external surfaces, will be hot to touch when in operation so use due care and the fire gloves provided.** Never place wood, paper, furniture, drapes or other combustible materials within 80cm (31½") of the front of the unit, 20cm (7⅞") from each side, and 10cm (4") from the back of the unit. Do not let children or pets touch it when it is hot.

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

**FIRE EXTINGUISHER AND SMOKE DETECTION:** All homes with a pellet burning stove should have at least one fire extinguisher in a central location known to all in the household. Smoke detectors should be installed and maintained in the room containing the stove when installing and operating a pellet burning appliance. If it sounds the alarm, correct the cause but do not deactivate. You may choose to relocate the smoke detection device within the room; **DO NOT REMOVE THE SMOKE DETECTOR FROM THE ROOM.**

**CHIMNEY OR RUN AWAY FIRE:** Call local fire department. Close the draft fully. Extinguish the fire in the burn pot liner with a cup of water and close the door. Examine the flue pipes, chimney, attic, and roof of the house, to see if any part has become hot enough to catch fire. If necessary, spray with fire extinguisher or water from the garden hose. **IMPORTANT:** Do not operate the stove again until you are certain the chimney and its lining have not been damaged.

**FUEL:** This pellet stove is designed and approved to only burn wood pellet fuel with up to 3% ash content. Dirty fuel will adversely affect the operation and performance of the unit and may void the warranty. Check with your dealer for fuel recommendations. **THE USE OF CORDWOOD IS PROHIBITED BY LAW. When filling fuel hopper,** open lid on top of unit, check hopper for foreign objects, empty the bag into the hopper, **DO NOT OVER FILL,** and ensure hopper lid closes completely. **DO NOT** use this appliance as an incinerator. **DO NOT** use unsuitable and non recommended fuels, including liquid fuels.

**KEEP ASH PAN FREE OF RAW FUEL.** **DO NOT PLACE UNBURNED OR NEW PELLETT FUEL IN ASH PAN.** A fire in the ash pan may occur.

**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: "SLIDER/DAMPER SETTING".**

# **SAFETY WARNINGS & RECOMMENDATIONS**

**CLEANING:** There will be some build up of fly ash and small amounts of creosote in the exhaust. This will vary due to the ash content of the fuel used and the operation of the stove. It is advisable to inspect and clean the exhaust vent semi-annually or every two tons of pellets. The appliance, flue gas connector and the chimney flue require regular cleaning. Check them for blockage prior to re-lighting after a prolonged shut down period.

**ASHES:** Disposed ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be on a non-combustible surface, well away from all combustible materials pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispensed, they should be retained in the closed container until all cinders have been thoroughly cooled.

**IMPORTANT:** The door and ash drawer cover must be kept closed except during ignition, refueling and removal of residue material to prevent fume spillage.

**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 Nature's Flame 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.

**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 (1.88-2.05 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 Nature's Flame 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 450 watts.

**OPERATION:** The door and ash drawer cover must be kept closed securely when the unit is in operation to prevent fume spillage and for proper and safe operation of the pellet stove. Also ensure all gaskets on the door are checked and replaced when necessary.

**CAUTION:** When operating during adverse weather, if the unit exhibits dramatic changes in combustion stop using the unit immediately.

**INSTALLATION:** Contact your local building or fire official to obtain a permit and any information on installation restrictions and inspection requirements for your area. All local regulations, including those referring to national and European Standards need to be complied with when installing this appliance.

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. This appliance must be installed on a floor with an adequate load bearing capacity. If an existing construction doesn't meet these prerequisite, suitable measures (e.g. load distributing plate) shall be taken to achieve it.

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.

# **SAFETY WARNINGS & RECOMMENDATIONS**

**FRESH AIR:** Outside Fresh Air connection is optional. Fresh Air must be connected to all units installed in "Air Tight Homes" or where required by local codes.

Consider all large air moving devices when installing your unit and provide room air accordingly. NOTE: Extractor fans when operating in the same room or space as the appliance, may cause problems. Limited air for combustion may result in poor performance, smoking and other side effects of poor combustion.

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.

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 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**

# SPECIFICATIONS

## RATING LABEL LOCATION:

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

Fireplace Insert and Built-In Heater: The rating label is located on the hopper cover.

## SPECIFICATIONS:

Table 1 : EF2 Classic Specifications.

| Classification  | Testing Standard  | Description   |
|---|---|---|
| Class I IP-20   | AS/NZS 4012:1999, 4013:1999   | Residential Wood Pellet Heater                              |
| Voltage   | Current   | Frequency   |
| 220 - 240 V   | 2.3 - 2.5 Amps  | 50 Hz   |
| Maximum Power Requirement                                   | Unit with Full Hopper   | Hopper Capacity   |
| 550W (1878 BTU/hr)  | ~ 134kg (295lb)   | ~ 25kg (55lb)   |
| Mean Flue Gas Temperature - High                            | Mean Flue Gas Temperature - Medium                                    | Mean Flue Gas Temperature - Low                             |
| FS: 197°C (387°F)<br>FPI: 222°C (432°F)                     | FS: 146°C (295°F)<br>FPI: 175°C (347°F)                               | FS: 104°C (219°F)<br>FPI: 122°C (252°F)                     |
| Fuel Consumption - High                                     | Fuel Consumption - Medium   | Fuel Consumption - Low                                      |
| FS: 2.1 kg/hr (4.63 lb/hr)*<br>FPI: 2.3 kg/hr (5.07 lb/hr)* | FS: 1.3 kg/hr (2.87 lb/hr)*<br>FPI: 1.4 kg/hr (3.09 lb/hr)*           | FS: 0.7 kg/hr (1.54 lb/hr)*<br>FPI: 0.8 kg/hr (1.76 lb/hr)* |
| Heat/Power Output - High                                    | Heat/Power Output - Medium  | Heat/Power Output - Low                                     |
| FS: 9.5 kW (32444 BTU/hr)<br>FPI: 9.4 kW (32103 BTU/hr)     | FS: 5.3 kW (18100 BTU/hr)<br>FPI: 6.3 kW (21516 BTU/hr)               | FS: 3.2 kW (10929 BTU/hr)<br>FPI: 3.1 kW (10587 BTU/hr)     |
| Average Particular Emissions (dry weight)                   | Average Emissions Rate  | Average Efficiency  |
| FS: 0.4g/kg<br>FPI: 0.4g/kg                                 | FS: 21mg/MJ<br>FPI: 24mg/MJ   | FS: 82%<br>FPI: 79%   |
| Gross Calorific value of Pellets (dry weight)               | Fuel type   |   |
| 20.2 MJ/kg (8.68 BTU/lb)                                    | wood pellets - 6mm dia. - complying with draft standard AS/NZS 4014.6 |   |

\*Note: Consumption will vary with the type of fuel used.

IMPORTANT: The above values were found during testing and may vary with the fuel type, climate, and installation style

# SPECIFICATIONS

## DIMENSIONS - FREESTANDING:

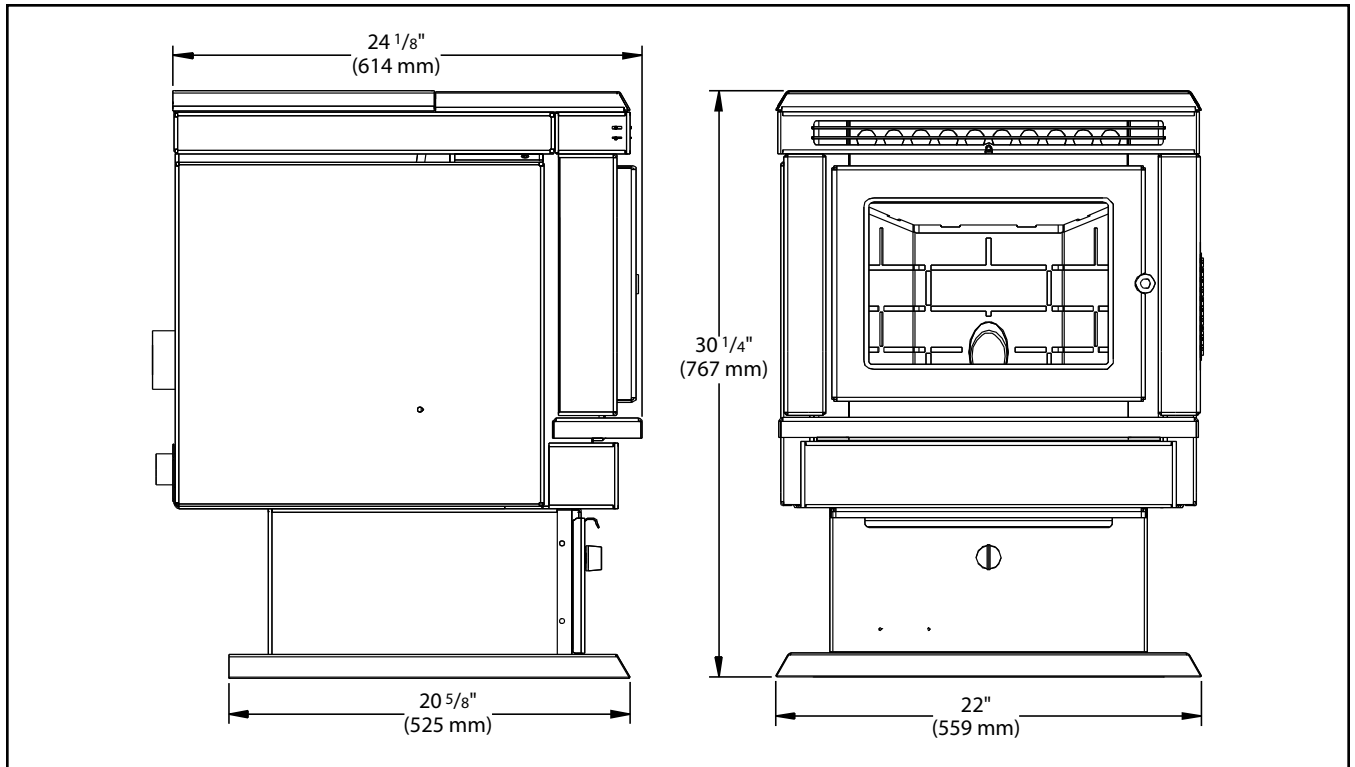


Figure 1: Dimensions of EF2 Classic Freestanding.

## DIMENSIONS - FIREPLACE INSERT AND BUILT-IN HEATER:

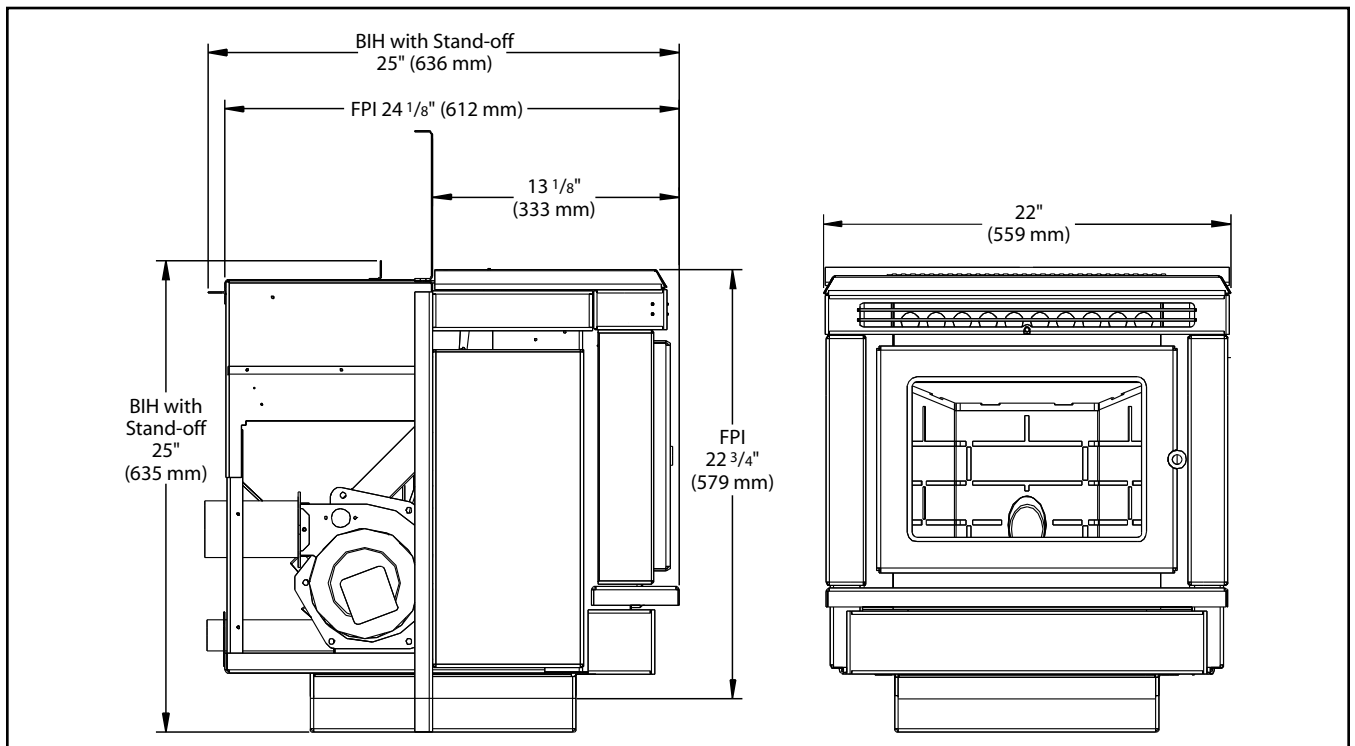


Figure 2: Dimensions of EF2 Classic Fireplace Insert and Built-In Heater.

# INSTALLATION

## DECIDING WHERE TO LOCATE YOUR PELLET APPLIANCE:

1. Do not install the stove in a bedroom or room where people sleep in.
2. Locate the stove in a large and open room that is centrally located in the house. This will optimize heat circulation.
3. Check clearances to combustibles and for the least amount of interference to house framing, plumbing, wiring, et.
4. You can vent the stove with approved pipe through an exterior wall behind the unit or pass it through the ceiling and roof. The stove can connect to an existing masonry or metal chimney (must be lined if the chimney is over 6" (15 cm) diameter, or over 28 inches<sup>2</sup> (180 cm<sup>2</sup>) cross sectional area).
5. This unit must not be installed directly onto carpet. If it is to be installed on a carpeted area, a solid surface (wood, metal or approved hearth pad) must be installed between the unit and the carpet.
6. This unit uses large quantities of air for combustion; outside Fresh Air connection is **strongly recommended**. Fresh Air **must** be connected to all units installed in Mobile and "Air Tight Homes" (R2000) or where required by local codes.
7. Do not obtain combustion air from an attic, garage or any unventilated space. Combustion air may be obtained from a ventilated crawlspace.
8. 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.

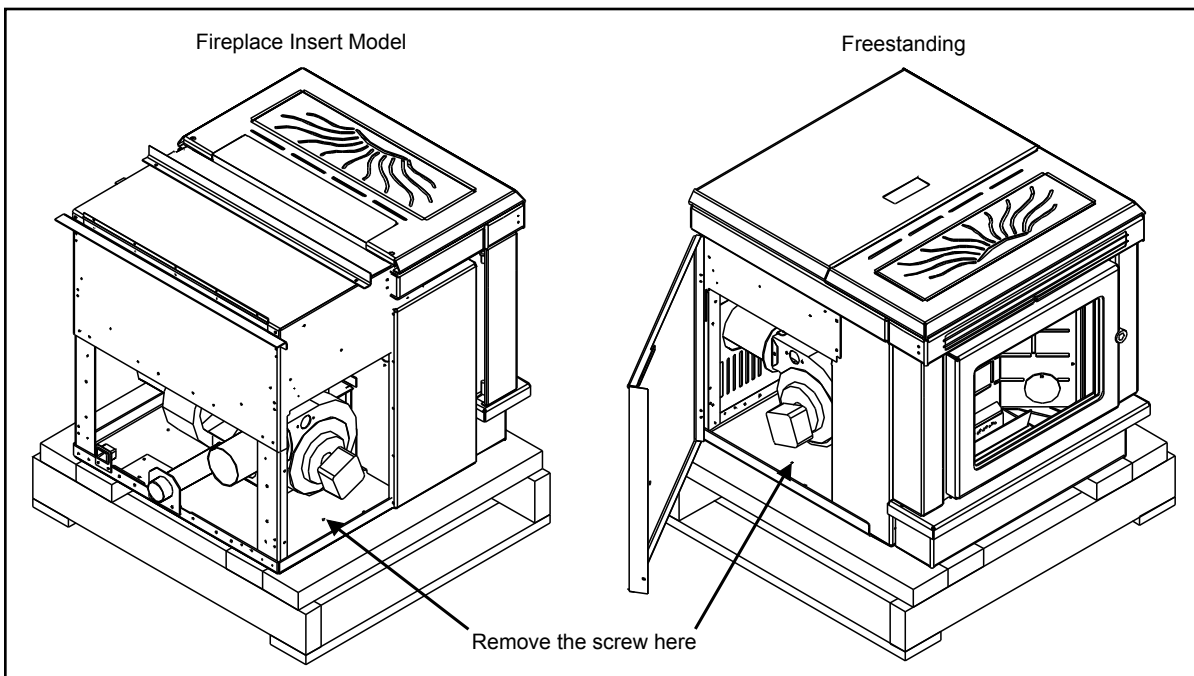


Figure 3: Screws to take out to remove stove from pallet.



# 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 3/4" (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)

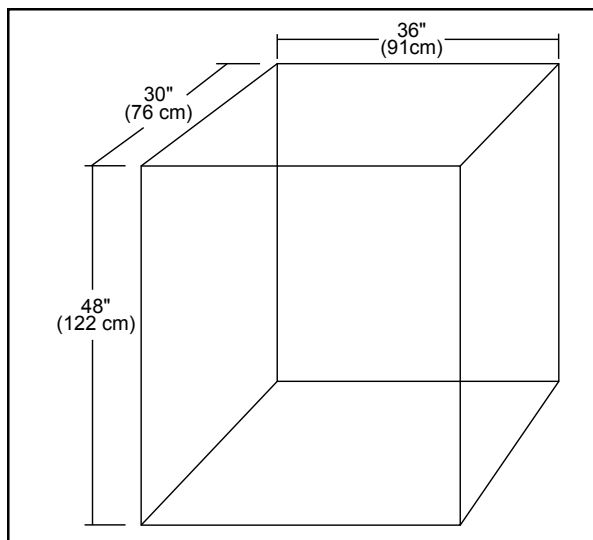


Figure 5: EF2 Classic Freestanding Minimum Alcove Size.

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

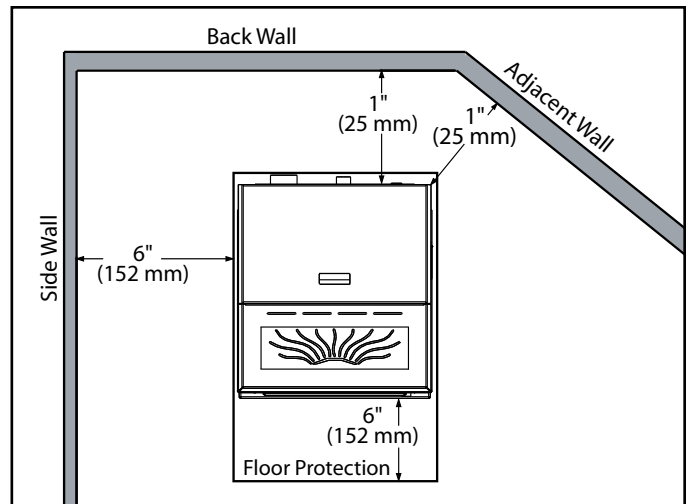


Figure 4: EF2 Classic Freestanding Clearance to Combustibles.

- 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.

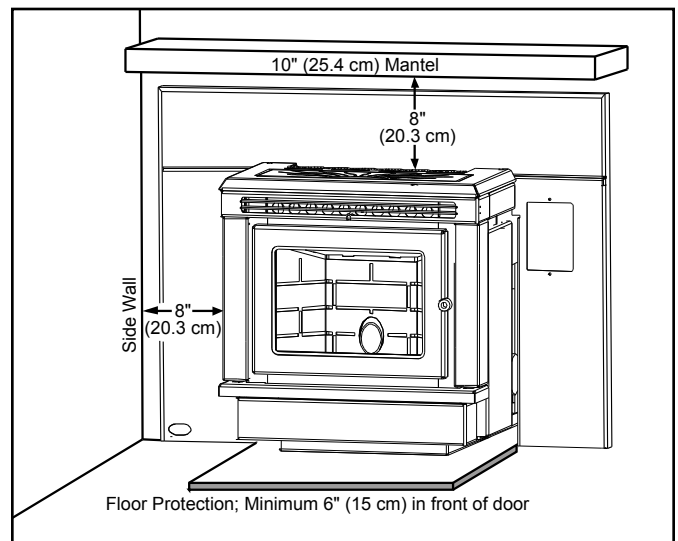


Figure 6: EF2 Classic Fireplace Insert Clearance to Combustibles.

# 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)   |

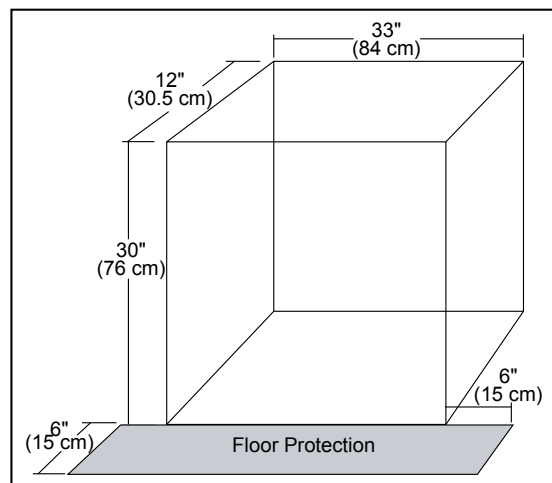


Figure 7: EF2 Classic Built-In Heater recommended framing.

## PEDESTAL INSTALLATION:

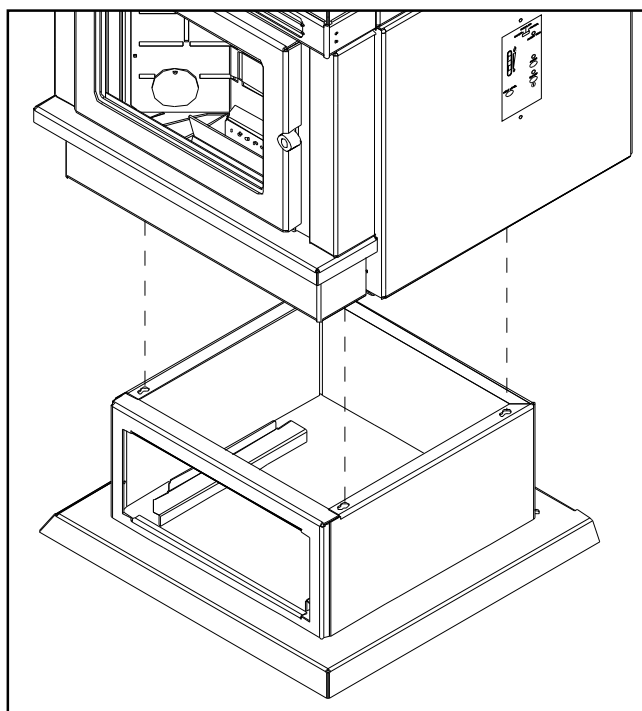


Figure 8: Freestanding Pedestal.

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.

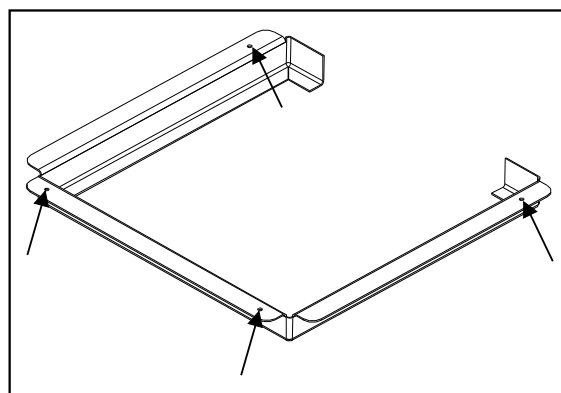


Figure 9: Fireplace Insert Pedestal.

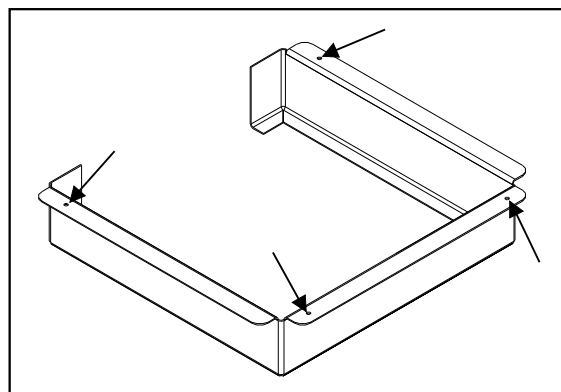


Figure 10: Built-In Heater Pedestal.

- Place the unit on its back on the pallet.
- Back the four (4)  $\frac{5}{16}$ " 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.

# INSTALLATION

## 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      | 61cm (24 in)   | Above grass, top of plants, wood, or any other combustible materials.  |
| B      | 122 cm (48 in)   | Beside/below any door or window that may be opened. (46 cm (18") if outside fresh air install.)                |
| C      | 30 cm (12 in)  | Above any door or window that may be opened. (23 cm (9") if outside fresh air install.)                        |
| D      | 61cm (24 in)   | To any adjacent building, fences and protruding parts of the structure.  |
| E      | 61cm (24 in)   | Below any eave or roof overhang  |
| F      | 30 cm (12 in)  | To outside corner.   |
| G      | 30 cm (12 in)  | To inside corner, combustible wall (vertical and horizontal terminations).                                     |
| H      | 91 cm (3 ft) within a height of 4.5 m (15 ft) above the meter/regulator assembly | To each side of center line extended above natural gas or propane meter/regulator assembly or mechanical vent. |
| I      | 91 cm (3 ft)   | From any forced air intake of other appliance  |
| J      | 30 cm (12 in)  | Clearance to non-mechanical air supply inlet to building, or the combustion air inlet to any appliance.        |
| K      | 61cm (24 in)   | Clearance above roof line for vertical terminations.   |
| L      | 2.13 m (7 ft)  | 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.

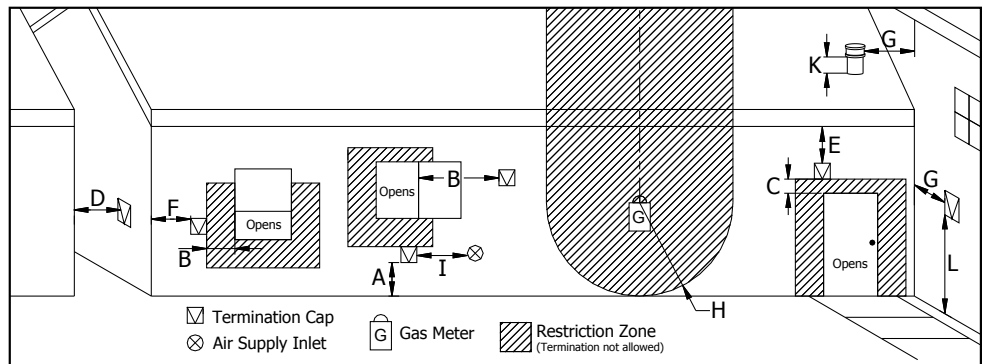


Figure 11: Use in conjunction with Table 1 for allowable exterior vent termination locations.

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 30 cm (12 in) 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.

**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 1 5/8" 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.

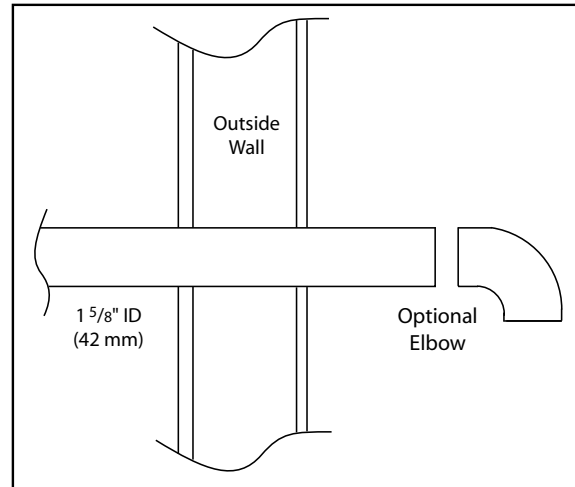


Figure 12: Outside Air Connection.

## EXHAUST AND FRESH AIR INTAKE LOCATIONS:

### EXHAUST

|                                  | Freestanding      | Fireplace Insert | Built-In Heater   |
|----------------------------------|-------------------|------------------|-------------------|
| Base of unit to center of flue   | 16 3/8" (41.5 cm) | 9" (22.8 cm)     | 10 3/4" (27.3 cm) |
| Center of unit to center of flue | 5 3/4" (14.6 cm)  | 5 3/4" (14.6 cm) | 5 3/4" (14.6 cm)  |

### FRESH AIR INTAKE.

|                                    | Freestanding      | Fireplace Insert | Built-In Heater |
|------------------------------------|-------------------|------------------|-----------------|
| Base of unit to center of intake   | 10 3/4" (27.3 cm) | 3 3/8" (7.4 cm)  | 5 1/8" (8.6 cm) |
| Center of unit to center of intake | 1" (2.5 cm)       | 1" (2.5 cm)      | 1" (2.5 cm)     |

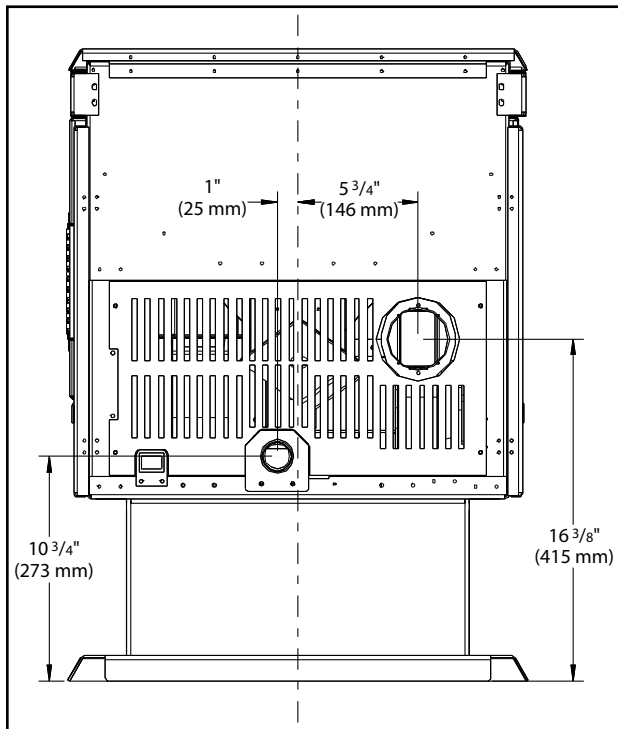


Figure 13: EF2 Classic Freestanding Inlet and Outlet Location.

## INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENTING MANUFACTURER

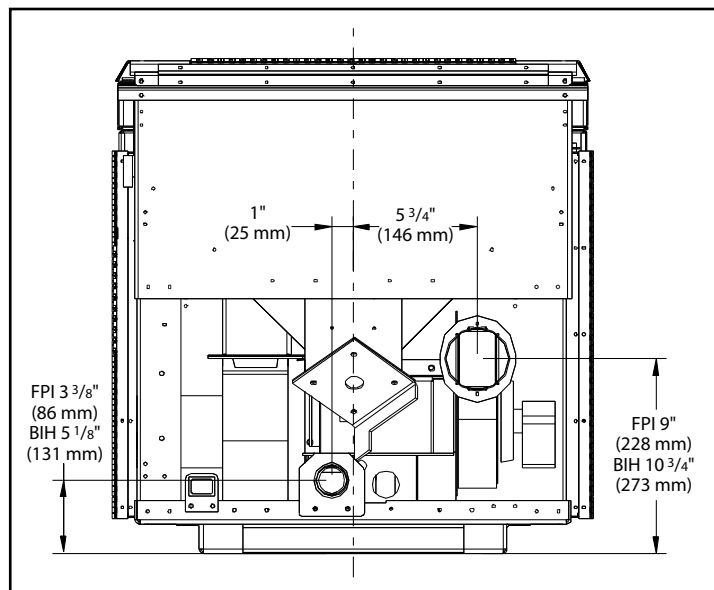


Figure 14: EF2 Classic Fireplace Insert Inlet and Outlet Location.

# INSTALLATION

## MOBILE HOME INSTALLATION - FREESTANDING:

- Secure the heater to the floor using the (2) 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.

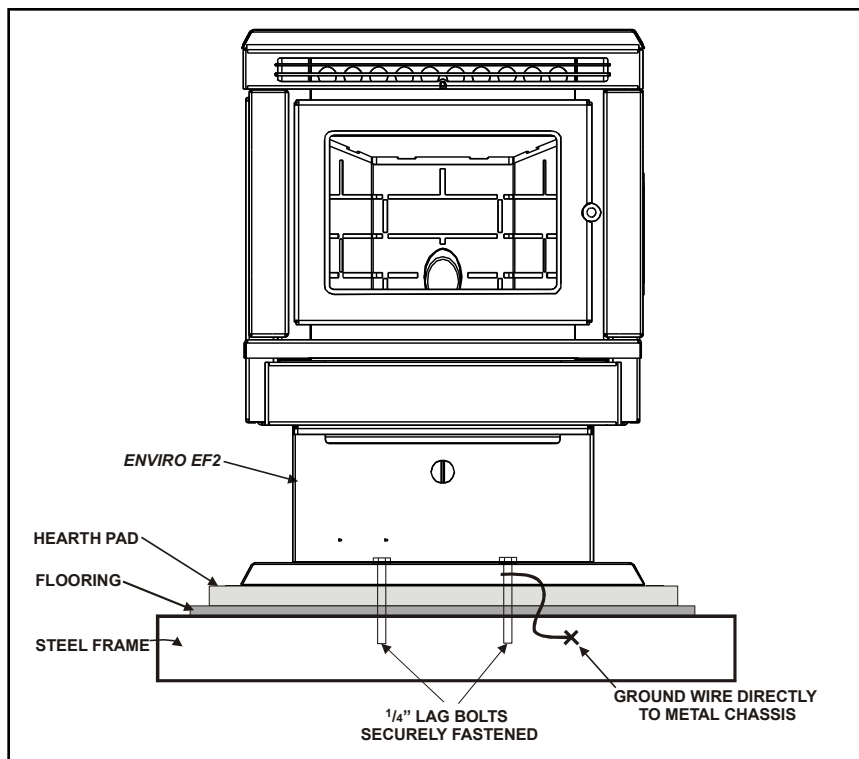


Figure 15: Mobile home installation.

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

## CORNER THROUGH WALL INSTALLATION - FREESTANDING:

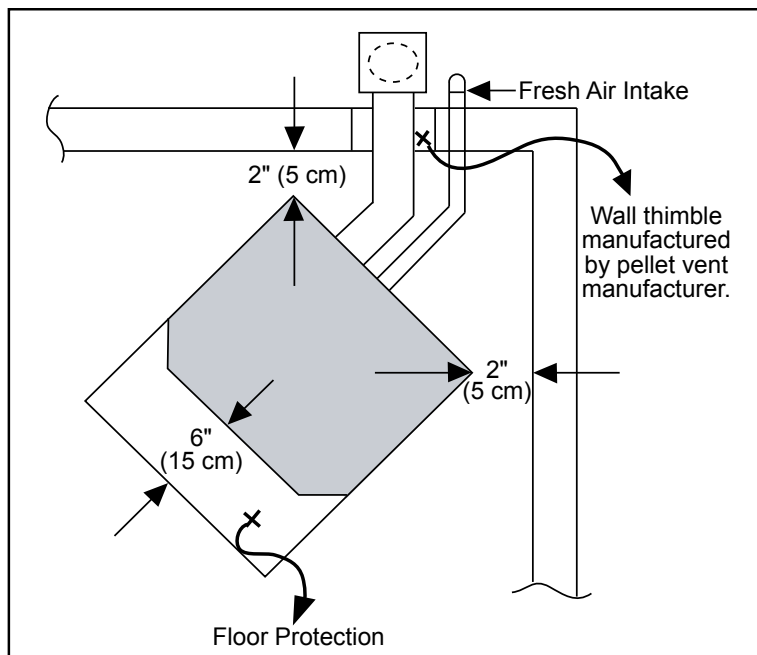


Figure 16: Corner Installation.

# 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 must conform with all local regulations, including those referring to regional, national or European Standards. Use 80mm stainless steel vent pipe to exhaust the unit to the outside.

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 375 mm (15") 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 80mm (3") 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 100mm (4") clearance from the back of the stove to the wall. Seal the vent pipe to the thimble with high temperature silicone.

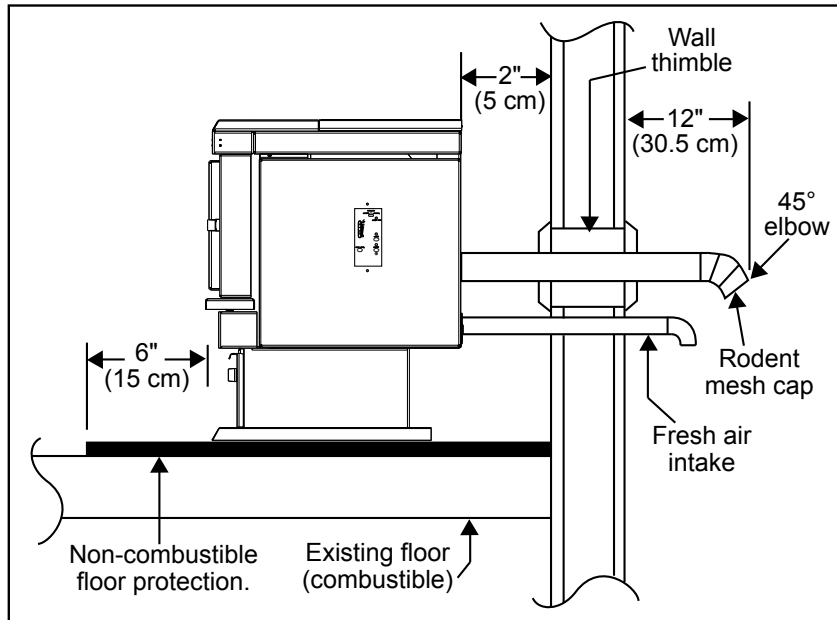


Figure 17: Straight through wall Installation.

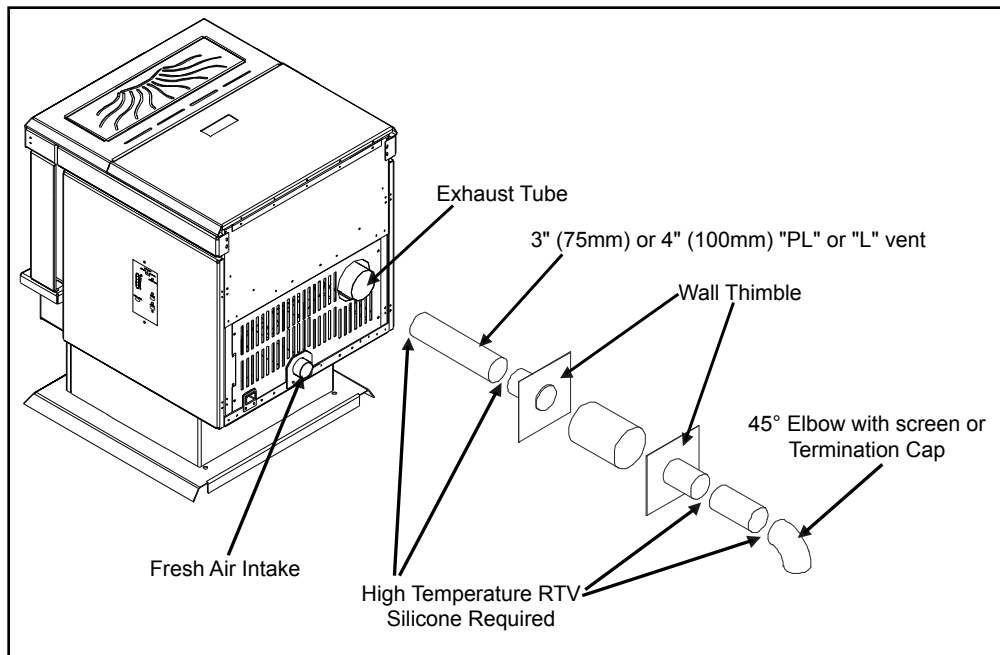


Figure 18: Venting to use with straight through wall Installation.

# INSTALLATION

- The pipe must extend at least 30 cm (12") away from the building. If necessary, bring another length of pipe 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.
- 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:

- It is recommended that horizontal through wall installations have 3 to 5 feet (91 to 152 cm) of vertical pipe in the system to help naturally draft the unit in the event of extreme weather or a power outage.
- Some horizontal through wall installations may require a "T" and 3 to 5 feet (91 to 152 cm) of vertical pipe outside the the building to help draft 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.
- Follow vent manufacturer's guidelines for installation of venting. High temperature sealant must be used when connecting the vent pipe to the unit's starter pipe. Improper seals at the vent joints may cause combustion byproducts to leak into the room where installed - seal as required.

## THROUGH WALL WITH VERTICAL RISE AND HORIZONTAL TERMINATION INSTALLATION - FREESTANDING:

A 45° down 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 305mm (12") from the outside wall and 305mm (12") above the ground.

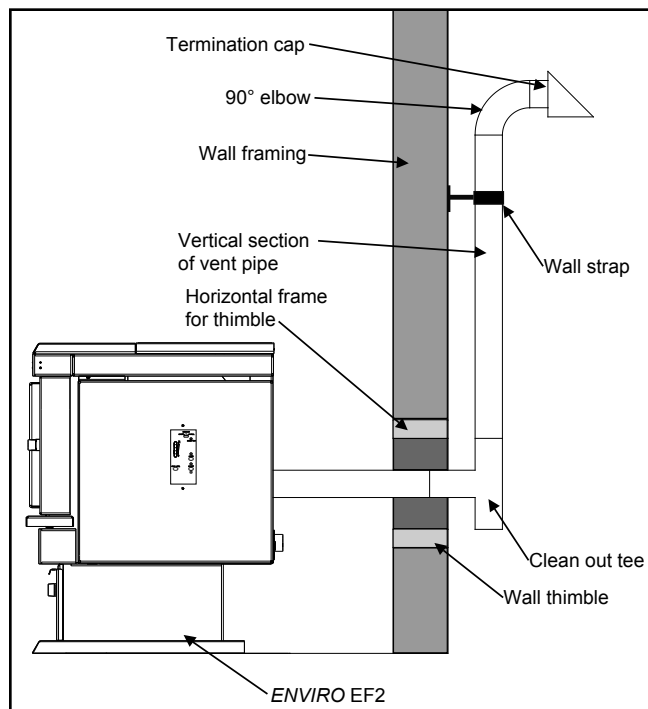


Figure 19: Venting horizontally with rise.

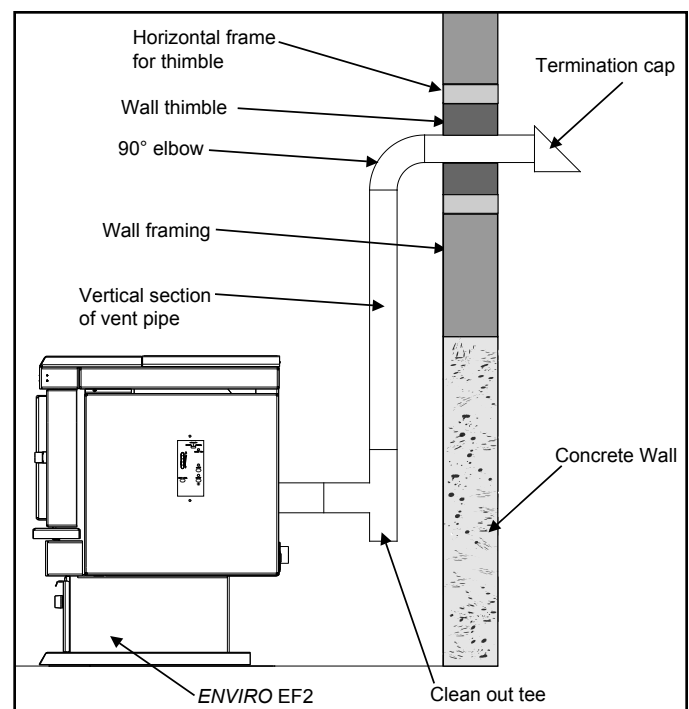


Figure 20: Venting with concrete wall behind unit.

# 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 100mm (4") 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 40mm (1 $\frac{5}{8}$ ") 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 100mm (4") 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 900 mm (36") above the roof.

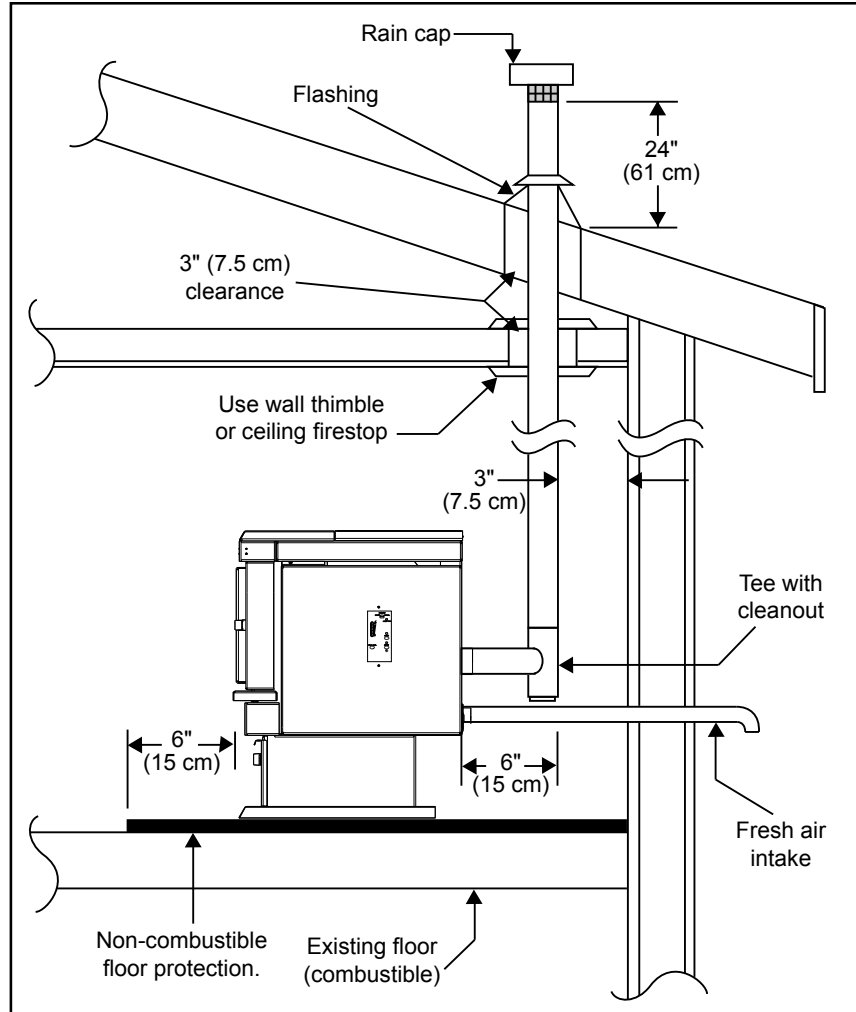


Figure 21: Inside Vertical Installation.

## 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 vent pipe 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 900 mm (36") above the roof.



# INSTALLATION

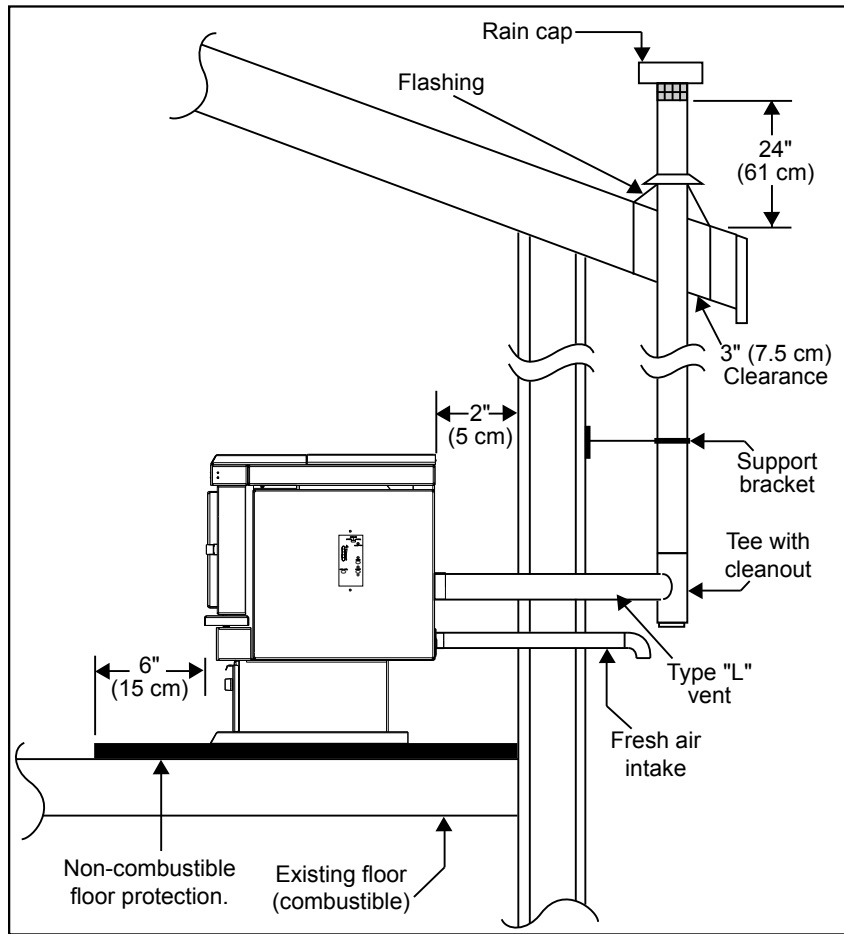


Figure 22: Outside Vertical Installation.

## HEARTH MOUNT INSTALLATION - FREESTANDING:

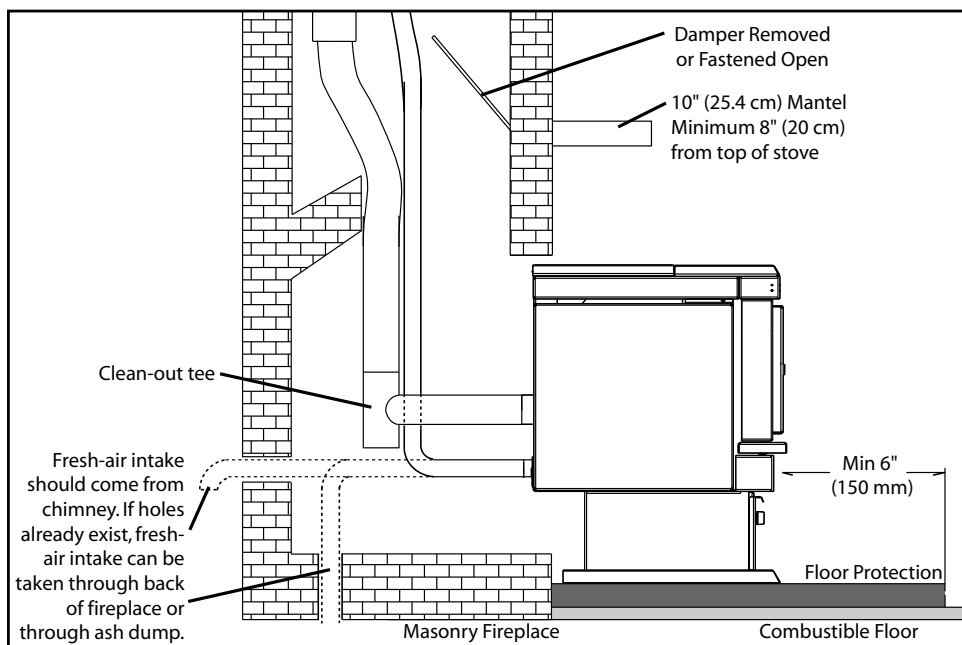


Figure 23: Freestanding hearth mount installation.

- 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.

# INSTALLATION

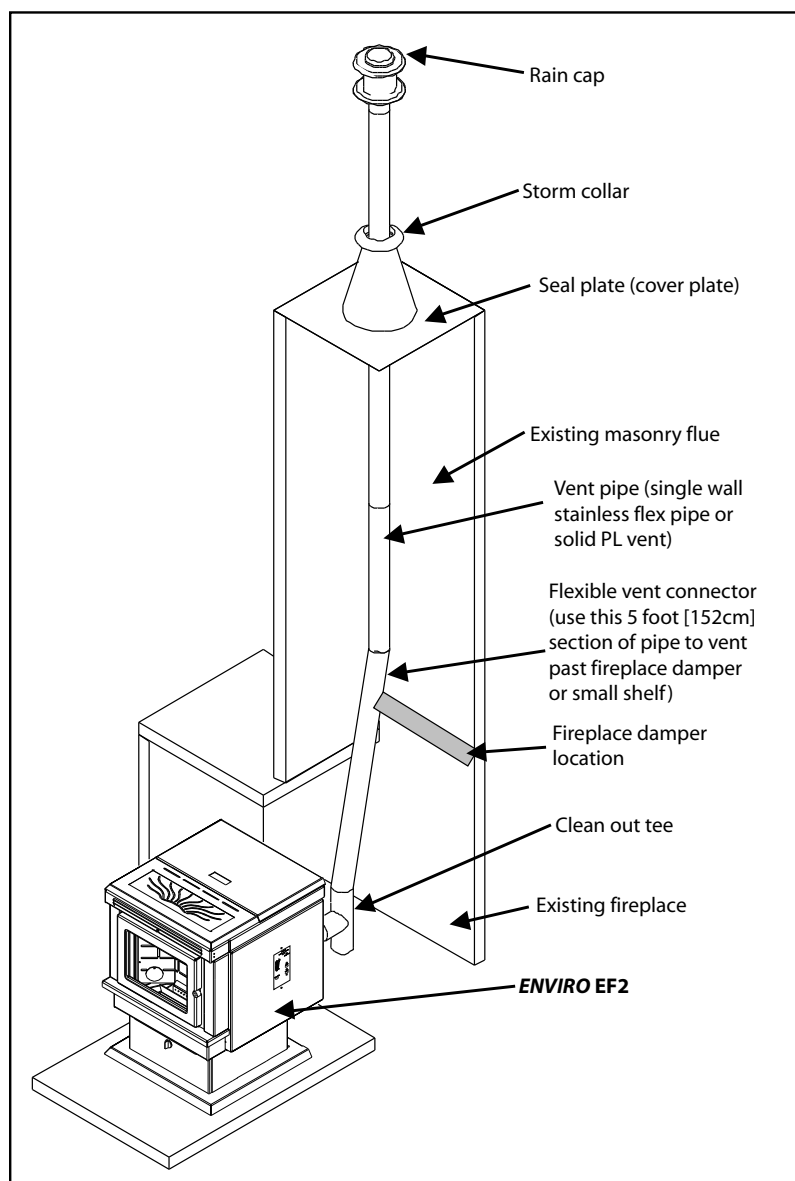


Figure 24: Freestanding hearth mount installation overview.

## MASONRY FIREPLACE INSTALLATION - FIREPLACE INSERT:

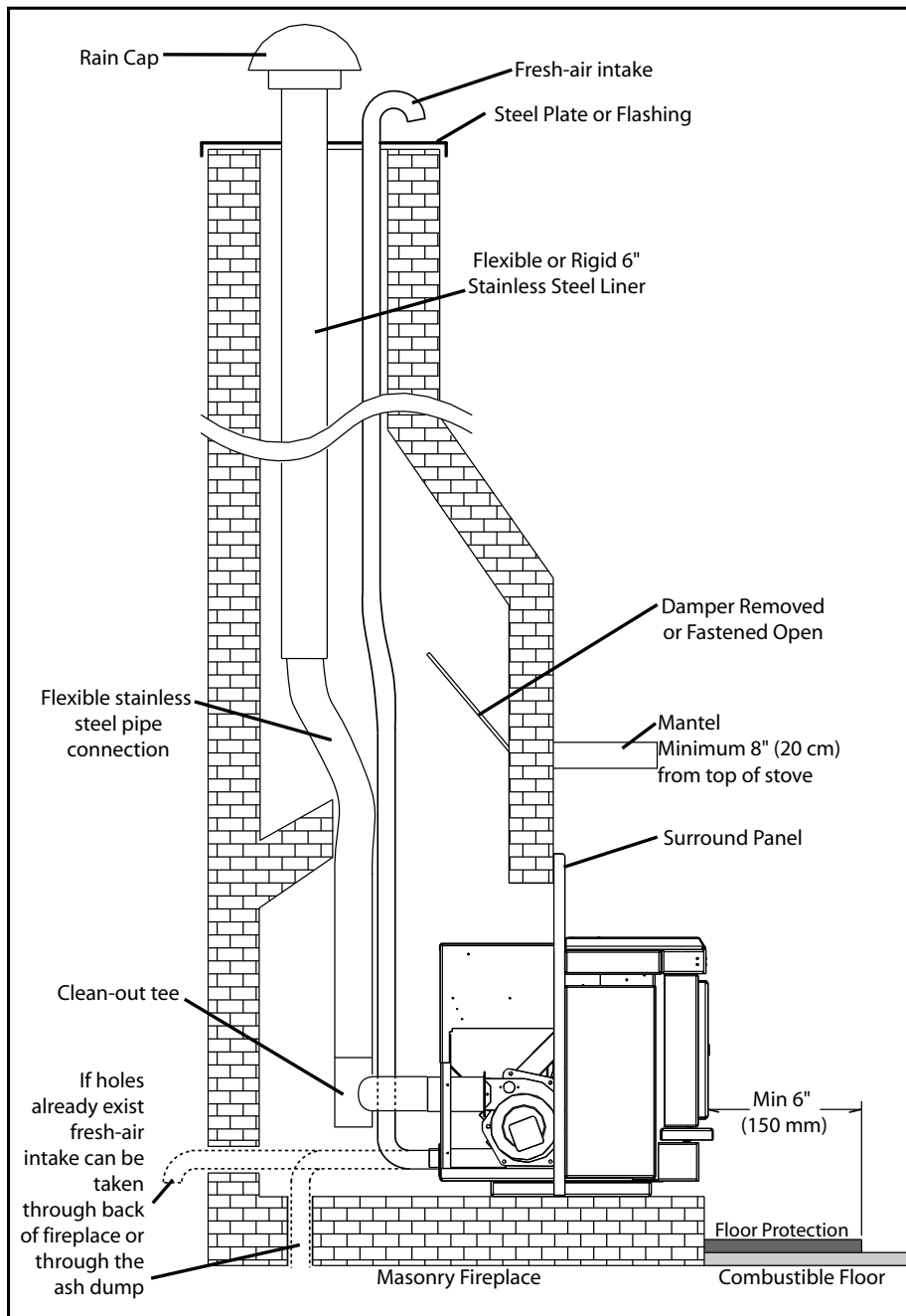
The fireplace insert model requires a surround panel and a pedestal. When installing this unit, ensure that the pedestal is removed from the inside of the hopper and installed on the bottom of the unit (see "PEDESTAL INSTALLATION").

Assemble surround panel (see "INSTALLATION OF CONTROL PANEL INTO SURROUND PANEL - FPI AND BIH" and "INSTALLATION AND REMOVAL OF THE SURROUND PANELS - FPI AND BIH") 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.

# 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.

Figure 25: Masonry fireplace installation.

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 Nature's Flame 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

## INSTALLATION FOR A BUILT-IN HEATER:

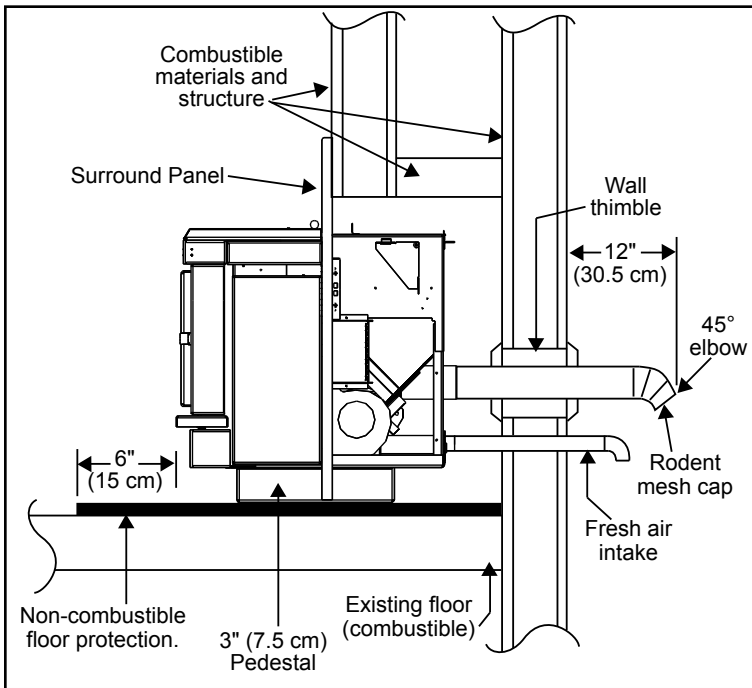


Figure 26: Built-in heater installation.

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.

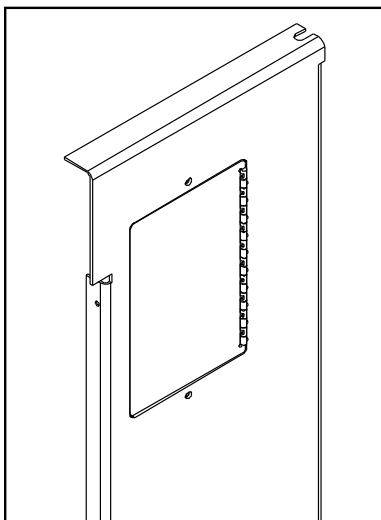


Figure 27: Control Panel Cover.

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).

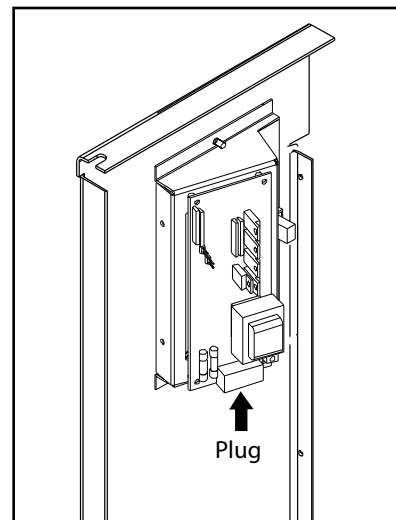


Figure 28: Control Panel Back

# INSTALLATION

## INSTALLATION AND REMOVAL OF THE SURROUND PANELS - FPI AND BIH:

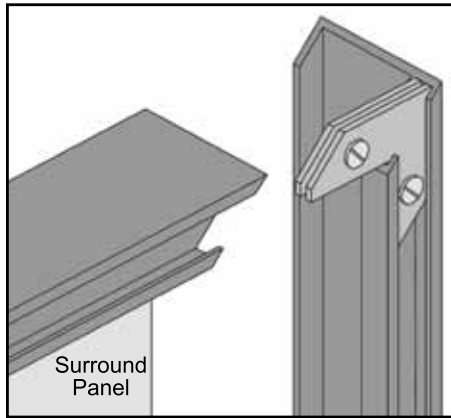


Figure 29: Corner brackets for trim.

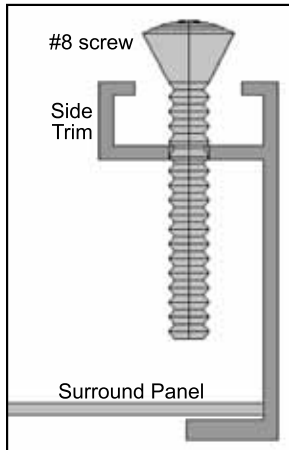


Figure 31: Screw to hold the trim against the surround.

1. Attach one side trim to the top trim, using a corner bracket (see Figure 29) to secure pieces together. There are two (2) main pieces to each corner bracket (see Figure 30). When installing the corner pieces into the trim, the "B FACE" sides must face each other and the screw heads are to face out. With the bracket in place and the top and a side trim snug together, use a flat head screwdriver to turn the two (2) screws in the bracket to tighten it into the trim. Do not over-tighten the corners or the side trim cannot be removed during servicing.

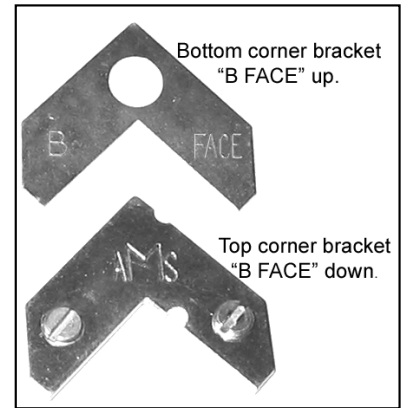


Figure 30: Two pieces of corner bracket.

2. Attach the other side trim piece to the top trim, using the same method used in Step 1.
3. 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 32).
4. Plug the wiring harness into the control panel (see Figure 28).
5. Loosen the front hopper lid screws and center the top surround panel under the hopper lid., tighten screws.
6. Insert each side panel anchor bolt through the top panel into the corresponding side panel holes and tighten using a  $\frac{7}{16}$ " wench or socket (refer to Figure 33).
7. Place assembled trim over the surround assembly. On the side trims, there are holes 2" (50 mm) from either end. Use a Phillips screwdriver to place a #8 screw  $1\frac{1}{4}$ " long in each hole and tighten just enough to keep the trim against the surround. (refer to Figure 31).

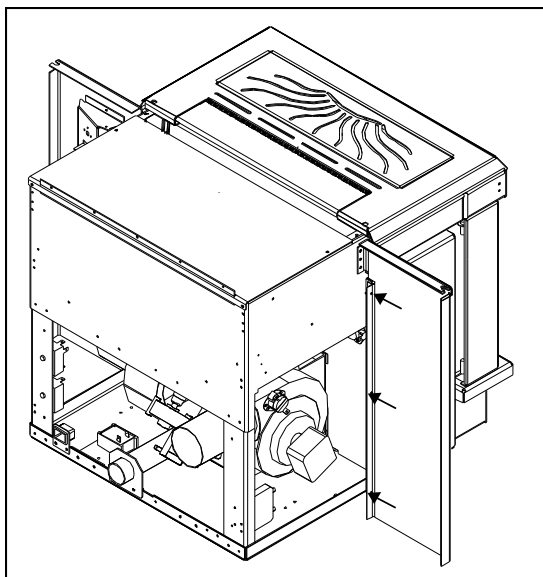


Figure 32: Panel placed on unit.

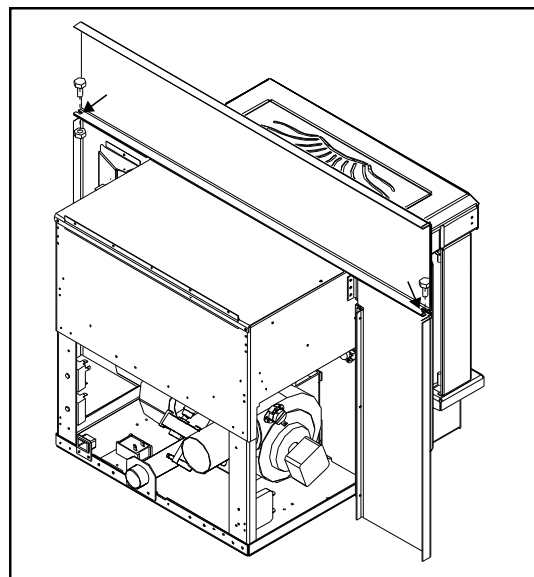


Figure 33: Assembling the Surround Panel, back view.

# INSTALLATION

## REMOVAL:

When maintenance is required on the unit the surround must be removed. Follow steps 4 through 7 in reverse order.

The side panel can remain attached because they swing forward for easy access (refer to Figure 34).

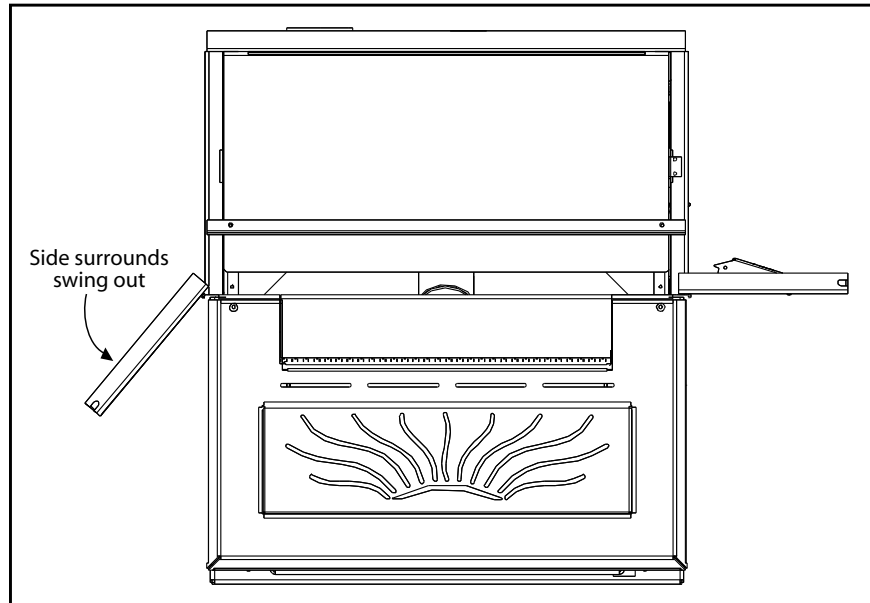


Figure 34: Side surround panel swings forward.

## THERMOSTAT INSTALLATION:

1. Install the wall thermostat (millivolt rated thermostat recommended, or a 12/24 volt rated thermostat set to millivolts) in a location that is not too close to the unit but will effectively heat the desired area.
2. Connect the Thermostat using an 18 x 2 gauge wire from the unit to the thermostat.

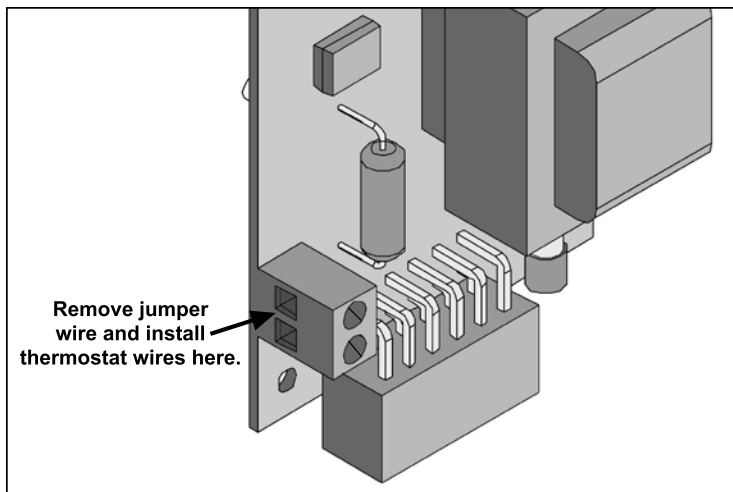


Figure 35: Thermostat wire placement.

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.

## 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.

# INSTALLATION

## **SLIDER/DAMPER SETTING:**

**THE SLIDER / DAMPER MUST BE SET AT TIME OF INSTALLATION, IT IS USED TO REGULATE THE AIRFLOW THROUGH THE PELLET STOVE.**

**A Qualified Service Technician or Installer must set the Slider Damper.**

The slider damper is used to regulate the airflow through the pellet stove and is located behind the left cab side. The door must be open for the cab side to be removed on all models. On freestanding model loosen the two T-20 torx screws, one above and one below hinge, swing open left panel to access. On insert model remove the two (2) T-20 torx screws on the front, one above and one below hinge, and the one T-20 at the top of the cab side under the top front.

The combustion exhaust blower is a variable speed blower controlled by the heat output button. This blower will decrease the vacuum pressure inside the stove and as the heat output button is turned down. The vacuum pressure inside the firebox will increase as the combustion exhaust blower increases in speed (higher heat output setting).

If the fire should happen to go out and the heat output indicator has been set on the lowest setting, the Slider Damper should be pushed in slightly, decreasing the air in the firebox.

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.



**Figure 36: Efficient Flame.**

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 (see Figure 36).

## **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).

Taking a reading of vacuum pressure inside the firebox with a magnehelic gauge can be used to set the slider for best combustion. The slider damper should be set only on a hot stove (operating for thirty (30) minutes or more) by placing a Magnahelic Pressure Gauge in the firebox. The reading can be taken from the 1/8" (3 mm) hole located on the front of the unit below the door and behind the magnetic ash lip. **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.**

# TROUBLESHOOTING

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## DO NOT:

- 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.
- Do not remove from the firebox any screws without penetrating oil lubrication.

## 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. Light # 2 on Heat output bar flashing.
5. Auger light flashes but auger motor does not turn at all
6. The 200 °F (93 °C) high limit temperature sensor has tripped.
7. The convection blower will not function normally.
8. Igniter- the pellets will not light.
9. Control settings (Heat Level) has no effect on the fire.
10. The stove keeps going out.

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

### 1. The stove will not start.

- ✓Make sure the stove is plugged in and the wall outlet is supplying power..
- ✓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 fuse on the circuit board.
- ✓If the unit still does not start, contact your local service dealer for service.

### 2. The stove will not operate when hot.

- ✓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 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. In this case clean the burn pot. **(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 the Exhaust Blower voltage across the blower wires ( $\geq 220V$  on #5 setting and  $\geq 150V$  on #1 setting). – Replace the Circuit Board if the Voltage reading is less than 150 V. with a line voltage  $>220 V AC$ .



# TROUBLESHOOTING

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✓ 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.

- ✓ 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.
- ✓ Check the fuse on the circuit board.

### **3. The exhaust motor will not function normally.**

- ✓ Open the left side access panel; check all connections against the wiring diagram.
- ✓ See "2. The stove will not operate when hot." section.

### **4. Light # 2 on Heat output bar flashing**

(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 ( $\geq 220V$  on #5 setting and  $\geq 150V$  on #1 setting). – Replace the Circuit Board if the Voltage reading is less than 150 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**

### **5. Auger light flashes but auger motor does not turn at all.**

- ✓ 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\*\*
- ✓ Check the fuse on the circuit board.

# TROUBLESHOOTING

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## **6. The 200 °F ( 93 °C) high limit temperature sensor has tripped.**

- ✓Reset sensor and determine cause – was it Convection Blower failure
- ✓Check the fuse on the circuit board.

## **7. The convection blower will not function normally.**

- ✓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, not contact your local dealer for service.

## **8. Ignitor- the pellets will not light.**

- ✓Everything else in the stove operates but the ignitor will not light the pellets.
- ✓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 to see if the exhaust blower is operating. If not, contact your local dealer for service.
- ✓Check the fuse on the circuit board.

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

## **9. Control settings (Heat Level) has no effect on the fire.**

- ✓NOTE: If the system light is flashing the Control Board has complete control of the unit. When the units 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.

## **10. The stove keeps going out.**

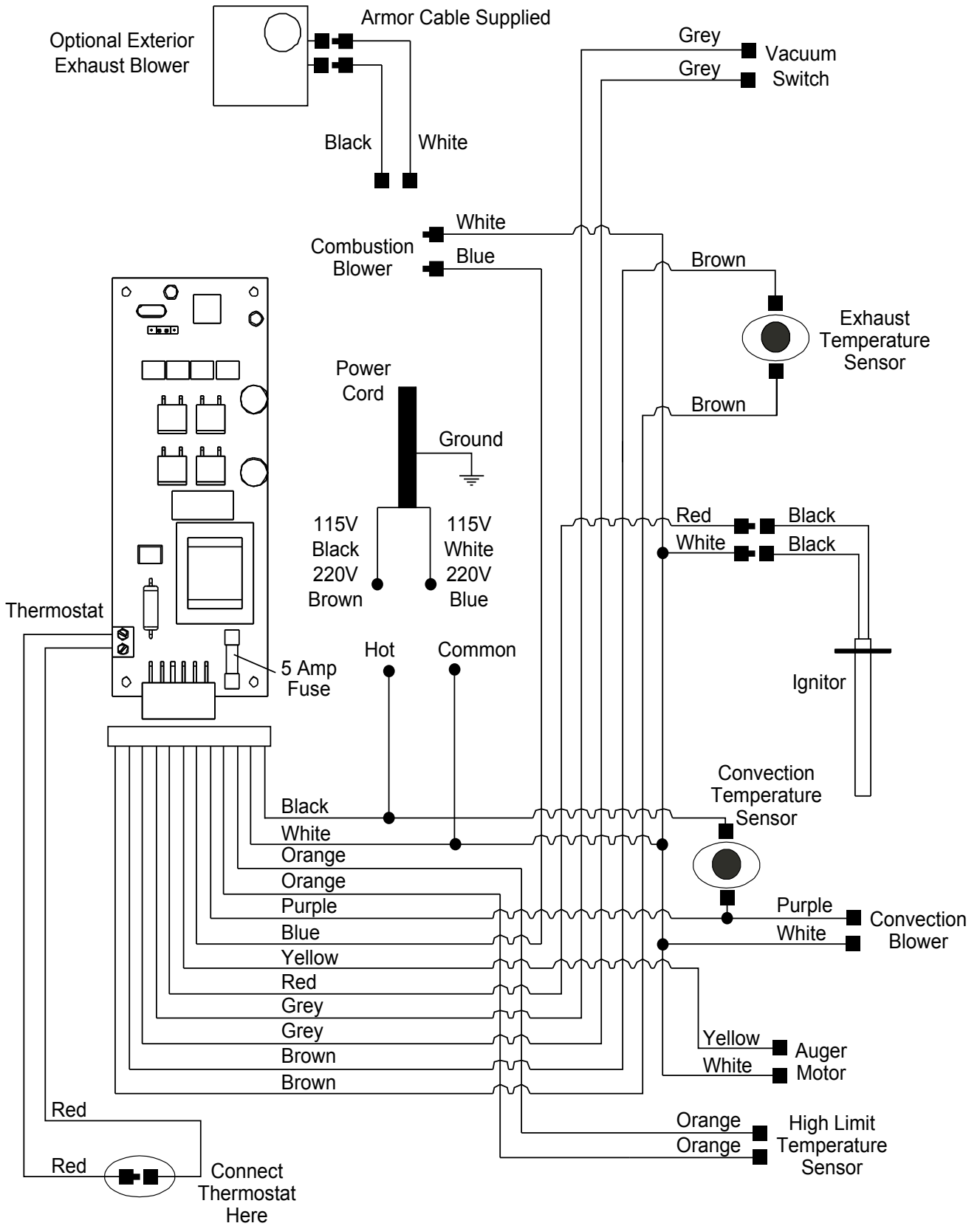
If the stove goes out and leaves fresh unburned pellets or cigarette-like ashes in the burn pot liner, the fire is going out before the stove shuts off.

- ✓Check to see that the Slider / Damper is in the correct position (set with a magnehelic gauge).
- ✓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.

- ✓Adjust the Slider / Damper.
- ✓Check to see if the stove needs a more complete cleaning.
- ✓Turn the Heat Level up slightly (poor quality pellets will require slightly higher settings).
- ✓Did the power go out?
- ✓Contact your local Dealer for service.

# WIRING DIAGRAM



# PARTS LIST

---

| Reference # | Description   | Part #      |
|-------------|---|-------------|
| 1           | 120°F (49°C) Ceramic Fan Temp Sensor                    | EC-001      |
| 2           | Auger Motor - 220V                                      | EF-001-220V |
| 3           | 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      |
|             | Combustion Blower Mounting Gasket                       | EF-011      |
|             | Combustion Blower Housing Gasket                        | EF-012      |
| 4           | Fan Temperature Sensor 160°F (71°C)                     | EF-013      |
| 5           | High Limit Temperature Sensor 200°F (93°C) Manual Reset | EF-016      |
| 6           | Vacuum Switch - 220V                                    | EF-017-220V |
|             | Silicone Hose   | EF-018      |
|             | Aluminum Hose Barb                                      | EF-019      |
| 7           | Ignition Burn Pot                                       | EF-021      |
| 8           | Auger   | EF-025      |
| 9           | Auger Brass Bushing & Plate                             | EF-026      |
|             | Door Handle with Knob, Rod, & Cams                      | EF-030      |
| 10          | Firebox Liner With Insulation                           | EF-048      |
|             | Heat Exchanger Rod With Knob                            | EF-051      |
|             | 5/8" Door Gasket 7' (2.1 m)                             | EF-056      |
|             | 1/2" Round Door Gasket 72" (1.8 m)                      | EF-057      |
|             | Window Channel Tape 60" (1.5 m)                         | EF-058      |
| 11          | FPI & BIH Ash Pan Latch                                 | EF-060      |
|             | Glass Set With Tape                                     | EF-061      |
|             | Slider Damper Plate                                     | EF-064      |
| 12          | Auger Brass Bushings (Set of 2)                         | EF-065      |
| 13          | Firebox Liner Top Plate                                 | EF-066      |

# PARTS LIST

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| Reference # | Description                                  | Part #  |
|-------------|--|---------|
|             | Knob 1 Inch Round                            | EF-068  |
|             | ¾" ID Auger Collar with Set Screw            | EF-069  |
|             | Fireplace Insert Pedestal Complete           | EF-074  |
|             | Built-In Heater Pedestal                     | EF-074A |
| 14          | Freestanding Stove Top                       | EF-096  |
| 15          | Freestanding Back Grill                      | EF-097  |
|             | Built-In Heater Kit                          | EF-102  |
| 16          | Ash Sill                                     | EF-103  |
| 17          | Freestanding Hopper Lid With Handle          | EF-104  |
| 18          | Fireplace Insert Ash Pan Drawer With Latch   | EF-105  |
| 19          | Front Grill                                  | EF-106  |
| 20          | Freestanding Left Cabinet Side               | EF-107  |
| 21          | Fireplace Insert Stove Top                   | EF-115  |
| 22          | Ash Pan Cover                                | EF-117  |
| 23          | FPI & BIH Hopper Cover                       | EF-122  |
|             | Shoulder Bolt & Nut                          | EF-125  |
|             | Firebox Ceramic Wool Insulation              | EF-126  |
| 24          | Steel Brick Lining                           | EF-130  |
|             | Fireplace Insert Cabinet Side Left           | EF-132  |
|             | Fireplace Insert Cabinet Side Right          | EF-132A |
| 25          | Freestanding Pedestal Complete               | EF-138  |
|             | Ignitor Tube Only                            | EF-140  |
| 26          | Freestanding Hopper Lid Hinge                | EF-141  |
| 27          | Freestanding Hopper Side Rail (Left & Right) | EF-142  |
|             | FPI & BIH Hopper Side Rail (Left & Right)    | EF-144  |
|             | Thermostat Interface Kit                     | EF-152  |
|             | Pellet Stove Cleaning Brush                  | EF-156  |
| 28          | Freestanding Ash Drawer with Latch           | EF-159  |

# PARTS LIST

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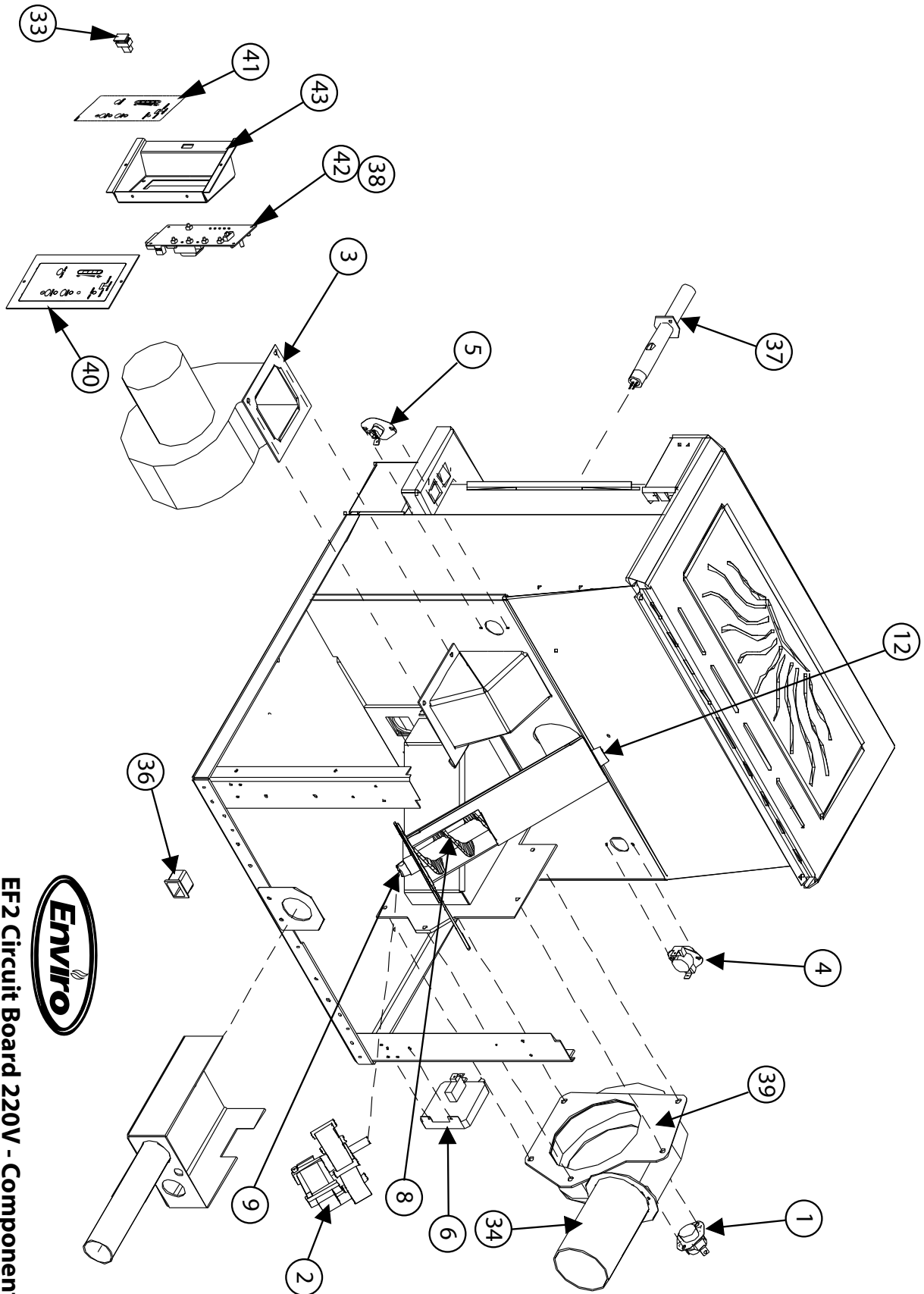
| Reference # | Description                                 | Part #  |
|-------------|---|---------|
| 29          | Freestanding Ash Pan Latch                  | EF-178  |
| 30          | FPI & BIH Ash Pan Cover Magnet Set          | EF-188  |
| 31          | Firebox Cleaning Port Covers                | EF-194A |
|             | Pedestal & Ash Pan Gasket 10' (3 m)         | EF-208  |
|             | NZ Power Cord - 220V                        | 20-011  |
|             | IEC Power Cord - 220V                       | 20-013  |
| 32          | Control Panel Door                          | 20-034  |
|             | 60° Exterior Exhaust Adaptor                | 50-096  |
|             | Built-In Heater Standoffs (Set of 2)        | 50-160  |
|             | Enviro Logo Gel Decal                       | 50-322  |
| 33          | Control Panel Touch Latch                   | 50-323  |
| 34          | Combustion Blower Exhaust Tube              | 50-327  |
|             | Firebox Liner Top Rod                       | 50-591  |
| 35          | Door Assembly                               | 50-603  |
| 36          | IEC Power Cord Inlet Socket                 | 50-713  |
| 37          | 300 Watt Ignitor - 220V                     | 50-829  |
| 38          | Circuit Board 5 Amp Fuses - 220V (Pair)     | 50-834  |
| 39          | Exhaust Blower Assembly - 220V              | 50-900  |
|             | Wiring Harness                              | 50-914  |
|             | Classic Freestanding Pedestal               | 50-965  |
|             | Fireplace Insert Hopper Lid                 | 50-967  |
| 40          | Control Panel and Decal - Freestanding      | 50-1481 |
| 41          | Control Panel Decal                         | 50-1482 |
|             | EMI Filter - 220V                           | 50-1584 |
|             | EF2 Classic NZ Owner's Manual               | 50-1732 |
|             | EF2 Classic NZ Technical Manual             | 50-1733 |
| 42          | Circuit Board with Thermostat Switch - 220V | 50-1741 |
| 43          | Control Panel and Decal - Fireplace Insert  | 50-1742 |
| 44          | Stainless Steel Burn Pot Liner - NZ         | 50-1745 |
| 45          | Freestanding Right Cabinet Side             | 50-1753 |

## PARTS LIST - OPTIONS

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| Reference # | Description                                  | Part #  |
|-------------|--|---------|
|             | Log Set                                      | 20-036  |
| 46          | Decorative Trivet - Painted                  | EF-148  |
| 46          | Decorative Trivet - Gold                     | EF-149  |
|             | Louvre Trim - Brass                          | 50-339  |
|             | Louvre Trim - Nickel                         | 50-341  |
|             | Firebox Pillar Trim (Left & Right) - Painted | 20-000  |
|             | Firebox Pillar Trim (Left & Right) - Brass   | 50-344  |
| 47          | Door Cover (No Louvre Trim) - Gold           | 50-466  |
| 47          | Door Cover With Louvre Trim - Nickel         | 50-467  |
| 47          | Door Cover (No Louvre Trim) - Painted        | 50-601  |
| 48          | 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  |
| 49          | 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  |
| 50          | 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  |

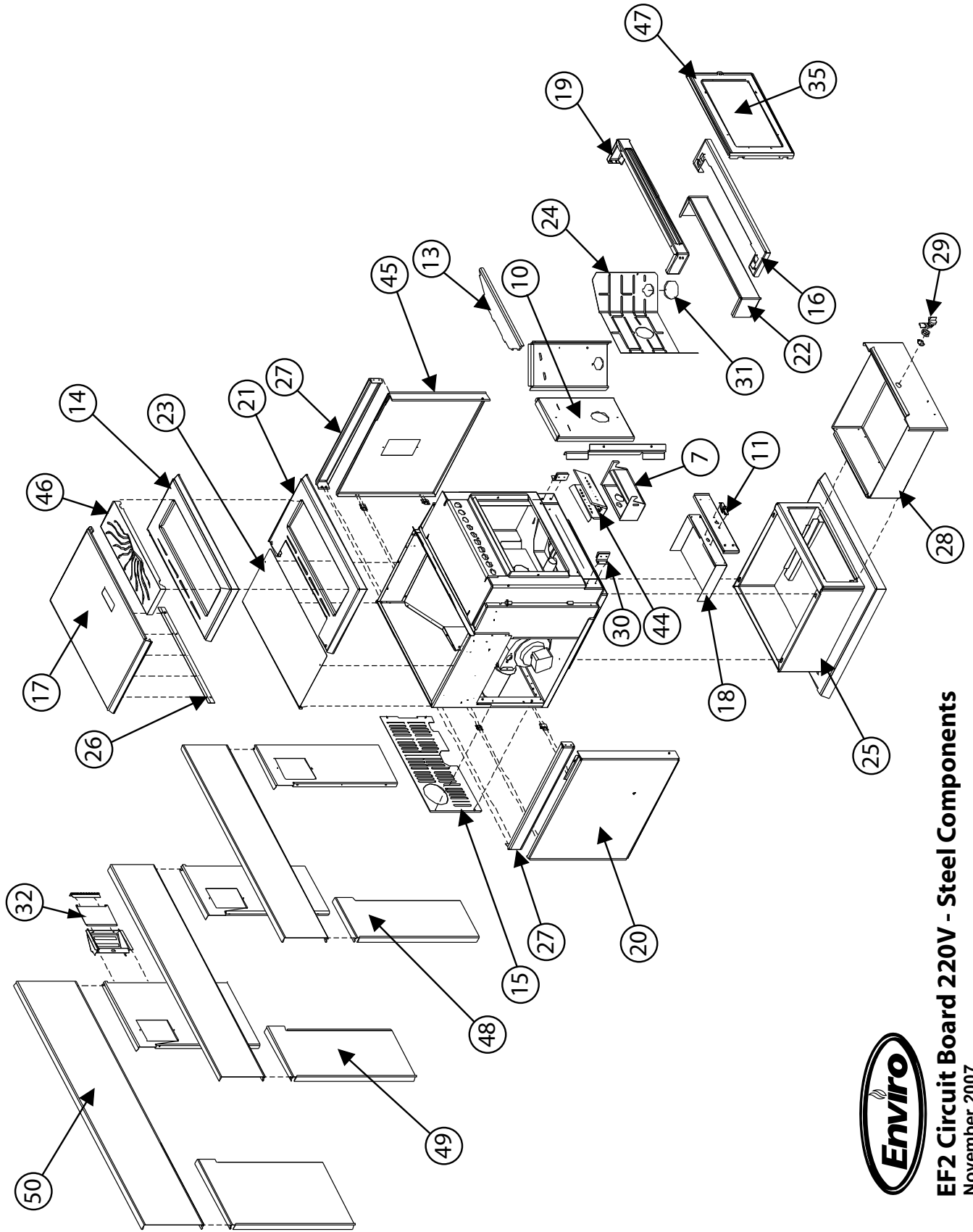
# PARTS DIAGRAM - COMPONENTS



EF2 Circuit Board 220V - Components  
November 2007



# PARTS DIAGRAM - STEEL



**EF2 Circuit Board 220V - Steel Components**  
November 2007

# INSTALLATION DATA SHEET

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

|   |
|---|
| NAME OF OWNER:<br><br>_____             |
| ADDRESS:<br><br>_____<br>_____<br>_____ |
| PHONE: _____                            |

|   |
|---|
| NAME OF DEALER:<br><br>_____            |
| ADDRESS:<br><br>_____<br>_____<br>_____ |
| PHONE: _____                            |

|  |
|--|
| MODEL: _____                             |
| SERIAL NUMBER: _____                     |
| DATE OF PURCHASE: _____ (dd/mm/yyyy)     |
| DATE OF INSTALLATION: _____ (dd/mm/yyyy) |
| MAGNEHELIC AT INSTALL: _____             |
| INSTALLER'S SIGNATURE:<br><br>_____      |

|   |
|---|
| NAME OF INSTALLER:<br><br>_____         |
| ADDRESS:<br><br>_____<br>_____<br>_____ |
| PHONE: _____                            |

**WARRANTY:** If you have any concerns with your unit please contact the dealer where you purchased the stove.

MANUFACTURED BY:  
SHERWOOD INDUSTRIES LTD.  
6782 OLDFIELD RD. SAANICHTON, BC, CANADA V8M 2A3  
January 23, 2008  
C-11441