Installation Manual

Installation and Appliance Setup

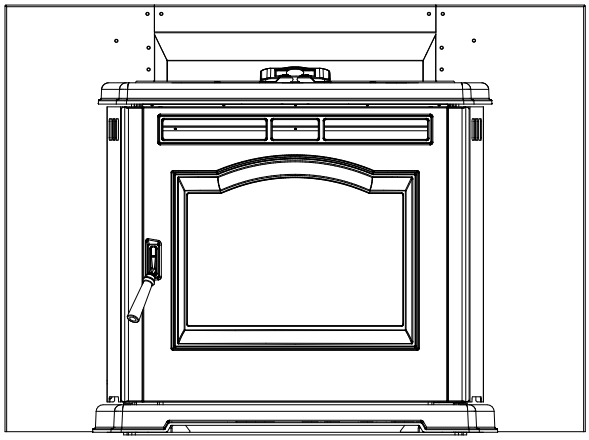
INSTALLER: Leave this manual with party responsible for use and operation.
OWNER: Retain this manual for future reference.

NOTICE: SAVE THESE INSTRUCTIONS

FORGE & FLAME

P42i Pellet Insert

Model(s):
P42i-TC



⚠ CAUTION

Check building codes prior to installation.

- Installation MUST comply with local, regional, state and national codes and regulations.
- Contact local building or fire officials about restrictions and installation inspection requirements in your area.

⚠ CAUTION

Tested and approved for wood pellets only. Burning of any other type of fuel voids your warranty. When burning higher ash content pellets more frequent cleanings may be required.

⚠ WARNING



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

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

⚠ WARNING



HOT SURFACES!

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

Hot glass will cause burns.

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

  High temperatures may ignite clothing or other flammable materials.
- Keep clothing, furniture, draperies and other flammable materials away.

NOTE

To obtain a French translation of this manual, please contact your dealer or visit www.forgenflame.com

Pour obtenir une traduction française de ce manuel, s'il vous plaît contacter votre revendeur ou visitez www.forgenflame.com

⚠ Safety Alert Key:

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

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➔ = Contains updated information

Installation Standard Work Checklist

ATTENTION INSTALLER:

Follow this Standard Work Checklist

This standard work checklist is to be used by the installer in conjunction with, not instead of, the instructions contained in this installation manual.

Customer: _____
Lot/Address: _____
_____
Model: _____

Date Installed: _____
Location of Stove: _____
Installer: _____
Dealer/Distributer Ph # _____
Serial Number: _____

WARNING! Risk of Fire or Explosion! Failure to install appliance to these instructions can lead to a fire or explosion.

Appliance Install Section 3	**YES**	**IF NO, WHY?**
Required non-combustible floor protection	☐	_____
Verified clearances to combustible.	☐	_____
Unit is Leveled and secured.	☐	_____
Venting/Chimney Section 4		
Venting Configuration complies to vent diagrams.	☐	_____
Venting installed, sealed and secured in place with proper clearances.	☐	_____
Exterior wall/roof flashing installed and sealed	☐	_____
Terminations installed and sealed.	☐	_____
Electrical Section 1		
120 VAC unswitched power provided to the appliance.	☐	_____
Check outlet with multi-meter for proper voltage. (115-120 VAC)	☐	_____
Record voltage reading: _____		
Appliance Setup Section 5		
All packaging and protective materials are removed	☐	_____
Accessories installed properly	☐	_____
Manual bag and all it's contents are removed from inside the appliance and given to party responsible for use and operation	☐	_____
Started appliance and verified that all motors and blowers operate as they should.	☐	_____
Checked draft using a Manometer. Record readings: _____	☐	_____
During operation, verify that the hopper lid switch (If applicable) and pressure switch are working properly by briefly opening the hopper lid and main door and verifying that the feed motor is interrupted.	☐	_____

Hearth and Home Technologies recommends the following:
Photographing the installation and copying this checklist for your file.
This checklist remain visible at all times on the appliance until the installation is complete.

Comments: Further description of the issues, who is responsible (Installer/Builder/Other Trades, etc.) and corrective action needed _____

_____

_____

Comments communicated to party responsible_____ by _____ on _____
(Builder / Gen Contractor) (Installer) (Date)

04/23

1 Product Specific and Important Safety Information

A. Appliance Certification

MODEL:	P42i-TC
LABORATORY:	PFS • TECO
REPORT NO.	F22-858
TYPE:	Pellet Fueled Insert/Supplementary For Residential Use
STANDARD(s):	ASTM E2779-10, ASTM E2515-11, ASTM E1509-22, CAN/ULC 628:2022, CSA B415.1:22

NOTE: This installation must conform with local codes. In the absence of local codes you must comply with the ASTM E1509, ULC-S628 & **(UM) 84-HUD**

The P42i Pellet Insert is certified to comply with 2020 EPA particulate emission standards.



Note: This installation must conform to local codes. In the absence of local codes you must comply with the **ASTM E 1509-2012, ULC S628-93, (UM) 84-HUD**

B. Glass Specifications

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

C. Manufactured Home Approved

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

The structural integrity of the manufactured home floor, ceiling, and walls must be maintained. The appliance must be properly grounded to the frame of the manufactured home using a minimum of 8 AWG copper solid or stranded, insulated or bare wire or equivalent and use only listed pellet vent, Class “PL” connector pipe.

A Forge & Flame Outside Air Kit must be installed in a manufactured home installation.

⚠ WARNING

DO NOT INSTALL IN SLEEPING ROOM.

⚠ CAUTION

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

D. BTU & Efficiency Specifications

EPA Certification Number:	344-23
EPA Certified Emissions:	1.0 g/hr
***LHV Tested Efficiency:**	84%
****HHV Tested Efficiency:**	79%
*****EPA BTU Output:**	5,637 - 32,782
******BTU Input**	7,400 – 41,800
Vent Size:	4 Inch
Hopper Capacity:	64.5 lbs
Fuel	Wood Pellet

* Weighted average LHV efficiency using data collected during EPA emissions test.

**Weighted average HHV efficiency using data collected during EPA emissions test.

***A range of BTU outputs based on EPA Default Efficiency and the burn rates from the low and high EPA tests.

******Based on the maximum feed rate per hour multiplied by approximately 8600 BTU’s which is the average BTU’s from a pound of pellets.

This wood heater has a manufacturer-set minimum low burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this wood heater in a manner inconsistent with operating instructions in this manual.

This wood heater needs periodic inspection and repair for proper operation. It is against federal regulations to operate this wood heater in a manner inconsistent with operating instructions in this manual.

Note: Some generator or battery back-up systems may not be compatible with the micro-processor electronics on this appliance. Please consult the power supply manufacturer for compatible systems.

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

E. Non-Combustible Materials Specification

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

Materials that are reported as passing **ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750º C** and **UL763** shall be considered non-combustible materials.

F. Combustible Materials Specification

Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flame proofed or not, or plastered or unplastered shall be considered combustible materials.

G. Electrical Codes

120 VAC, 60 Hz, Start 5.0 Amps, Run 4.0 Amps

Note: Some generator or battery back-up systems may not be compatible with the micro-processor electronics on this appliance. Please consult the power supply manufacturer for compatible systems.

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

DO NOT:

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

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

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

H. California Safety Information

WARNING

This product and the fuels used to operate this product (wood), and the products of combustion of such fuels, can expose you to chemicals including lead and carbon black, which is known to the State of California to cause cancer, and carbon monoxide, which is know to the State of California to cause birth defects or other reproductive harm. For more information go to: www.P65Warnings.ca.gov

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

2 Getting Started

A. Design and Installation Considerations

1. Appliance Location

NOTICE: *Check building codes prior to installation.*

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

It is a good idea to plan your installation on paper, using exact measurements for clearances and floor protection, before actually beginning the installation

Consideration must be given to:

- Safety, convenience, traffic flow
- Placement of the chimney and chimney connector.
- If you are not using an existing chimney, place the appliance where there will be a clear passage for a factory-built listed chimney through the ceiling and roof.
- Installing an optional outside air kit would affect the location of the vent termination.

Suitable fireplaces for installation:

- Masonry Fireplace
- Existing Factory Built Wood Burning Fireplace
- Zero Clearance Cabinet - Part #1-00-574323

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, provided that 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.

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

- Windows
- Air Intakes
- Air Conditioner
- Overhangs, soffits, porch roofs, adjacent walls
- Landscaping, vegetation

When locating vent and venting termination, vent above roof line when possible.

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

NOTICE: *Locating the appliance in a location of considerable air movement can cause intermittent smoke spillage from appliance. Do not locate appliance near:*

- *Frequently open doors*
- *Central heat outlets or returns*

myhht FACTORY training

Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends HHT Factory Trained or NFI Certified professionals.

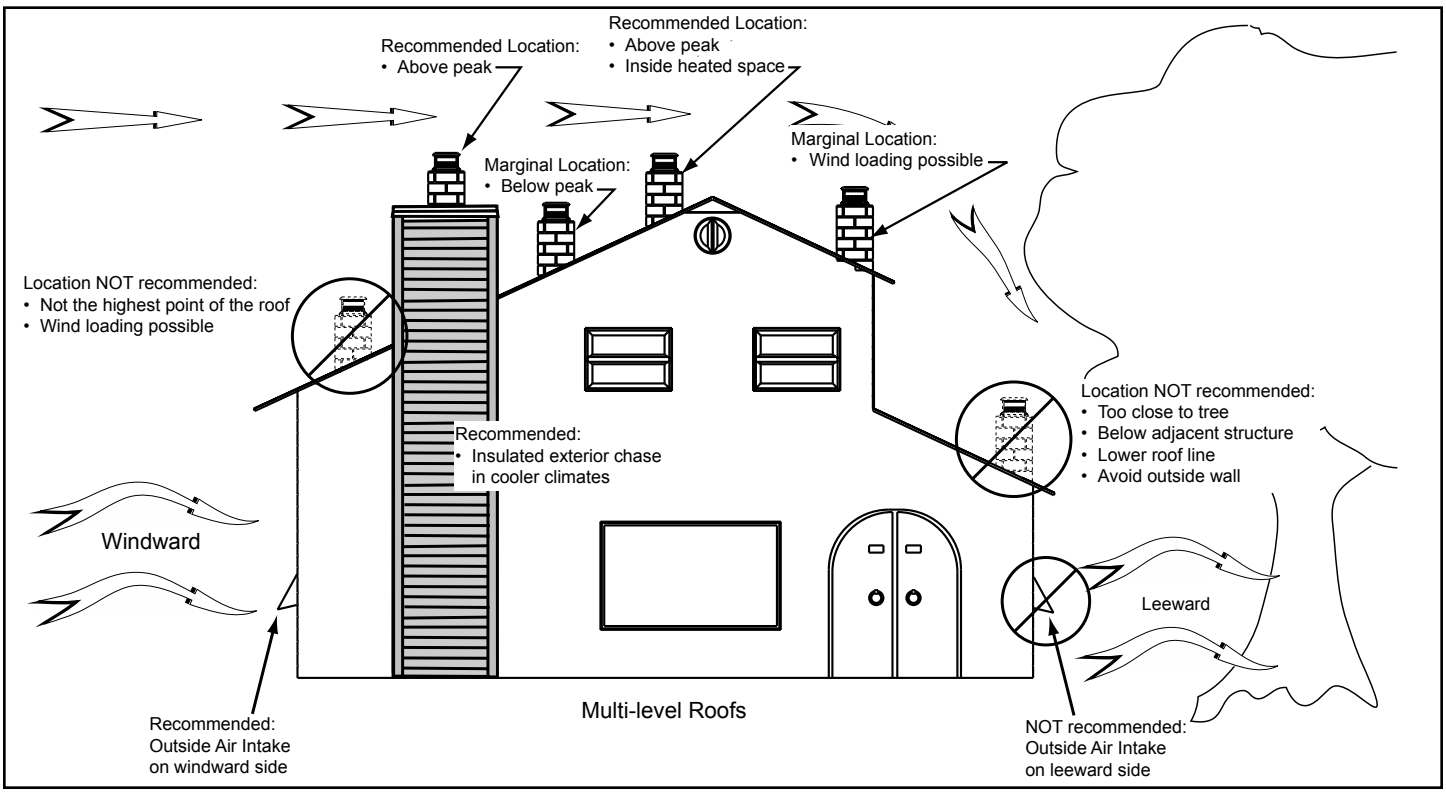


Figure 2.1

B. Tools And Supplies Needed

Tools and building supplies normally required for installation, unless installing into an existing masonry fireplace:

Reciprocating Saw	Gloves
Hammer	Safety Glasses
Phillips Screw driver	Electric Drill & Bits
Tape Measure	
Level	**May also need:**
Non-Combustible Sealant Material	Vent Support Straps
	Venting Paint

C. Inspect Appliance and Components

- Carefully remove the appliance and components from the packaging.
- The vent system components and decorative doors and fronts may be shipped in separate packages.
- If optional log set is purchased, the log bracket must be installed prior to installing the log set.
- Report to your dealer any parts damaged in shipment, particularly the condition of the glass.
- **Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**

WARNING



RISK OF FIRE OR EXPLOSION! Damaged parts could impair safe operation. DO NOT install damaged, incomplete or substitute components. Keep appliance dry.

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance or vent system component.
- Modification of the appliance or vent system.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Any such action may cause a fire hazard.

WARNING



Risk of Fire, Explosion or Electric Shock! DO NOT use this appliance if any part has been under water. Call a qualified service technician to inspect the appliance and to replace any part of the control system that has been under water.

3 Clearances

A. Appliance Dimension Diagram

Dimensions are actual appliance dimensions. Use for reference only.

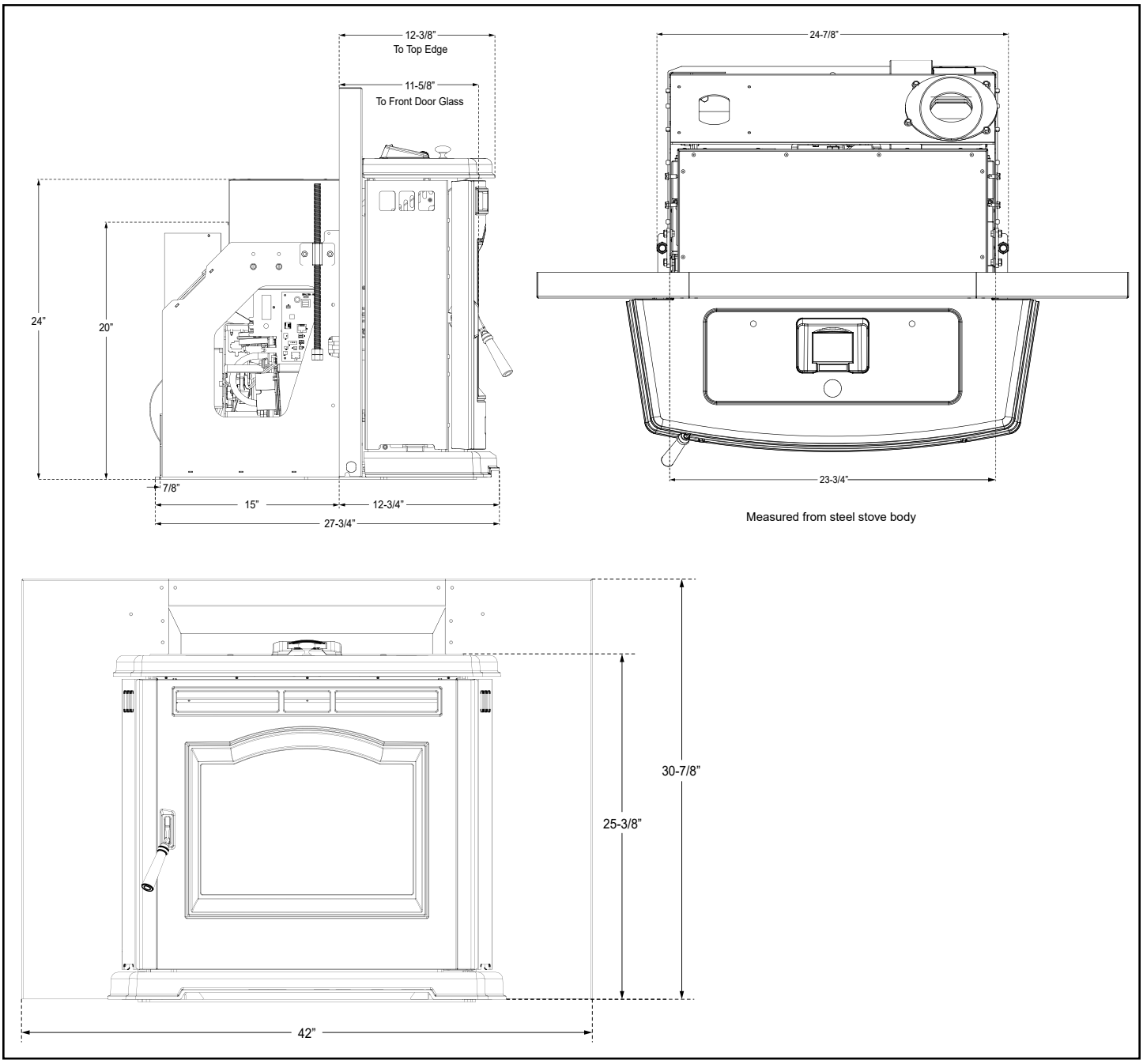


Figure 3.1

B. Clearances to Combustibles & Floor Protection

When selecting a location for the appliance it is important to consider the required clearances to walls (see Figure 3.2).

WARNING! Risk of Fire or Burns! *Provide adequate clearance around air openings and for service access. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.*

NOTICE: *Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY. Illustrations/diagrams are not drawn to scale. Actual installation may vary due to individual design preference.*

⚠ CAUTION

Hearth and Home Technologies does not recommend adhesive based vinyl flooring due to thermal expansion. Floating-style flooring (LVP - luxury vinyl plank or LVT – luxury vinyl tile) can be used, but it will reach temperatures up to 110 °F in a room with ambient temperature of 70 °F. Consult flooring specifications to ensure compatibility.

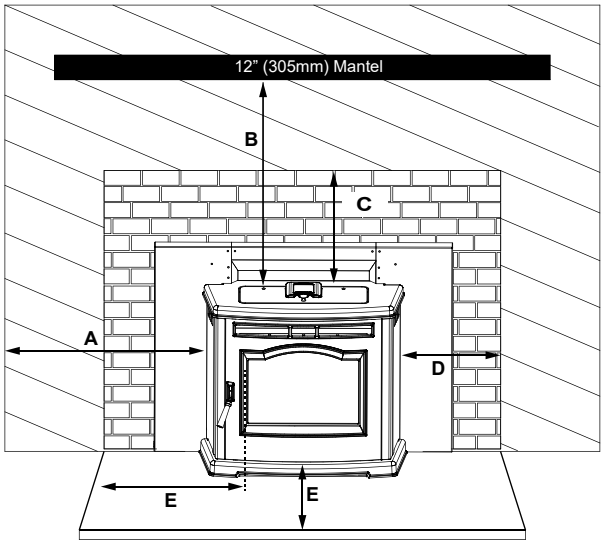
HHT recommends wood stoves and inserts have 29 inches of alternative flooring in front of the stove before using LVP/LVT regardless if they sit flush on the floor or are elevated on a raised hearth.

For all other flooring, continue to follow clearance to combustible requirements in the installation manual.

NOTICE: *Clearances that do not meet the minimum guidelines could result in damage or buckling to the vinyl flooring and is done at the installer's or homeowner's risk.*

Clearances:	A	B	*C	D	E (From Glass)
From Insert Body:	12" (305 mm)	12" (305 mm)	0"	8" (203 mm)	6" (152 mm)
*3/4 Trim, Zero Clearance to Surround					

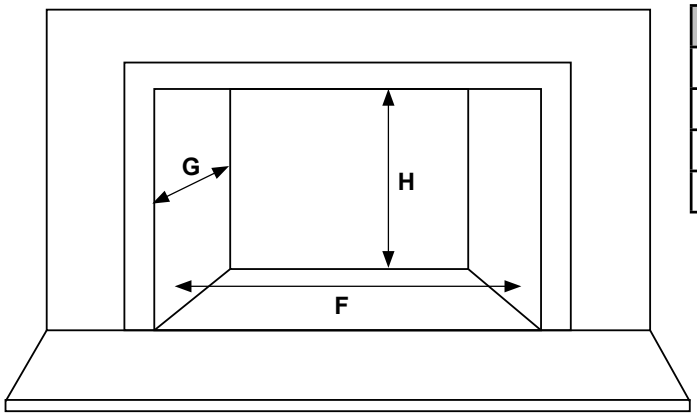
Floor protection must be used from hearth opening to 6" (152mm) in front of door glass and 6" (152mm) to each side of the door opening OR 8" (203mm) to sides to protect combustibles from hot ashes. A minimum size will be 17" deep by 30" wide and be made of a non-combustible material or meet UL approval.



A = to sidewall
B = to 12" mantel
C = to 3/4" trim
D = to 3/4" trim
E = floor protection

Figure 3.2

C. Minimum Opening - Masonry and Manufactured Fireplaces

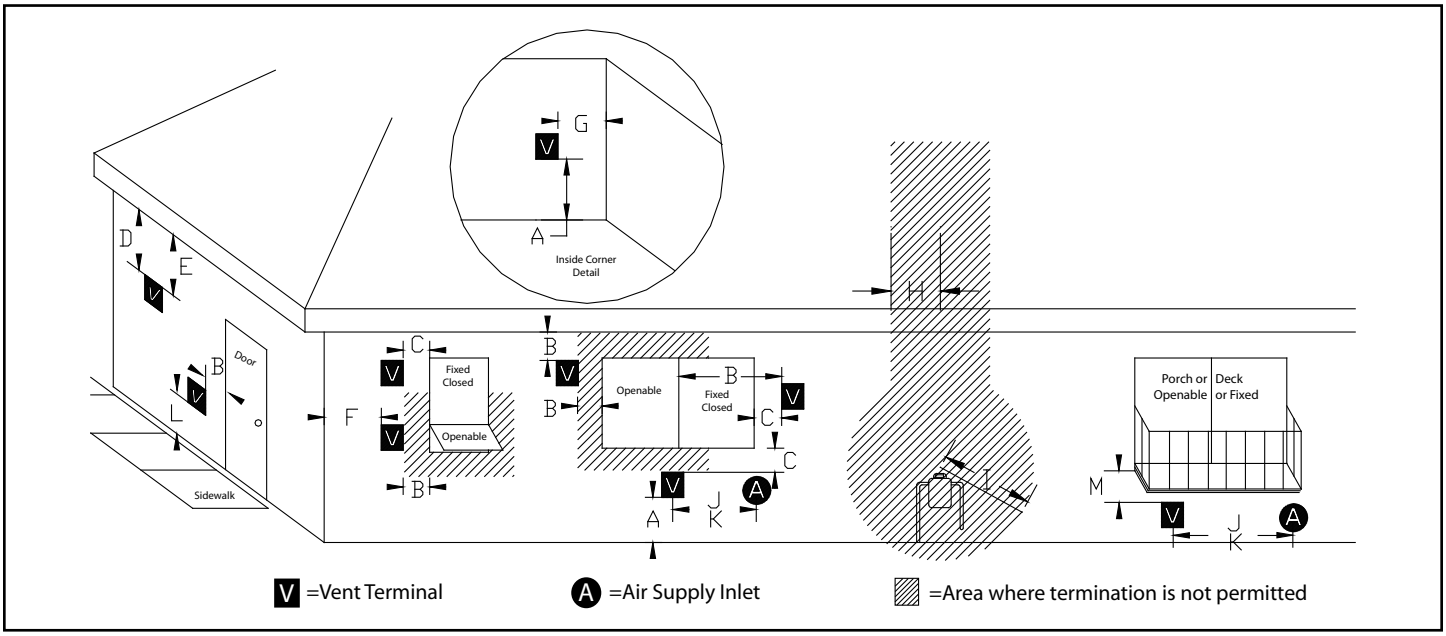


Location		Inches	Millimeters
F	Minimum Width	24-7/8	632
G	Minimum Depth	15-9/16	395
H	Minimum Height (24" Hopper)	24	610
H	Minimum Height (20" Hopper)	20	508

4 Termination Location and Vent Information

A. Vent Termination Requirements

Chimney connector shall not pass through an attic or roof space, closet or similar concealed space, or a floor or ceiling.



WARNING: Venting terminals must not be recessed into a wall or siding.

NOTE: Only PL or L vent pipe wall pass-throughs and fire stops should be used when venting through combustible materials.

NOTE: Always take into consideration the affect the prevailing wind direction or other wind currents will cause with flyash and /or smoke when placing the termination.

In addition, the following must be observed:

A. The clearance above grade must be a minimum of 12".

B. The clearance to a window or door that may be opened must be a minimum of 48" to the side and 48" below the window/door, and 12" above the window/door. **(with outside air installed, 9" to side and below)**

C. A 12" clearance to a permanently closed window is recommended to prevent condensation on the window.

D. The vertical clearance to a ventilated soffit located above the terminal within a horizontal distance of 2 feet (607mm) from the center-line of the terminal must be a minimum of 18".

E. The clearance to an unventilated soffit must be a minimum of 12".

F. The clearance to an outside corner is 11" from center of pipe.

G. The clearance to an inside corner is 12".

H. A vent must not be installed within 3 feet (914mm) above a gas meter/regulator assembly when measured from the horizontal center-line of the regulator.

I. The clearance to service regulator vent outlet must be a minimum of 6 feet.

J. The clearance to a non-mechanical air supply inlet to the building or the combustion air inlet to any other appliance must be a minimum of 48".

K. The clearance to a mechanical air supply inlet must be a minimum of 10 feet. (**with outside air installed, 6 feet**)

L. The clearance above a paved sidewalk or a paved driveway located on public property must be a minimum of 7 feet.

M. The clearance under a veranda, porch, deck or balcony must be a minimum of 12". **(B. also)**

NOTE: The clearance to vegetation and other exterior combustibles such as mulch is 36" as measured from the center of the outlet or cap. This 36" radius continues to grade or a minimum of 7 feet below the outlet.

Certain Canadian and or Local codes or regulations may require different clearances.

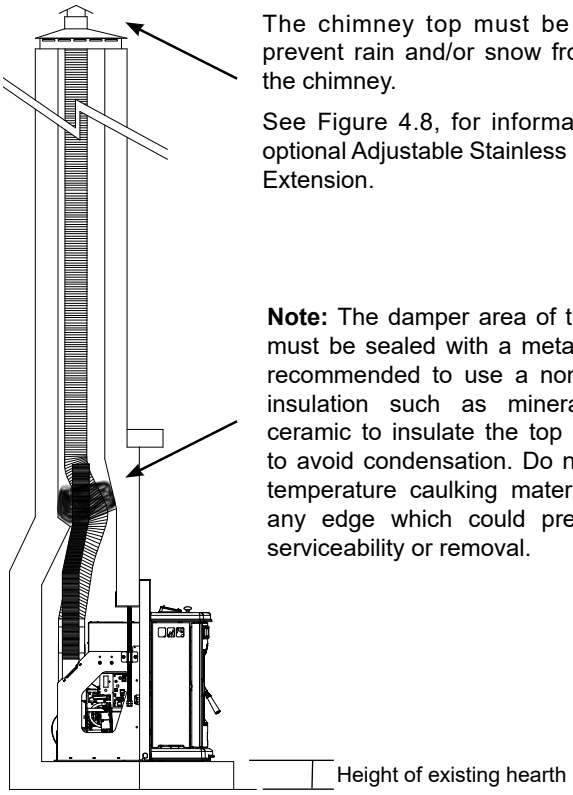
A vent shall not terminate directly above a side-walk or paved driveway which is located between two single family dwellings and serves both dwellings.

Only permitted if veranda, porch, deck, or balcony is fully open on a minimum of 2 sides beneath the floor.

See NFPA 211 for more installation clearance reductions when using outside air.

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

B. Venting Termination Design



The chimney top must be capped to prevent rain and/or snow from entering the chimney.

See Figure 4.8, for information on the optional Adjustable Stainless Steel Intake Extension.

Note: The damper area of the fireplace must be sealed with a metal plate. It is recommended to use a non-flammable insulation such as mineral wool or ceramic to insulate the top of the plate to avoid condensation. Do not use high temperature caulking materials to seal any edge which could prevent future serviceability or removal.

Figure 4.1

#1 Installing into an existing fireplace chimney

This method provides excellent venting with 100% outside air which is the most efficient operation of this unit. This method also provides natural draft in the event of a power failure.

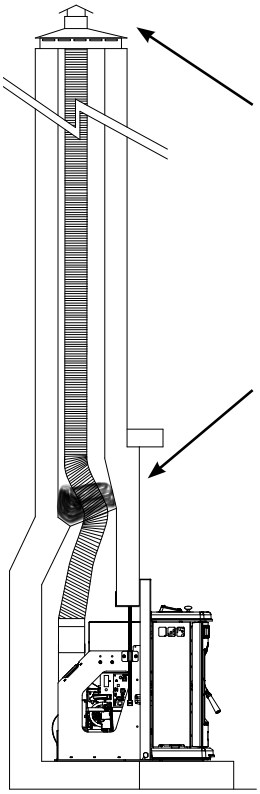
A 4" stainless steel flex pipe is needed for the flue pipe, and 3" aluminum or Stainless Steel Flex Pipe is used for the intake.

⚠ WARNING

CHIMNEY CONNECTOR PIPE MAY NOT PASS THROUGH CONCEALED SPACES INCLUDING AN ATTIC, ROOF SPACE, CLOSET, FLOOR OR CEILING.

⚠ WARNING

DO NOT REMOVE BRICKS OR MORTAR FROM THE EXISTING FIREPLACE.



The chimney top must be capped to prevent rain and/or snow from entering the chimney.

Note: The damper area of the fireplace must be sealed with a metal plate. It is recommended to use a non-flammable insulation such as mineral wool or ceramic to insulate the top of the plate to avoid condensation. Do not use high temperature caulking materials to seal any edge which could prevent future serviceability or removal.

Figure 4.2

#2 Installing into an existing fireplace chimney

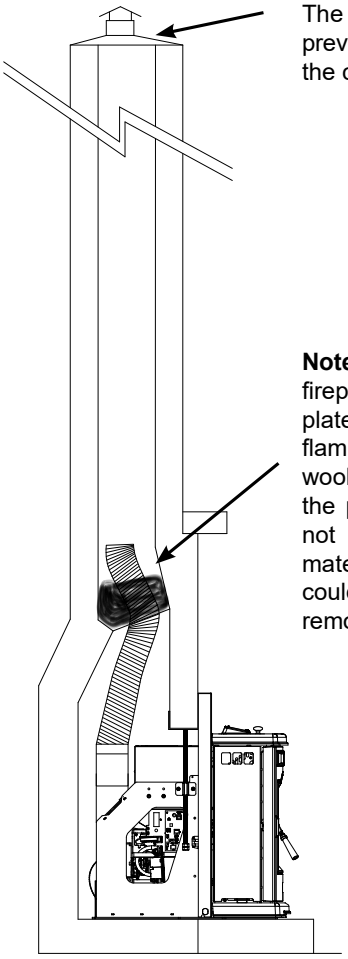
This method provides excellent venting for normal operation. This method also provides natural draft in the event of a power failure.

A cap should be installed on the chimney to keep out rain.

Combustion air is provided from the living area and enters the feed system from around the wing and stove body spaces.

⚠ WARNING

DO NOT REMOVE BRICKS OR MORTAR FROM THE EXISTING FIREPLACE.



The chimney top must be capped to prevent rain and/or snow from entering the chimney.

Note: The damper area of the fireplace must be sealed with a metal plate. It is recommended to use a non-flammable insulation such as mineral wool or ceramic to insulate the top of the plate to avoid condensation. Do not use high temperature caulking materials to seal any edge which could prevent future serviceability or removal.

Figure 4.3

#3 Installing into an existing chimney

This method provides excellent venting for normal operation. This method also provides natural draft in the event of a power failure. If the chimney condition is questionable you may want to install a liner as in method #2.

This is the minimum allowed vent pipe using 4" stainless steel flex pipe.

The vent pipe must extend past the damper sealing area by at least 12 inches.

Note: The insulation material must not be allowed to expand to the point that it covers the end of the flex pipe.

The chimney should be capped with any style cap that will not allow rain or snow to enter.

In some places in the US and Canada, it is required that the vent pipe extend all the way to the top of the chimney. Check your local codes.

⚠ WARNING

CHIMNEY CONNECTOR PIPE MAY NOT PASS THROUGH CONCEALED SPACES INCLUDING AN ATTIC, ROOF SPACE, CLOSET, FLOOR OR CEILING.

⚠ WARNING

DO NOT REMOVE BRICKS OR MORTAR FROM THE EXISTING FIREPLACES.

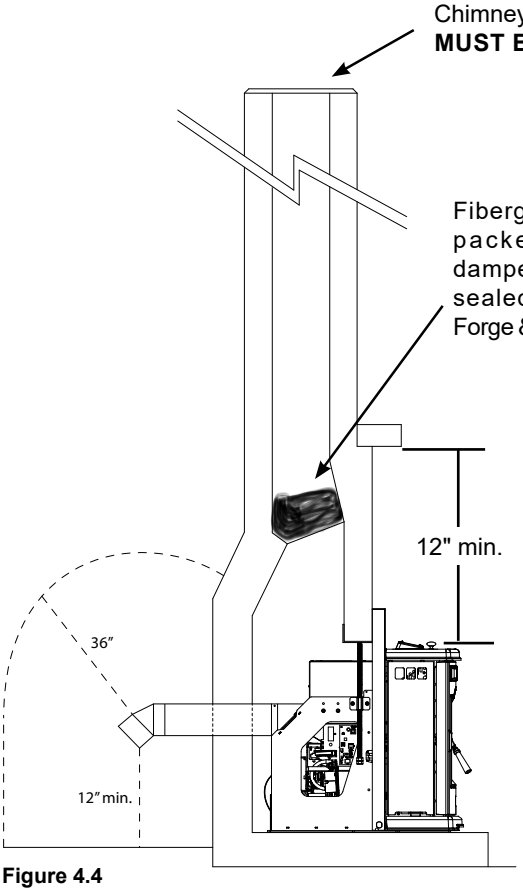


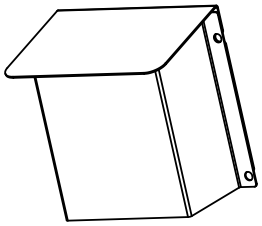
Figure 4.4

#4 Preferred method

This method provides excellent venting for normal operation and in a fireplace with inadequate flue space, or a height of over 30 feet. 4" PL vent pipe should be used with the needed swivel flue stub.

Note: With a 100% outside air kit the outside air can be installed in the same manner as the flue pipe.

Stainless Steel Outside Air Inlet Cover
Part# 1-10-09542



⚠ CAUTION

KEEP COMBUSTIBLES (SUCH AS GRASS, LEAVES, ETC.) AT LEAST 3 FEET AWAY FROM THE FLUE OUTLET ON THE OUTSIDE OF THE BUILDING.

IN CANADA: This fireplace insert must be installed with a continuous chimney liner of a minimum 4" diameter extending from the insert to the top of the chimney. The chimney liner must conform to the Class 3 requirements of CAN/ULC-S635, Standard for Lining Systems for Existing Masonry or Factory Built Chimneys and Vents, or CAN/ULC-S640, Standard for Lining Systems for New Masonry Chimneys.

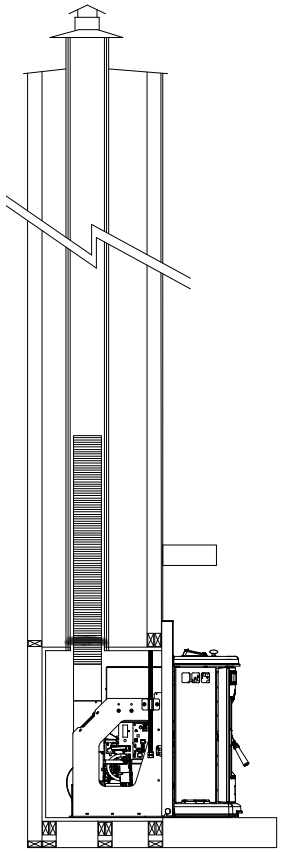


Figure 4.5

Note: If the P42i Pellet Insert is installed into a factory built wood burning fireplace, the label (Part #160-1246) to the right MUST be attached to the altered fireplace. This label is included in the Manufactured fireplace installation kit.

Additionally, the firebox floor of the Zero Clearance Wood Fireplace may be removed down to the outer metal shell of the fireplace if kit 1-00-574305 is used. The kit includes installation instructions and all materials needed to remove the firebox floor and still maintain a safe, compliant installation. Be certain to contact local code enforcement officials before beginning any modifications, as they may not be reversible in many cases.

Installing the P42i Pellet Insert into an existing factory built wood burning fireplace

When installing the P42i Pellet Insert into a factory built wood burning fireplace, the Manufactured Fireplace Installation Kit #1-00-574205 must be used. In addition, several things need to be taken into consideration.

The size of the fireplace opening. Will the unit fit into the opening? Many of these units have metal smoke shields inside the top that can be removed to gain height. Often the side and rear refractory can be removed to gain depth and width. In some circumstances, the front lower lip or grill work may also be removed. Be sure and follow the guidelines in the kit instructions. Floor protection guidelines, as listed on Figure 3.2 must also be followed.

The factory built chimney must be listed per UL 127 (US) and meet type HT requirements of UL 103 (US). Factory Built fireplace chimneys tested to UL 127-98 may be, at the fireplace manufacturers option, tested to the same criteria as UL 103HT requirements. If the chimney is not listed as meeting HT requirements, or if the factory built fireplace was tested prior to 1998, a full height listed chimney liner must be installed from the appliance flue collar to the chimney top. Liner must meet high temperature (2100° F) per UL1777 (US). The liner must be securely attached to both the flue collar and the chimney cap. To prevent room air passage to the chimney cavity of the fireplace, seal the damper area around the chimney liner with fiberglass batting.

THIS FIREPLACE HAS BEEN ALTERED TO ACCOMMODATE AN INSERT AND SHOULD BE INSPECTED BY A QUALIFIED PERSON PRIOR TO RE-USE AS A CONVENTIONAL FIREPLACE.

CE FOYER À ÉTÉ MODIFIÉ AFIN D'ÊTRE UTILISÉ AVEC UNE UNITÉ ENCASTRABLE ET DEVRAIT ÊTRE INSPECTÉ PAR UNE PERSONNE QUALIFIÉE AVANT D'ÊTRE RÉUTILISÉ COMME UN FOYER CONVENTIONNEL.

160-1246B

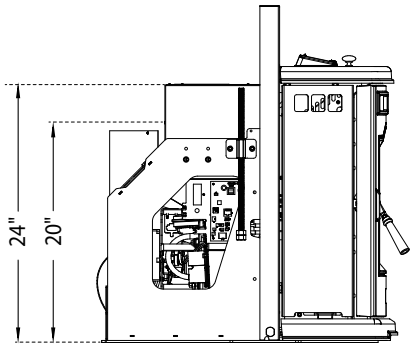
OPTIONAL HOPPER CONFIGURATIONS FOR SMALLER FIREPLACE OPENINGS:

The P42i Pellet Insert can be factory built with shorter hopper configurations.

The standard requires a 24" opening. Part #1-90-584240

Option 1: Requires a 20" opening height. Part #1-90-584200

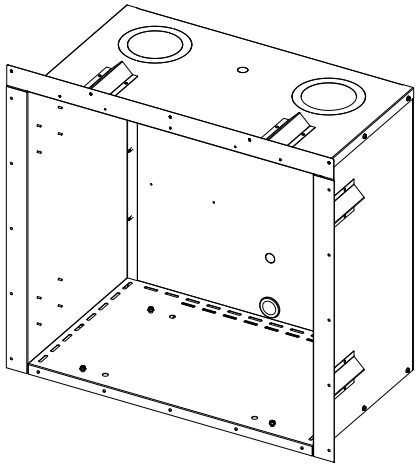
Keep in mind the hopper capacities will decrease with the optional heights.



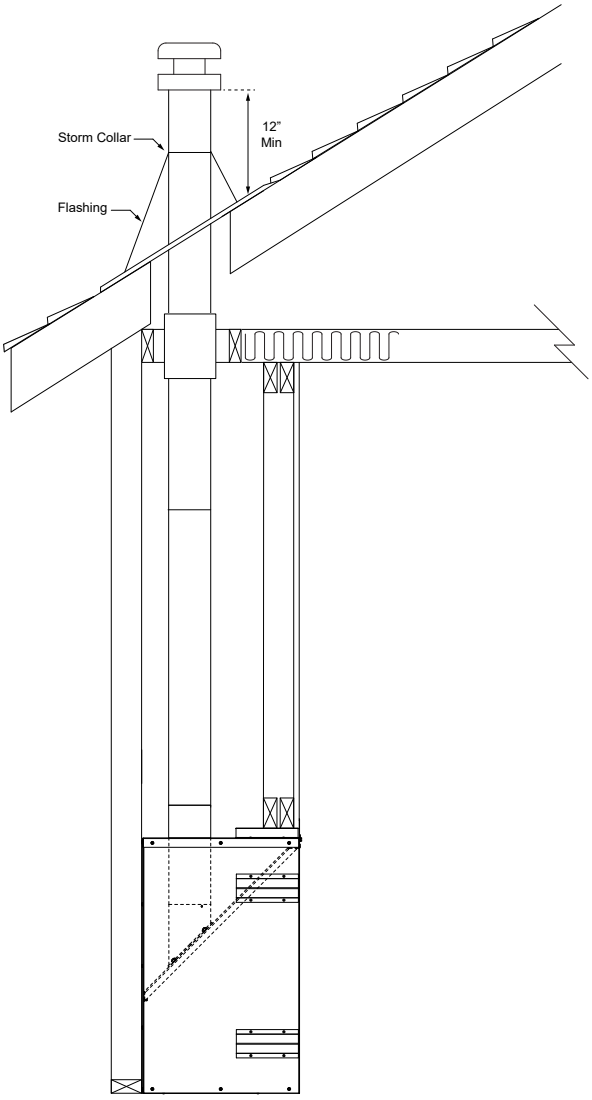
Installing the P42i Pellet Insert into a Zero Clearance Cabinet

If you don't have a factory built fireplace or masonry fireplace, the P42i Pellet Insert can also be installed into a Zero Clearance Cabinet, Part # 1-00-574323. This is the **only permissible** way to install the P42i Pellet Insert without a suitable fireplace. After the Zero Clearance Cabinet is installed, type PL vent pipe, wall pass-through and terminations are used (**Note:** Flex pipe is not approved in these types of installation). Detailed installation instructions are included with the Zero Clearance Cabinet. These same installation instructions can also be found on-line at www.forgenflame.com.

Below are two sample installations using the Zero Clearance Cabinet.



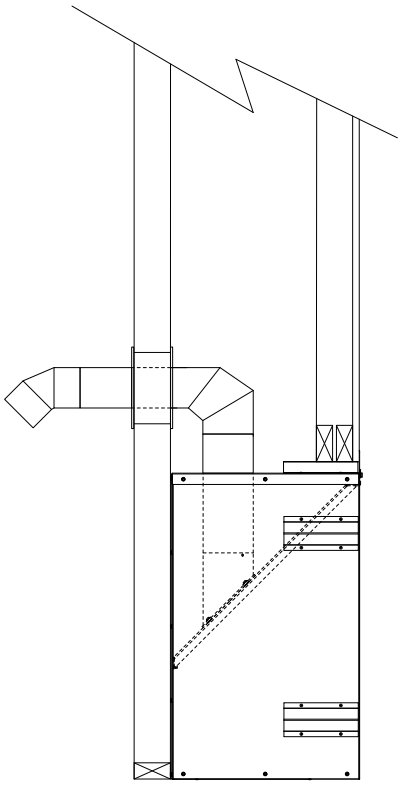
Zero Clearance Cabinet



PL Vent Pipe installed through a ceiling.

Requirements for Terminating the Venting through an Exterior Wall.

The clearance to a window or door that may be opened must be a minimum of 48" to the side and 48" below the window/door, and 12" above the window/door. (**with outside air installed, 12" to the side or below**)



PL Vent Pipe installed through an exterior wall

C. Venting & Use of Elbows

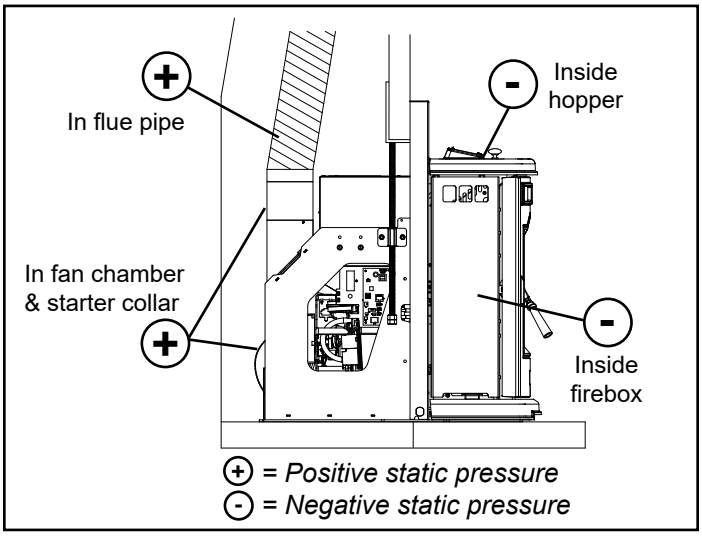


Figure 4.6

A combustion blower is used to extract the combustion gases from the firebox. This causes a negative pressure in the firebox and a positive pressure in the venting system as shown in Figure 4.6. The longer the vent pipe and more elbows used in the system, the greater the flow resistance. **The recommended maximum flue lengths for the P42i Pellet Insert are as follows:**

4" Flex Pipe:
Maximum 30 Ft. Vertical

Long runs of flex or PL vent pipe installed directly vertical from the flue stub may require more frequent cleaning due to fly ash falling off inside and collecting directly above the combustion blower outlet.
Any use of horizontal venting will require more frequent cleaning. It is the responsibility of the installer to make sure the entire flue configuration is accessible for cleaning.

4" stainless steel flex vent piping is only allowed for use in masonry fireplaces and chimneys or factory built wood burning fireplaces with class A metal chimneys. All pellet vent pipe must be secured together either by means provided by pipe manufacturer or by 3 screws at each joint.

Note: The unit ships with a 4” starter collar for using with flex pipe. If the unit will be installed with Type PL pellet pipe, 1-00-574100 Stub kit will need to be used.

Use only the specified venting components. Use of any other components will void the product warranty and may pose a hazard.

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

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

INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENT MANUFACTURER.

D. Battery Back-up Power

Minimizing Smoke During Loss of Power Using Battery Back-up

Forge & Flame strongly recommends installing battery back-up to minimize entry of smoke into the room in the event of power loss.

Your pellet/biomass burning appliance relies on a combustion blower to remove exhaust. A power failure will cause the combustion blower to stop. This may lead to exhaust seeping into the room. Vertical rise in the venting may provide natural draft. It is, however, no guarantee against leakage.

There are two approved battery back-up options for your appliance:

Uninterruptible Power Supply (UPS) battery back-ups are available online or at computer and office equipment stores. Your appliance with Rev E or later software available beginning in November 2010 may be plugged directly into an approved UPS:

- The APC (American Power Conversion) model #BE750G and the TrippLite model INTERNET750U are tested and approved. Other brands or models may not be compatible.

When power is lost, a fully charged UPS will power a safe, combustion blower only shut-down. Your appliance will pulse the blower every few seconds to clear exhaust until the fire is out.

Note: The UPS provides safe shut-down only. It is not intended for continued operation.

Your appliance will recognize when power is restored. What happens depends on ESP temperature and whether it is equipped with automatic ignition:

- **In "Automatic" setting,** units equipped with automatic ignition will respond to the set point and ESP temperature and resume normal operation.
- **In "Manual" setting** or for units without automatic ignition:
- If the ESP is cool, the appliance will remain shut down.
- If the fire is out and the ESP is still warm, the feeder may restart. Since the fire is out, the ESP temperature will not rise. The unit will then shut-down, and may flash a six-blink status error. (See ESP error codes)
- If the fire is still burning, it will resume normal operation.

Contact your dealer if you have questions about UPS compatibility with your appliance.

CAUTION

Always keep appliance doors and hopper lid closed and latched during operation and during power failures to minimize risk of smoke or burn-back.

CAUTION

Use only a approved battery back-up devices. Other products may not operate properly, can create unsafe conditions or damage your appliance.

E. Outside Air

The outside air kit consists of a Intake Stub, Stub Gasket, Outside Air intake Weldment and hardware. Figure 4.7.

An adjustable chimney intake extension, part #1-00-674104 is available to be used on masonry chimneys only. Figure 4.8.

Additional information and diagrams can be found under the “Venting Termination Design” section of the manual.

To install outside air, use kit part #1-00-574350. Follow the installation instructions provided with the kit.

100% Outside Air Kit - #1-00-574350

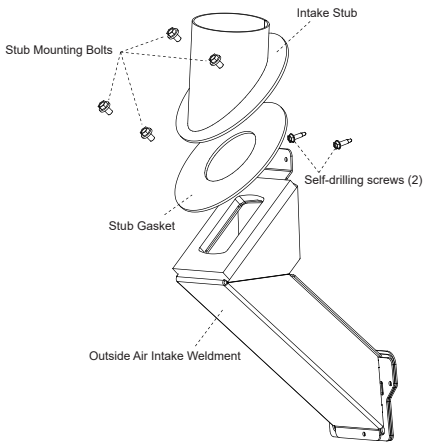


Figure 4.7

Adjustable Chimney Intake Extension Part # 1-00-674104

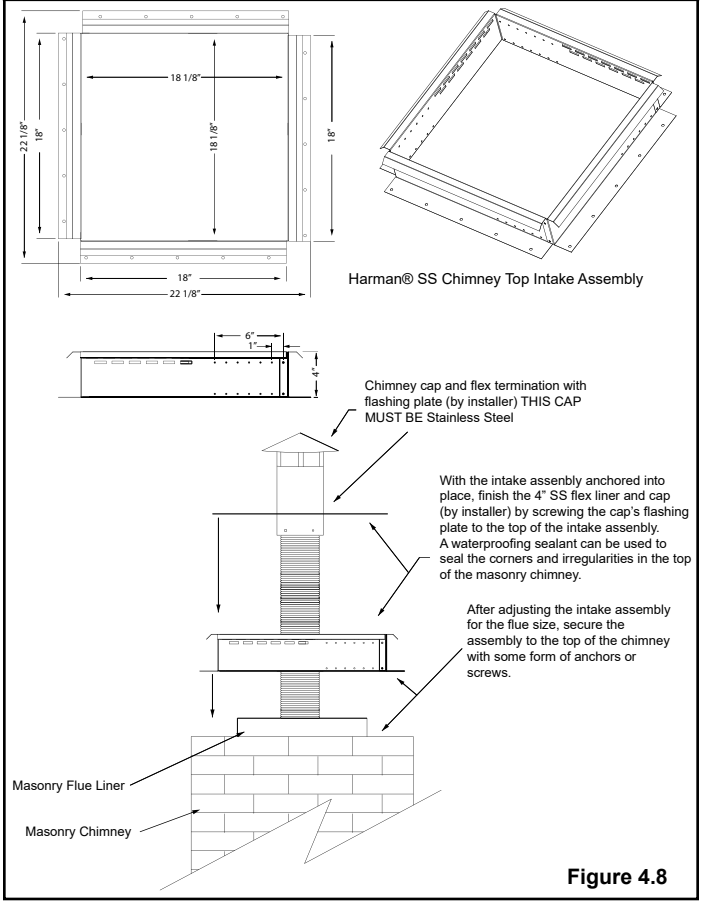


Figure 4.8

F. Locating Your Appliance & Chimney

Location of the appliance and chimney will affect performance.

- Install through the warm airspace enclosed by the building envelope. This helps to produce more draft, especially during lighting and die-down of the fire.
- Penetrate the highest part of the roof. This minimizes the effects of wind loading.
- Locate termination cap away from trees, adjacent structures, uneven roof lines and other obstructions.
- Minimize the use of chimney offsets.
- Consider the appliance location relative to floor and ceiling and attic joists.

CAUTION

- DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE.
- DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.

May allow flue gases to enter the house

G. Negative Pressure

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

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

Causes include:

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

To minimize the effects of negative air pressure:

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

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

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

H. Avoiding Smoke and Odors

Avoiding Smoke and Odors

Negative Pressure, Shut-down, and Power Failure:

T**o reduce the probability of back-drafting or burn-back in the pellet burning appliance during power failure or shut-down conditions, the stove must be able to draft naturally** without exhaust blower operation. Negative pressure in the house will resist this natural draft if not accounted for in the pellet appliance installation.

Heat rises in the house and leaks out at upper levels. This air must be replaced with cold air from outdoors, which flows into lower levels of the house. Vents and chimneys into basements and lower levels of the house can become the conduit for air supply, and reverse under these conditions.

Outside Air:
Hearth & Home Technologies recommend attaching outside air in all installations, especially lower level and main floor locations.

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

When the appliance is side-wall vented: The air intake is best located on the same exterior wall as the exhaust vent outlet and located lower on the wall than the exhaust vent outlet.

When the appliance is roof vented: The air intake is best located on the exterior wall oriented towards the prevailing wind direction during the heating season.

The outside air connection will supply the demands of the pellet appliance, but consideration must be given to the total house demand. House demand may consume some air needed for the stove, especially during a power failure. It may be necessary to add additional ventilation to the space in which the pellet appliance is located. Consult with your local HVAC professional to determine the ventilation demands for your house.

Vent Configurations:

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

- Installing the pellet vent with a minimum vertical run of five feet, preferably terminating above the roof line.
- Installing the outside air intake at least four feet below the vent termination.

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

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

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

WARNING! DO NOT CONNECT THIS UNIT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.

If a rear exit flue configuration is used, with or without outside air, make sure the flue pipe termination clearances are followed as per NFPA 211.

Vent Pipe

Be sure to use approved pellet vent pipe wall and ceiling pass-through fittings to go through combustible walls and ceilings. Be sure to use a starting collar to attach the venting system to the stove. Follow vent manufacturers instructions for proper sealing.

4” stainless steel flex vent piping is only allowed for use in masonry fireplaces and chimneys or factory built wood-burning fireplaces with class A metal chimneys.

Pellet venting pipe (also known as Type PL vent) is constructed of two layers with air space between the layers. This air space acts as an insulator and reduces the outside surface temperature to allow a clearance to combustibles of only 1 inch. The sections of pipe lock together to form an air tight seal. Follow vent manufacturers instructions for proper sealing.

Where passing through an exterior wall or roof, be sure to use the appropriate pass-through device providing an adequate vapor barrier. Venting manufacturers generally provide these pass-through devices.

Venting Termination Requirements

1. Termination must exhaust above air inlet elevation. It is recommended that at least 60 inches (1524mm) of vertical pipe be installed when appliance is vented directly through a wall. This will create a natural draft, which will help prevent the possibility of smoke or odor venting into the home during a power outage. It will also keep exhaust from causing a nuisance or hazard by exposing people or shrubs to high temperatures. The safest and preferred venting method is to extend the vent vertically through the roof.
2. Distance from doors and operable windows, gravity or ventilation air inlets into building:
   a. Not less than 48 inches (1219mm) below;
   b. Not less than 48 inches (1219mm) horizontally from;
   c. Not less than 12 inches (305mm) above.
3. Distance from permanently closed windows:
   a. Not less than 12 inches (305mm) below, horizontally from or above.
4. Distance between bottom of termination and grade should be 12 inches (305mm) minimum. This is conditional upon plants in the area, and nature of grade surface. The grade surface must be a non-combustible material (i.e., rock, dirt). The grade surface must not be lawn. Distance between bottom of termination and public walkway should be 84 inches (2134mm) minimum.
5. Distance to combustible materials must be 24 inches (610mm) minimum. This includes adjacent buildings, fences, protruding parts of the structure, roof overhang, plants and shrubs, etc.
6. Termination Cap Location (Home Electrical Service)

- Side-to-side clearance is to be the same as minimum clearance to vinyl inside corners.
- Clearance of a termination cap below electrical service shall be the same as minimum clearance to vinyl soffits.
- Clearance of a termination cap above electrical service will be 12 inches (305mm) minimum.
- Location of the vent termination must not obstruct or interfere with access to the electrical service.

<u>For Canada Only:</u> This Fireplace Insert must be installed with a continuous chimney liner of 4” diameter extending from the fireplace insert to the top of the chimney. The chimney liner must conform to the Class 3 requirements of CAN/ULC-S635, Standard for Lining Systems for Existing Masonry or Factory-Built Chimneys and Vents, or CAN/ULC-S640, Standard for Lining Systems for New Masonry Chimneys.

I. Manufactured Home Installation

You must use a Forge & Flame Outside Air Kit for installation in a manufactured home.

1. An outside air inlet must be provided for the combustion air and must remain clear of leaves, debris, ice and/or snow. It must be unrestricted while the appliance is in use to prevent room air starvation which causes smoke spillage. Smoke spillage can also set off smoke alarms.
2. The combustion air duct system must be made of metal. It must permit zero clearance to combustible construction and prevent material from dropping into the inlet or into the area beneath the dwelling and contain a rodent screen.
3. The appliance must be secured to the manufactured home structure by bolting it to the floor (using lag bolts). Use the same holes that secured the appliance to the shipping pallet.
4. The appliance must be grounded with #8 solid copper grounding wire or equivalent, terminated at each end with an NEC approved grounding device.
5. Refer to “Clearances to Combustibles and Floor Protection” section of this manual for listings to combustibles.
6. Use silicone to create an effective vapor barrier at the location where the chimney or other component penetrates to the exterior of the structure.
7. Follow the chimney manufacturer’s instructions when installing the vent system for use in a manufactured home.
8. Installation shall be in accordance with the Manufacturers Home & Safety Standard (HUD) CFR 3280, Part 24.

WARNING

Asphyxiation Risk:

NEVER INSTALL INTO A SLEEPING ROOM

Consumes oxygen in the room

WARNING

Installation must comply with Manufactured Home and Safety Standard (HUD), CFR 3280, Part 24

CAUTION

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

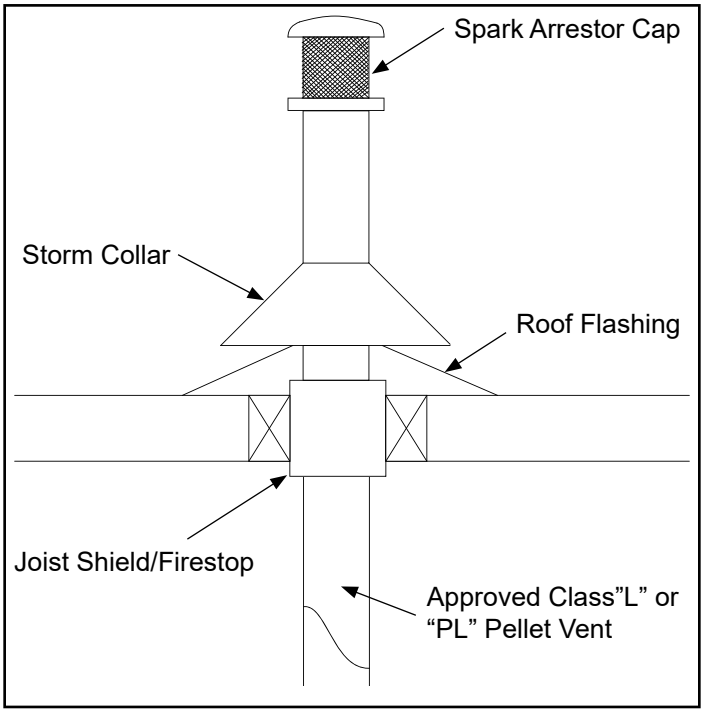
Do NOT cut through:

- Floor joist, wall, studs ceiling trusses.
- Any supporting material that would affect the structural integrity.

CAUTION

Never draw outside combustion air from:

- Wall, floor or ceiling cavity.
- Enclosed space such as an attic or garage.



J. Fire Safety

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

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

⚠ WARNING



Fire Risk.

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance.
- Modification of the appliance.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.
- Operating appliance without fully assembling all components.
- Do NOT Overfire.

Or any such action that may cause a fire hazard.

⚠ WARNING

THIS WOOD HEATER HAS A MANUFACTURER-SET MINIMUM LOW BURN RATE THAT MUST NOT BE ALTERED. IT IS AGAINST FEDERAL REGULATIONS TO ALTER THIS SETTING OR OTHERWISE OPERATE THIS WOOD HEATER IN A MANNER INCONSISTENT WITH OPERATING INSTRUCTIONS IN THIS MANUAL.

K. Inspect Appliance & Components

- Remove appliance and components from packaging and inspect for damage.
- Report to your dealer any parts damaged in shipment.
- **Read all the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**

⚠ WARNING



Inspect appliance and components for damage. Damaged parts may impair safe operation.

- Do NOT install damaged components.
- Do NOT install incomplete components.
- Do NOT install substitute components.

Report damaged parts to dealer.

5 Appliance Set-Up

A. Reducing Weight for Installation

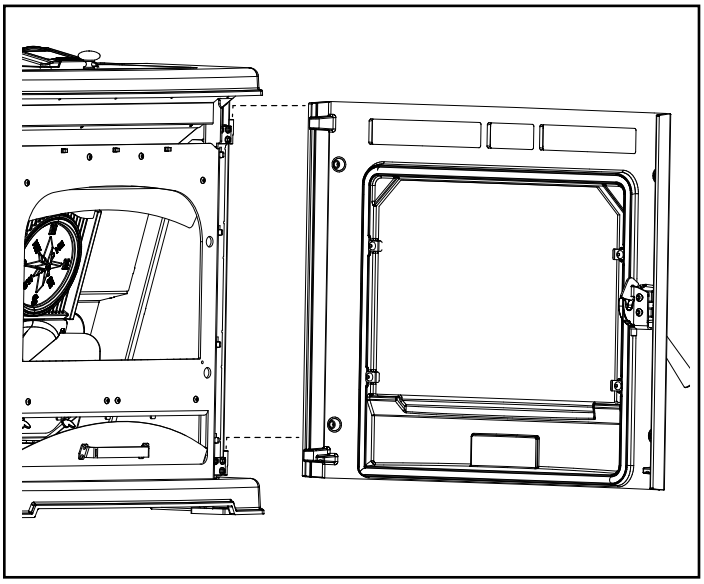


Figure 5.1

1. Remove the front viewing door by swinging it open approximately 90° and lift it upward until it clears the hinge pins. See Figure 5.1.
2. Remove the ash pan
3. Remove the (2) internal pieces of cast iron Figure 5.2. See Figure 5.3 for Center Medallion removal instructions.

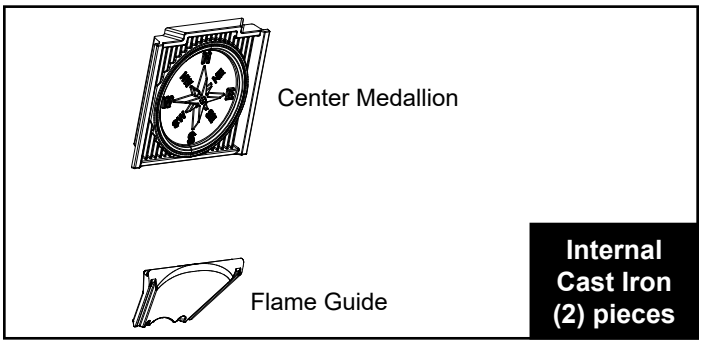
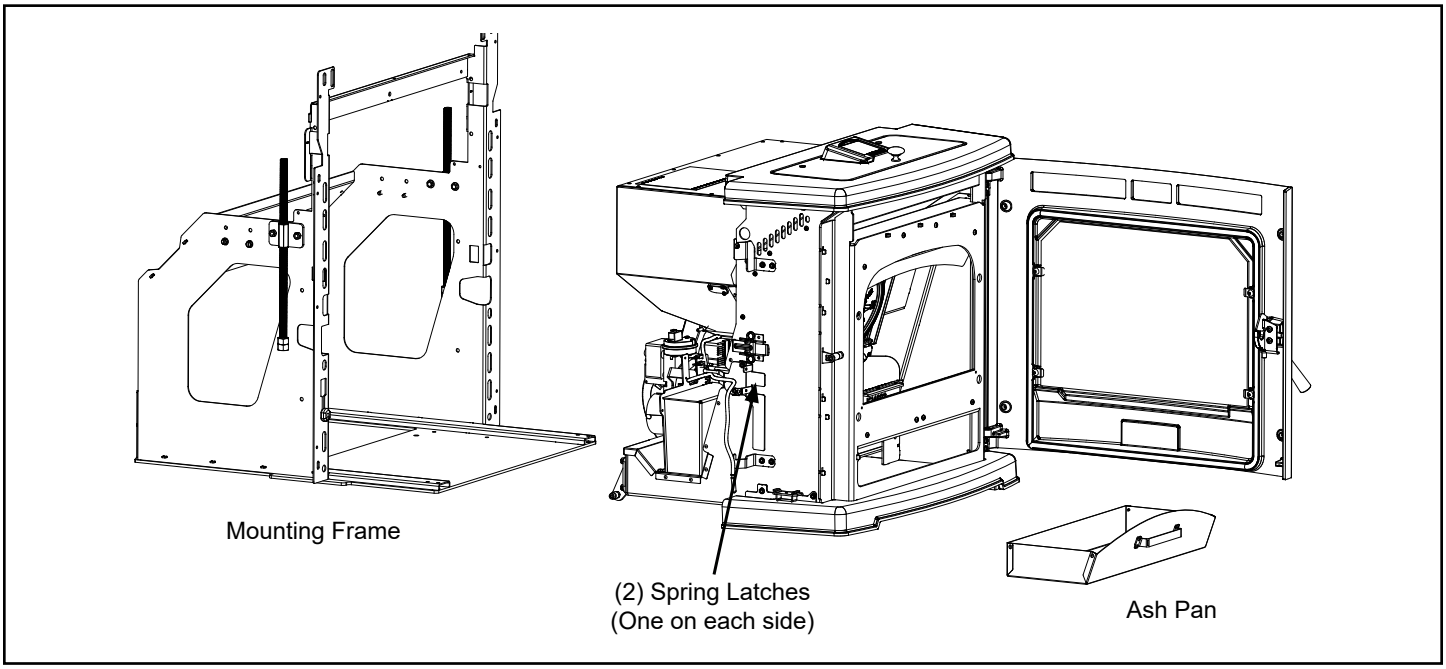


Figure 5.2



The drawing above shows the major sub components of the P42i. Take notice as to where the spring latches are located.

Removing the Center Medallion

1. Lift up on the 2 bottom corners of the medallion until it is higher than the top of the flame guide.
2. Pull the bottom edge of the medallion front approximately 1 inch.
3. Pull downward on the corners of the medallion until the top is released from the retainer that keeps the top aligned when in place. Figure 5.3.

Note: The heat exchanger covers will tilt to the front when the center medallion is removed.

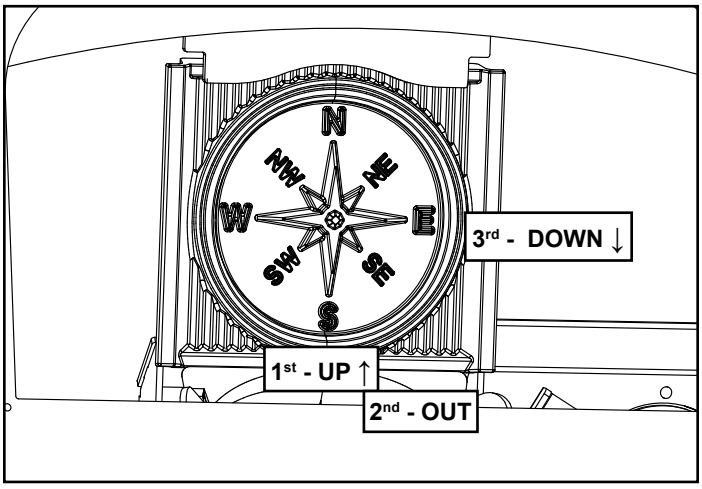
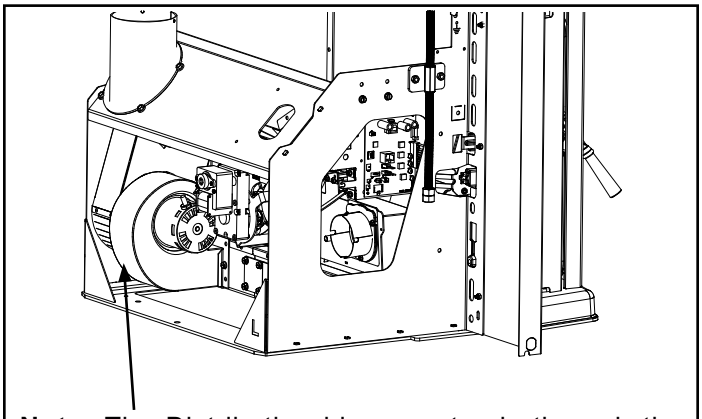


Figure 5.3

B. Beginning the Installation

The use of the optional service rail kit (Part #1-00-574354) is highly recommended for installation.

Locate the 3/8” hex head shipping bolts (one per side) that secure the stove to the mounting frame and use a 3/8” socket or nut-driver to loosen and remove these screws; these screws will not be reused and can be discarded. Figure 5.4



Note: The Distribution blower extends through the mounting frame in the rear approximately 7/8". The overall depth of the mounting frame is 15”, this includes the 7/8” overhang referenced in Figure 3.1.

Figure 5.4

Release the spring latches located behind the side panels on both sides of the insert and remove insert from frame.

Using (8) 10-24 nuts and studs, install the left and right surround panels to the mounting frame. Leave these bolts loose until the entire surround assembly has been adjusted for proper clearance. Figure 5.5

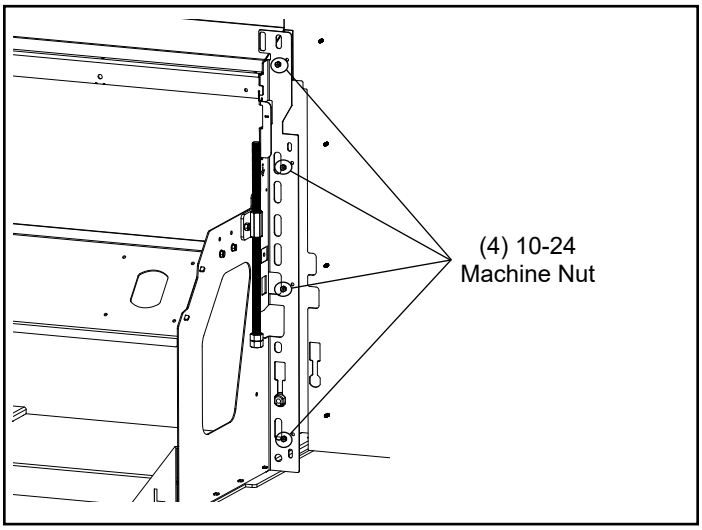


Figure 5.5

Next, locate the center top surround section and install four 10-24 Machine Nut & Studs into the holes shown below using a 3/8” wrench or nut driver. Figure 5.7.

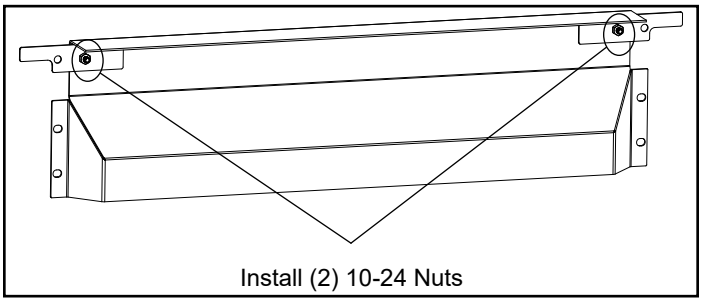


Figure 5.7

Slide the center surround section onto the mounting frame and install a 10-24 nut onto each of the four studs. These nuts should remain loose until the entire surround has been installed and adjusted. Figure 5.8.

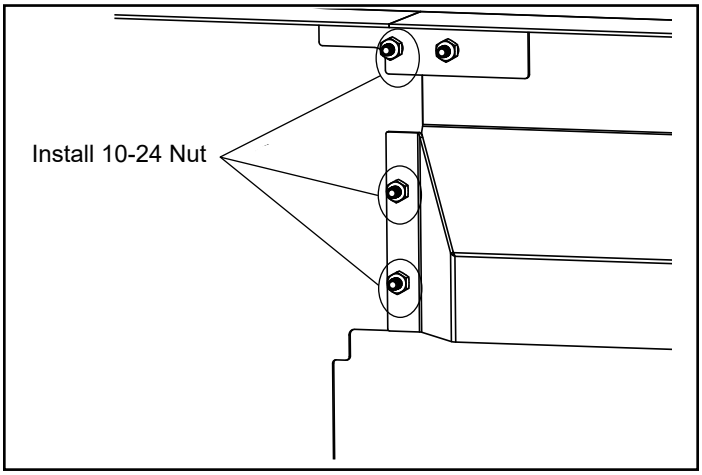


Figure 5.8

Align the top center surround section between the right and left panels and tighten the four 1/4” nuts to lock it in place. Now tighten the 3 bolts and nuts on the left and right side panels.

Unbolt the mounting frame from the shipping pallet using a 1/2” socket on the three lag screws; the lag screws and the pallet will not be reused and can be discarded.

Install the outside air pipe stub [if used], to the mounting frame. Figure 5.9.

The unit comes standard with a 4” (1-00-574034) pipe stub.

1. Part # 1-00-574100 is for use with 4” PL vent starter pipe and part# 1-00-574034 for 4”Stainless Steel flex pipe.

The flue stub assembly base is a round plate which allows it to swivel to allow the flue pipe to exit the mounting frame in other positions rather than straight up. Figure 5.10.

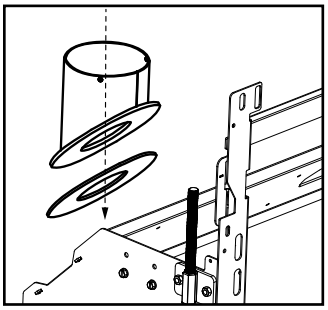


Figure 5.9

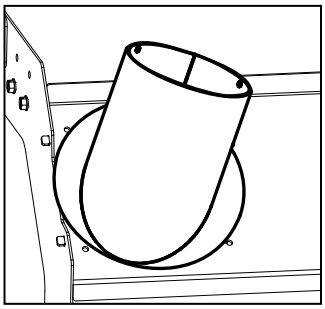


Figure 5.10

Inserting the Power Cord

The power cord can be inserted into the Line Filter located behind the side panel. Figure 5.11.

⚠ WARNING

ROUTE POWER CORD AWAY FROM THE APPLIANCE. DO NOT RUN CORD UNDER OR IN FRONT OF THE APPLIANCE.

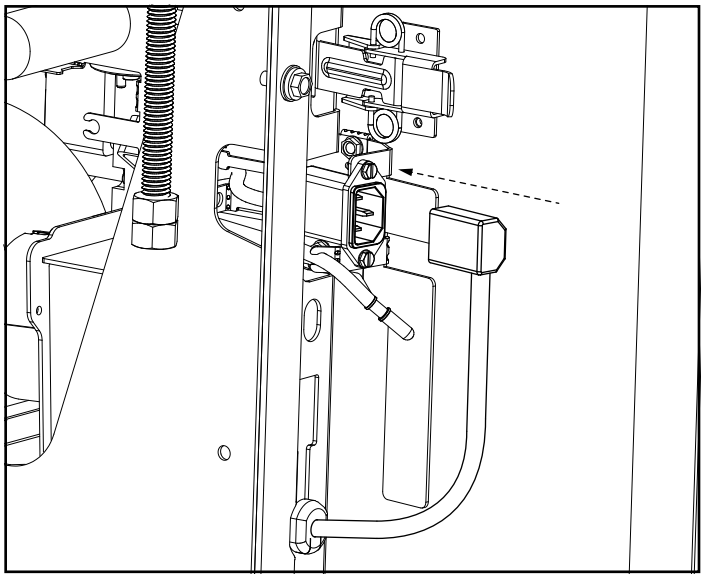


Figure 5.11

Note: If installing the optional wing extension it must be installed before completing the following steps.

With the surround attached, install the coupler nut weldments to the frame in the hole location that suits your needs with the (4) 1/4-20 x 5/8 flange screws and nuts and 1/2” jack bolts. Install the (4) 5/16”-18 leveling bolts into the threaded holes in the bottom pan of the mounting frame, install the mounting frame into the opening and adjust these bolts to insure the frame is level. (**Note:** Use of all 4 leveling bolts may not be necessary.) Tighten the 1/2” jack bolts against the lintel. See Figure 5.12.

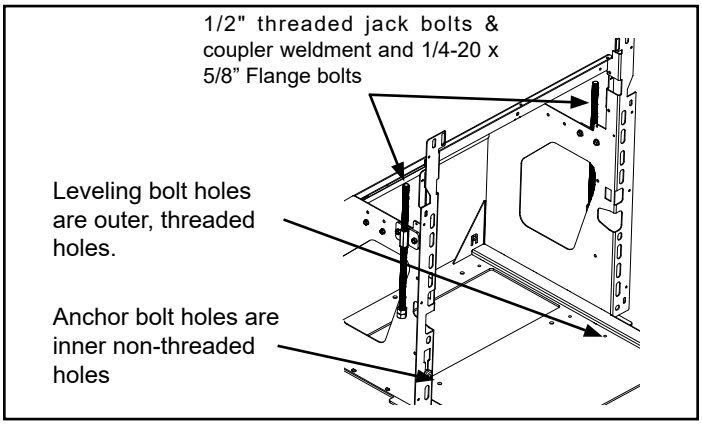


Figure 5.12

Connect the venting system and outside air system [if used], to the pipe stub(s) on the mounting frame, following the procedures detailed in “Section 4: Termination Location and Venting”. If outside combustion air will be used on the unit, be certain to install the Forge & Flame Outside Air Adapter P/N 1-00-574350 onto the unit before installing it into the mounting frame.

Install the optional Service Rail Kit to the mounting frame. Place the unit on the service rail leaving enough room to gain access to the wiring. Figure 5.13.

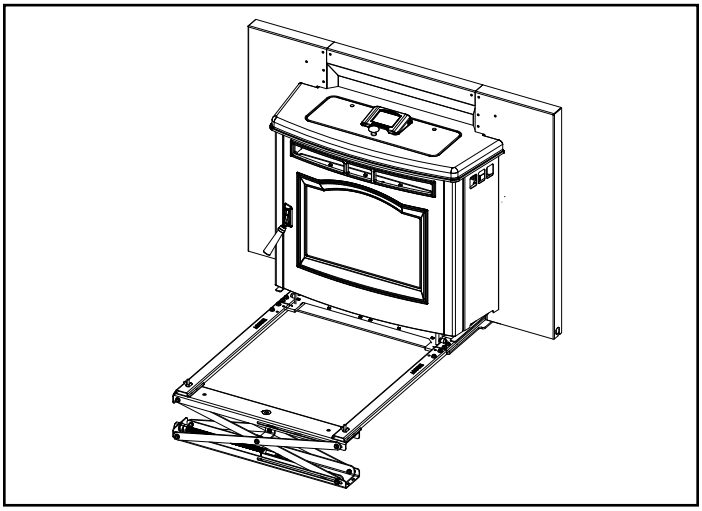


Figure. 5.13

C. Electrical Connection Installation

Note: If the room sensor is connected as a return air sensor, the wire should be connected long enough to allow this, but not too long that it would get tangled or pinched anywhere.

Connecting the room sensor as a return air sensor

Insert the sensor end of the wire from the rear of the mounting frame through the hole as shown in Figure 5.14.

Note: For optimal temperature accuracy and performance, use of the optional Wireless Remote Sensor is highly recommended.

Place the sensor end so that the sensing tip is laying near the ash lip rail. Figure 5.14.

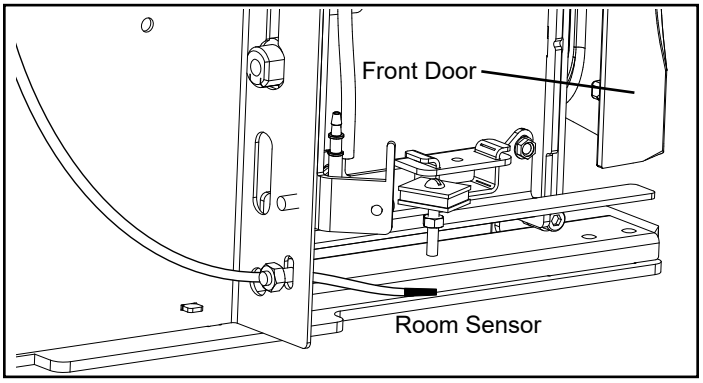


Figure 5.14

Connecting the Room Sensor

Once the location has been decided, run the wiring to the control panel. You'll need to remove the two terminals from the end of the sensor cable and replace them with the two smaller terminals from the hardware bag. Plug the terminals into the control board, Figure 5.15. These connections are not polarity specific.

Note: If the room sensor is located too close to the appliance, or in a direct path of the distribution air, You may need to elevate the temperature setting to maintain a comfortable temperature level throughout the heated space.

If service is performed, the room sensor may need to be disconnected to gain enough room to allow access to the rear of the unit.

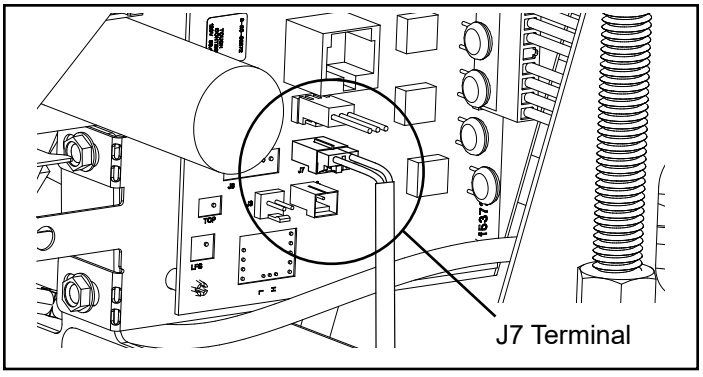


Figure 5.15

Slide the unit into the mounting frame making sure wires are clear of the frame and stove body. Snap the left and right spring latches to secure the stove and remove the service rail kit. Re-install the medallion.

D. Flame Guide

Install the cast iron flame guide on top of the burn pot. Make sure that the flame guide is fully seated on the vertical sides of the burn pot and that the back of the guide rests against the body of the stove. Figure 5.16.

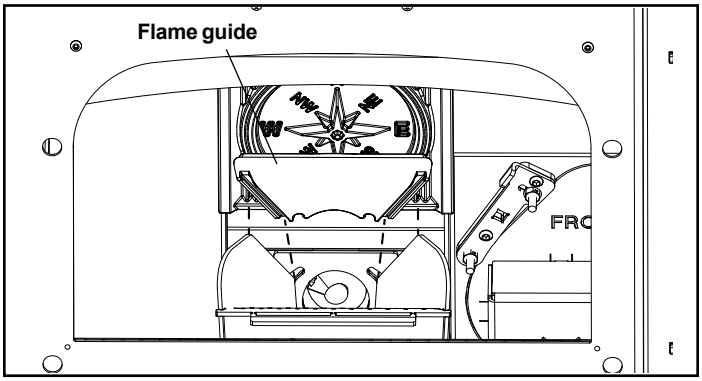


Figure 5.16

E. Reminders

Always disconnect the power cord before the unit is pulled from the mounting frame.

As you can see, the control board is easily accessible from the rear with the body pulled out of the frame, even if it is only pulled out several inches. Figure 17.

Always inspect the wiring harness and the 11 pin socket (large white flat plug where all of the power wires terminate.)

Always inspect the wiring harness where the wires transfer from the control to the rear inside of the body.

Make sure there are no worn or frayed areas.

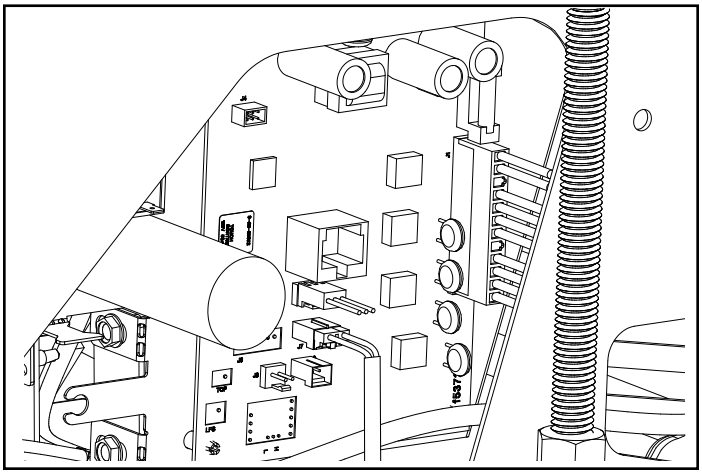


Figure 5.17

Do not allow pellets or sawdust to build up on the hopper lip. Figure 5.18.

Inspect the hopper lid gasket for damage. A good hopper lid seal is very important for proper operation.

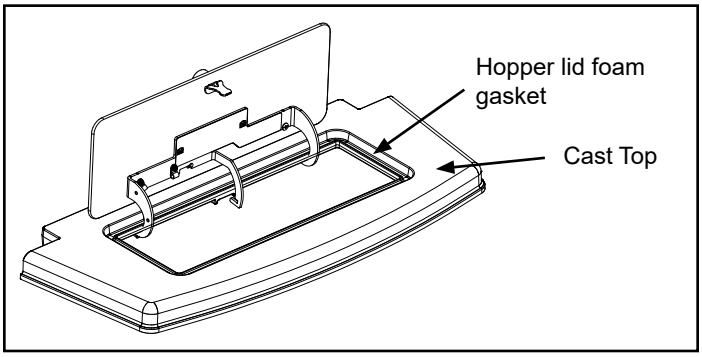


Figure 5.18

After the installation is completed, but before the first fire is lit, check and record the high and low draft readings.

⚠ CAUTION

- DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE.
- DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.

May allow flue gases to enter the house

F. Firebox Draft and Combustion Fan RPM

These units are pre-tested at the factory with exactly 120 VAC, 60 Hz. They are checked and adjusted for firebox tightness, gasket leakage, motor operation and igniter operation. The P42i is then factory set at a mid-point adjustment and in most cases will not need any adjustments.

Check and record the firebox draft before installing venting and after venting is installed ***(before starting fire)***.

There is a silicone draft meter port located behind the left hand door at the power supply plug. Install the magnahelic meter *(capable of at least .5" of water column)* Figure 5.19.

Considerations for successful draft include:

- Negative pressure in the firebox
- Location of appliance and chimney

To measure the draft or negative pressure on your appliance use a magnahelic or a digital pressure gauge capable of reading 0 - 1 inches of water column (W.C.).

The appliance should be running on high for at least 15 minutes for the test.

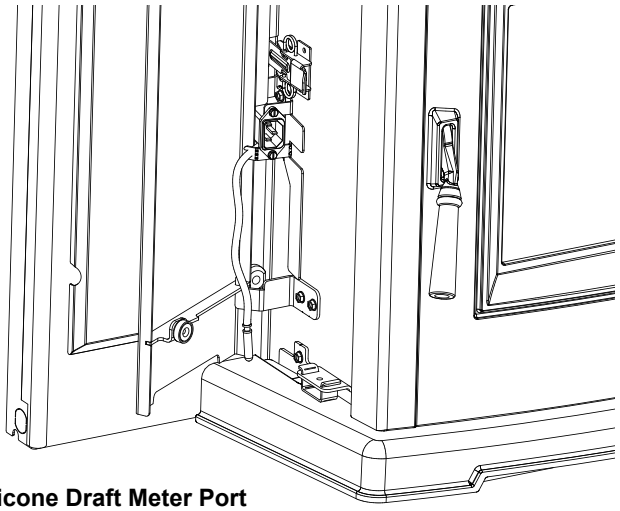
With the stove running on high you should have a negative pressure equal to or greater than the number given in the chart below. If you have a lower reading than you find on the chart, your appliance does not have adequate draft to burn the fuel properly.

Plug unit into a 120 VAC, 60 Hz outlet.

Go to the "Home Screen", the power icon should be gray. Press menu, on the first menu press "test".

The test screen has 4 component test modes. The second icon is for the combustion fan test.

One press of the icon turns the combustion fan to full line voltage. **(Note: During this test , the combustion fan will not achieve its top RPM of 3200 due to the density of the ambient air.)** All RPM displays could vary +/- 50 from that of the set RPM's. Allow several minutes for the fan motor to warm up.



Silicone Draft Meter Port
The Draft Test Port can be accessed from inside the left hand side door just below the power supply plug.

Figure 5.19

Press the icon a second time, the combustion fan will go to "Maximum" (as set in the ***Authorized Dealer Only*** area under the combustion fan icon)

The "Maximum" is factory set at 2900 RPM. Allow the RPM to stabilize and record the firebox draft Maximum.

Before Install: _____ IWC
After Install: _____ IWC

(Firebox Draft and Combustion Fan RPM Cont.)

Press the icon a third time, the combustion fan will go to "Minimum" (as set in the ***Authorized Dealer Only*** area under the combustion fan icon) allow the RPM to stabilize and record the firebox draft minimum.

Before Install: _____ IWC
After Install: _____ IWC

Cold Stove Draft:

2500 RPM Low -.20 and -.25
2900 RPM High -.45 and -.50

Leaving the test screen will end any tests in progress and goes back to whatever mode of operation it was set to on the home screen.

If the unit is not adjusted properly, it does not cause a safety concern. If the unit is adjusted too high, only efficiency is lost. If the unit is adjusted too low, the low draft pressure switch will not allow the feed motor or the igniter to operate.

G. Wireless Room Sensor

The Wireless Room Sensor was exclusively designed to communicate with the EASY Touch Controls on Forge & Flame pellet products. Simply place the wireless sensor up to 30 feet away, and enjoy the warmth of pellet heat exactly where you want it. The Wireless Room Sensor mounts on a wall wherever you want your heat measured.

The Wireless Room Sensor keeps your space within 1 degree of your set temperature. Simply sync to your EASY Touch Control (which takes about 20 seconds) and install with the provided screws.

Smart Features:

- After a power outage, the wireless room sensor resets the controls to the current time, allowing your heat schedule to resume automatically.
- Communicates to the EASY Touch Control every 17 seconds, keeping your set temperature as accurate as possible, all day, every day.
- Easily mount up to 30 feet away from the stove or insert on any interior wall (mounting hardware included).
- We provide two AA batteries with a life expectancy of more than a year.
- Track connection strength and battery levels on EASY Touch Control Diagnostic page 6 (Located on unit).
- Low Battery Warning messages will be seen on the home screen.
- If connection is lost due to a dead battery the stove continues operation by automatically switching to its back-up sensor when the batteries are dead, and will display a “replace batteries” message on the home screen of the EASY Touch Control).

The Wireless Room Sensor has light indicators to communicate the following:

- A green LED flashes when good communication is made to the display.
- An amber LED flashes when searching.
- A red LED flashes when searching in energy saving mode – this may occur when the appliance has been unplugged, or is experiencing an extended power loss.

6 Reference Material

A. Safety Reminders

When installing the P42i Pellet Insert, respect basic safety standards. Read these instructions carefully before you attempt to install or operate the P42i Pellet Insert. Failure to do so may result in damage to property or personal injury and may void the product warranty.

Consult with your local building code agency and insurance representative before you begin your installation to ensure compliance with local codes, including the need for permits and follow-up inspections.

CAUTION

This appliance must be vented to the outside.

Due to high temperatures, this stove should be placed out of traffic and away from furniture and draperies.

Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burn to skin and/or clothing.

Young children should be carefully supervised when they are in the same room as the stove.

Clothing and other flammable materials should not be placed on or near this stove.

Installation and repair of this stove should be done by a qualified service person. The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning will be required. It is imperative that control compartments, burners, and circulating air passageways of this stove be kept clean.

WARNING

MOBILE/MANUFACTURED HOME GUIDELINES DO NOT ALLOW INSTALLATION IN A SLEEPING ROOM.

CAUTION

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

CAUTION

THE STOVE IS HOT WHILE IN OPERATION.

KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.

WARNING

KEEP COMBUSTIBLE MATERIALS SUCH AS GRASS, LEAVES, ETC. AT LEAST 3 FEET AWAY FROM THE POINT DIRECTLY UNDER THE VENT TERMINATION.

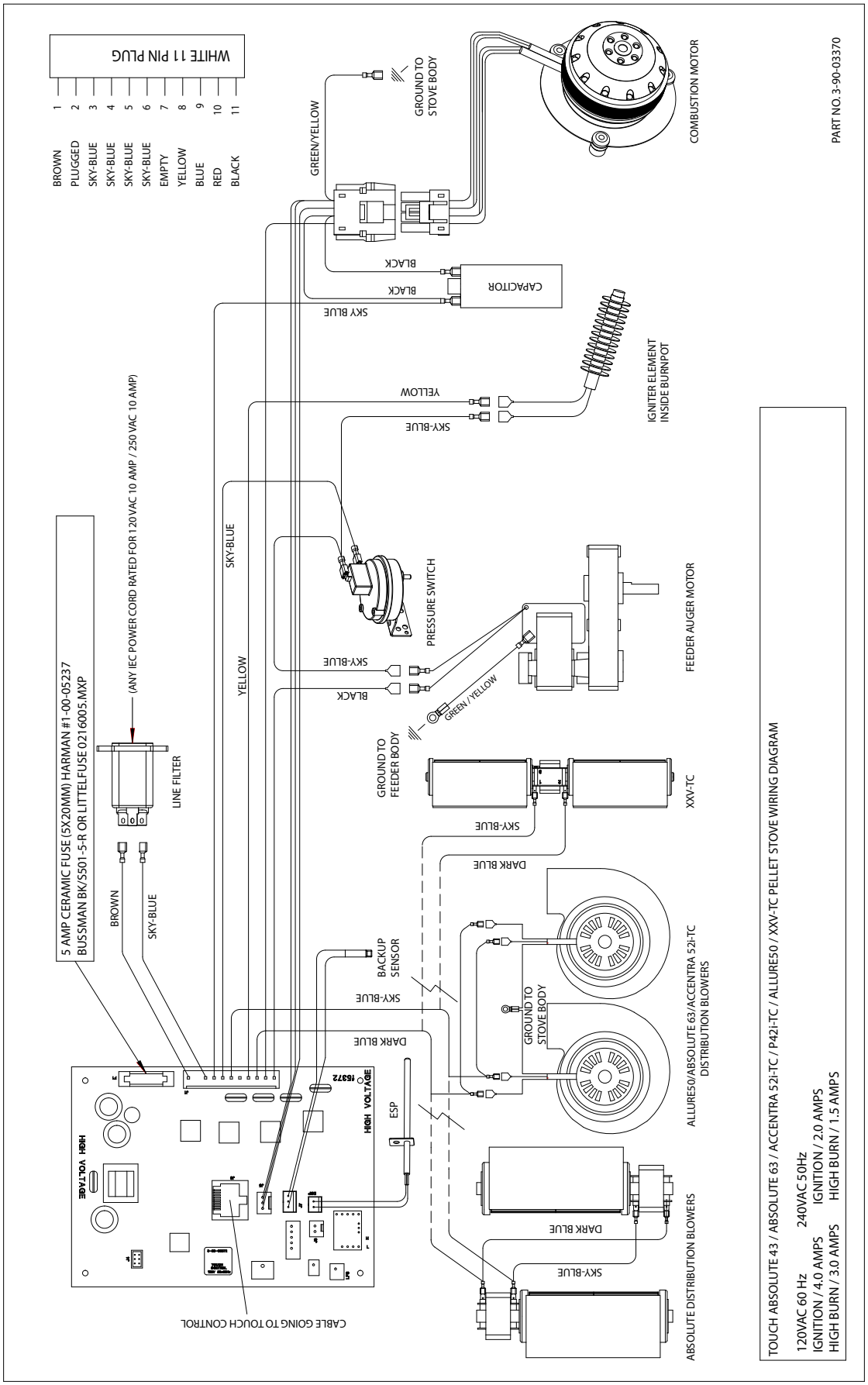
WARNING

USE OF IMPROPER FUELS, FIRE STARTERS OR ALTERING THE STOVE FOR HIGHER HEAT OUTPUT MAY CAUSE DAMAGE TO THE STOVE AND COULD RESULT IN A HOUSE FIRE. USE ONLY APPROVED FUELS AND OPERATION GUIDELINES

CAUTION

DO NOT USE MAKESHIFT COMPONENTS OR OTHER COMPROMISES WHEN INSTALLING THIS APPLIANCE.

B. Wiring Diagram



FORGE & FLAME

CONTACT INFORMATION

Hearth & Home Technologies
352 Mountain House Road
Halifax, PA 17032
Division of HNI INDUSTRIES

**Please contact your Forge & Flame dealer with any questions or concerns.
For the number of your nearest Forge & Flame dealer
log onto www.forgenflame.com**

CAUTION



DO NOT DISCARD THIS MANUAL

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



We recommend that you record the following pertinent information for your heating appliance.

Date purchased/installed:	
Serial Number:	Location on appliance:
Dealership purchased from:	Dealer Phone: 1( ) -
Notes:	

This product may be covered by one or more of the following patents: (United States) 5341794, 5263471, 6688302, 7216645, 7047962 or other U.S. and foreign patents pending.