

Installation Manual

Installation & Appliance Set-Up

INSTALLER: Leave this manual with party responsible for use and operation.

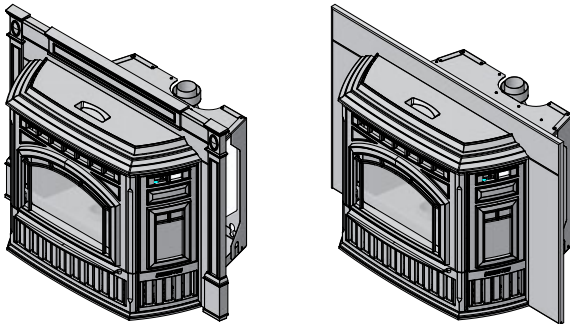
OWNER: Retain this manual for future reference.

NOTICE: DO NOT DISCARD THIS MANUAL

QUADRA-FIRE®

**TREKKER INSERT PELLET
APPLIANCE**

**MODEL(S):
TREKKERI-MBK
TREKKERI-CSB
TREKKERI-PMH**



CAUTION

Check building codes prior to installation.

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

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



WARNING



If the information in these instructions is not followed exactly, a fire could result causing property damage, personal injury, or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not over fire - If appliance or chimney connector glows, you are over firing. Over firing will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.



WARNING



HOT SURFACES!

Glass and other surfaces are hot during operation AND cool down. Hot glass will cause burns.

- Do not touch glass until it is cooled
- **NEVER** allow children to touch glass
- Keep children away
- **CAREFULLY SUPERVISE** children in same room as fireplace.
- Alert children and adults to hazards of high temperatures
- High temperatures may ignite clothing or other flammable materials.
- Keep clothing, furniture, draperies and other flammable materials away.



CAUTION

Tested and approved for wood pellets only. Burning of any other type of fuel voids your warranty.

NOTE

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

Pour obtenir une traduction française de ce manuel, s'il vous plaît contacter votre revendeur ou visitez www.quadrafire.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 appliance or to property.

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1 Important Safety Information

A. Appliance Certification

Model	Trekker Insert Pellet Appliance
Laboratory	OMNI Test Laboratories, Inc.
Report No.	061-S-84-2
Type	Solid Fuel Room Appliance, Pellet Fuel Burning Type
Standard	ASTM E1509-12, ULC-S628-93 and (UM) 84-HUD, Mobile Home Approved.
FCC	Complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

B. BTU & Efficiency Specification

Emissions Report Number:	0061PS094E
EPA Certification #:	98-17
EPA Certified Emissions:	0.74 g/hr
*LHV Tested Efficiency:	83.2%
**HHV Tested Efficiency:	77.9%
***EPA BTU Output:	12,682 - 39,428 / HR
****BTU Input:	16,396 - 50,775 / HR
Vent Size:	3, 4 or 6 inches, "L" or "PL"
Hopper Capacity:	52 lbs.
Fuel	Wood Pellets
* 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 HHV and the burn rates from the low and high EPA tests.	
****Maximum BTU input based on the high burn section of the EPA emissions test.	

NOTICE: This installation must conform with local codes. In the absence of local codes you must comply with the ASTM E1509-12, ULC S628-93, (UM) 84-HUD and ULC/ORD-C-1482.

This manual describes the installation of the Quadra-Fire, Trekker Insert pellet appliance. This appliance meets the 2020 U.S. Environmental Protection Agency's crib wood emission limits for wood heaters sold after May 15, 2020. Under specific test conditions this heater has been shown to deliver heat at rates ranging from 12,682 to 39,428 Btu/hr.

This pellet appliance needs periodic inspection and repair for proper operation. It is against federal regulations to operate this pellet appliance in a manner inconsistent with the operating instructions in the owner's manual.

Approved for ZC fireboxes.

C. Glass Specifications

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

D. Electrical Rating

115 VAC, 60 Hz, Start 2.9 Amps, Run 2.45 Amps

E. Mobile Home Approved

- This appliance is approved for mobile home installations when not installed in a sleeping room and when an outside combustion air inlet is provided.
- The structural integrity of the mobile home floor, ceiling, and walls must be maintained.
- The appliance must be properly grounded to the frame of the mobile home and use only Listed pellet vent Class "L" or "PL" connector pipe.
- Outside Air Kit, part OAK-3 must be installed in a mobile home installation.

F. Non-Combustible Materials

Material which will not ignite and burn, composed of any combination of the following:

- | | |
|-----------|------------|
| - Steel | - Concrete |
| - Plaster | - Tile |
| - Brick | - Glass |
| - Iron | - Slate |

Materials reported as passing ASTM E 136, Standard Test Method for Behavior of Metals, in a Vertical Tube Furnace of 750° C.

G. Combustible Materials

Material made of/or surfaced with any of the following materials:

- | | |
|--------------------|------------------------|
| - Wood | - Plastic |
| - Compressed Paper | - Plywood/OSB |
| - Plant Fibers | - Sheet Rock (drywall) |

Any material that can ignite and burn: flame proofed or not, plastered or non-plastered.

H. Sleeping Room

When installed in a sleeping room it is recommended that 3ft of vertical be installed prior to horizontally exiting the room and a smoke/CO alarm be installed in the bedroom. The size of the room must be at least 50ft³ per 1,000 Btu/hr stove input, if the stove exceeds the room size, out air must be installed.

I. California - Prop65



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 carbon black, which is known to the State of California to cause cancer, and carbon monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to: WWW.P65Warnings.ca.gov



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.
- Operating appliance without legs attached (if supplied with appliance).
- Do NOT Over fire - If appliance or chimney connector glows, you are over firing.

Any such action that may cause a fire hazard.

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.

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

Install Guide

2 Getting Started

A. Design, Installation & Location 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. Location of the appliance and chimney will affect performance.

Consideration must be given to:

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

When locating vent and venting termination, the ideal location is to vent above roof line when possible. This minimizes the affects of wind loading.

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

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

2. Floor Support

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

Ensure that your floor will support these weights prior to installation. Add sufficient additional support to meet this weight requirement prior to installation. The weight of the appliance is 510 lbs. with a full load of fuel the max weight is 557 lbs.



WARNING

Risk of Fire.

Damaged parts could impair safe operation. Do NOT install damaged, incomplete or substitute components.

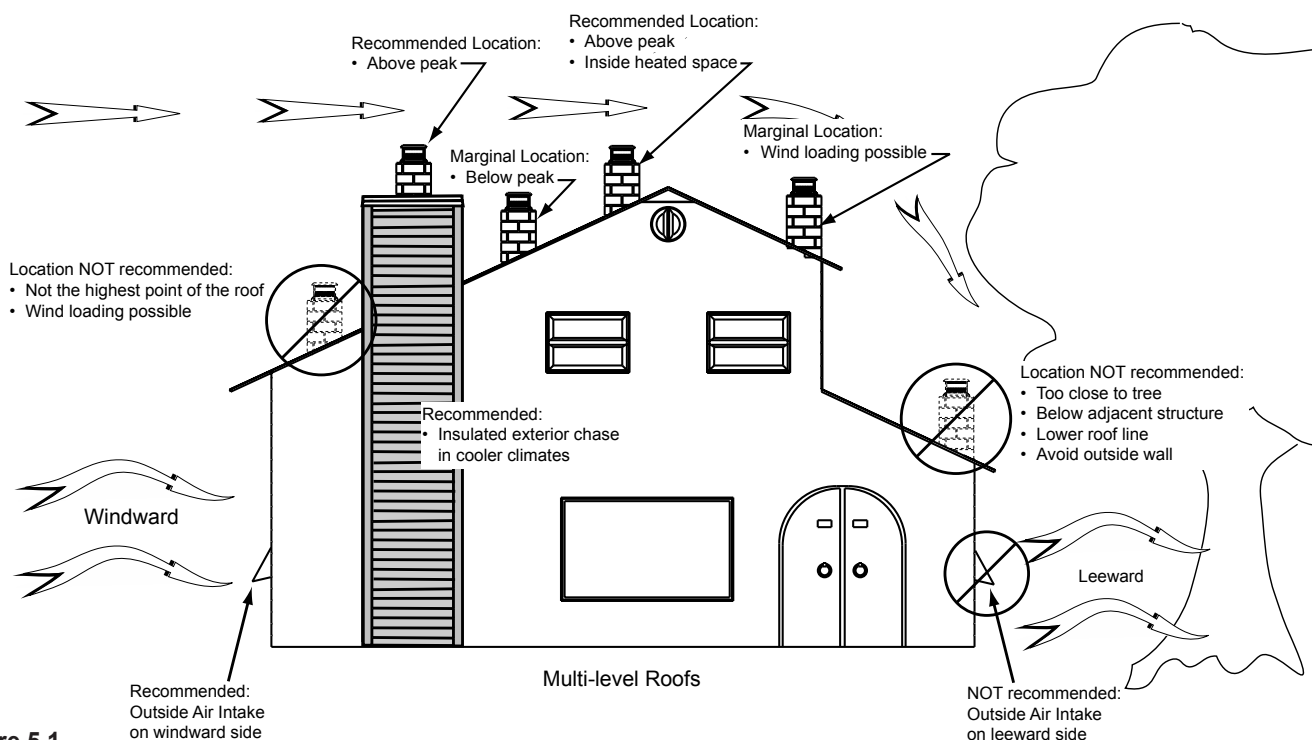


Figure 5.1

**WARNING****Risk of Fire!**

- Damaged parts could impair safe operation.
- Do NOT install damaged, incomplete or substitute components.

**WARNING**

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.
- Operating appliance without legs attached (if supplied with appliance).
- Do NOT Over fire

Or any such action that may cause a fire hazard.

C. Inspect Appliance and Components

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

NOTE: Upon removing the appliance from the fireplace a tag shall be permanently attached to the fireplace indicating it has been altered and should be inspected by a qualified person prior to re-use as a convectional fireplace (tag included in component pack).

B. Tools And Supplies Needed

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

- Reciprocating Saw
- Channel Locks
- Hammer
- Phillips Screwdriver
- Tape Measure
- Plumb Line
- 1/4" Self-Tapping Screws
- Framing Material
- Hi-temp Caulking Material
- Gloves
- Safety Glasses
- Framing Square
- Electric Drill & Bits (1/4")
- Level

May also need:

Vent Support Straps
Venting Paint

D. Install 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: _____
 Date Installed: _____
 Lot/Address: _____
 Location of Appliance: _____
 Installer: _____
 Dealer/Distributor Phone Number: _____
 Serial Number: _____
 Model Name: _____



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

Appliance Install

Verified clearance to combustibles.
 Appliance is leveled and connector is secured to appliance.
 Hearth extension size/height decided.
 Outside air kit installed.
 Floor protection requirements have been met.
 If appliance is connected to a masonry chimney, it should be cleaned and inspected by a professional. If installed to a factory built metal chimney, the chimney must be installed according to the manufacturer's instructions and clearances.

YES**IF NO, WHY?**
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Venting/Chimney

Chimney configuration complies with diagrams.
 Chimney installed, locked and secured in place with proper clearance.
 Chimney meets recommended height requirements (5 feet minimum vertical).
 Roof flashing installed and sealed.
 Terminations installed and sealed.

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Electrical

120 VAC unswitched power provided to the appliance.
 Check outlet with multi-meter for proper polarity and voltage (115-120 VAC).
 Record voltage reading: _____

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Clearances

Verified all clearances meet installation manual requirements.
 Mantels and wall projections comply with installation manual requirements.
 Floor protection and heart extensions installed per manual requirements.

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Appliance Setup

All protective materials removed.
 All labels have been removed from the door.
 All packaging materials are removed from inside/under appliance.
 Manual bag and all of its contents are removed from inside/under the appliance and given to the 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: _____
 Checked vacuum using a Manometer. Record readings: _____

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Hearth & Home Technologies recommends the following:

Photographing the installation and copying this checklist for your file.
 That 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)

3 Dimensions and Clearances

A. Appliance Dimensions

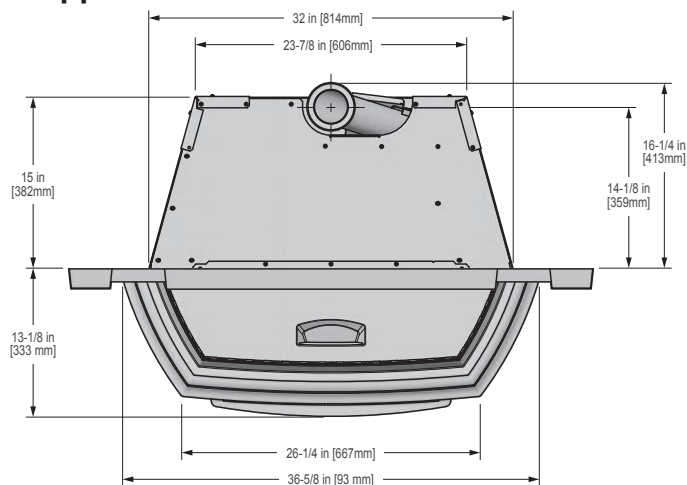


Figure 8.1 - Top View with Cast Panel Set

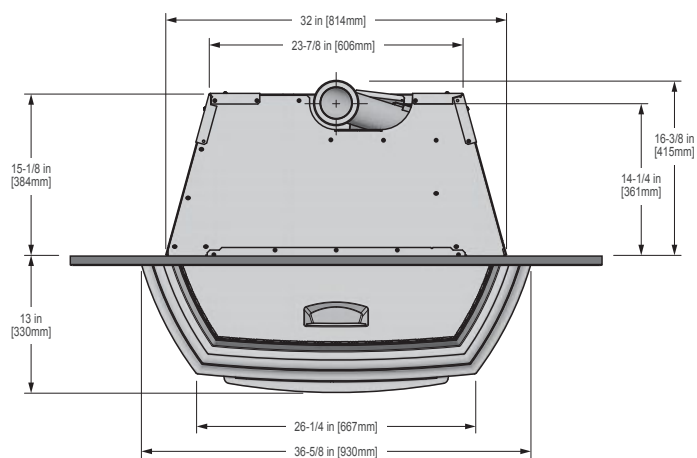


Figure 8.4 - Top View with Basic Surround Panel Set

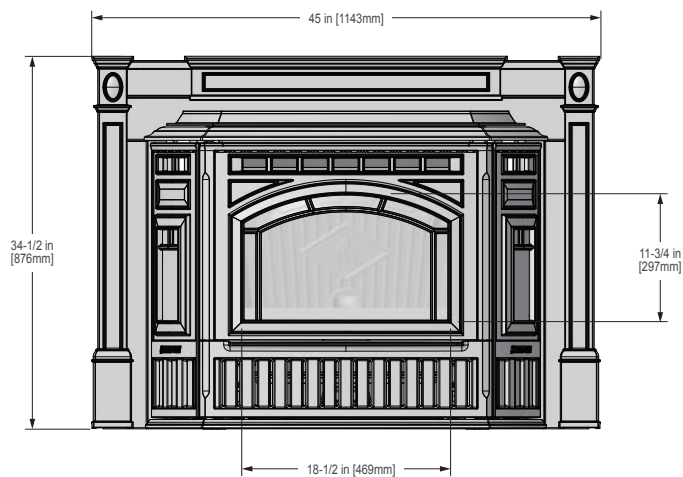


Figure 8.2 - Front View with Cast Panel Set

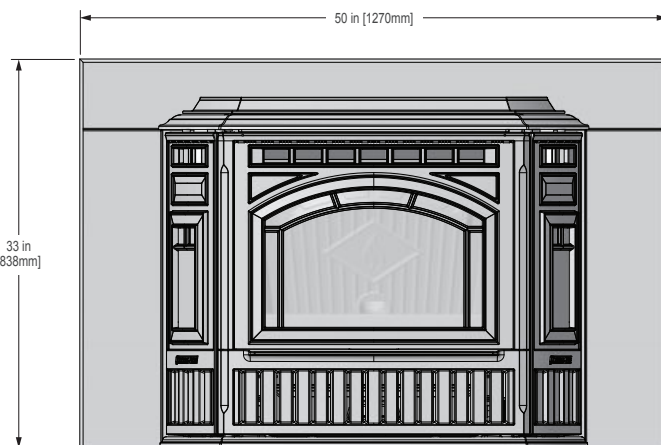


Figure 8.5 - Front View with Basic Surround Panel Set

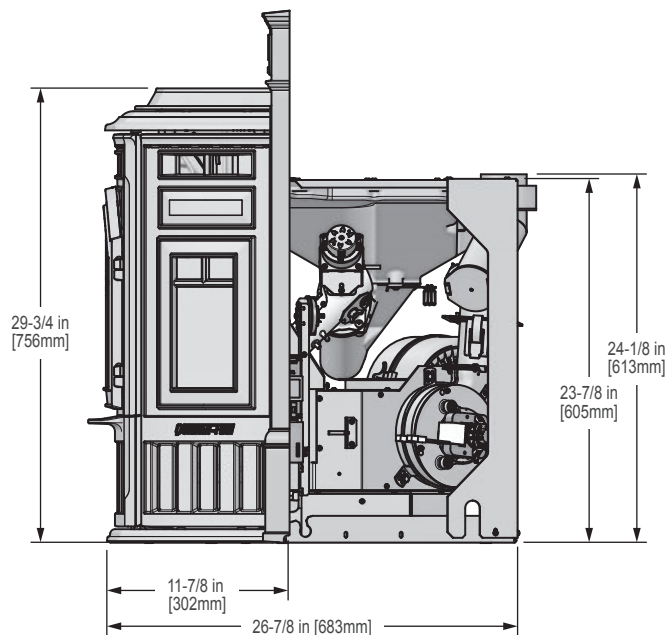


Figure 8.3 - Side View with Cast Panel Set

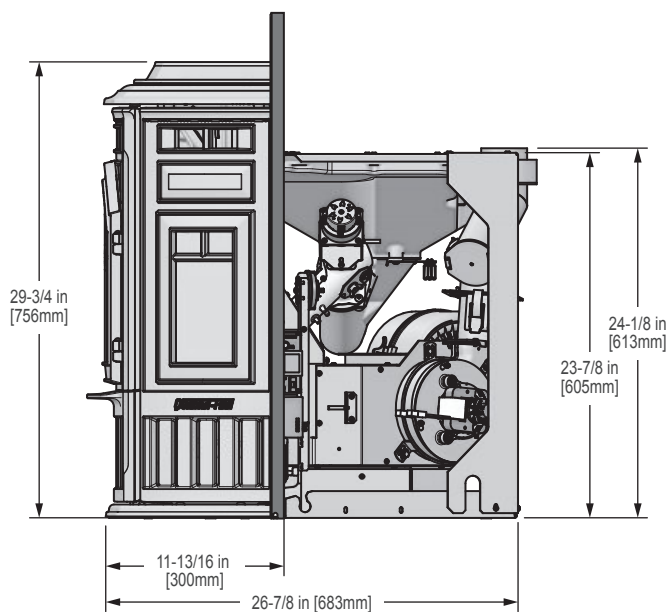


Figure 8.6 - Side View with Basic Surround Set

B. Clearance to Combustibles, US & CAN

Built-in Appliance - Rear Vent

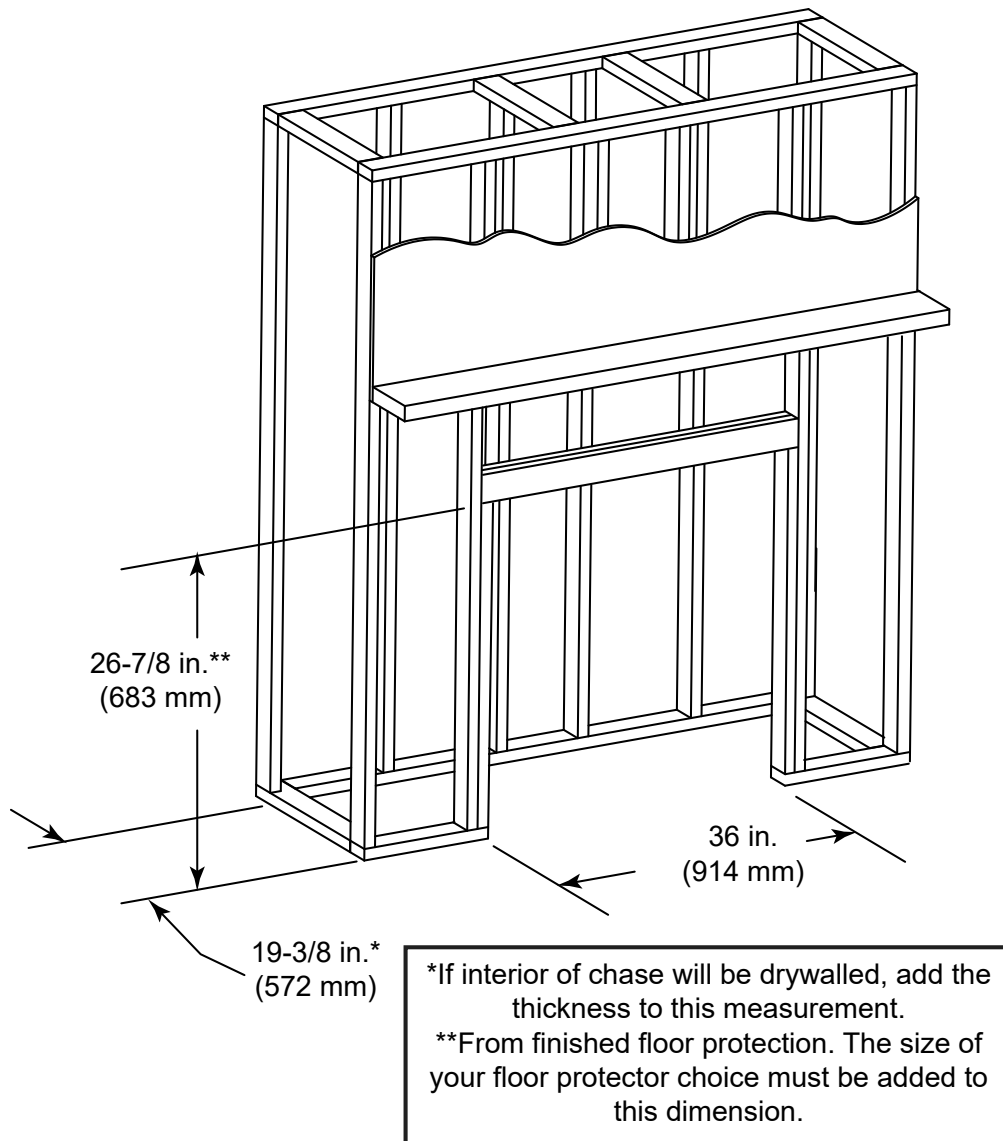


Figure 9.1



WARNING



Fire Risk.

- Comply with all minimum clearances to combustibles as specified.
- Failure to comply may cause house fire.

NOTE:

- 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.

Built-In Vertical

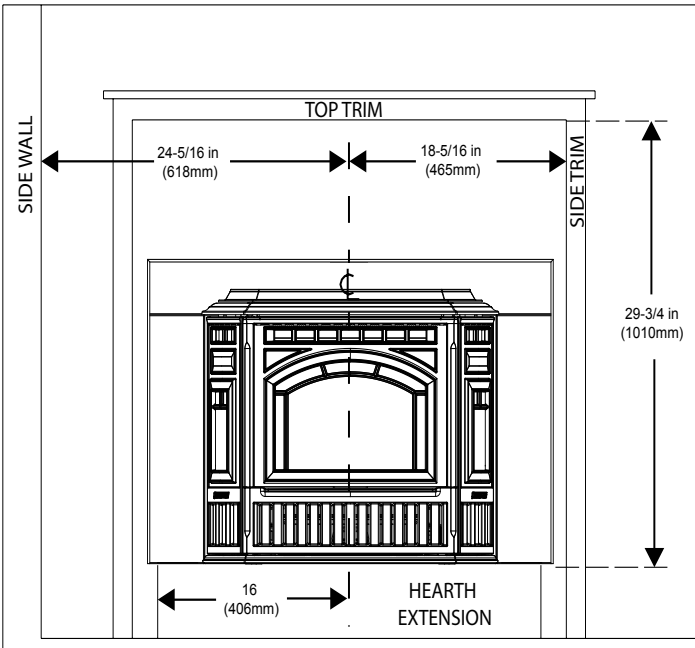


Figure 10.1

C. Minimum Opening for Masonry & ZC Fireplaces

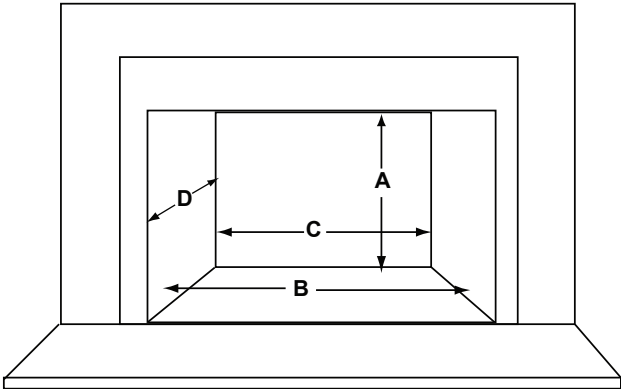


Figure 10.3

Minimum Opening Dimensions		Inches	Millimeters
A	Height	24-3/8	619
B	Front Width (Steel Panel Set)	32-1/4	819
	Front Width (Cast Panel Set)	32-1/4	819
C	Back Width	24-1/8	613
D	Depth (Steel Panel Set)	16-5/8	422
	Depth (Cast Panel Set)	16-1/4	413

D. Hearth Extension

Use a non-combustible ember floor protector, extending beneath the appliance and to the front, and to the sides as indicated in sub-section E. Floor Protection.

E. Floor Protection

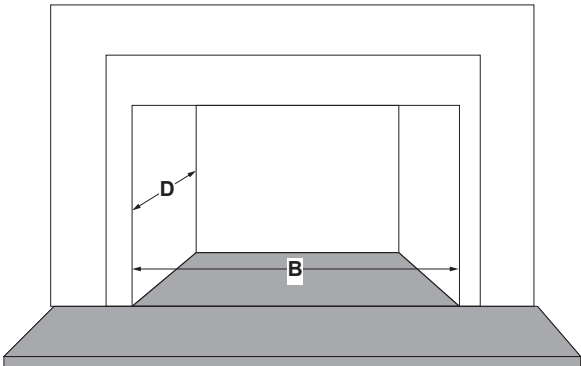


Figure 10.4

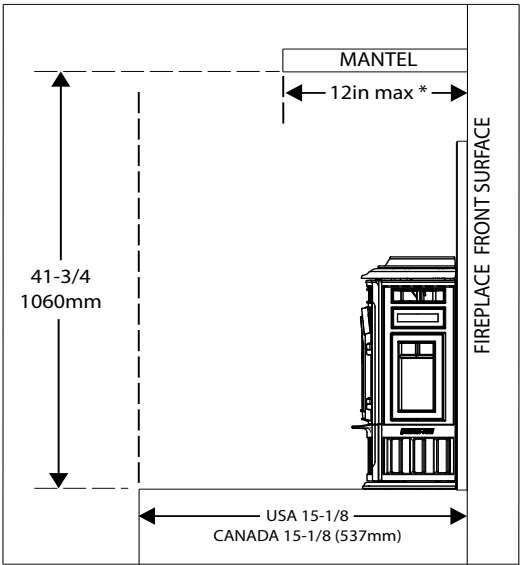


Figure 10.2

HEARTH EXTENSION
No thermal protection required
Ember protection only!

*If mantel depth is 10 inches or less, than the height from the hearth to the bottom of the mantel is 39-3/4 inches.

If employing a hearth extension, any parts or materials used in construction must be non-combustible.

F. Installation into a Factory-Built Fireplace

The following modifications are permissible:

- Removal of damper or locked in open position
- Removal of smoke shelf or baffle
- Removal of ember catches
- Removal of fire grate
- Removal of view screen/curtain
- Removal of doors
- Removal of factory-built fireplace floor
- External trim pieces which do not affect the operation of the fireplace may be removed providing they can be stored on or within the fireplace for reassembly if the insert is removed.
- The permanent metal warning label provided must be attached to the back of the fireplace, with screws or nails, stating that the fireplace may have been altered to accommodate the insert, and must be returned to original condition for use as a conventional fireplace (Figure 11.1).

WARNING

THIS FIREPLACE MAY HAVE BEEN ALTERED TO ACCOMMODATE AN INSERT. IT MUST BE RETURNED TO ITS ORIGINAL CONDITION BEFORE USE AS A SOLID FUEL BURNING FIREPLACE.

250-2061

Figure 11.1

- If the hearth extension is lower than the fireplace opening, the portion of the insert extending onto the hearth must be supported.
- Manufacturer designed adjustable support kit can be ordered from your dealer.

NOTE: Refer to chimney liner manufacturer for recommendations on supporting the liner. Installation into fireplaces without a permit will void the listing.

- The firebrick (refractory), glass doors, screen rails, screen mesh and log grates can be removed from a factory-built firebox in order to gain minimum insert opening requirements.
- Any smoke shelves, shields and baffles may be removed from a factory-built firebox if attached with mechanical fasteners.
- The metal floor of the factory-built firebox may be removed to facilitate the installation of the insert only when a 1 inch (25mm) airspace is provided between the insert and the floor of outer wrap.

The following is only one example as there are many different models of factory-built fireplaces.

NOTE: This example is for reference only. Any modifications must not compromise the structural integrity or reduce the protection for combustible materials.

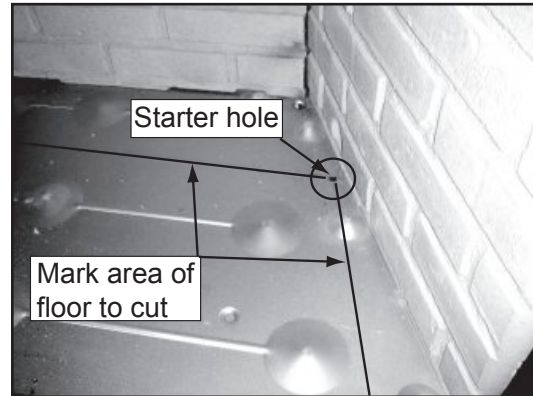


Figure 11.2 - Measure and mark the metal floor for cutting. With a drill, make a starter hole in each corner.

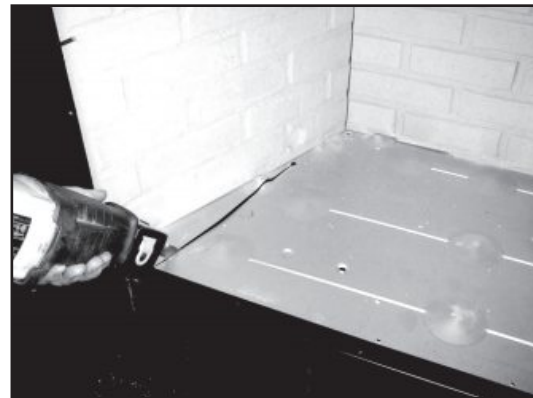


Figure 11.3 - Using a saws-all, cut out the floor.

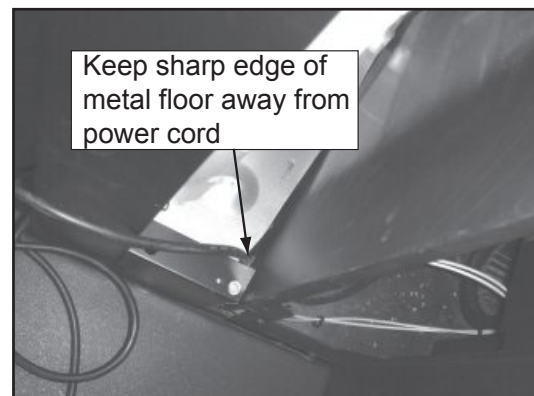


Figure 11.4 - Place the insert into the factory-built firebox. Ensure that the power cord can not be damaged by the sharp metal edge. You may need to cut out a notch to accommodate the cord.

G. Installation into a Masonry Fireplace

All modifications that can be made to a Factory Built Fireplace can be made to a Masonry Fireplace.

In addition **DO NOT** remove any brick or mortar from the existing fireplace.



WARNING

- Removing floor of fireplace must not weaken structure of firebox or reduce protection for combustible materials.
- Final approval of this installation type is contingent upon the appropriate local authority having jurisdiction.

H. Prefabricated Metal Chimney

The chimney can be new or existing, masonry or prefabricated and must meet the following minimum requirements:

- Must be minimum 6 inch (152mm) inside diameter of high temperature chimney listed to UL 103 HT (2100°F) or ULC-S628.
 - Must use components required by the manufacturer for installation.
 - Must maintain clearances required by the manufacturer for installation.
 - Refer to manufacturers instructions for installation
 - This insert is listed to ASTM E 1509-12 Standard and is approved for installation into listed factory-built zero clearance fireplaces listed to UL 127 conforming to the following specifications and instructions:
 - The original factory-built clearance fireplace chimney cap must be re-installed after installing the approved chimney liner meeting type UL 103 HT requirements (2100°F) per UL 1777.
 - 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.
 - The liner must be securely attached to the insert flue collar and the chimney top.
 - The air flow of the factory-built zero-clearance fireplace system must not be altered. The flue liner top support attachment must not reduce the air flow for the existing air-cooled chimney system.
 - No dilution air is allowed to enter the chimney.
1. Secure the fireplace damper in the open position. If this cannot be accomplished, it will be necessary to remove the damper.
 2. Seal damper area of chimney around chimney connector with a high temperature sealant or seal insert against the face of the fireplace.
 3. Both methods must be removable and replaceable for cleaning and re-installation.



WARNING



Risk of Fire!

Follow venting manufacturer's clearances and instructions when installing venting system.

NOTICE: In Canada when using a factory-built chimney it must be safety listed, Type UL103 HT (2100°F) [1149°C] CLASS "A" or conforming to CAN/ULC-S629M, STANDARD FOR 650°C FACTORY-BUILT CHIMNEYS.

4 Vent Information

A. Venting Termination Minimum Requirements

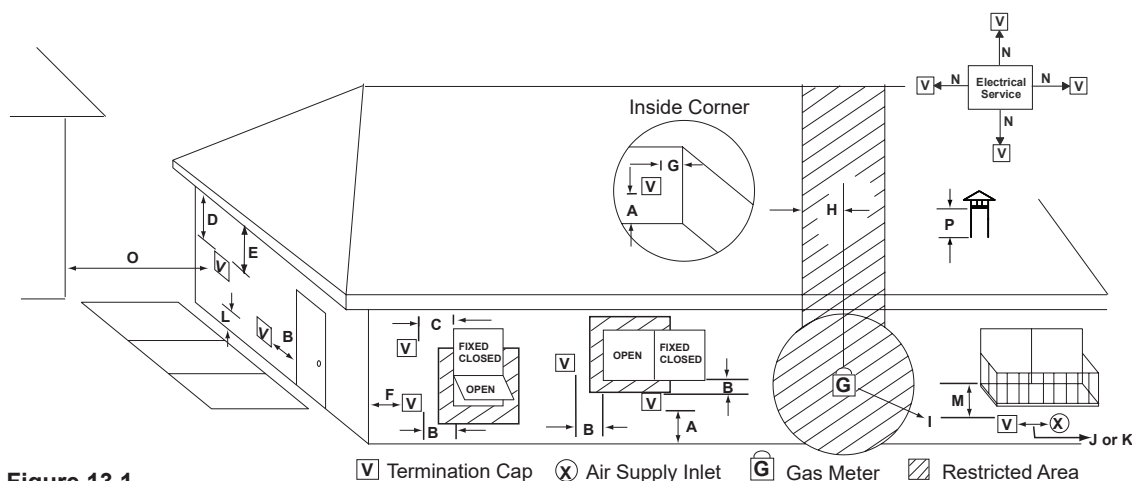


Figure 13.1

All minimum clearances are listed with an Outside Air Kit (OAK) installed, unless otherwise noted in table below.

A	12 in.	Above Finish Grade (the grade surface must be a non-combustible material)
B	12 in. 48 in. no OAK	Open door or window: below or to the side
B	12 in.	Open door or window: above
C	6 in.	Permanently closed window: above, below or to the side
D	18 in. 36 in. no OAK	Vertical clearance to a ventilated soffit located above the terminal within a horizontal distance of 2 ft from the center-line of the terminal
E	12 in.	Clearance to unventilated soffit
F	12 in.	Clearance to outside corner
G	12 in.	Clearance to inside corner
H	36 in.	Above gas meter/regulator measured from horizontal center-line of regulator
I	36 in. USA 72 in. Canada	Clearance to service regulator vent outlet
J	12 in. 48 in. no OAK	Clearance to non-mechanical air supply inlet to the building or the combustions air inlet to any other appliance
K	10 ft horizontal 3 ft vertical	Clearance to mechanical air supply
L	7 ft.	Above paved sidewalk, paved driveway located on public property
M	12 in.	Under an open veranda, porch, deck or balcony
N	See Note below*	Electric service: above, below or to the side (location must not obstruct or interfere with access)
O	24 in.	Adjacent building, fences and protruding parts of the structure
P	12 in.	Clearance above roof line for vertical terminations

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

24 in.	Above grass, top of plants, wood or any other combustible
12 in. 36 in. no OAK	Clearance from any forced air intake of other appliance
12 in.	Clearance horizontally from combustible wall
15 in.	Vented directly through a wall, minimum length of horizontal pipe
6 in. horizontal 12 in. vertical	Minimum horizontal or vertical terminations must protrude from wall

NOTICE

DO NOT TERMINATE VENT:

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

NOTICE

TERMINATION MUST EXHAUST ABOVE AIR INLET ELEVATION:

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

B. Avoiding Smoke and Odors

Negative Pressure, Shut-Down and Electrical Power Failure

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

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

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

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

Outside Air

An outside air kit (OAK-3) is recommended in all installations and must be ordered separately.

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

When the appliance is roof vented (strongly recommended):

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

When the appliance is side-wall vented:

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

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

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

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

Vent Configurations

When installing a pellet appliance with a horizontal vent configuration the frequency of power outages should be considered:

- Power outages during operation will cause the appliance to immediately turn off and may create conditions where smoke will back draft into the house. In order to reduce the likelihood of smoke back drafting into the house during a power outage, Hearth and Home Technologies strongly suggests:
 - Installing the pellet venting with a minimum vertical run of 5 feet (1.52m).
 - Installing the outside air kit at least 4 feet (1.22m) below the vent termination.

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

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



CAUTION

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

C. Negative Pressure



WARNING

Risk of Asphyxiation!

Negative pressure can cause spillage of combustion fumes and soot

Negative pressure results from the imbalance of air available for the 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 appliances 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

D. Draft

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

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

Considerations for successful draft include:

- Preventing negative pressure
- Location of appliance and chimney

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

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

E. Chimney and Exhaust Connection

1. **Chimney & Connector:** Use 3 or 4 inch (76-102mm) diameter type “L” or “PL” venting system. It can be vented vertically or horizontally.

NOTE: The appliance exhaust outlet is designed to accommodate 3 inch venting. Use of 4 inch venting requires the use of a 3-to-4 inch exhaust vent increaser in addition to any other venting components needed, sold separately.

2. **Mobile Home:** Approved for all Listed pellet vent. If using the 3 inch (76mm) vertical Top Vent Adapter Kit or the 3 to 6 inch (76-152mm) Top Vent Offset Adapter, use Listed double wall flue connector. A Quadra-Fire Outside Air Kit (OAK-3) must be used with manufactured home installations.
3. **Residential:** The 3 inch (76mm) vertical Top Vent Adapter Kit and the 3 to 6 inch (76-152mm) Top Vent Offset Adapter are tested to use 24 gauge single wall flue connector or Listed double wall flue connector to Class A Listed metal chimneys, or masonry chimneys meeting International Residential Code standards for solid fuel appliances.
4. **INSTALL VENT AT CLEARANCE SPECIFIED BY THE VENT MANUFACTURER.**
5. Secure exhaust venting system to the appliance with at least 3 screws. Also secure all connector pipe joints with at least 3 screws through each joint.
6. **DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS APPLIANCE.**
7. **DO NOT CONNECT THIS APPLIANCE TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.**

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



WARNING

USE ONLY RECOMMENDED VENTING COMPONENTS; OTHERWISE MAKESHIFT PARTS MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.

F. Equivalent Feet of Pipe

The table below can help you calculate the equivalent feet of pipe which is a method used to determine pellet vent size (Figure 16.1).



WARNING



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

Example of 3 Elbow-Rear Vent Termination Calculation

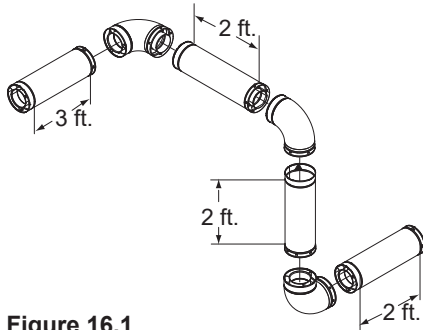


Figure 16.1

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

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

G. Pipe Selection Chart

The chart will help you in determining proper venting size according to the equivalent feet of pipe calculated previously and the altitude above sea level of this installation (Figure 16.2).

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

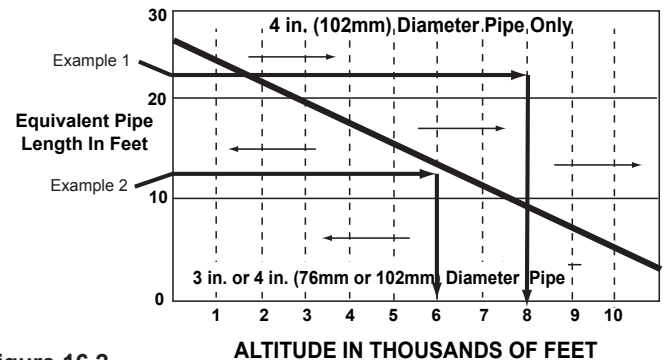


Figure 16.2

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

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

NOTICE

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



WARNING

Risk of Fire!

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



WARNING

Risk of Injury or Property Damage.

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



5 Venting Systems

A. Full Reline wit Outside Air - Horizontal



CAUTION

Never draw outside combustion air from:

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



WARNING

Fire Risk.

Inspection of Chimney:



- Masonry chimney must be in good condition.
- Meets minimum standard of NFPA 211
- Factory-built chimney must be a minimum 6 inch (152mm) UL103 HT.

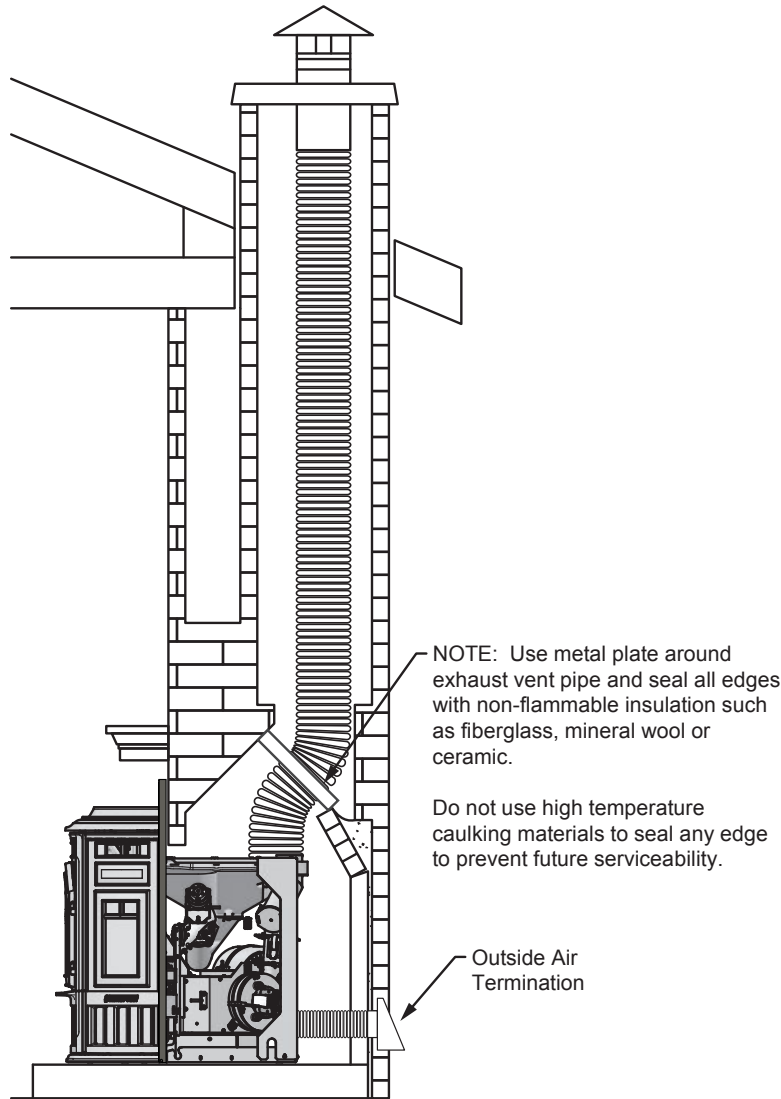


Figure 17.1

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

NOTE:

- 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.

B. Full Reline with Outside Air - Vertical

NOTE: Check clearances carefully for this type of installation to ensure adequate room for outside air venting.

NOTE: In Canada only a full reline is allowed per ULC S628, ORD ULC C1482-M1990.

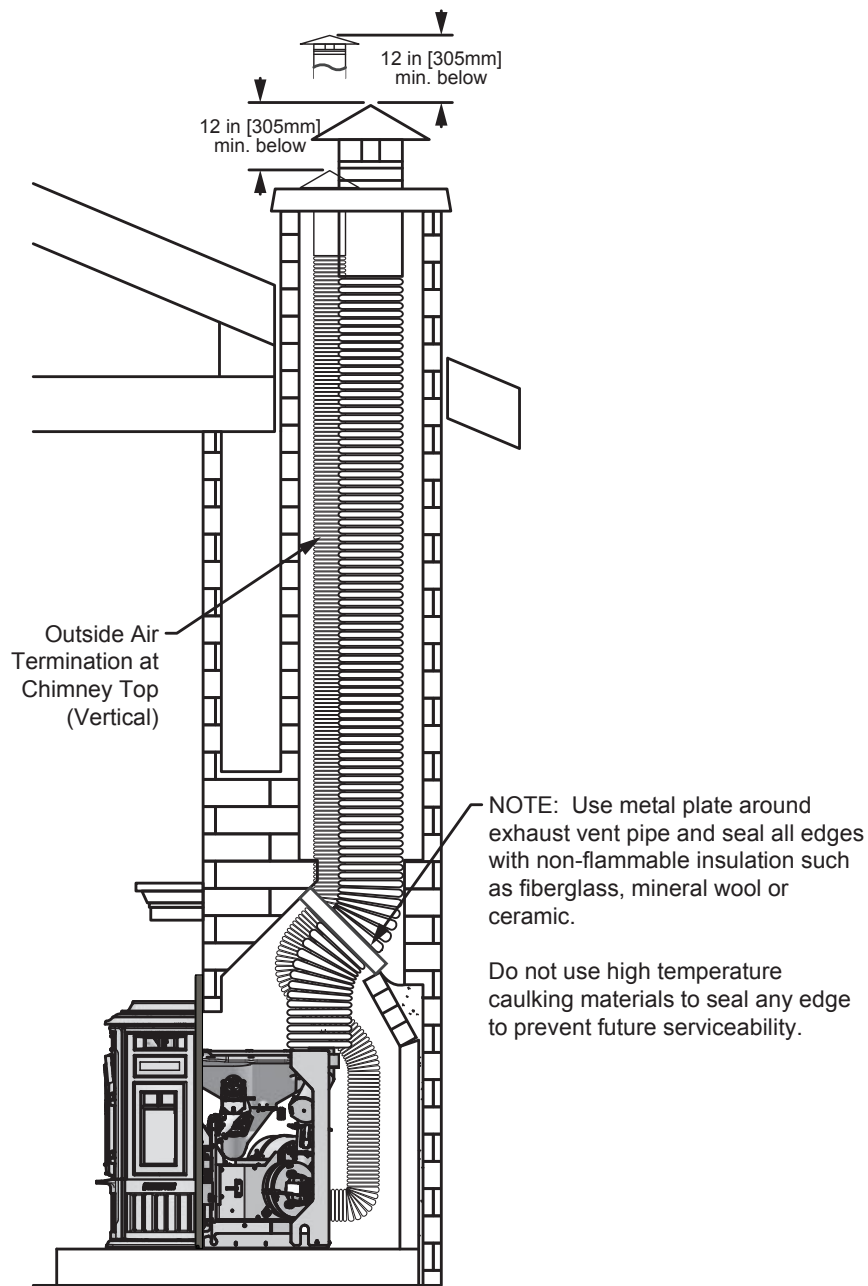


Figure 18.1

NOTE: In Canada this fireplace insert must be installed with a continuous chimney liner 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.



CAUTION

Check building codes prior to installation.

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

6 Appliance Set-Up

A. Leveling System

The leveling bolts are located on the sides of the appliance, front and rear. To access the bolts, remove the front access panels. Reach in and turn the bolt to the desired height to level the appliance (**Figure 19.1**).

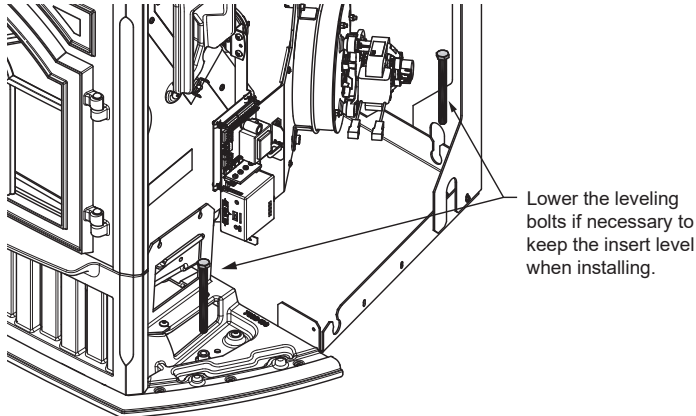


Figure 19.1

B. Outside Air Kit Instructions

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

3 INCH (76mm) ALUMINUM FLEX PIPE NOT INCLUDED

Tools Needed: Phillips head screw driver; wire cutters; hole saw or jig saw.

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



CAUTION

Never draw outside combustion air from:

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

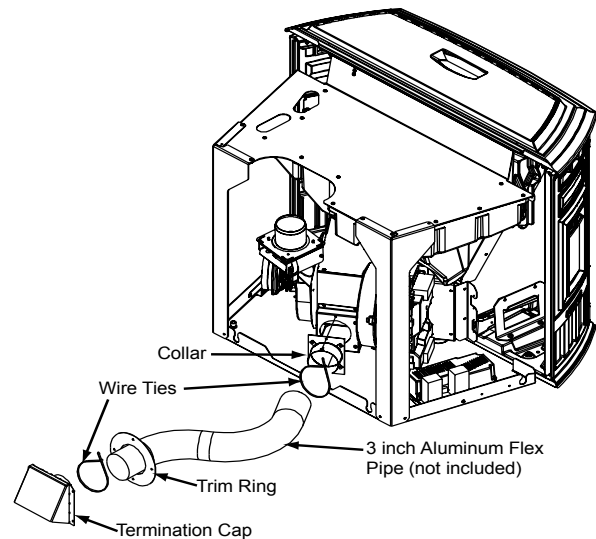


Figure 19.2 - OAK Exploded View

C. Hearth Support

Included in Kit: (1) bottom, (1) trim front, (2) trim sides, (2) trim extensions

Tools Needed: Phillips head screw driver, measuring tape, gloves

1. Remove contents from box and lay on protective surface to avoid scratching the paint.
2. Lay front and sides face down. Bend the tabs down toward the inside (**Figure 18.3**).
3. The side pieces are shipped flat. It is must easier to flex the sides into a bowed position before installing.
4. Lay the cast bottom face up. Attach the 2 sides FIRST and then the front piece (**Figure 19.1 on pg. 19**).
5. Turn the cast bottom right side up and attach the panel extensions. Note the alignment hole.
6. Attach the appropriate footers depending on the panels & trim set you are installing. The footers come in 2 sizes, 3 and 5 inches. Discard the footers not used.
7. Place the assembled hearth support under the insert. Lower the leveling bolts if necessary to keep the insert level.
8. Open the door and attach the hearth support to the insert. There are 9 attachment holes (**Figure 19.2 on pg. 19**).

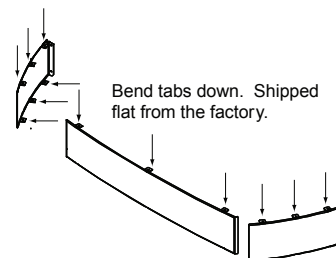


Figure 19.3

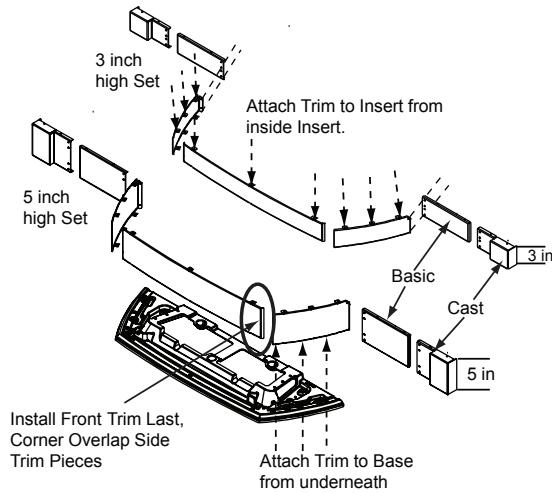


Figure 20.1

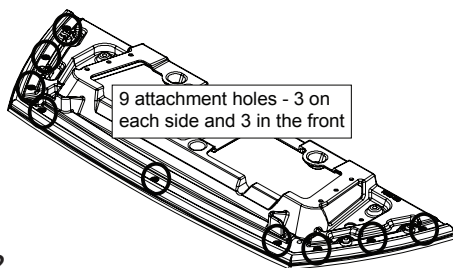


Figure 20.2

D. Removal of Cast Sides

Remove the cast side by releasing the upper, spring-loaded latch. Access the latch through the upper panel vent holes. The cast panel should fall forward. Lift it out of its lower nest and set the panel aside.

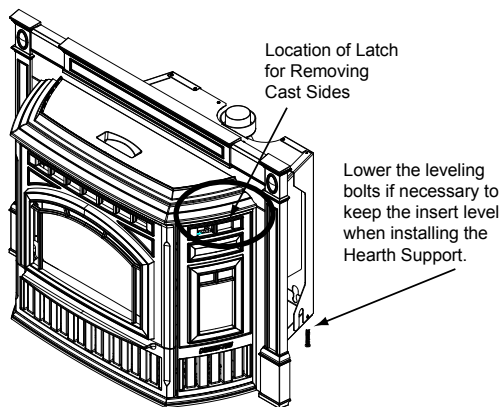


Figure 20.3 - Shown with Cast Panel Set

E. Surround & Cast Trim Set

Included in Surround Kit: (2) side panels, left and right; (1) panel top; (1) fastener package.

Included in Cast Trim Kit: (2) cast trim legs, left and right; (1) cast trim header; (2) cast trim footers, left and right; (1) fastener package.

Tools Needed: Powered Phillips head screw driver

1. Remove contents from box being careful not to scratch or damage the cast trim pieces.
2. Lay the surround set face down on protective covering to prevent scratching the painted surface.
3. Secure the surround legs to top panel with the screws provided.
4. Now bend the tabs down toward the backside of the panel set, 5 on top and 2 on each leg. Leave the panel set face down (**Figure 20.4**).
5. Place the corresponding cast trim pieces (2 cast trim legs and 1 cast trim header) underneath the panel set, also face down.
6. Place washer provided over tab and secure the trim and panel together with screw. Continue for all tabs.
7. Secure cast footers with screws.
8. Remove both left and right cast sides from insert (**See Figure 20.3**).
9. Carefully slide surround and trim over the top of the insert into place matching the mounting holes on the panel with the mounting holes on the insert. Secure with screws provided.

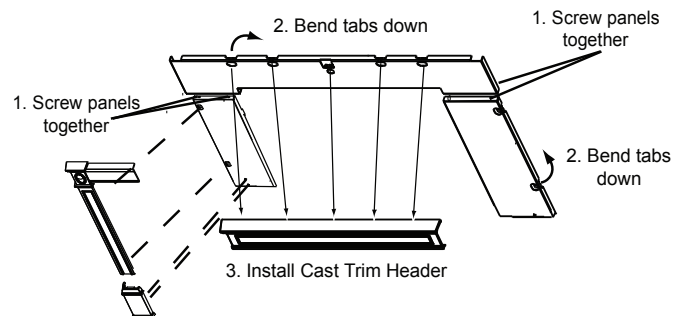


Figure 20.4

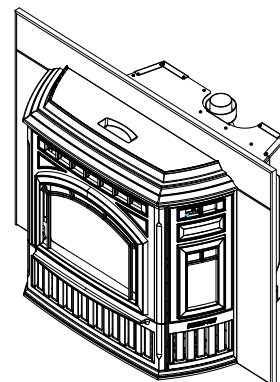


Figure 20.5- Completed View

F. Surround & Basic Trim Set

Included in Surround & Trim Kit: (2) corner brackets and set screws; (1) trim set, 3 piece; (2) side panels; (1) top panel; (4) screws.

Tools Needed: Powered Phillips head screw driver

1. Secure the top panel to the surround sides with the screws provided (**Figure 21.1**).
2. Assemble the trim with the (2) corner brackets provided (**Figure 21.2**).
3. Remove the 2 cast sides and slide the assembled trim over the assembled surround set (**Figure 19.3 on pg 19**).
4. Carefully slide surround and trim over the top of the insert into place matching the mounting holes on the panel with the mounting holes on the insert. Secure with screws provided (**Figure 21.3**).

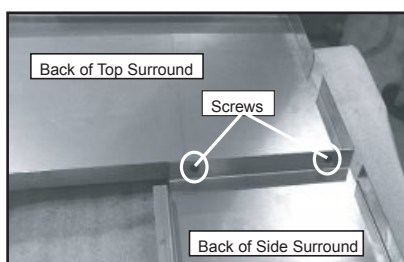


Figure 21.1

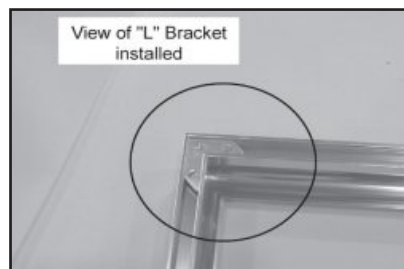
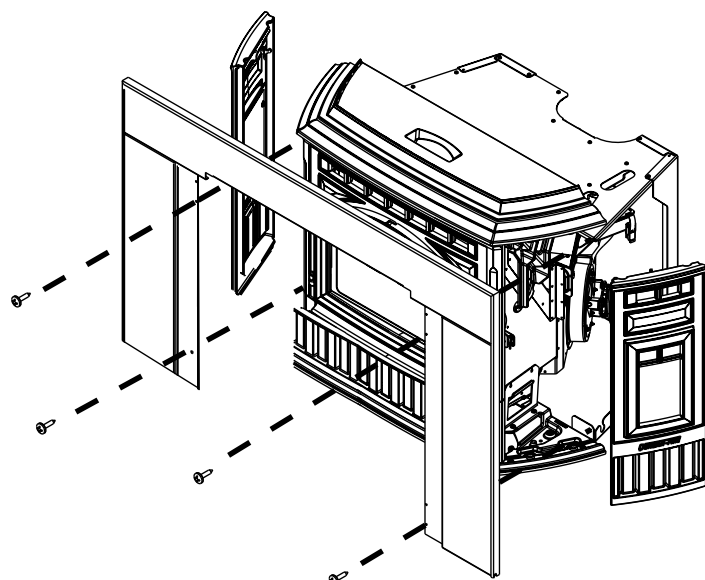


Figure 21.2



Shown with trim installed on panel set.

Figure 21.3

G. Optional Log Set Instructions

2 PIECE LOG SET INSTALLATION

1. Place the left log as shown. There are 2 indentations in the bottom of the log to fit over the screw heads in the firebox (**Figures 21.4 & 21.5**).
2. Place the right log in front of the 2 screw heads in the firebox (**Figures 21.6 & 21.7**).



CAUTION

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

NOTICE: Due to the abrasive nature of a pellet appliance fire, the logs are not covered under warranty. Any placement variation other than shown here can cause excessive heat and shall void the appliance warranty.

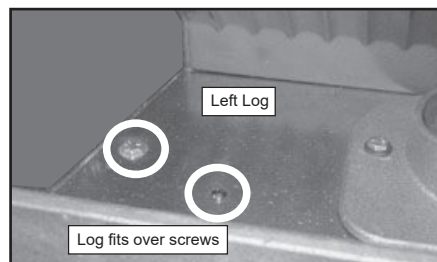


Figure 21.4

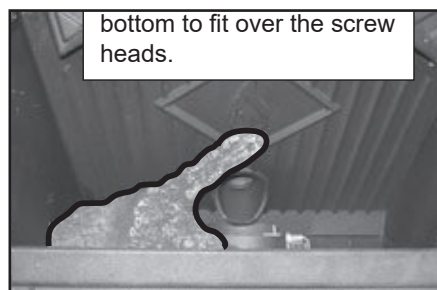


Figure 21.5

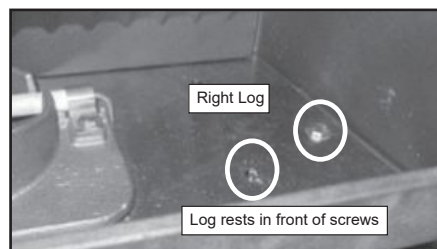


Figure 21.6



Figure 21.7

H. Installation of Bluetooth Key

Plug the Bluetooth key into the appliance (Figure 22.1).

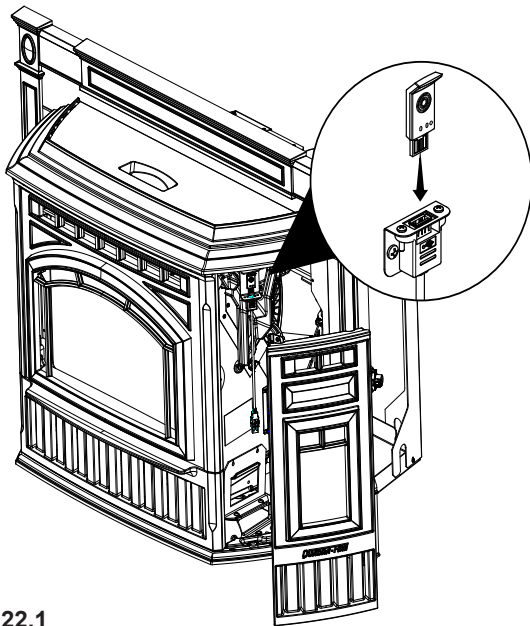


Figure 22.1

I. Power to Appliance and User Interface

1. Prior to installing the power cord, turn the user interface to OFF.
2. Make sure the wall receptacle has 120vac output.

NOTE: Using a circuit protector can protect the appliance circuits from power surges.

3. The appliance receptacle is located on its lower, back right hand corner. Install the cord to the appliance reception and to the wall (Figure 22.3).
 - This will cause the combustion blower to turn on for approximately 45 seconds and run a systems check.

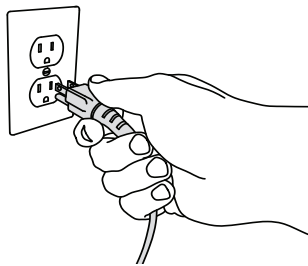


Figure 22.2



CAUTION

Shock hazard.



- Do NOT remove grounding prong from plug.
- Plug directly into properly grounded 3 prong receptacle.
- Route cord away from appliance.
- Do NOT route cord under or in front of appliance.

Install battery (Figure 22.4)

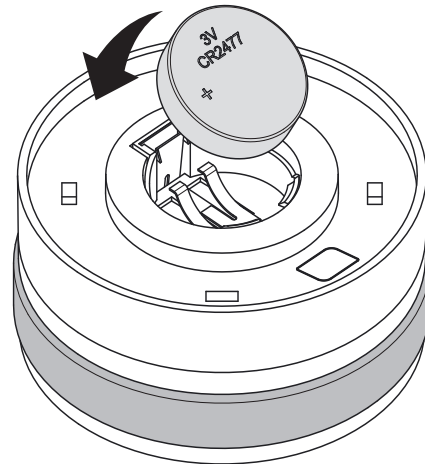


Figure 22.3

NOTE: See user interface manual on how to operate the user interface.

J. Location & Mounting of User Interface

- Make sure you have a reliable bluetooth connection
- Maximum distance of 30 foot radius from appliance
- On an interior wall
- 5 feet from the floor
- Not behind doors, bookcases or other objects
- Away from drafts and direct heat from the appliance

Mount base plate using screws and anchors provided using the level as a guide.

If necessary drill 3/16 holes for drywall or drill 7/32 for plaster.

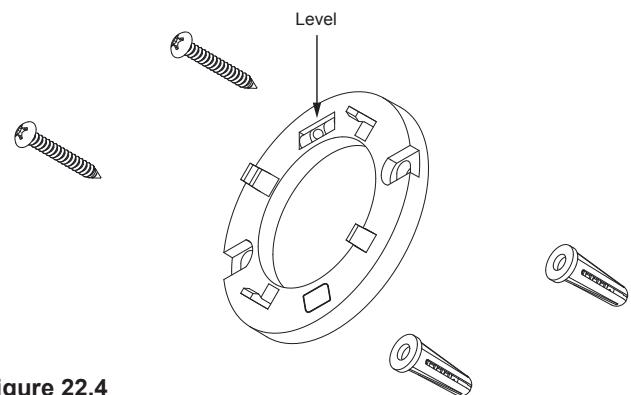


Figure 22.4

7 Mobile Home Installation

You must use a Quadra-Fire Outside Air Kit for installation in a mobile 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 mobile 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 requirements on page 8 for listings to combustibles and appropriate chimney systems.
6. Use silicone to create an effective vapor barrier at the location where the chimney or other component penetrates to the exterior of the structure.
7. Follow the chimney manufacturer's instructions when installing the vent system for use in a mobile home.
8. Installation shall be in accordance with the Manufacturers Home & Safety Standard (HUD) CFR 3280, Part 24.

Part Number: OAK-3

WARNING

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

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

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



CAUTION

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

Do NOT cut through:

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

This appliance is to be connected to a factory-built chimney conforming to CAN/ULC-S629, Standard for 650°C Factory-Built Chimneys.

For removal of the chimney for mobile home transportation, contact the proper transportation officials.

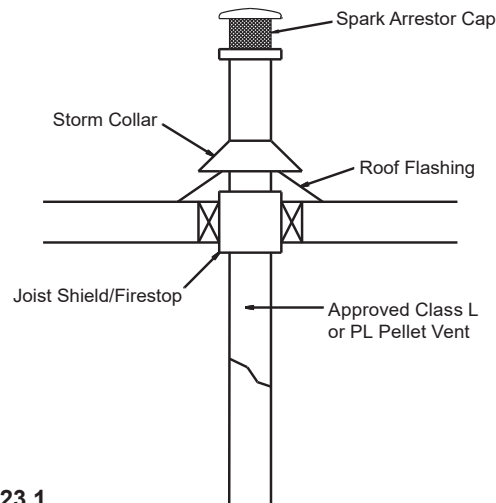


Figure 23.1



CAUTION

Never draw outside combustion air from:

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



WARNING

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

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



WARNING

NEVER INSTALL IN A SLEEPING ROOM.

[illegible]

TREKKER INSERT

[illegible]

B. Accessory List

QUADRA-FIRE® Service Parts

TREKKER INSERT

Beginning Manufacturing Date: June 2018

Ending Manufacturing Date: Active

IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.


**Stocked
at Depot**

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
Accessories				
	Adjustable Hearth Support		ADJSPT-12	Y
	Damper, 3 Inch - Tall Vertical Installs Only		PEL-DAMP3	Y
	Damper, 4 Inch - Tall Vertical Installs Only		PEL-DAMP4	
	Exhaust Probe		SRV7000-669	
	Log Set (2 Pc)	Sold as set only	LOGS-60-AE-B	Y
	Outside Air Kit		OAK-3	
	Top Vent Adapter		TPVNT-4	
	Surround, Std, Panel, For Cast Trim		SP-MTVS-CST	
	Component Pack		7036-041	
	Surround, Std, Panel, w/Gold Trim		SP-MTVS-GD	
	Component Pack		7036-042	
	Trim, Panel Set, Gold		SRV250-4660	
	Component Pack		7036-042	
	Trim Set, Black Nickel		7019-027	
	Bracket for Trim Installation		SRV7022-503G	
	Trim Cast	Matte Black	811-0930	
		Sienna Bronze	TR-CAST-CSB	
		Porcelain Mahogany	811-0960	
	Footer, Left	Matte Black	414-7090MBK	
		Sienna Bronze	414-7090CSB	
		Porcelain Mahogany	414-7090PMH	
	Footer, Right	Matte Black	414-7100MBK	
		Sienna Bronze	414-7100CSB	
		Porcelain Mahogany	414-7100PMH	
	Header	Matte Black	414-7110MBK	
		Sienna Bronze	414-7110CSB	
		Porcelain Mahogany	414-7110PMH	
	Trim Leg, Left	Matte Black	414-7120MBK	
		Sienna Bronze	414-7120CSB	
		Porcelain Mahogany	414-7120PMH	
	Trim Leg, Right	Matte Black	414-7130MBK	
		Sienna Bronze	414-7130CSB	
		Porcelain Mahogany	414-7130PMH	



CONTACT INFORMATION

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

Please contact your Quadra-Fire dealer with any questions or concerns.
For the number of your nearest Quadra-Fire dealer
log onto www.quadrafire.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.

**DO NOT
DISCARD**

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.

