

Installation Manual

Installation & Appliance Set-Up

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

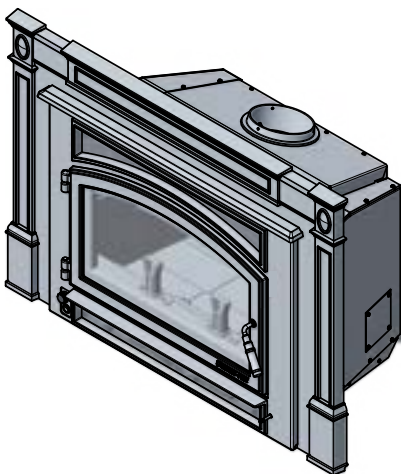
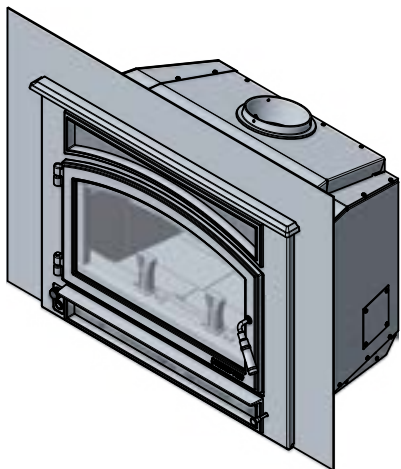
OWNER: Retain this manual for future reference.

NOTICE: DO NOT DISCARD THIS MANUAL

QUADRA-FIRE®

**EXPEDITION II AUSTRALIAN
WOOD INSERT
AUTOMATIC COMBUSTION
CONTROL (ACC)**

**MODEL NUMBER:
EXPEDITIONII-AU**



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 and appliance will cause burns.

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

WARNING



Fire Risk.

For use with solid wood fuel only. Other fuels may over fire and generate poisonous gases (i.e. carbon monoxide).



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.

TABLE OF CONTENTS

1 Important Safety Information

A. Insert Certification 3
 B. BTU & Efficiency Specifications 3
 C. Glass Specifications 3
 D. Non-Combustible Materials 3
 E. Combustible Materials 3

2 Getting Started

A. Design and Installation Considerations 4
 B. Fire Safety 4
 C. Negative Pressure 5
 D. Tools And Supplies Needed 5
 E. Inspection of Appliance and Components 5
 F. Install Checklist 6

3 Dimensions and Clearances

A. Appliance Dimensions 7
 → B. Clearances to Combustibles 9

4 Chimney Systems

A. Locating Your Appliance & Chimney 12
 B. Minimum Height of Flue System Exit 13
 C. Chimney Termination Requirements 13
 D. Venting Systems 14
 E. Inspections 14
 F. Larger Chimneys 14
 G. Masonry Chimney 15
 H. Install into a Masonry Fireplace 16
 I. Install Into a Factory Built Fireplace 16
 J. Securing Chimney Components 16
 K. Altering the Fireplace 16
 L. Zero-Clearance Fireplace 17
 M. Ovalizing Round Stainless Steel Liners 17
 N. Chimney Height / Rise and Run 17

5 Appliance Set-Up

A. Outside Air Kit 18
 B. Stove Pipe or Liner to Flue Collar 19
 C. Optional Offset Adapter 19
 D. Power Cord 19
 E. Appliance to Stove Pipe or Liner 19
 F. Flat Surround 20
 G. Flat Surround with Trim Kit 21
 H. Standard Surround & Cast Trim Kit 22

6 Reference Materials

A. Service and Maintenance Log 23
 B. Service Parts List 25

→ = Contains updated information

1 Important Safety Information

A. Insert Certification

Model:	EXPEDITIONII-AU
Laboratory:	ASFT
Report No:	ASFT20046
Type:	Hardwood only at 25% dry basis
Standard:	AS/NZS4013 for Hardwood

B. BTU & Efficiency Specifications

Overall Average Efficiency Burning Hardwood (AS/NZS 4014)	61%
Average Particulate Emission Factor Burning Hardwood (AS/NZS 4014)	1.3 g/kg
Maximum Average Heat Output Burning Hardwood	8.5 kW
Wetback	Wetbacks are NOT an approved option and must not be fitted.
Vent Size:	6 inches
Firebox Size:	56.65 Litres
Recommended Wood Length:	457 mm
Fuel Orientation:	Side to Side
Approved Fuel	Hardwood only with a Moisture content less than 25% (dry basis)

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.

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.

Hearth & Home Technologies WILL NOT warranty appliances that exhibit evidence of over firing. Evidence of over firing includes, but is not limited to:

- Warped air tube
- Deteriorated refractory brick retainers
- Deteriorated baffle and other interior components

D. Non-Combustible Materials

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

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

E. Combustible Materials

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

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

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

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

The Quadra-Fire Expedition II Australian Wood Insert is Hardwood Certified. Hardwood Particulate Emissions equaling 1.3 g/kg with a Space Heating Efficiency of 61%.

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

2 Getting Started

A. Design and Installation Considerations


Consideration must be given to:


- Safety
- Convenience
- Traffic flow
- Chimney and chimney connector required

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

We recommend that a qualified building inspector and your insurance company representative review your plans before and after installation.

If this appliance is in an area where children may be near it is recommended that you purchase a decorative barrier to go in front of the appliance. Remember to always keep children away while it is operating and do not let anyone operate this appliance unless they are familiar with these operating instructions.

 CAUTION
Check building codes prior to installation. <ul style="list-style-type: none">• Installation MUST comply with local, regional, state and national codes and regulations.• Consult insurance carrier, local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.

 WARNING
Asphyxiation Risk. <ul style="list-style-type: none">• Do NOT connect this appliance 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.

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

- Inadequate draft due to environmental conditions
- Down drafts
- Tight sealing construction of the structure
- Mechanical exhausting devices
- Over drafting caused by excessive chimney heights
- Ideal performance is with height of chimney between 14-16 feet (4.26-4.88m) measured from the base of the appliance.

B. Fire Safety



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

1. Install at least one smoke detector on each floor of your home to ensure your safety. They should be located away from the heating appliance and close to the sleeping areas. Follow the smoke detector manufacturer's placement and installation instructions, and be sure to maintain regularly.
2. A conveniently located Class A fire extinguisher to contend with small fires resulting from burning embers.
3. A CO detector should be installed in the room with the appliance.
4. A practiced evacuation plan, consisting of at least two escape routes.
5. A plan to deal with a chimney fire as follows:

In the event of a chimney fire:

- a. Evacuate the house immediately
- b. Notify fire department.

C. Negative Pressure

 WARNING	
	Asphyxiation Risk. <ul style="list-style-type: none">• Negative pressure can cause spillage of combustion fumes, soot and carbon monoxide.• Appliance needs to draft properly for safety.



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 optional 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
- Basement installations should be avoided

 WARNING	
	Fire Risk. <p>Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:</p> <ul style="list-style-type: none">• 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).• <u>Do NOT Over fire</u> - If appliance or chimney connector glows, you are over firing. <p>Any such action that may cause a fire hazard.</p>



D. Tools And Supplies Needed

Before beginning the installation be sure the following tools and building supplies are available:

- Reciprocating saw
- Pliers
- Hammer
- Phillips screwdriver
- Flat blade screwdriver
- Plumb line
- Level
- Misc. screws and nails
- Framing material
- High temp caulking material
- Gloves
- Framing square
- Electric drill and bits
- Safety glasses
- Tape measure
- 7/16 socket or wrench
- 1/2-3/4 in. length, #6 or #8 self-drilling screws

E. Inspection of Appliance and 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	
	Fire Risk. <p>Inspect appliance and components for damage. Damaged parts may impair safe operation.</p> <ul style="list-style-type: none">• Do NOT install damaged components.• Do NOT install incomplete components.• Do NOT install substitute components. <p>Report damaged parts to dealer.</p>

F. 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 #: _____
 Serial #: _____
 Model: _____

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

Appliance Install

Verified clearances 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?
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____

Chimney

Chimney configuration complies with diagrams.
 Chimney installed, locked and secured in place with proper clearance.
 Chimney meets recommended height requirements (14-16 feet).
 Roof flashing installed and sealed.
 Terminations installed and sealed.

<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____

Clearances

Combustible materials not installed in non-combustible areas.
 Verified all clearances meet installation manual requirements.
 Mantels and wall projections comply with installation manual requirements.
 Protective hearth strips and hearth extension installed per manual requirements.

<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____

Appliance Setup

All packaging and protective materials removed.
 Firebrick, baffle and ceramic blanket installed correctly.
 All labels have been removed from the door.
 All packaging materials are removed from inside/under the 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.

<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____

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

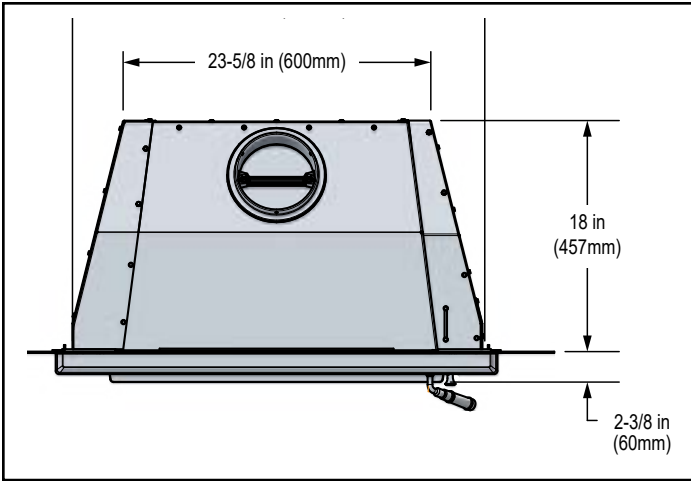


Figure 3.1 - Top View with Flat Surround

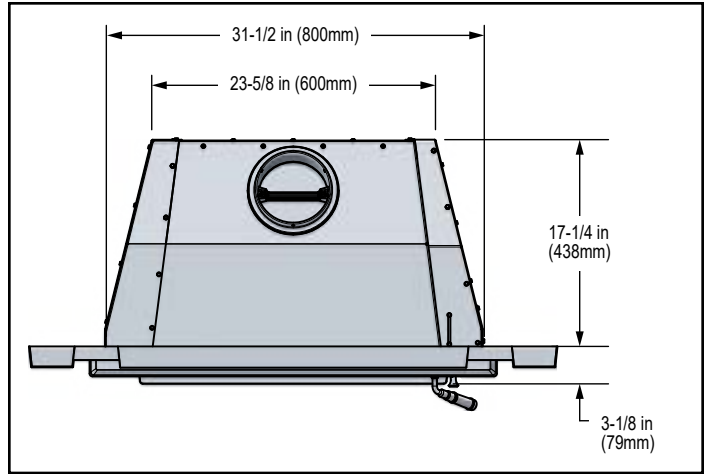


Figure 3.4 - Top View with Cast Surround

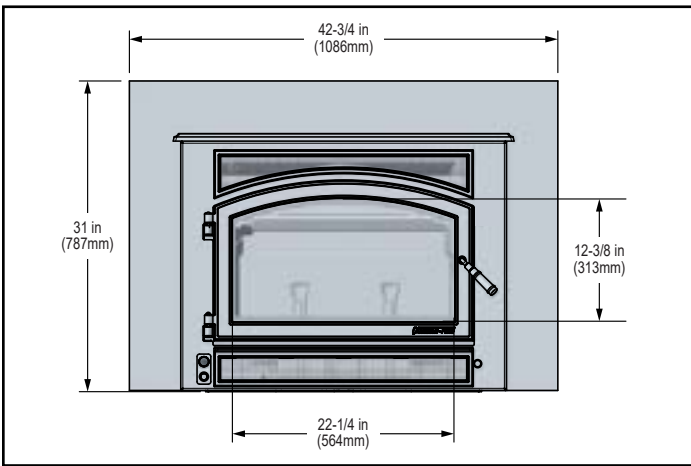


Figure 3.2 - Front View with Small Flat Surround (SP2-4331)

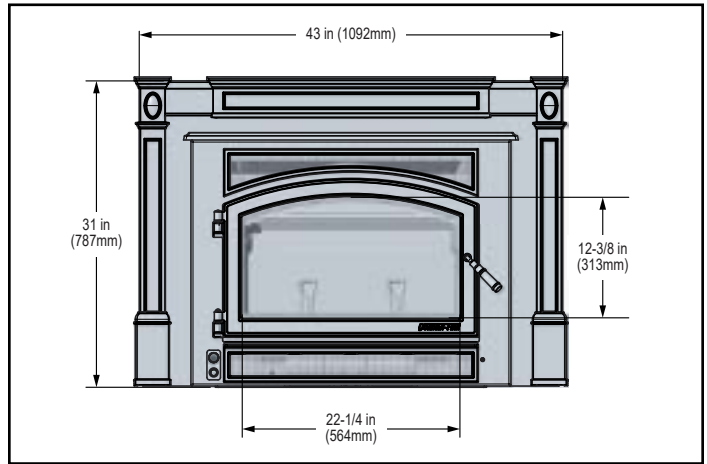


Figure 3.5 - Front View with Small Flat Surround (CT2-4331) with Cast Trim (811-0930)

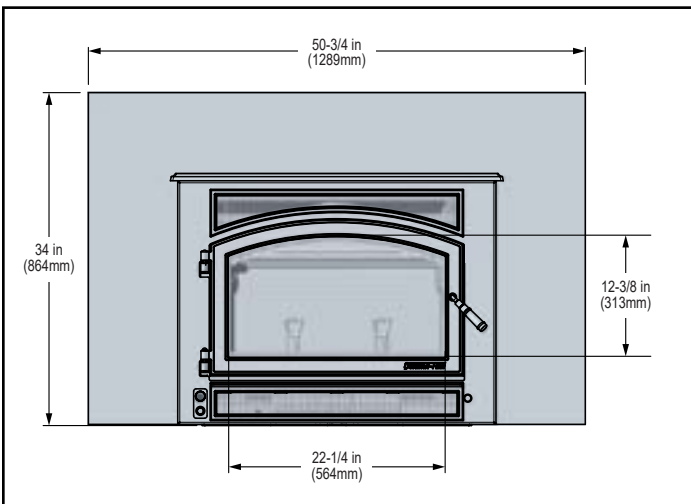


Figure 3.3 - Front View with Large Flat Surround (SP2-5134)

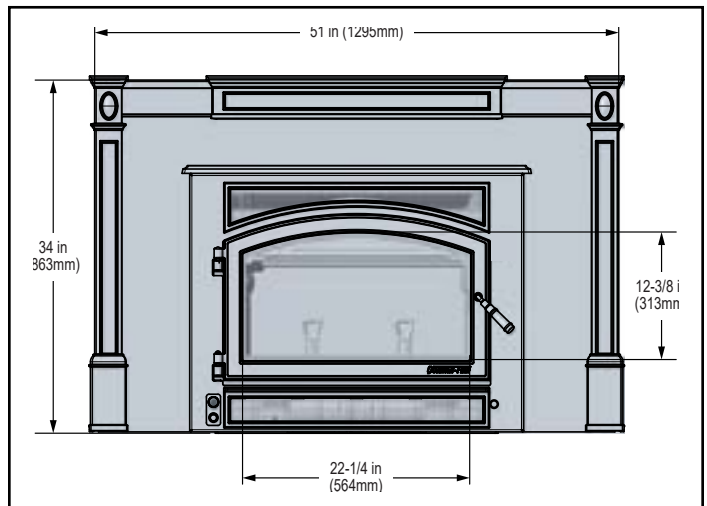


Figure 3.6 - Front View with Large Flat Surround (CT2-5134) with Cast Trim (811-0930)

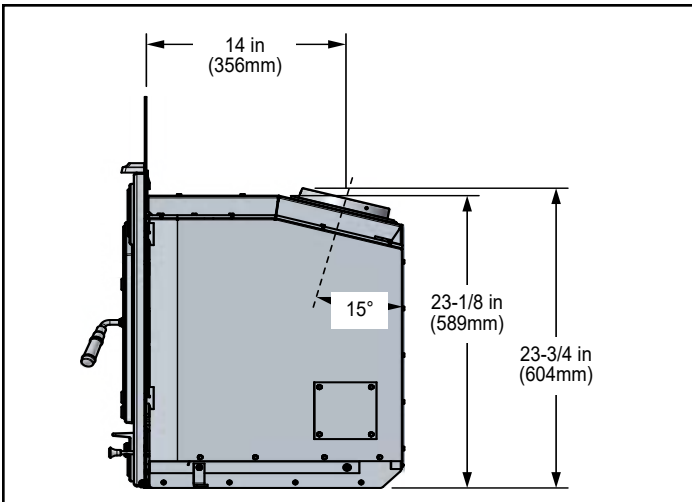


Figure 3.7 - Side View with Flat Surround

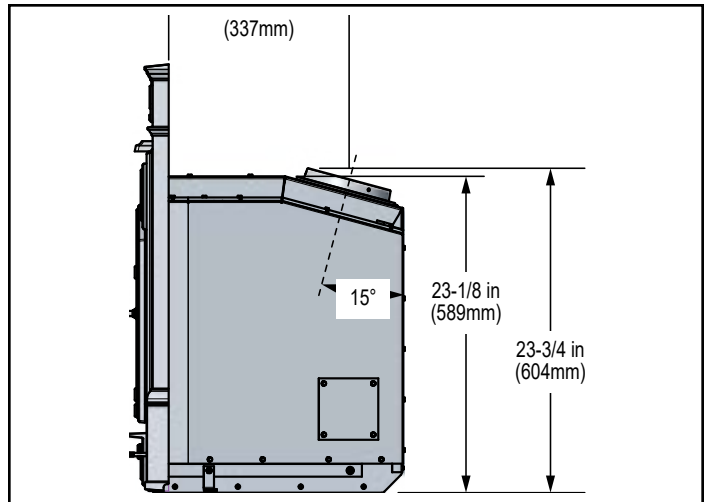


Figure 3.10 - Side View with Cast Surround

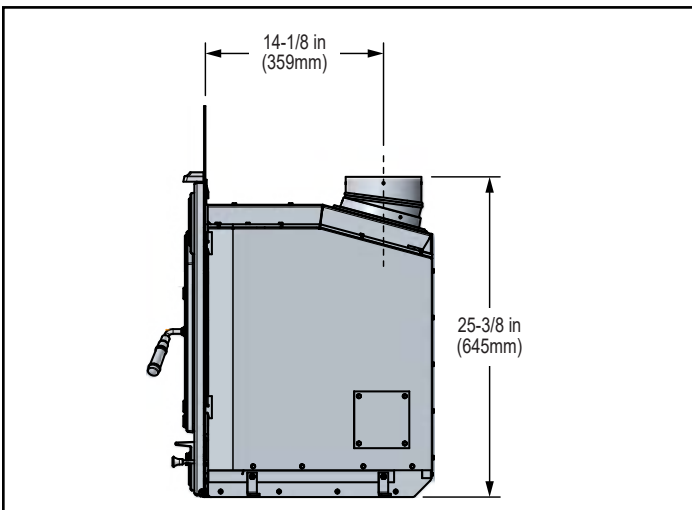


Figure 3.8 - Side View with Flat Surround and Optional 15 Degree Adapter (DV-6DLR-E15ADSS)

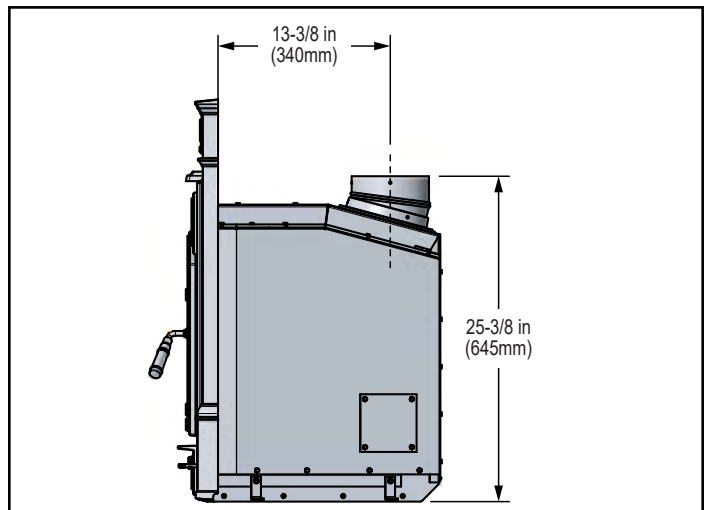


Figure 3.11 - Side View with Cast Surround and Optional 15 Degree Adapter (DV-6DLR-E15ADSS)

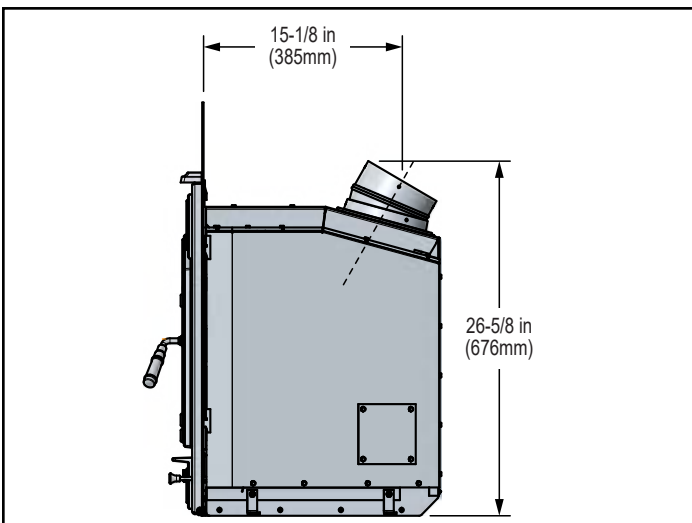


Figure 3.9 - Side View with Flat Surround and Optional 15 Degree Adapter (DV-6DLR-E15ADSS)

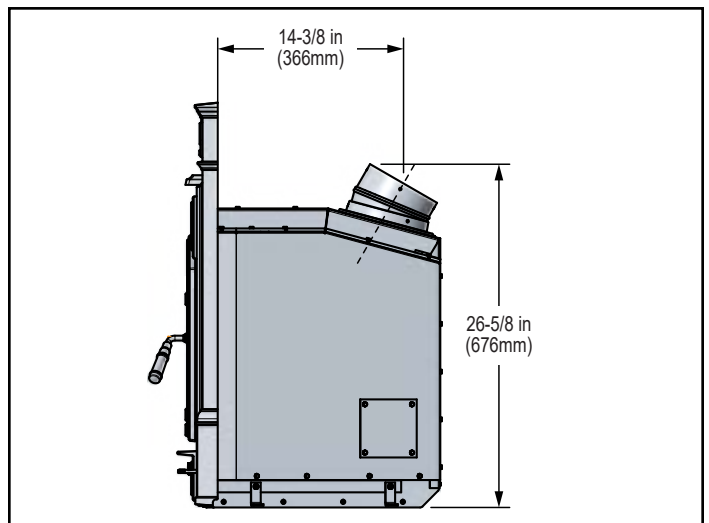


Figure 3.12 - Side View with Cast Surround and Optional 15 Degree Adapter (DV-6DLR-E15ADSS)

B. Clearances to Combustibles

→ THESE MEASUREMENTS ARE FOR WHEN USING THE OPTIONAL ZERO CLEARANCE BOX - PLEASE REFER TO ADDITIONAL MANUAL.

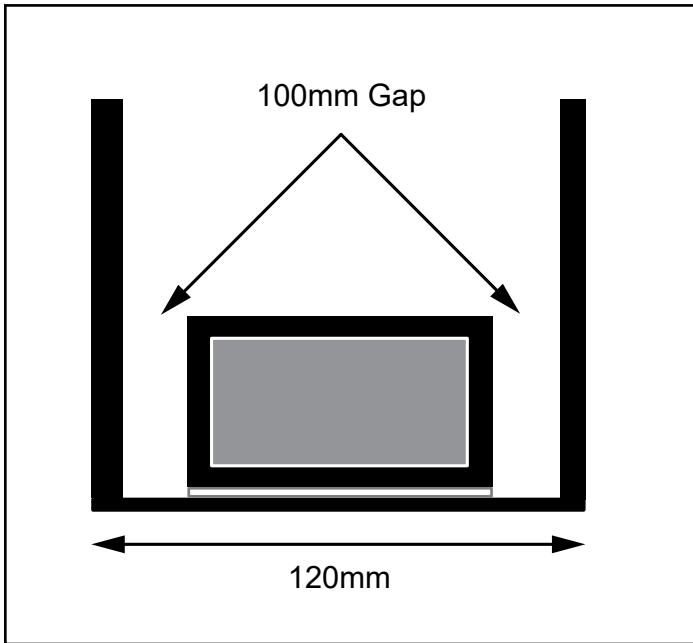


Figure 3.13 - When using optional Zero Clearance Box

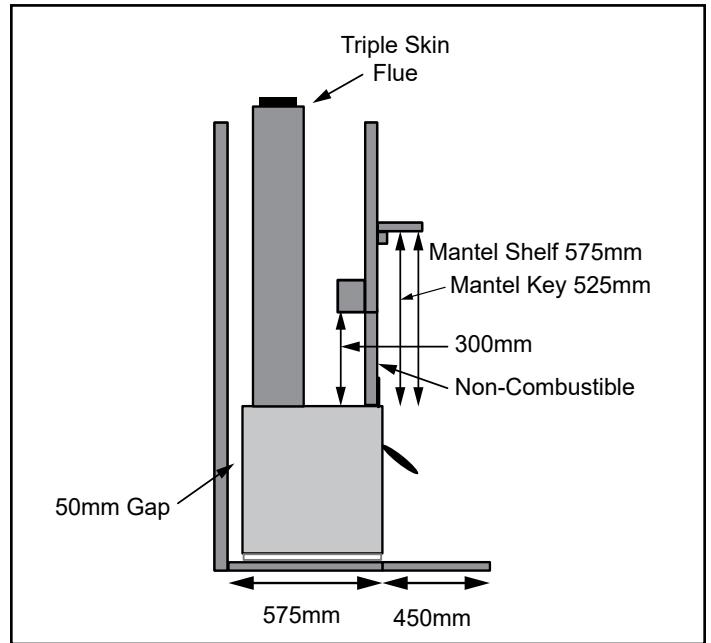


Figure 3.14

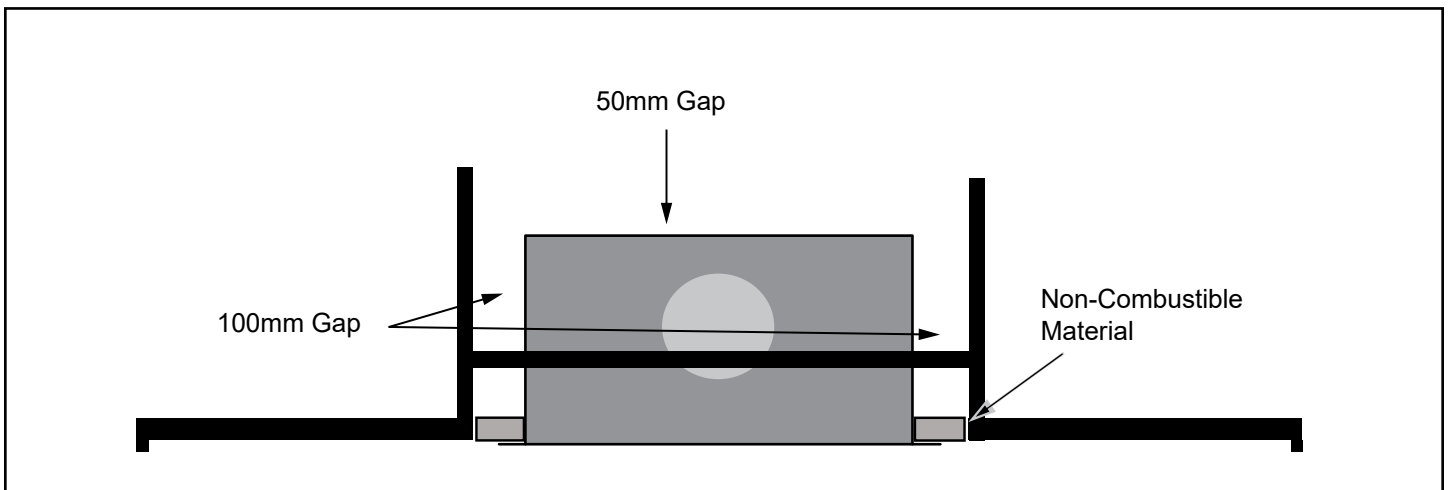


Figure 3.15

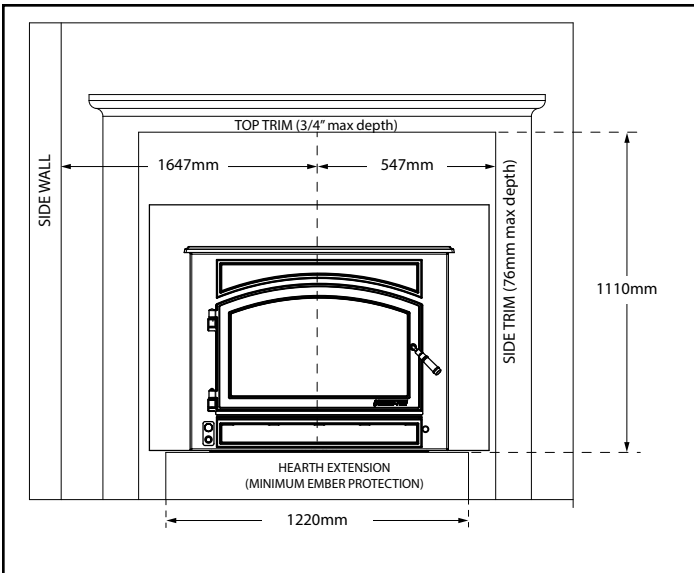


Figure 3.16

NOTE: If trim measurement is over 76mm in depth use mantle or side clearances to combustibles.

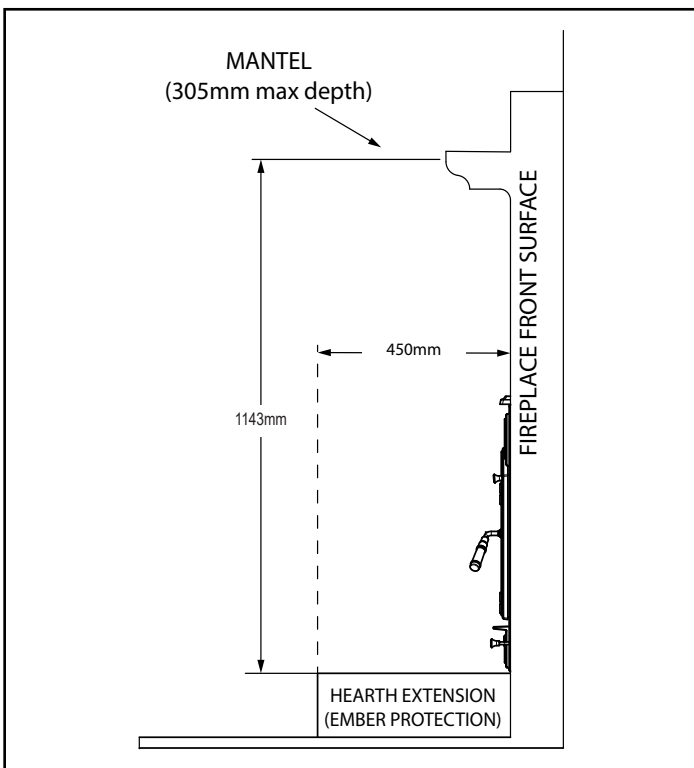




Figure 3.17



WARNING



Fire Risk.

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

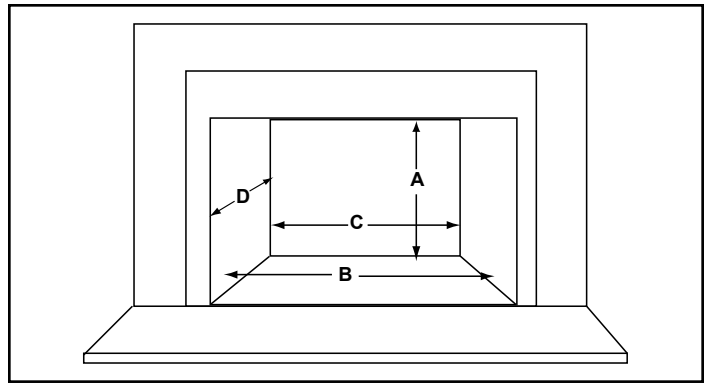


Figure 3.18

Minimum Opening Dimensions		Millimeters
A	Height	594
B	Front Width	813
C	Back Width	606
D	Depth (Steel Surround)	464
	Depth (Cast Surround)	445

NOTE: Minimum opening dimensions include a 1/4 inch (6mm) clearance around unit.

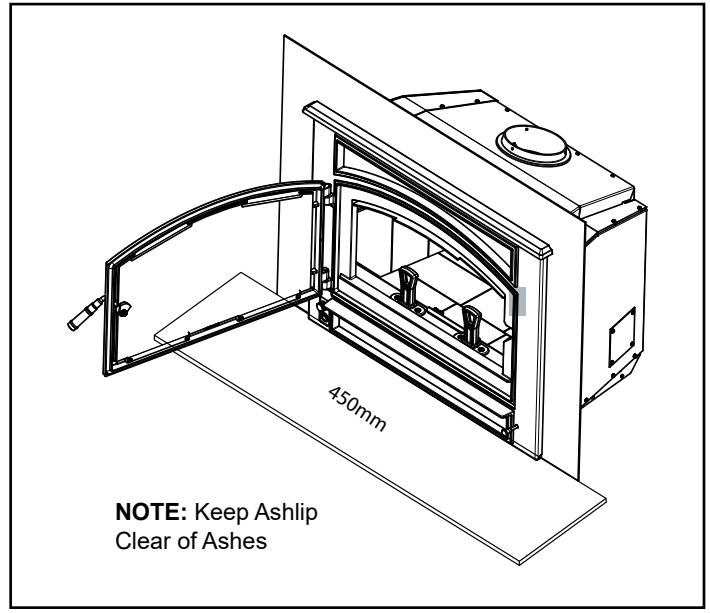


Figure 3.19

NOTE: Clearances may only be reduced by means approved by AS/NZS 2918-2018.



WARNING



Fire Risk.

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

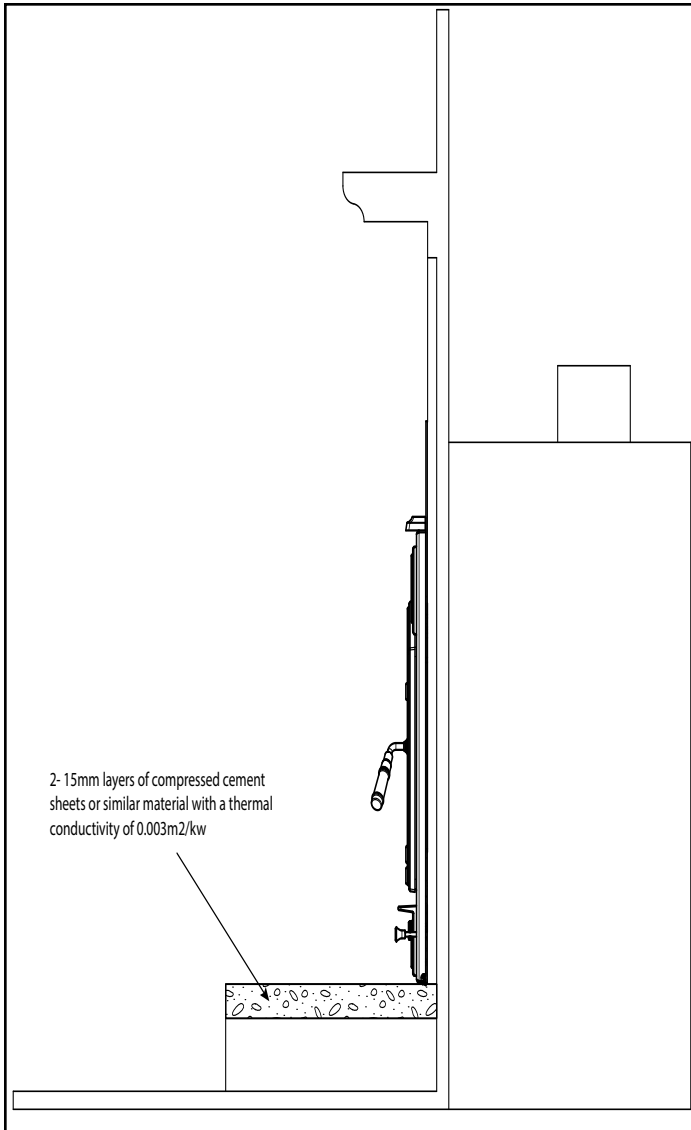


Figure 3.20

4 Chimney Systems

A. Locating Your Appliance & Chimney

Location of the appliance and chimney will affect performance. As shown in **Figure 4.1** the chimney should:

- Install through the warm space 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 affects of wind turbulence and down drafts.

- Consider the appliance location in order to avoid floor and ceiling attic joists and rafters.
- Locate termination cap away from trees, adjacent structures, uneven roof lines and other obstructions.

Your local dealer is the expert in your geographic area and can usually make suggestions or discover solutions that will easily correct your flue problem.

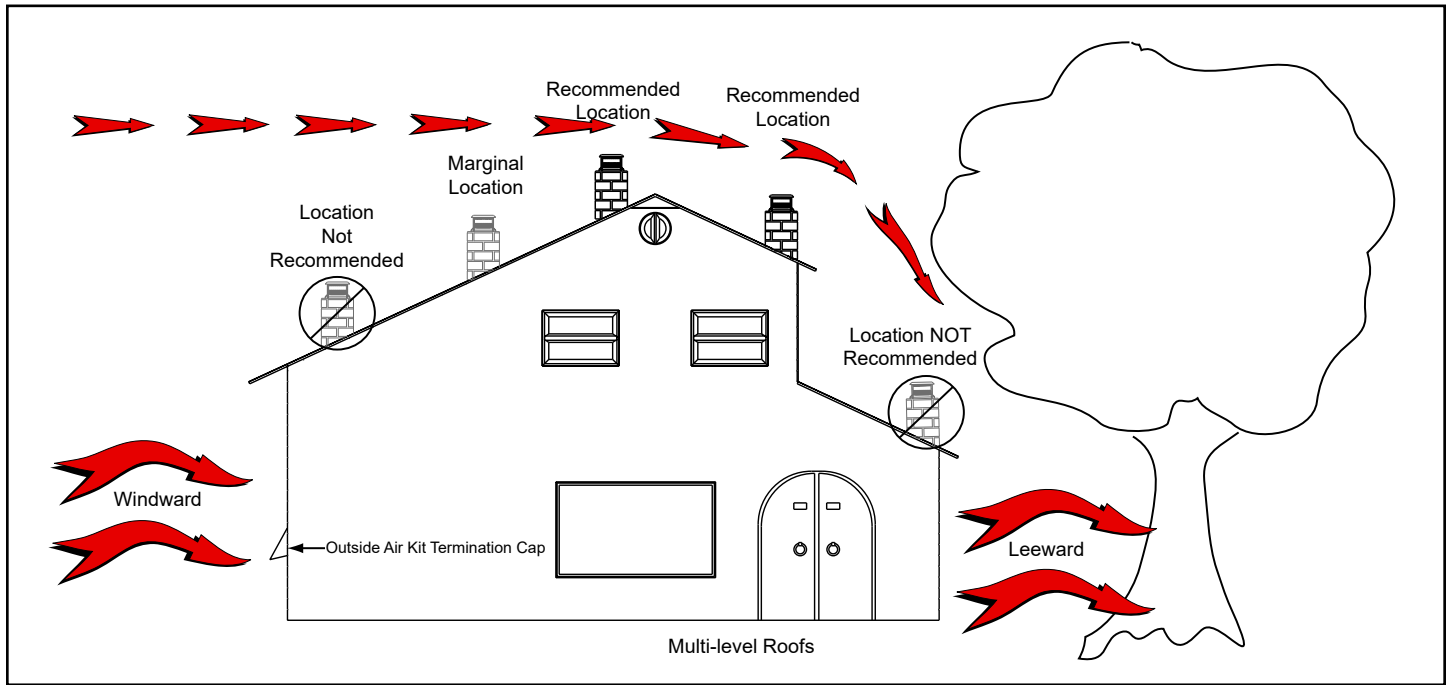


Figure 4.1

B. Minimum Height of Flue System Exit

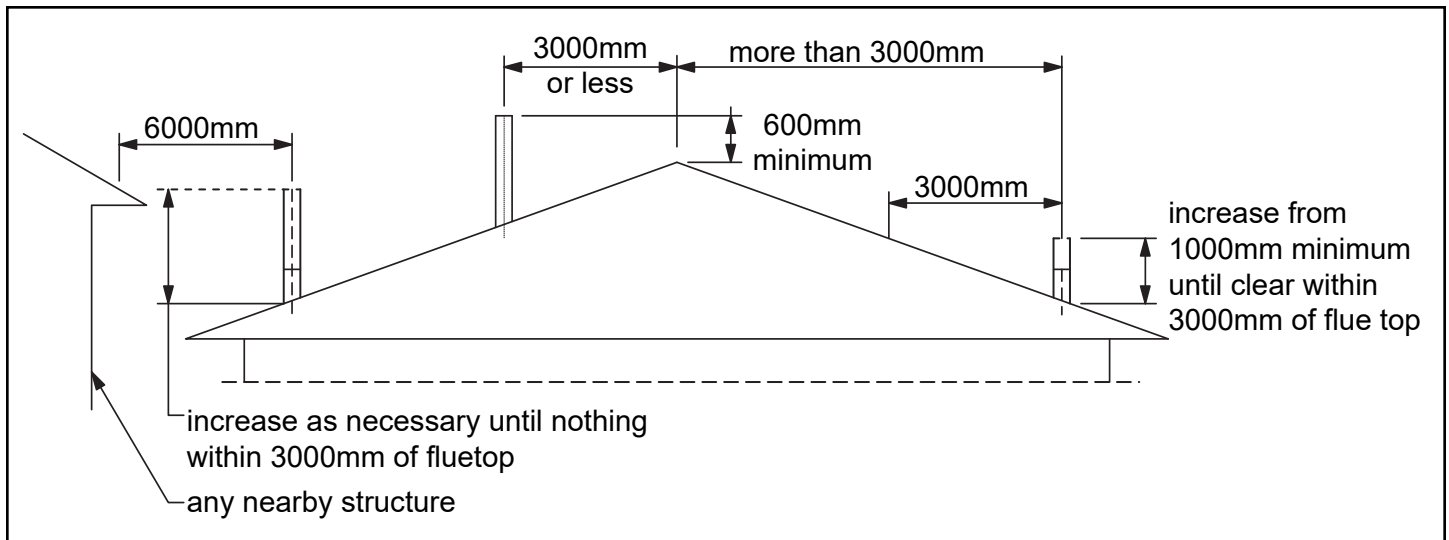


Figure 4.2

NOTICE:

- Chimney performance may vary.
- Trees, buildings, roof lines and wind conditions affect performance.
- Chimney height may need adjustment if smoking or overdraft occurs.

NOTICE:

- Locating the appliance in a basement or 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

C. Chimney Termination Requirements

Follow manufacturer's instructions for clearance, securing flashing and terminating the chimney.

- Must have an approved and Listed cap
- Must not be located where it will become plugged by snow or other material
- Must terminate at least 91cm above the roof and at least 61cm above any portion of the roof within 305cm.
- Must be located away from trees or other structures

WARNING



Asphyxiation Risk.

- DO NOT CONNECT THIS Appliance 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.

WARNING

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.

WARNING



Fire Risk.

Follow Chimney Connector Manufacturer's Instructions for Proper Installation.

ONLY use connector:

- Within the room, between appliance and ceiling or wall.
- Connector shall NOT pass through:
 - Attic or roof space
 - Closet or similar concealed space
 - Floor or ceiling

Maintain minimum clearances to combustibles



D. Venting Systems

Chimney Connector:

It is also known as flue pipe or stove pipe. It must be 152mm minimum diameter stainless steel connector pipe. (Solid or Flex and must run the entire chimney)



Chimney:

The chimney can be new or existing, masonry or prefabricated and must meet the following minimum requirements as specified below.

 WARNING	
	Risk of Fire! Follow venting manufacturer's clearances and instructions when installing venting system.

E. Inspections

Existing chimneys should be inspected and cleaned by a qualified professional prior to installation. The chimney must not have cracks, loose mortar or other signs of deterioration and blockage. Hearth & Home recommends a certified professional or a technician, under the direction of a certified professional.

 WARNING	
	Fire Risk. Inspection of Chimney: <ul style="list-style-type: none">• Chimney must be in good condition.• Factory-built chimney must be 152mm.

F. Larger Chimneys

Per Australian Standard, all fireplace inserts being installed into an existing masonry fireplaces require a full 152 (6") liner

NOTICE: Check with your local building authorities.
--

G. Masonry Chimney

- Must have at least 16mm fire clay lining joined with refractory cement.

NOTE: Installations into a clay flue without a stainless steel liner may reduce draw which affects performance, will cause the glass to darken and produce excessive creosote and create start-up issues.

- The masonry wall of the chimney, if brick or modular block, must be a minimum of 102mm nominal thickness.
- A chimney of rubble stone must be at least 305mm thick.
- Must be lined with a 152mm stainless steel flue liner to improve performance and reduce creosote build-up.
- An equivalent liner must be a listed chimney liner system or other approved material.
- No dilution air is allowed to enter the chimney.
 - Secure the fireplace damper in the open position. If this cannot be accomplished, it will be necessary to remove the damper
 - Seal damper area of chimney around chimney connector with a high temperature sealant or seal insert against the face of the fireplace.
 - Both methods must be removable and replaceable for cleaning and re-installation.
- When possible, install an airtight clean-out door to the rear of the smoke shelf.

NOTE: Masonry chimneys are significantly less than ideal for venting solid fuel appliances. A masonry chimney is not subject to any temperature limit test, therefore a full reline is required to meet AS/NZS 2918.

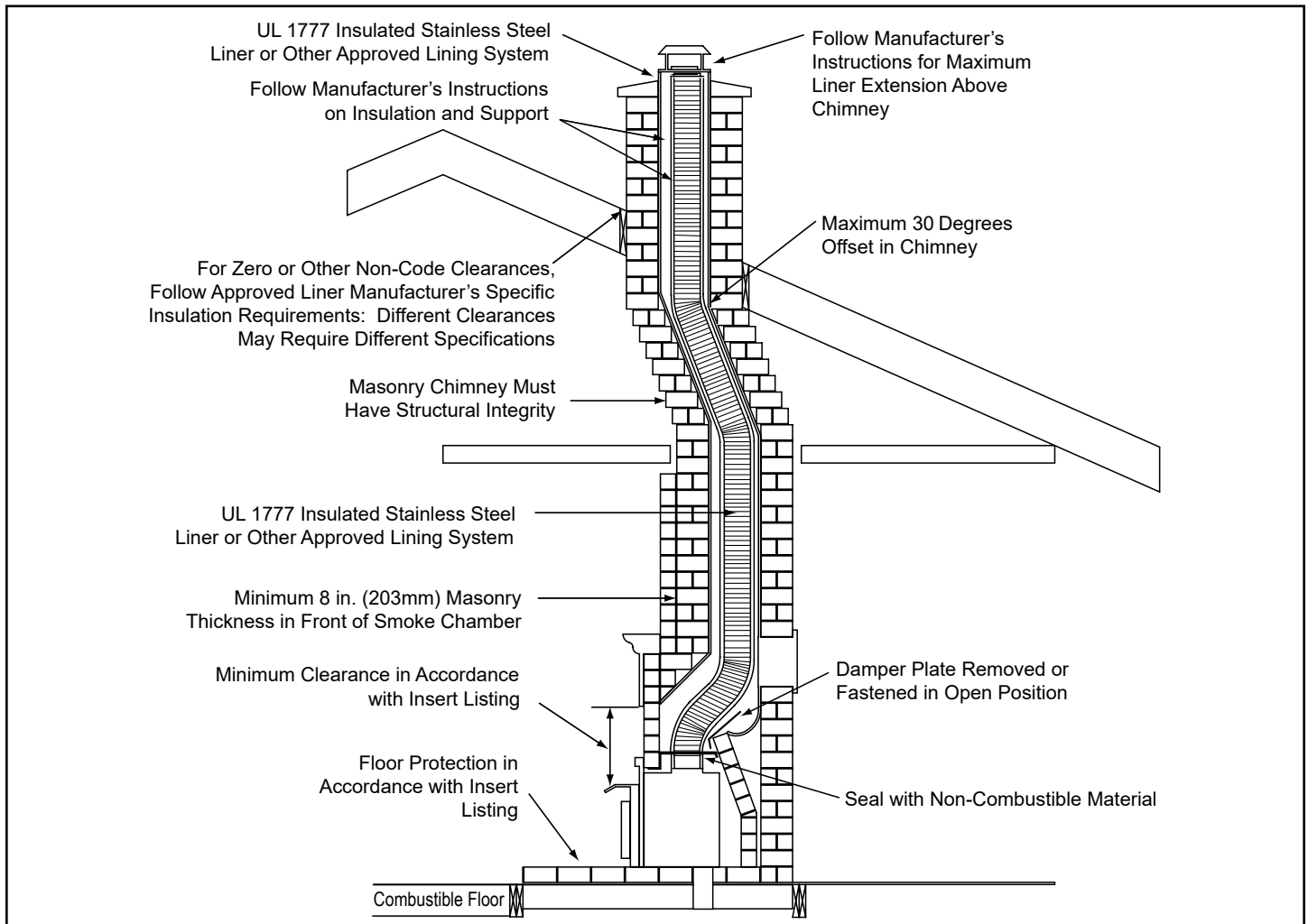


Figure 4.3 - Generic Insert Model Shown in Illustration

H. Install into a Masonry Fireplace

The insert must be installed as per the requirements of your local inspection authority. It is recommended to use a full liner as it is the safest installation and provides the most optimum performance. Your retailer should be able to help you decide which system would be the best for your application.

The use of this connection method not only increases the safety of your insert by directing the hot gases up the flue, but will also help increase the unit's efficiency and decrease creosote deposits in the chimney.

When a connected flue or liner is in use, the insert is able to "breathe" better by allowing a greater draft to be created. This great draft can decrease problems such as difficult start-ups, smoking out the door and dirty glass.

I. Install Into a Factory Built Fireplace

1. When installed in a factory built fireplace, a full stainless steel rigid is mandatory, for both safety and performance purposes. When a flue or liner is in use, the insert is able to breathe better by allowing a great draft to be created. The great draft can decrease problems such as difficult start-ups, smoking out the door, and dirty glass.
2. In order to position the flue liner, the existing rain cap must be removed from your chimney system. In most cases the flue damper should also be removed to allow passage of the liner.
3. In most cases opening the existing spark screens fully should give enough room for the insert installation. If it does not, remove and store.
4. If the floor of your fireplace is below the level of the fireplace opening, adjust the inserts leveling bolts to accommodate the difference. When additional shimming is required, use non-combustible masonry or steel shims.
5. Measure approximately the alignment of the flue liner with the position of the smoke outlet hole on the insert to check for possible offset. If an offset is required, use a proper stainless steel unit available with the chimney liner.
6. Once the above items have been checked, slide your insert into position after first positioning the flue liner and offset if required. (Re-install rain-cap at completion of installation).

J. Securing Chimney Components

All joints should be secured with 3 sheet metal screws or rivets per pipe manufacturers instructions. The sections must be attached to the insert and to each other with the crimped (male) end pointing toward the insert (**Figure 4.5**).

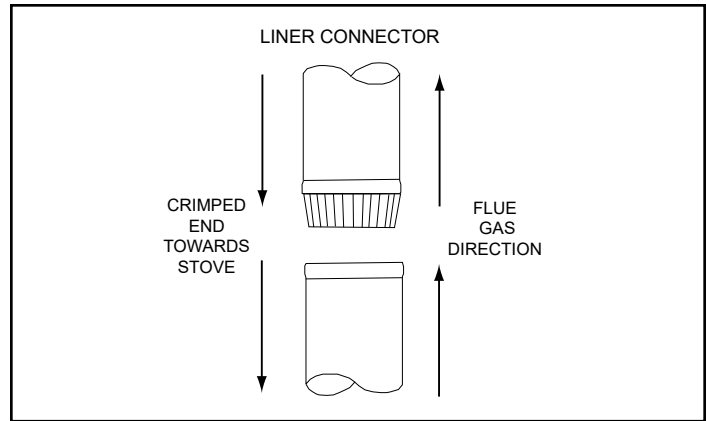


Figure 4.5

WARNING

Risk of Fire!

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

K. Altering the Fireplace

The following modifications of factory-built fireplaces are permissible:

The following parts may be removed:	
Damper	Smoke Shelf or Baffle
Ember Catches	Fire Grate
Viewing Screen/Curtain	Doors

- The fireplace must not be altered. Cutting any sheet metal parts of the fireplace in which the fireplace insert is to be installed is prohibited per **ANSI Z21.88** except that the damper may be removed to accommodate a direct-connect starter pipe or chimney liner,
- 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 in the component pack 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.
- 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.
- Final approval of this installation type is contingent upon the authority having jurisdiction.

L. Zero-Clearance Fireplace

A permit may be required for installations, final approval is contingent of the authority having local jurisdiction. Consult insurance carrier, local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.

Inspect the existing fireplace and chimney for any damage or flaws such as burnouts, metal or refractory warping.

Inspection to a minimum of **NFPA 211 Level II** is recommended. All repairs must be made prior to installing an insert. The fireplace must be structurally sound and be able to support the weight of the solid-fuel insert

The factory-built chimney must be listed per **UL 127 or ULC 610-M87** for all installations. Install thermal protection per this appliance listing requirements.

A full height 6 inch diameter stainless steel full height listed chimney liner must be installed meeting **type HT (2100°F) requirements per UL 1777 (USA) or ULC S635 with "0" clearance to masonry (Canada)**. The full liner must be attached to the insert flue collar and to the top of the existing chimney.

The flue liner top support attachment must not reduce the air flow for the existing air-cooled chimney system. Re-install original factory-built chimney cap only (See **Prefabricated Metal Chimney** on page 14).

To prevent room air passage to the chimney cavity of the fireplace, seal either the damper area around the chimney liner or the insert surround. Circulating air chamber (i.e. in a steel fireplace liner or metal hearth circulatory) may not be blocked. The air flow within and around the fireplace shall not be altered, blocked by the installation of the insert. (i.e. no louvers or cooling air inlet or outlet ports may be blocked by the insert or the insert surround.

See **Altering the Fireplace** on page 15 for modifications allowed for factory-built fireplaces.

WARNING

Risk of Asphyxiation!

- Do NOT connect this appliance to a chimney flue servicing another appliance or to any air distribution duct or system.

This may allow flue gases to enter the house.

M. Ovalizing Round Stainless Steel Liners

Ovalizing round stainless steel liners to accommodate the liner passing through the damper region of a fireplace is an allowable and acceptable practice.

Ensure that the ovalization is minimized to the extent required to fit through the damper.

N. Chimney Height / Rise and Run

To be sure that your Quadra-Fire insert burns properly, the chimney draft (static pressure) should be approximately -2.54mm water column (W.C.) during a high burn and -1.016mm W.C. during a low burn, measured 152mm above the top of the insert after one hour of operation at each burn setting.

NOTE: These are guidelines only, and may vary somewhat for individual installations.

- This product was designed for and tested on a 152mm chimney, 4.27-4.87m high, (includes appliance height) measured from the base of the appliance.
- The further your stack height or diameter varies from this configuration, the possibility of performance problems exists.
- Chimney height may need to be increased by 2 - 3% per each 304.8m above sea level.
- It is not recommended to use offsets or elbows at altitudes above 1219.2m above sea level or when there are other factors that affect flue draft.

WARNING



Fire Risk.

Do NOT pack insulation or other combustibles between spacers.

- ALWAYS maintain specified clearances around venting and spacers.
- Install spacers as specified.

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

WARNING



Fire Risk.

This appliance relies upon natural draft to operate properly.

- Chimney heights exceeding 7.62m from base of appliance may create an over-draft situation.

• Overdraft condition may create over firing. Over firing may ignite creosote and/or damage appliance and chimney

5 Appliance Set-Up

A. Outside Air Kit

A source of air (oxygen) is necessary in order for combustion to take place. Whatever combustion air is consumed by the fire must be replaced. Air is replaced via air leakage around windows and under doors. In homes that have tightly sealed doors and windows, an outside air source is needed. An optional Outside Air Kit is available.

Items Needed for Installation (not supplied)

- Needed for option two:
 - 4 inch flex aluminum pipe, or if using alternate material, then it shall be made from durable, non-combustible, heat resistant material up to 350°F.
 - Cut the pipe to the required length for your installation.
- Needed for both options:
 - Phillips head screw driver
 - 5/32 Allen Wrench
 - Silicone sealant


Option One - Installation Instructions


1. Ensure existing access hole in fireplace will not be covered by the outer can. Existing outside air intake hole may be under at the rear or side of outer can. Outside air may also enter down existing chimney chase in some situations.
2. Level outer can and install appliance. After installing the appliance in the outer can, seal the fireplace opening and trim package with insulation to prevent air leakage into the room.

Option Two - Installation Instructions

3. Ensure existing access hole in fireplace is sufficient to feed the 4 inch flex.
4. After sliding can into fireplace, feed flex into cut opening to obtain outside combustion air.
5. Level outer can and install appliance.

NOTE: Do not use plastic wire ties that come with the kit as they will melt. You may need to install the flex pipe into the firebox first depending on installation. Attach flex to adapter with at least 2 screws.


WARNING




Fire Risk. Asphyxiation Risk.

Do not draw outside combustion air from:

- Wall, floor or ceiling cavity
- Enclosed space such as an attic or garage
- Close proximity to exhaust vents or chimneys

Fumes or odor may result



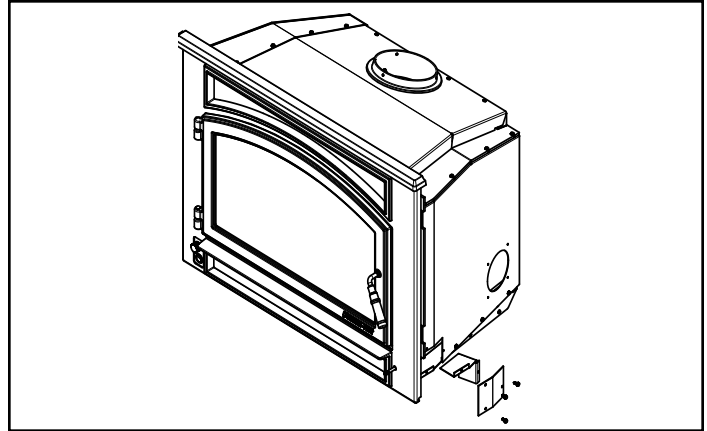


Figure 5.1

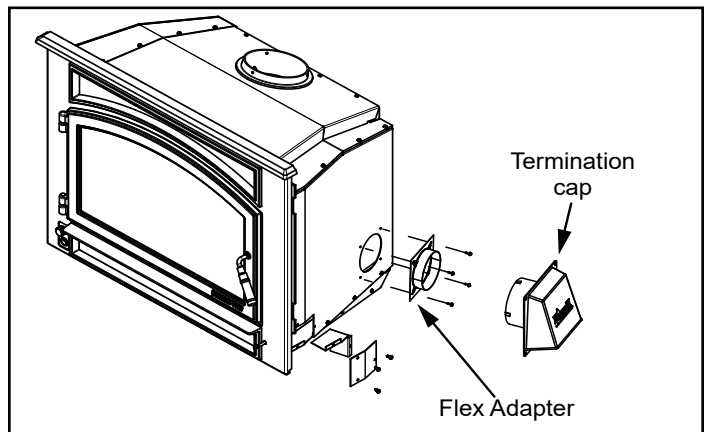




Figure 5.2


WARNING





Asphyxiation Risk.

Outside air inlet must be located to prevent blockage from:

- Leaves
- Snow or ice
- Other debris

Block may cause combustion air starvation. Smoke spillage may set off alarms or irritate sensitive individuals.


WARNING



Asphyxiation Risk.

Length of outside air supply duct shall NOT exceed the length of the vertical height of the exhaust flue.

- Fire will not burn properly
- Smoke spillage occurs when door is opened due to air starvation.

B. Stove Pipe or Liner to Flue Collar

1. There are 4 already drilled holes in the flue collar 90 degrees apart. Attach the flue collar to the stove pipe/liner. If the seal is questionable use high temperature sealant such as stove mastic (**Figure 5.3**).
2. Attach gasket to bottom side of flue collar with a thin coat of silicone.

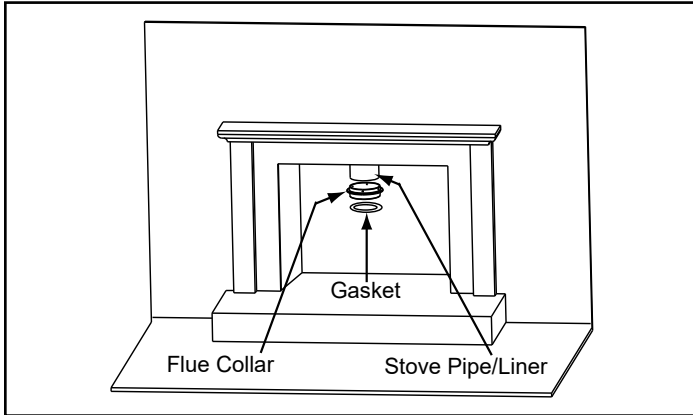


Figure 5.3

C. Optional Offset Adapter

Optional use of a Simpson Duravent 15° Universal Elbow Part Number 4615 may be purchased directly through your local Simpson Duravent Pipe Distributor or from your local Quadra-Fire dealer, Part Number DV-6DLR-E15ADSS.

Figure 5.4 shows a vertical installations and also how to create an optional 30° elbow installation.

The 15° elbow may be secured directly to the flue collar. Follow the pipe manufacturer's instructions for using screws or rivets for attachment. Most pipe manufacturer's 6 inch (152mm) diameter flue liners may be attached directly to the top of the 15° elbow.

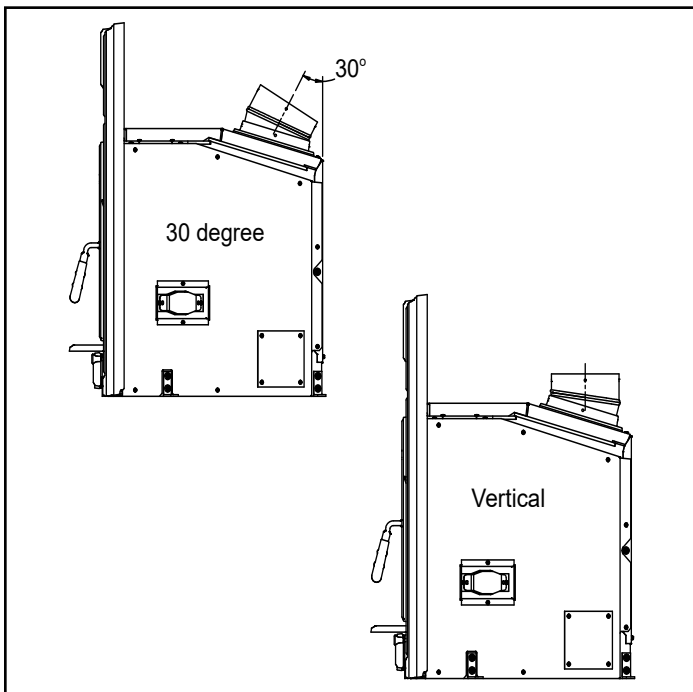


Figure 5.4

D. Power Cord

The power cord is shipped assembled to the appliance. You may route the power cord either to the left or right side depending on your configuration for power source (**Figure 5.5**).

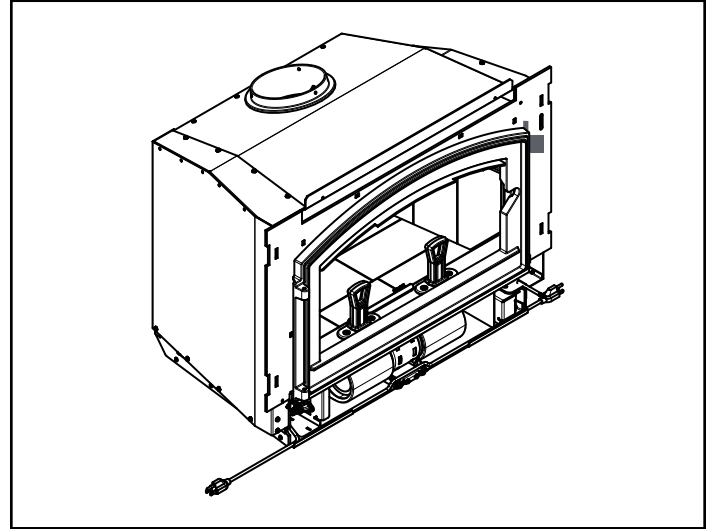


Figure 5.5

E. Appliance to Stove Pipe or Liner

1. Once you have the appliance in place and secured, reach up through the flue opening and grab the attachment bar and pull down inside flue opening (**Figure 5.6**).
2. Insert the 5/16 bolts inside the cast flue and through the chimney mounting bar. Securely tighten the nuts; fasteners are provided.
3. Re-install the tube channel assembly, baffle board, ceramic blanket and baffle protection channel.

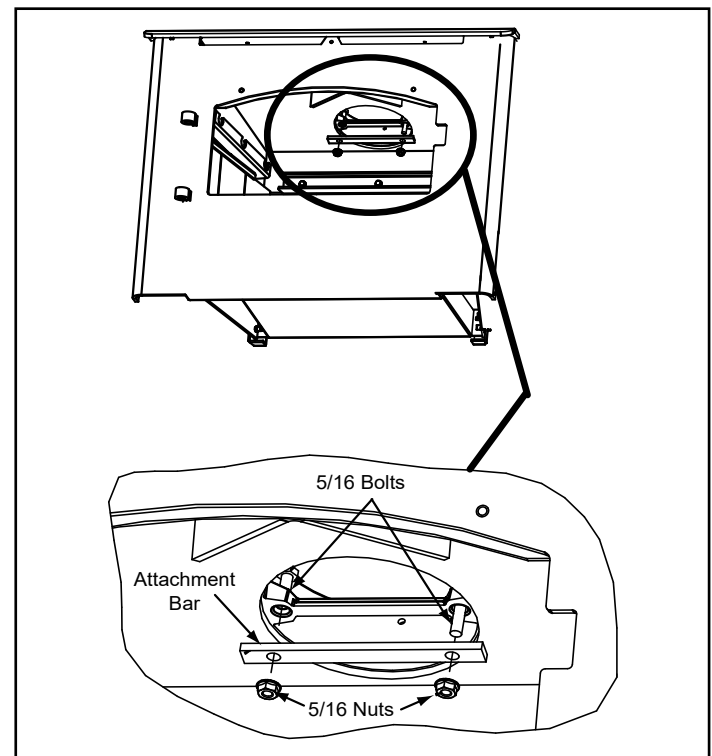


Figure 5.6

NOTE: These are generic drawings and may not represent your specific model.

F. Flat Surround

	Overall Dimensions	Part Number
Standard Size	43" x 31"	SP2-4331
Large Size	51" x 34"	SP2-5134

Table 5.1

1. Lay surround face down on a protected surface to prevent scratching.
2. Remove door by unlatching handle from face and lifting up on door, set aside by laying it onto a protective surface (Figure 5.7).

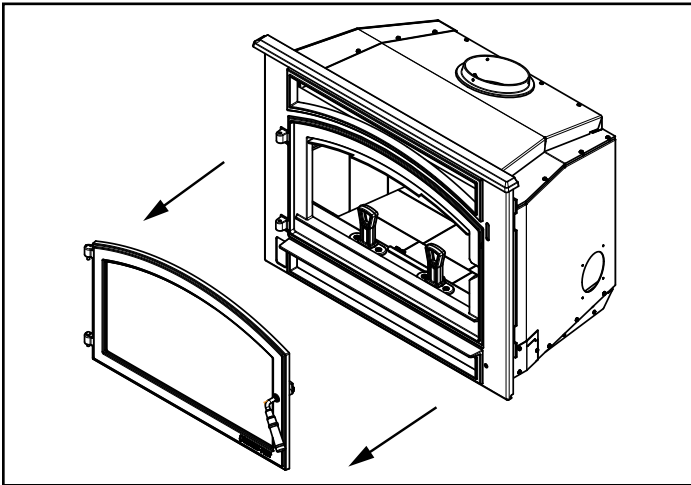


Figure 5.7

3. Remove face by lifting up then out away from appliance and set aside laying it onto a protective surface (Figure 5.8).

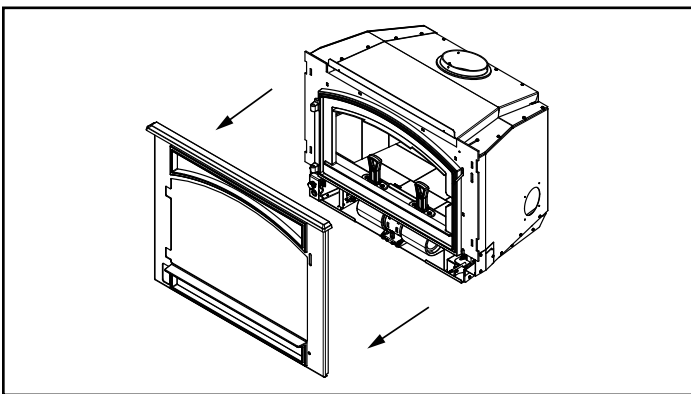


Figure 5.8

4. Lift surround on to front of appliance (Figure 5.9).

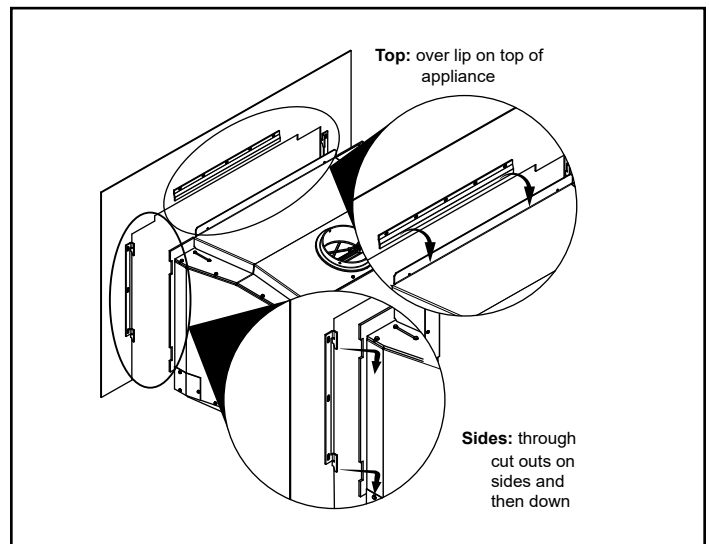


Figure 5.9

5. Reinstall face to front of appliance (Figure 5.10).

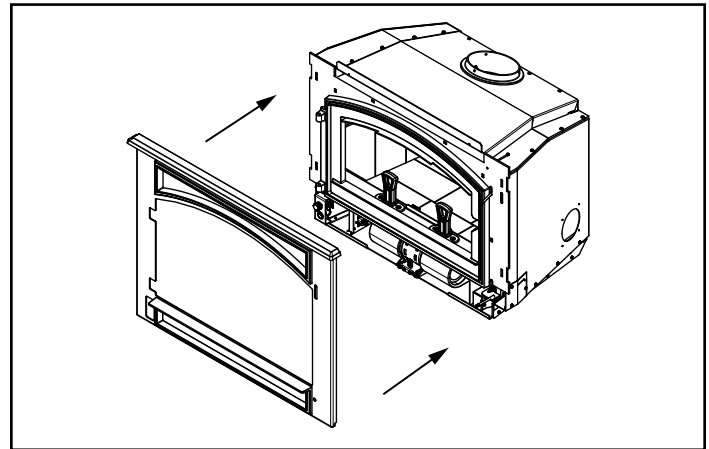


Figure 5.10

6. Reinstall door to face of appliance (Figure 5.11).

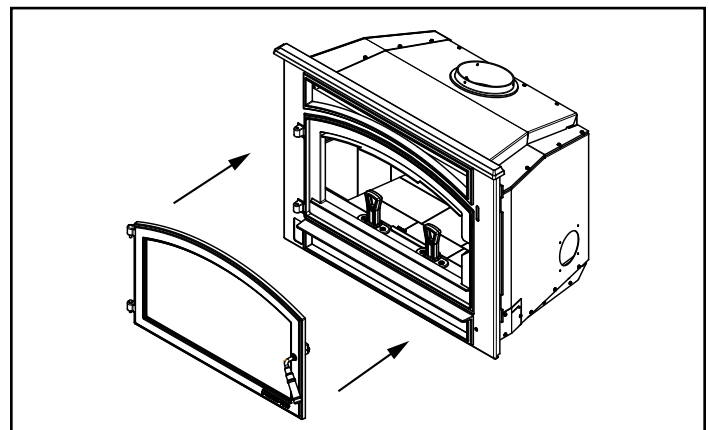


Figure 5.11

G. Flat Surround with Trim Kit

	Overall Dimensions	Part Number	Trim Kit
Standard Size	43" x 31"	SP2-4331	TRIMKIT-4331-NL
Large Size	51" x 34"	SP2-5134	TRIMKIT-5134-NL

Table 5.2

1. Follow steps one through three of Flat Surround Installation on page 19.
2. Lift surround assembly to front of appliance (**Figure 5.9 on page 19**).
3. Assemble trim as shown in **Figure 5.12**.

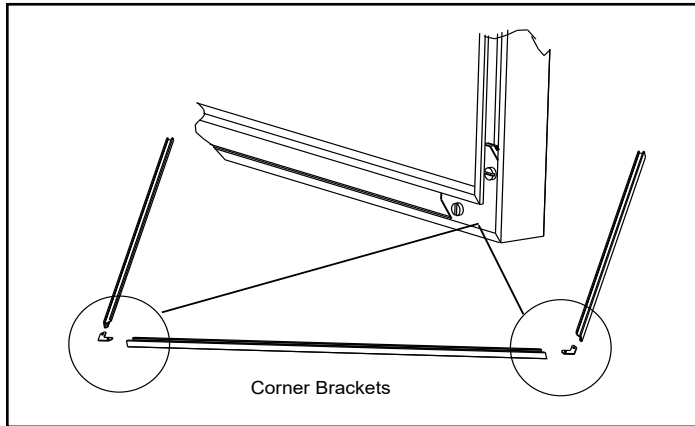


Figure 5.12

NOTE: May need to pull appliance away from fireplace to clear mantle as you slide the trim over the flat surround.

4. Slide trim over flat surround as shown in **Figure 5.13**.

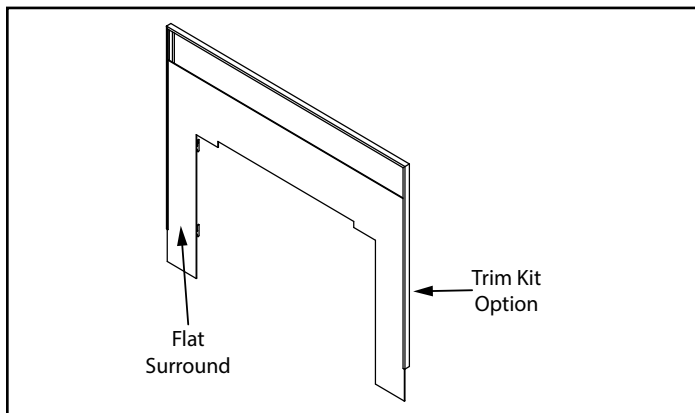


Figure 5.13

5. Install two steel springs at the top on each side and between the flat surround and the assembled trim kit as shown in **Figure 5.14**.

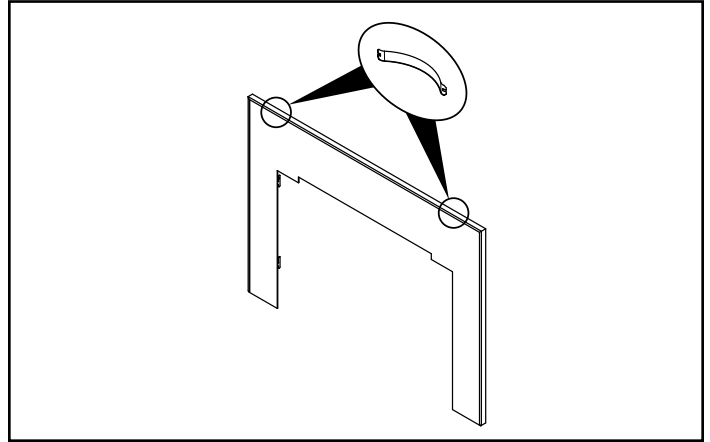


Figure 5.14

6. Install two steel springs on each side of the flat surround towards the bottom and the assembled trim kit (**Figure 5.15**).

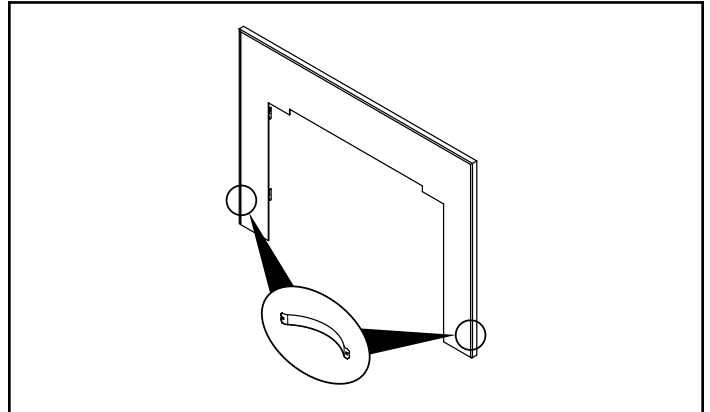


Figure 5.15

7. If needed push appliance back into fireplace.
8. Reinstall face to front of appliance (**Figure 5.10**).
9. Reinstall the door to the face of the appliance (**Figure 5.11**).

H. Standard Surround & Cast Trim Kit

	Overall Dimensions	Part Number
Standard Surround	43" x 31"	CT2-4331
Cast Trim Kit		811-0930

Table 5.3

1. Remove contents from box being careful not to scratch or damage the cast trim pieces.
2. Lay surround face down on a protected surface to prevent scratching.
3. Place the peel and stick round felt vibration insulation pads on the front side in each corner of the top metal piece and on the back side in each corner of the top cast piece (**Figure 5.16**).

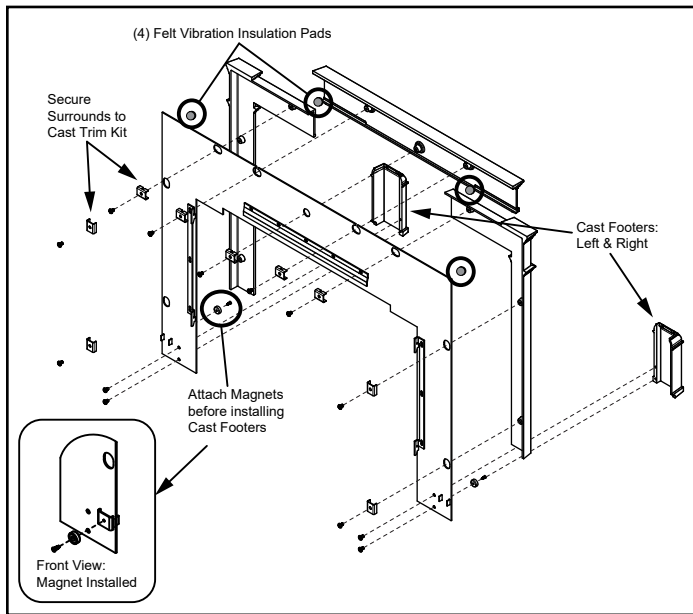


Figure 5.16

4. Place the corresponding cast trim pieces (2 cast trim sides and 1 cast trim header) underneath the panel set, also face down. Align the holes in the metal pieces with the 5 bosses on the top cast piece and 2 bosses on each side piece.
5. Secure the magnet to the bracket. The magnet is facing the front (**Figure 5.17**).

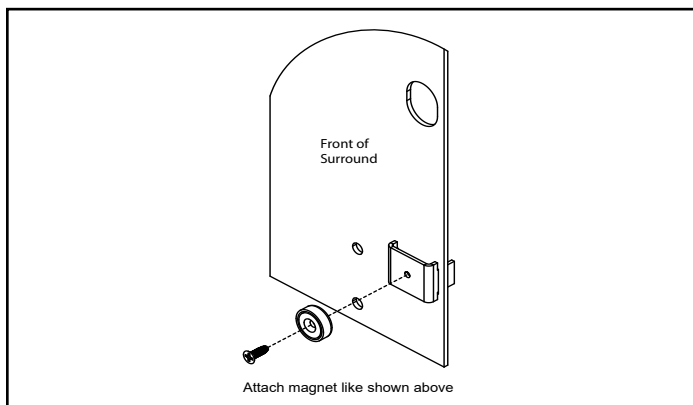


Figure 5.17

6. Place the cast footers under the metal sides aligning the top and bottom holes in the cast footers and metal sides.
7. The 9 mounting clips are shipped in one long strip. Hand break apart or use pliers.
8. Each clip has a clearance notch to allow room for the cast on the insert. Place the clip so the notch is facing the outer edges of the surrounds (**Figure 5.18**).

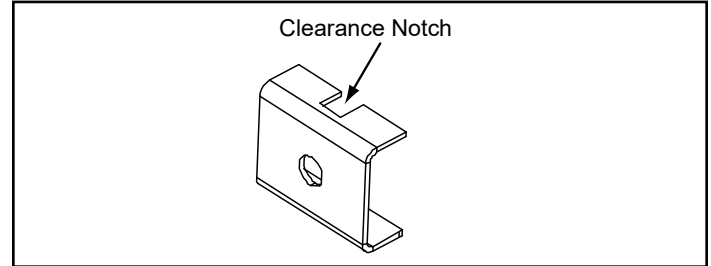


Figure 5.18

9. It is best to install all of the 1/4-20 screws only half way at first to allow for adjustments. After adjustment, tighten the 2 screws in each cast footer first and then work your way around to the rest.
10. Slide surround and trim over the top of the insert into place matching the mounting tabs on the metal sides with the slots on the insert (**Figure 5.19**).
11. Align the 2 screws in the top metal surround piece to the 2 alignment holes on the appliance top. Secure in place (**Figure 5.19**).

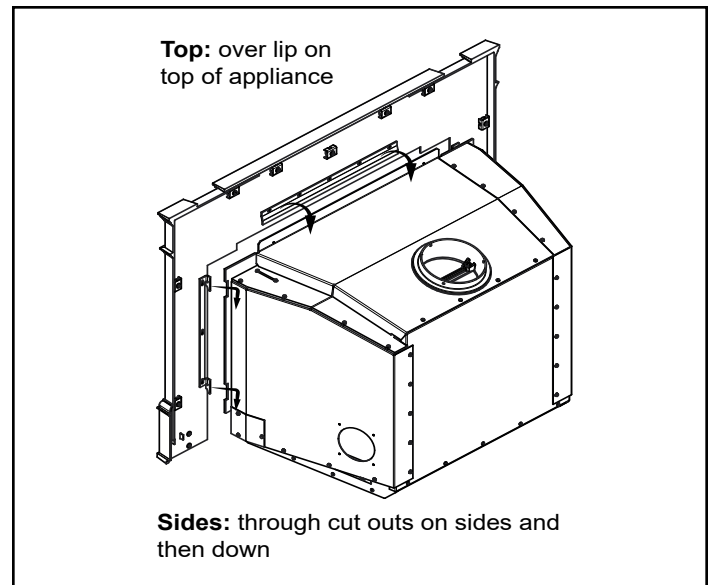


Figure 5.19

QUADRA-FIRE®

NOTHING BURNS LIKE A QUAD

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 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.


HEARTH & HOME
technologies®