Installation Manual
Installation & Appliance Set-Up

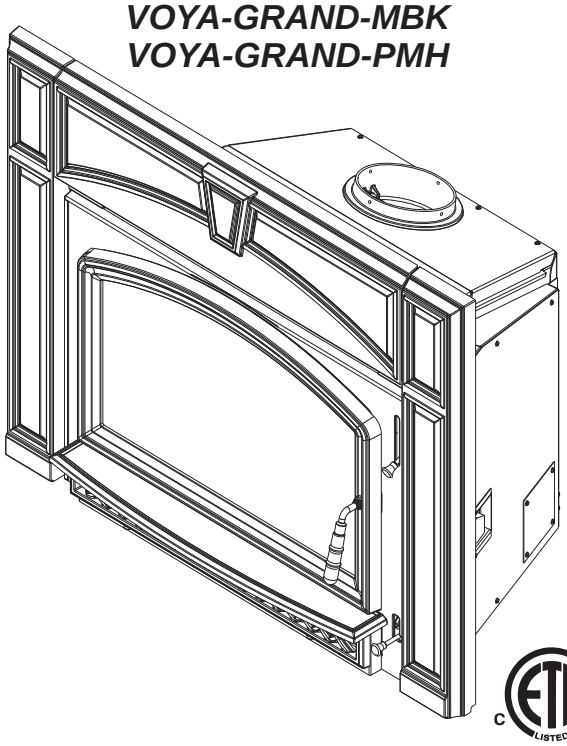
INSTALLER: Leave this manual with party responsible for use and operation.
OWNER: Retain this manual for future reference.

NOTICE: DO NOT DISCARD THIS MANUAL

QUADRA-FIRE®

VOYAGEUR GRAND WOOD INSERT
Automatic Combustion Control (ACC)

Model(s):
VOYA-GRAND-MBK
VOYA-GRAND-PMH



C ETL LISTED US
Intertek

⚠ WARNING

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

Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends NFI certified professionals, or technicians supervised by an NFI certified professional.

NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED

Wood Energy Technical Training www.wettinc.ca

⚠ WARNING

If the information in these instructions is not followed exactly, a fire may 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 overfire - If heater or chimney connector glows, you are overfiring. Overfiring will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.

⚠ WARNING



HOT SURFACES!
Glass and other surfaces are hot during operation AND cool down.

Hot glass will cause burns.
- Do not touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away
- CAREFULLY SUPERVISE children in same room as 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.

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 may result in death or serious injury.
- ***CAUTION!*** Indicates a hazardous situation which, if not avoided, may 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. Insert Certification

Model:	VOYAGEUR GRAND wood Insert
Laboratory:	Intertek
Report No:	100868597PRT-001
Type:	Solid Fuel Type, Listed Room Heater
Standard:	UL1482 and ULC S628-93 and (UM) 84-HUD, Mobile Home Approved.

B. BTU & Efficiency Specifications

EPA Certification #:	912
EPA Certified Emissions:	3.2 grams per hour
*LHV Tested Efficiency:	78.4 %
**HHV Tested Efficiency:	72.5 %
***EPA BTU Output:	10,700 to 28,600 / hr.
****Peak BTU/Hour Output:	58,600
Vent Size:	6 inches
Firebox Size:	2.35 cubic feet
Recommended Wood Length:	20 inches
Fuel Orientation:	Side-to-Side
Fuel	Seasoned Cord Wood
* Weighted average LHV efficiency using Douglas Fir dimensional lumber and data collected during EPA emissions test.	
**Weighted average HHV efficiency using Douglas Fir dimensional lumber and data collected during EPA emissions test.	
***A range of BTU outputs based on EPA Default Efficiency and the burn rates from the low and high EPA tests, using Douglas Fir dimensional lumber.	
****A peak BTU out of the unit calculated using the maximum first hour burn rate from the High EPA Test and the BTU content of cordwood (8600) times the efficiency.	

The Quadra-Fire Voyageur Grand Wood Insert (ACC) meets the U.S. Environmental Protection Agency's crib wood emission limits for wood heaters sold after May 15, 2015.

C. 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 with #8 copper ground wire, and chimney must be listed to UL103 HT or a listed UL-1777 full length six inch (152mm) diameter liner must be used.
- Outside Air Kit, part OAK-ACC must be installed in a mobile home installation.

Quadra-Fire is a registered trademark of Hearth & Home Technologies.

NOTE: This installation must conform with local codes. In the absence of local codes you must comply with the UL1482, (UM) 84-HUD and NPFA211 in the U.S.A. and the ULC S628-93 and CAN/CSA-B365 Installation Codes in Canada.

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

D. Glass Specifications

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

⚠ 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 unit).
- Do NOT Overfire - If appliance or chimney connector glows, you are overfiring.

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.

Hearth & Home Technologies WILL NOT warranty stoves 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

E. Non-Combustible Materials

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

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

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

F. Combustible Materials

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

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

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

Install Guide

2 Getting Started

A. Design and Installation Considerations

CAUTION

Check building codes prior to installation.

- 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.

Before installing, determine the following:

- Type of chimney connector to be used
  - single wall, 6 inch (152mm) diameter, stainless steel, or
  - double wall, 6 inch (152mm) diameter, stainless steel
- Consult page 28 for clearances to combustibles
- Power outlet located close by for optional blower

WARNING



Asphyxiation Risk.

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

May allow flue gases to enter the house.

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 unit).
- Do NOT Overfire - If appliance or chimney connector glows, you are overfiring.

Any such action that may cause a fire hazard.

B. Draft

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

Considerations for successful draft include:

- Preventing negative pressure
- Location of appliance and chimney

To be sure that your appliance burns properly:

- During a low burn, the chimney draft (static pressure) should be approximately -.04 inch water column (W.C.)
- During a high burn the chimney draft should be approximately -.10 inch (W.C.)
- Measure the W.C at 6 inches (152mm) above the top of the appliance after one hour of operation at each burn setting.

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

- Inadequate draft due to environmental conditions
- Downdrafts
- Tight sealing construction of the structure
- Mechanical exhausting devices
- Overdrafting 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.

C. Negative Pressure

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

Causes include:

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

To minimize the effects of negative air pressure:

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

⚠ WARNING



Asphyxiation Risk.

- Negative pressure can cause spillage of combustion fumes, soot and carbon monoxide.
- Appliance needs to draft properly for safety.

D. Tools And Supplies Needed

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

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

E. Inspect Appliance and Components

- Remove appliance and components from packaging and inspect for damage.
- Vent system components and doors are shipped in separate packages.
- 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.

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

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

Report damaged parts to dealer.

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 Fireplace: _____

Installer: _____

Dealer/ Distributor Phone #: _____

Serial #: _____

Model (circle one): VOYA-GRAND-MBK VOYA-GRAND-PMH

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

Appliance Install	**YES**	**IF NO, WHY?**
Verified clearances to combustibles. (Pg. 9)	☐	_____
Fireplace is leveled and liner is secured to appliance. (Pg. 20)	☐	_____
Hearth extension size/height decided. (Pg. 9)	☐	_____
Outside air kit installed. (Pg. 18)	☐	_____
Floor protection requirements have been met.	☐	_____
The masonry chimney is inspected by a professional and is clean or the factory built metal chimney is installed according to the manufacturer's instructions and clearances.	☐	_____

Chimney Section 4 (Pg. 13)		
Chimney configuration complies with diagrams.	☐	_____
Chimney installed, locked and secured in place with proper clearance.	☐	_____
Chimney meets the minimum height requirements.	☐	_____
Roof flashing installed and sealed.	☐	_____
Terminations installed and sealed.	☐	_____

Clearances Section 3 (Pg. 8)		
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.	☐	_____

Appliance Setup Section 5 (Pg. 18)		
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 fireplace.	☐	_____
Manual bag and all of its contents are removed from inside/under the fireplace and given to the party responsible for use and operation.	☐	_____

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 fireplace 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)

Part # 4017-254 • Rev B • 01/29/13

3 Dimensions and Clearances

A. Appliance Dimensions

NOTE: Flue Collar size is 6 inch (152mm) diameter (ID)

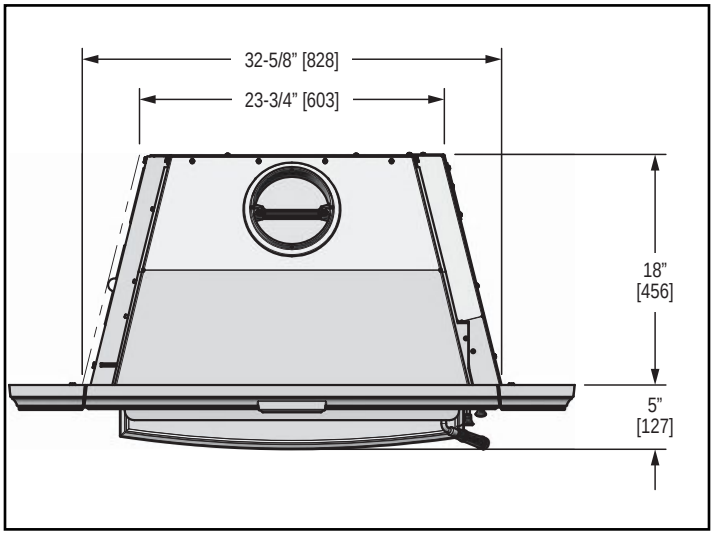


Figure 8.1 Top View

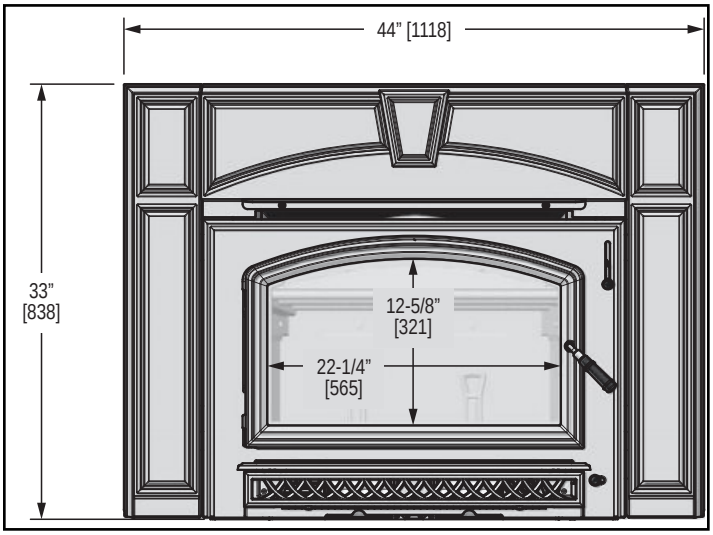


Figure 8.2 Front View - Cast Surround

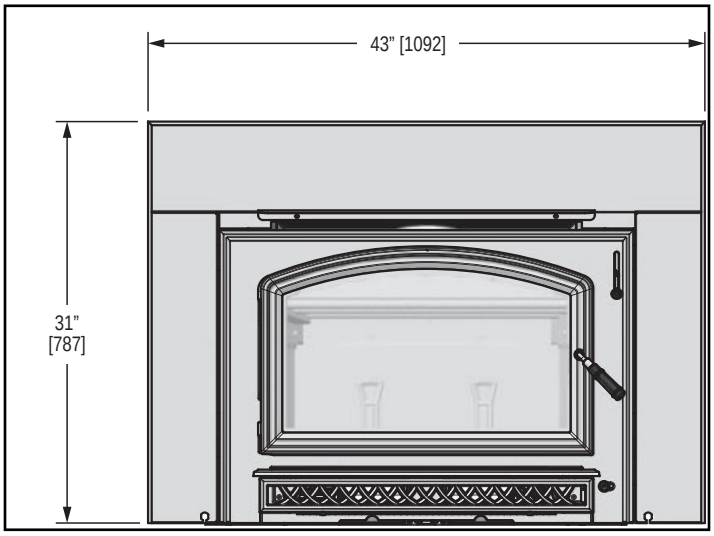


Figure 8.3 Front View - Small Steel Surround

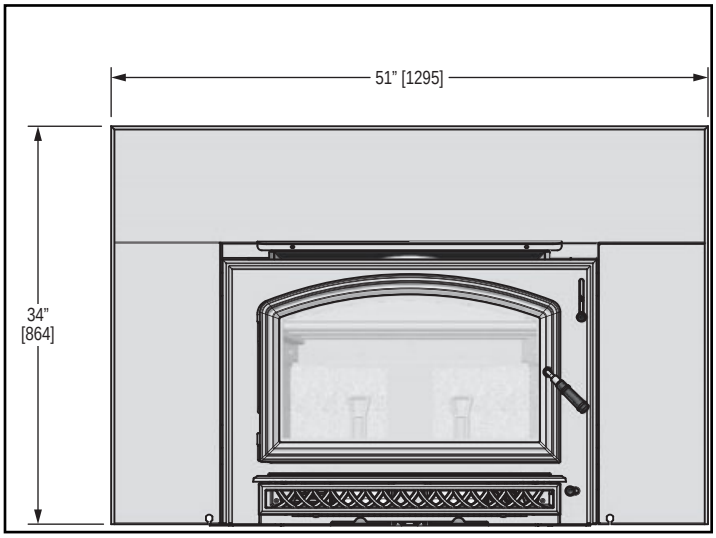
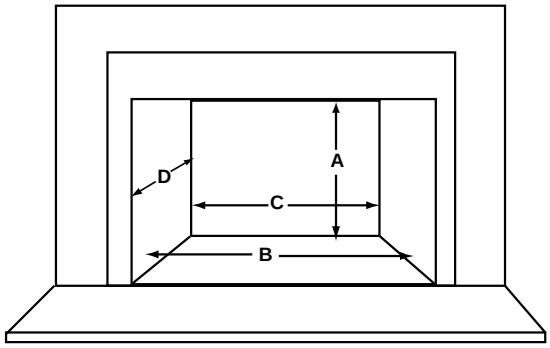


Figure 8.4 Front View - Large Steel Surround



Minimum Opening Dimensions		Inches	Millimeters
A	Height	24	610
B	Front Width	33-5/8	854
C	Back Width	24-3/4	629
D	Depth	18-1/2	470

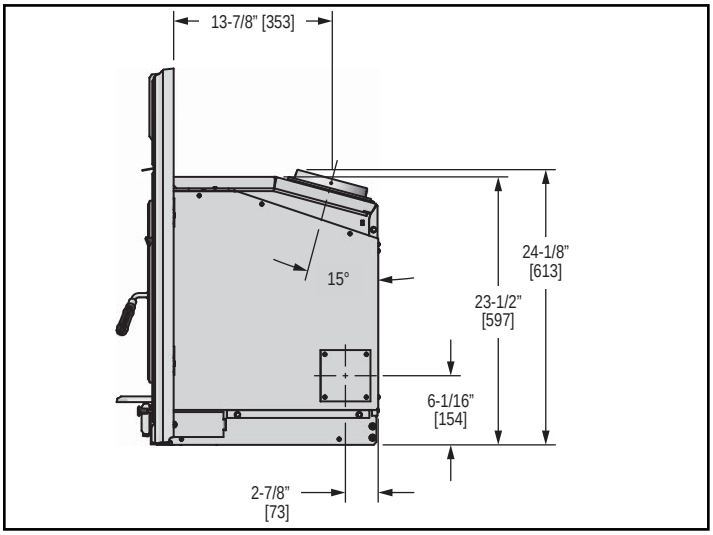


Figure 9.1 Side View

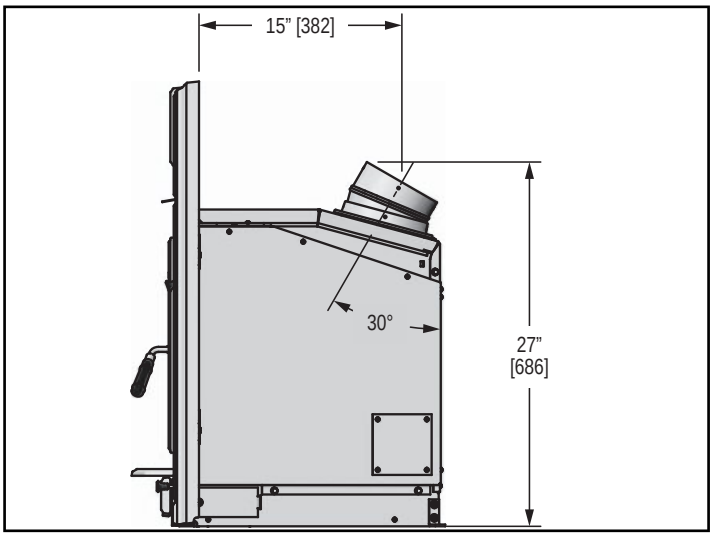


Figure 9.2 Side View with Optional 15 Degree Adapter

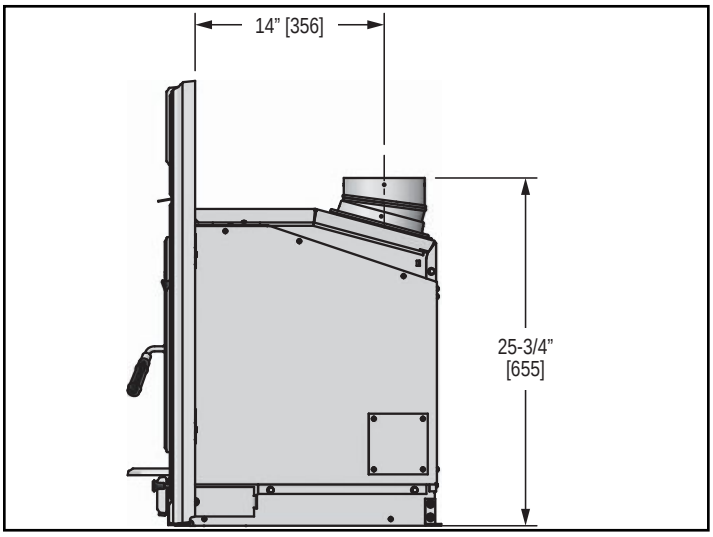
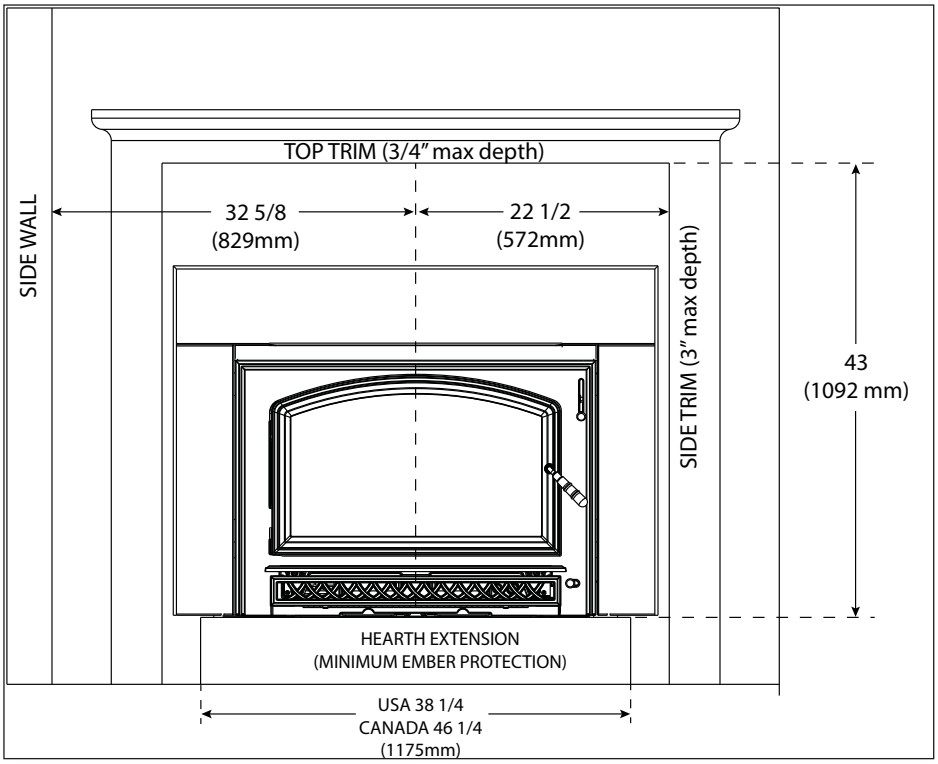
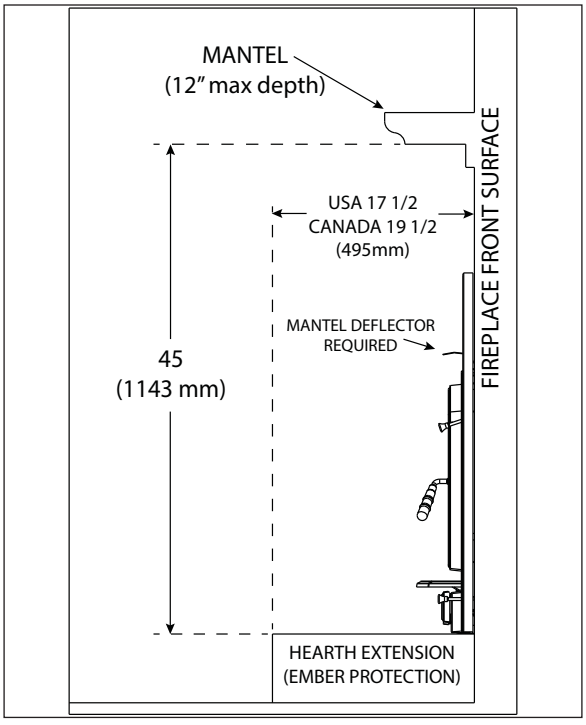
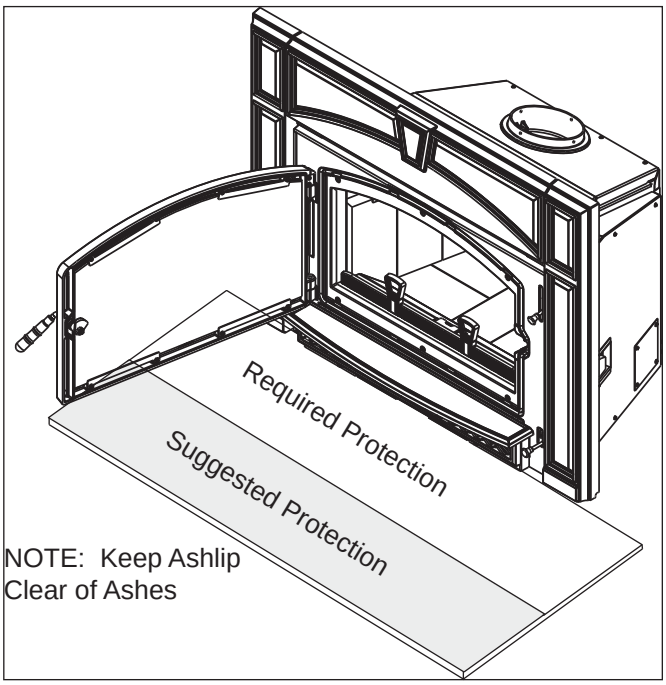


Figure 9.3 Side View with Optional 15 Degree Adapter

B. Clearances to Combustibles, United States and Canada (UL and ULC)







In Canada a full length 6 inch (152mm) S635 flue liner required as per ULC S628.
In USA a minimum 5 ft length (1.82m), 6 inch (152mm) diameter flue liner is required as per UL 1482.

⚠ WARNING

Fire Risk.

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

NOTE: Clearances may only be reduced by means approved by the regulatory authority having jurisdiction

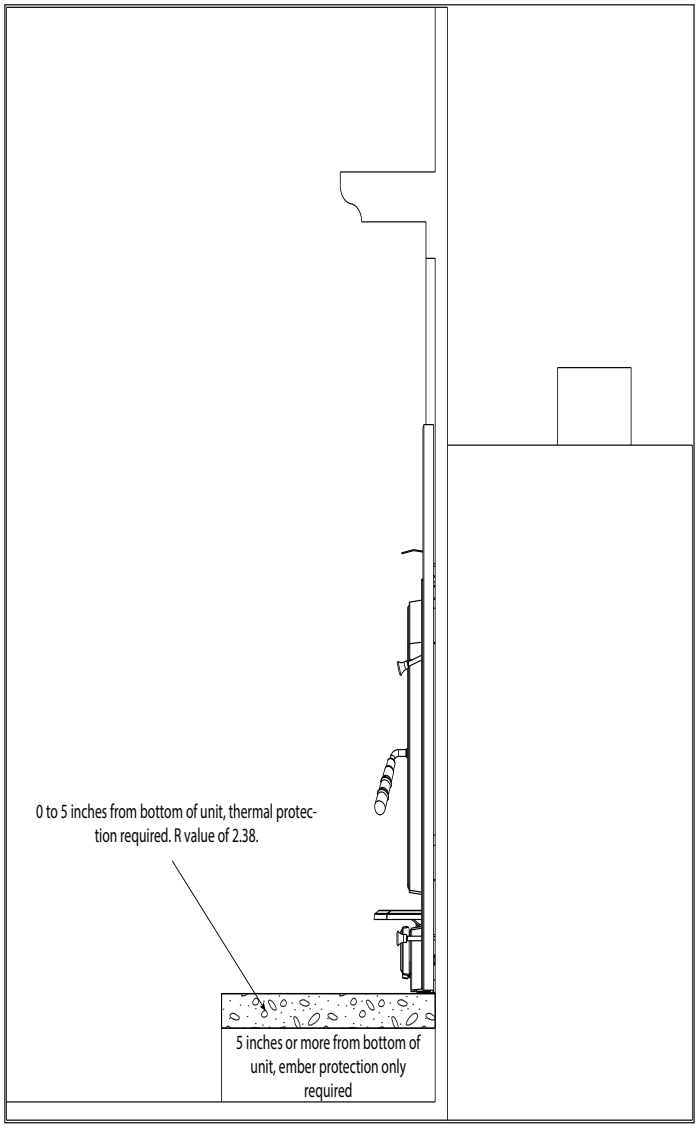


Figure 10.1

NOTE: Hearth Rug may be used in Suggested Area

Material

Thermal Conductivity: k value

The k value indicates the amount of heat (in BTU's) that will flow in 1 hour through 1 square foot of a uniform material 1 inch thick for each degree (F) of temperature difference from one side of the material to the other.

The LOWER the k factor means less heat is being conducted through the non-combustible material to the combustible material beneath it.

The k value of a material must be equal or smaller then the required k value to be acceptable.

$$\frac{\text{(BTU) (inch)}}{\text{(foot}^2\text{ (hour) (}^\circ\text{F)}}$$

Thermal Resistance: R value

The R value is a measure of a material's resistance to heat transfer.

R value is convenient when more than one material is used since you can add the R values together, whereas you can not do this for k value.

The HIGHER the R factor means less heat is being conducted through the non-combustible material to the combustible material beneath it.

The R value of a material must be equal or larger then the required R value to be acceptable.

Converting k to R:

Divide 1 by k and multiply the results times the thickness in inches of the material.

R = 1/k x inches of thickness

Converting R to k:

Divide the inches of thickness by R.

k = inches of thickness/R

Calculations:

Example: Floor protection requires k value of 0.84 and 3/4 inch thick.

Alternative material has a k value of 0.6 and is 3/4 inch thick.

Divide 0.6 by .75 = k value of 0.80. This k value is smaller than 0.84 and therefore is acceptable.

C. Locating Your Stove & Chimney

Location of the appliance and chimney will affect performance. As shown in **Figure 11.1** 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.

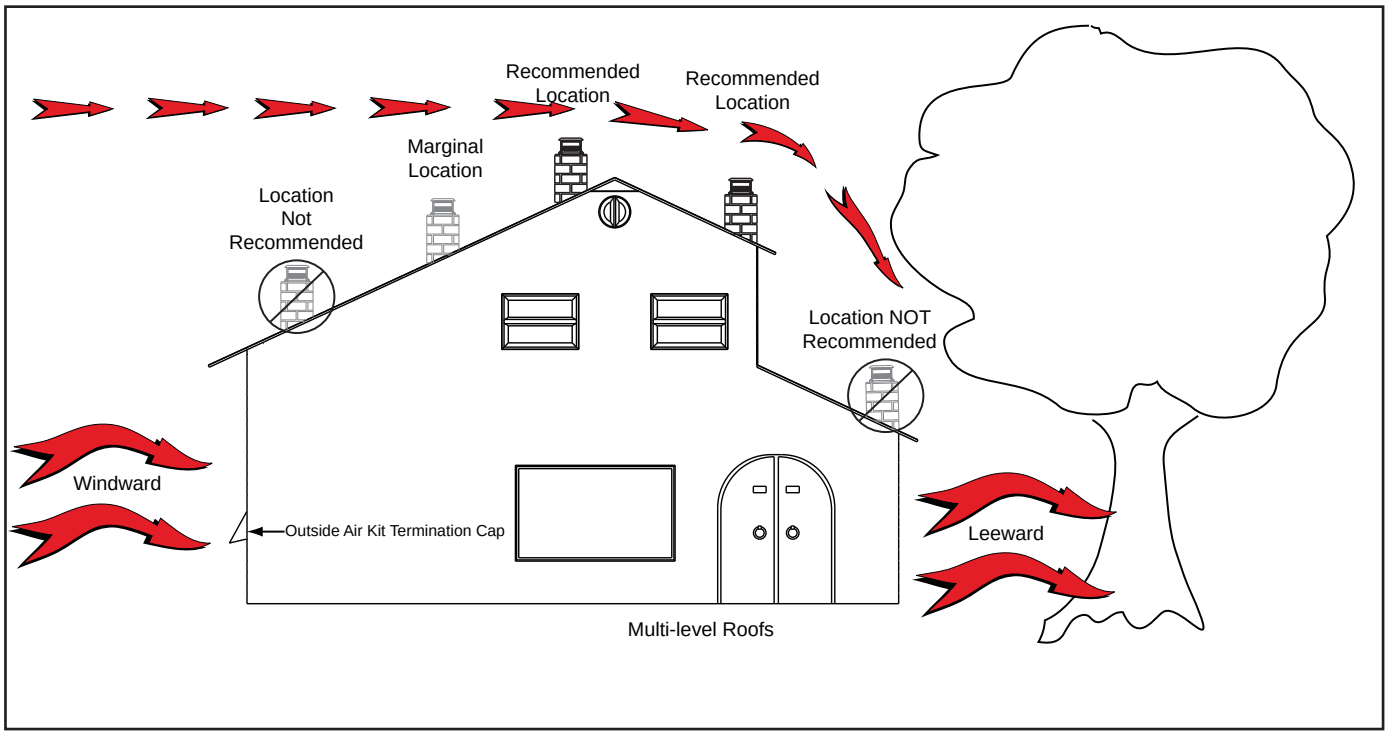


Figure 11.1

D. 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 3 feet (91cm) above the roof **and** at least 2 feet (61cm) above any portion of the roof within 10 feet (305cm).
- Must be located away from trees or other structures

***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*

E. 2-10-3 Rule

These are safety requirements and are not meant to assure proper flue draft.

This appliance is made with a 6 inch (152mm) diameter chimney connector as the flue collar on the unit.

- Changing the diameter of the chimney can affect draft and cause poor performance.
- It is not recommended to use offsets and elbows at altitudes above 4000 feet above sea level and or when there are other factors that affect flue draft.

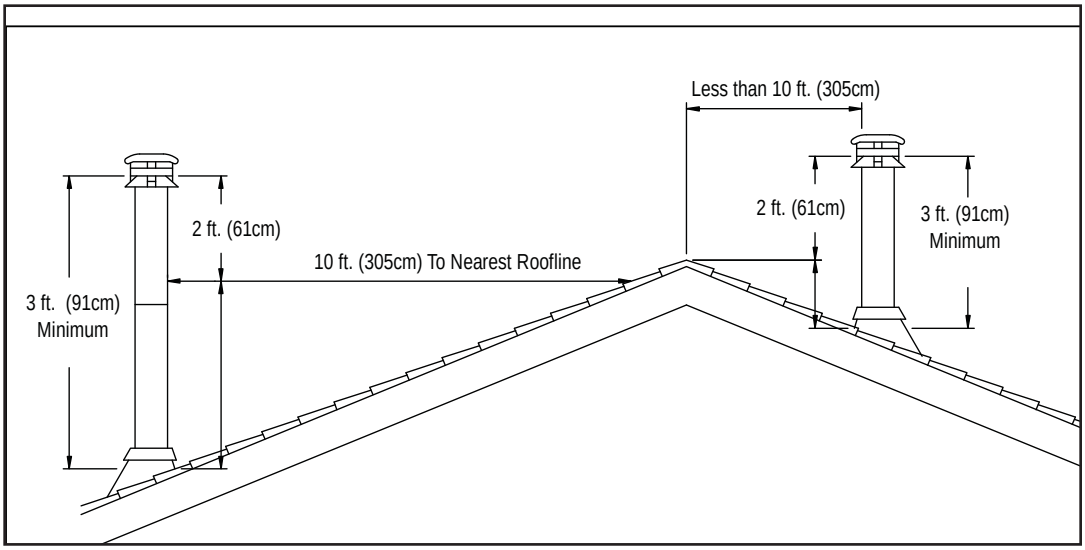


Figure 12.1 Pitched Roof

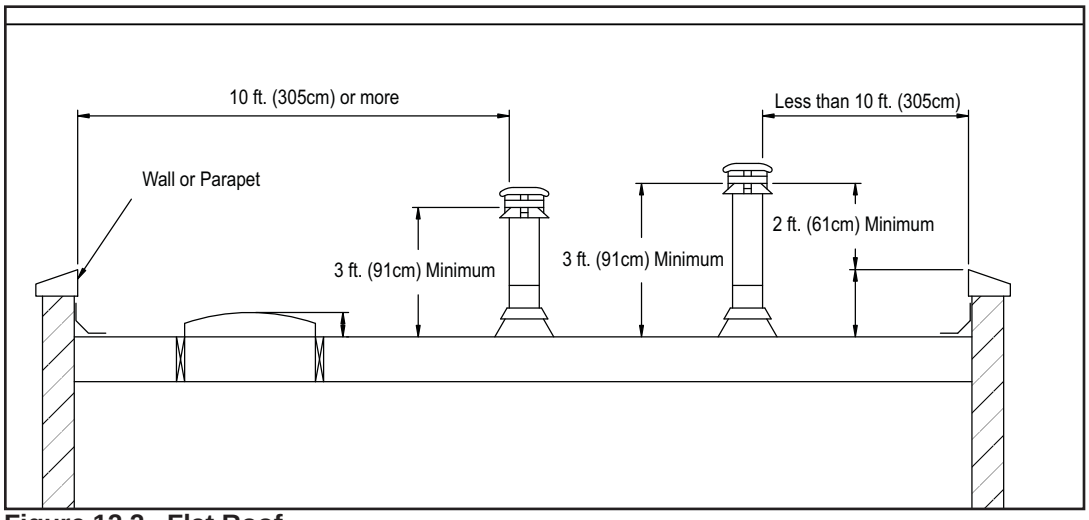


Figure 12.2 Flat Roof

4 Chimney Systems

A. Venting Systems

Chimney Connector:

It is also known as flue pipe or stove pipe. It must be 6 inches (152mm) minimum diameter stainless steel connector pipe.

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.

B. 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 NFI or CSIA certified professional or a technician, under the direction of a certified professional, conduct a Level II inspection per NFPA 211.

⚠ WARNING



Fire Risk

Inspection of Chimney:

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

C. Larger Chimneys

It is recommended that chimneys with larger diameters than 6 inches (152mm) be relined. An oversized flue can affect draft and impair performance and will allow increased build-up of creosote.

NOTICE: Check with your local building authorities and/or consult the National Fire Protection Association (NFPA 211).

D. Masonry Chimney

- Must meet minimum standards of NFPA 211.
- Must have at least 5/8 inch (16mm) fireclay lining joined with refractory cement. (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).
- The masonry wall of the chimney, if brick or modular block, must be a minimum of 4 inches (102mm) nominal thickness.
- A chimney of rubble stone must be at least 12 inches (305mm) thick.
- Cross-sectional area shall conform to NFPA 211-2006 Section 12.4.5.1.
- Should be lined with a 6 inch (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.
  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.
- When possible, install an airtight clean-out door to the rear of the smoke shelf.

Masonry Chimney (Cont'd)

This insert conforms with the UL 1482 and ULC S628 (Canada) in all respects, and is approved to UL & ULC safety standards for installation and use within a fireplace with a masonry chimney in accordance with NFPA 211 and CAN/CSA-B365-01.

NOTE: In Canada, this fireplace insert must be installed with a continuous chimney liner of a 6 inch (152mm) diameter extending from the fireplace insert to the top of the chimney. The chimney liner must conform to the Class 3 requirements of CAN/ULC-S635, Standard for Lining Systems for Existing Masonry or Factory-Built Chimneys and Vents, or CAN/ULC-S640, Standard for Lining Systems for New Masonry Chimneys.

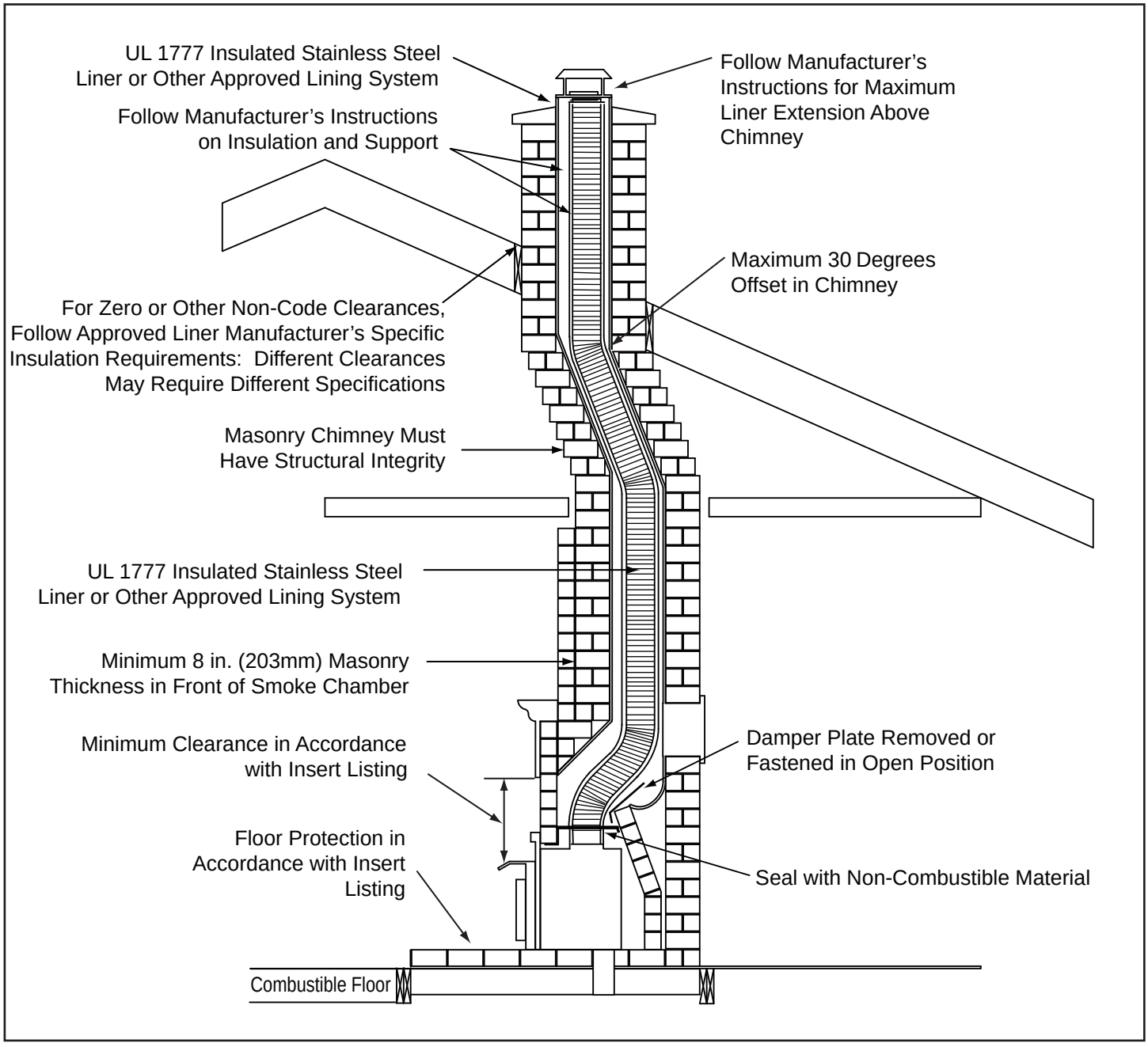


Figure 14.1

Generic Insert Model Shown in Illustration

E. Metal Heat Circulating Masonry

This insert conforms with the safety standard UL-1482 and ULC S628 (Canada) in all respects and is approved to UL & ULC safety standards for installation and use within a fireplace with masonry chimney, in accordance with NFPA 211, with a direct flue collar connection.

F. 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^{o}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 UL 1482 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.

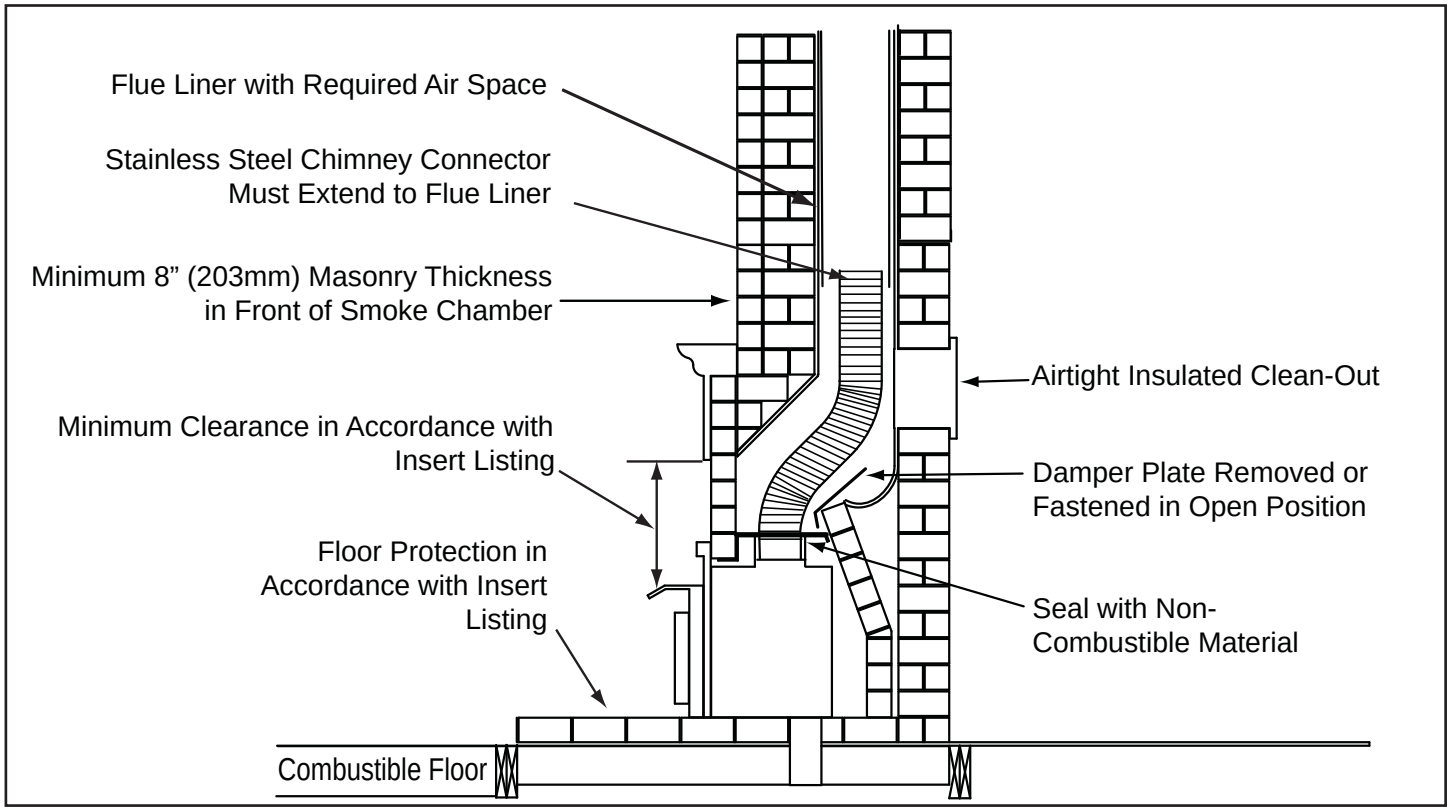


Figure 15.1

Generic Insert Model Shown in Illustration

Prefabricated Metal Chimney (Cont'd)

Fireplace Opening Dimensions	*Inches*	*Millimeters*
Minimum Width of Cavity Opening - Front	33-1/8	841
Minimum Width of Cavity Opening - Rear	24-1/4	616
Minimum Height	24-5/8	625
Minimum Depth from Front to Rear	18-1/2	470

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

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

⚠ WARNING

Fire Risk.

When lining air-cooled factory-built chimneys:.

- Run chimney liner approved to UL 1777 Type HT requirements (2100 degrees F)
- Re-install original factory built chimney cap ONLY
- DO NOT block cooling air openings in chimney
- Blocking cooling air will overheat the chimney

G. 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 15.1**.

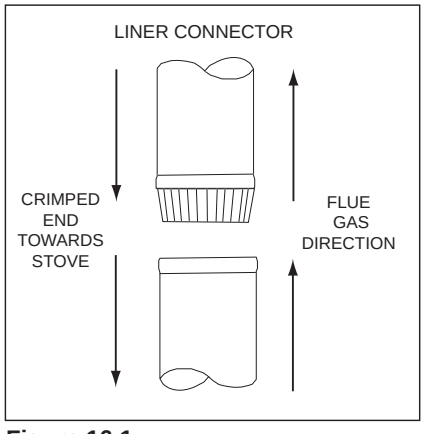


Figure 16.1

WARNING! Risk of Fire!

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

H. 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.

I. 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 refectory 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 Section F., Prefabricated Metal Chimney)

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 "H. Altering the Fireplace" 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.

J. 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.

K. Chimney Height / Rise and Run

To be sure that your Quadra-Fire insert burns properly, the chimney draft (static pressure) should be approximately -0.10 inches water column (W.C.) during a high burn and -0.04 inches W.C. during a low burn, measured 6 inches (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 6 inch (152mm) chimney, 14 to 16 feet (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 1000 feet (304.8m) above sea level.
- It is not recommended to use offsets or elbows at altitudes above 4000 feet (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 25 feet (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 Installation

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)

- 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.
- Phillips head screw driver
- 5/32 Allen Wrench
- Silicone sealant

Option One - Outside Air Installation Instructions

1. Swing grille down to expose the two screws. **Figure 18.1.**
2. Remove the two screws and pull the access assembly away from the appliance.
3. Assemble the outside air cover plate A supplied in component pack.
4. Re-install the access assembly.
5. Remove the outside air cover plate B on outer can and discard. **Figure 18.2.**
6. Install optional flex adapter to outer can with the same screws. Do not use plastic wire ties that come with the kit as they will melt. NOTE: You may need to install the flex pipe into the firebox first depending on installation. Attach flex to adapter with at least 2 screws.
7. Ensure existing access hole in fireplace is sufficient to feed the 4 inch flex.
8. After sliding can into fireplace, feed flex into cut opening to obtain outside combustion air.
9. Level outer can and install appliance. See **page 19.**

Option Two - Outside Air Installation Instructions

1. Follow steps 1-5 in Option One above
2. 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.

WARNING

Asphyxiation Risk.

Outside air inlet must be located to prevent blockage from:

- Leaves, snow, ice or other debris Block may cause combustion air starvation
- Smoke spillage may set off alarms or irritate sensitive individuals.

3. Repeat step 9 under Option One with one exception. After installing the appliance in the outer can, seal the fireplace opening and trim package with insulation to prevent air leakage into the room.

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

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.

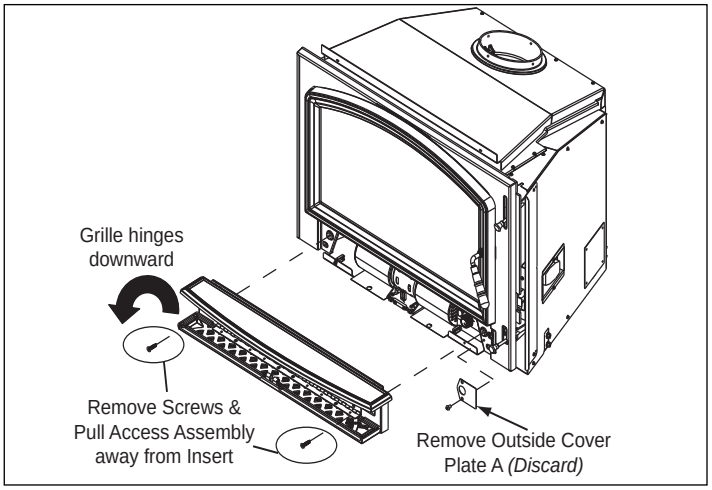


Figure 18.1

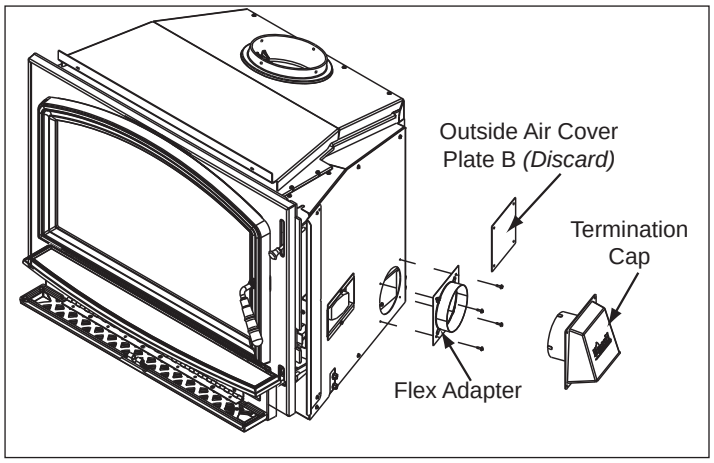


Figure 18.2

B. Securing Stove Pipe/Liner to Flue Collar

1. There are 4 pre-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 19.1.**
2. Attach gasket to bottom side of flue collar with a thin coat of silicone.

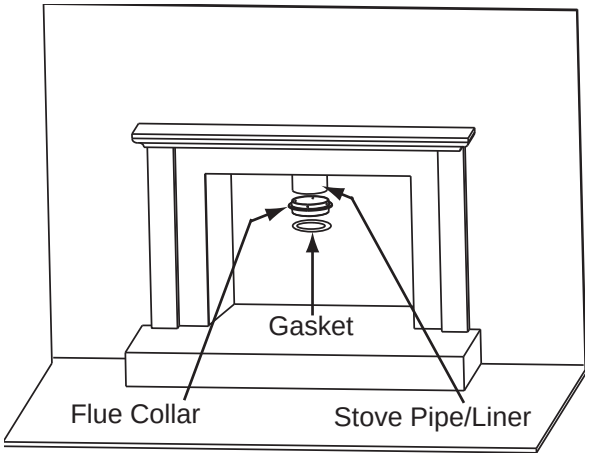


Figure 19.1

C. Optional Offset Adapter Installation

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

Figure 19.2 shows a vertical installation 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.

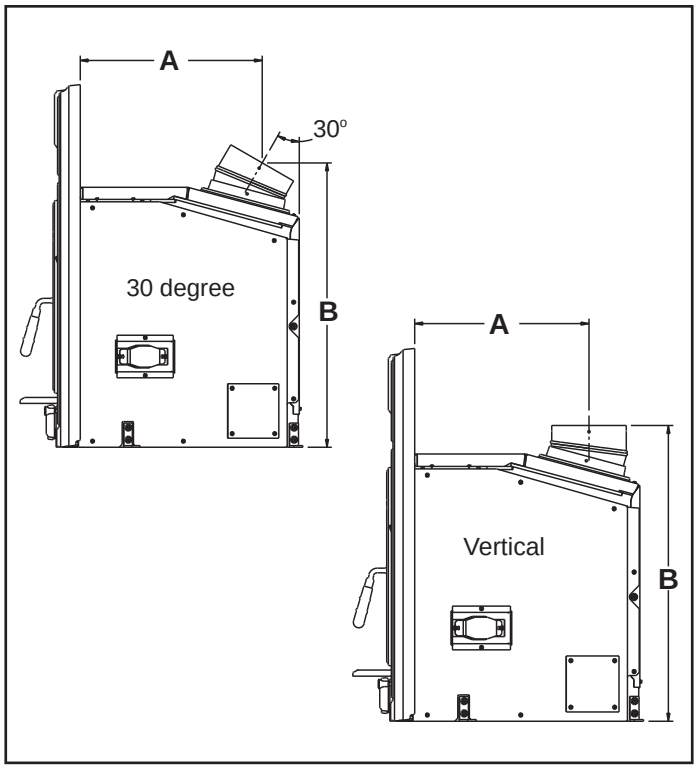


Figure 19.2

Flue Adapter	A	B
Vertical	14 in. (344mm)	25 3/4 in. (532mm)
30 Degree	15 in. (371mm)	25 1/2 in. (525mm)

D. Leveling Legs

1. Remove the 2 screws already installed on each leg.
2. Move legs to the desired height**.**
3. Re-install the screws to secure in place.

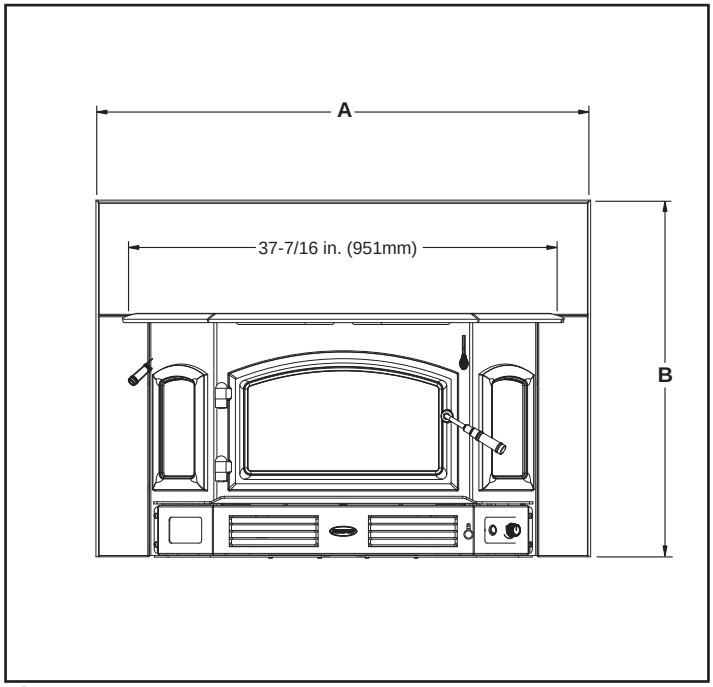


Figure 20.1

E. Securing Appliance to Stove Pipe/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 20.2**.
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.

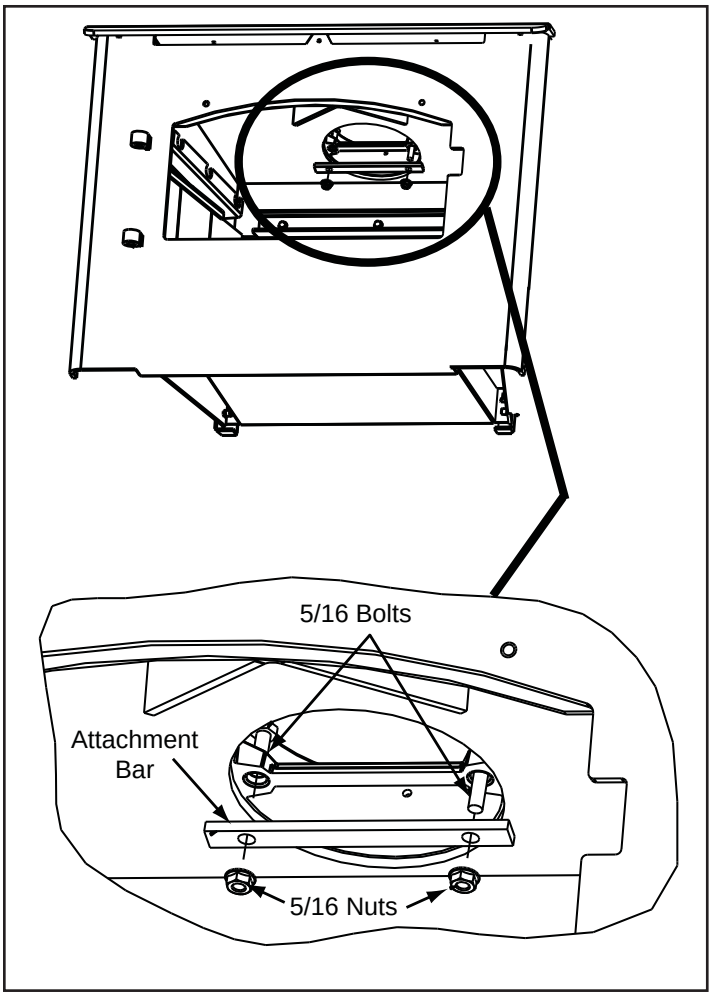


Figure 20.2

F. Surround & Trim Kit Installation

Standard Size: 43 in. W x 31 in. H
Large Size: 51 in. W x 34 in. H

1. Lay surround face down on a protected surface to prevent scratching.
2. Using a 4 to 6 inches long Phillips head screw driver attach the side surrounds to the top surround using (2) #8 sheet metal screws on each side provided with the kit. **Figure 21.2**.
3. Lay the trim face down and place the corner brackets into position.
4. Using a standard flat screw driver tighten the corner brackets. **Figure 21.2**.
5. Slide the assembled trim set over the surround set. and then over the appliance matching the mounting tabs on the side pieces with the slots on the appliance. **Figure 21.2.**
6. Align the 2 screws in the top surround piece to the 2 alignment holes on the appliance top. Secure in place. **Figure 21.1**.
7. Use the strain relief in the surround side for blower cord installation and use the cover plug to insert into the hole where the blower cord is not installed.

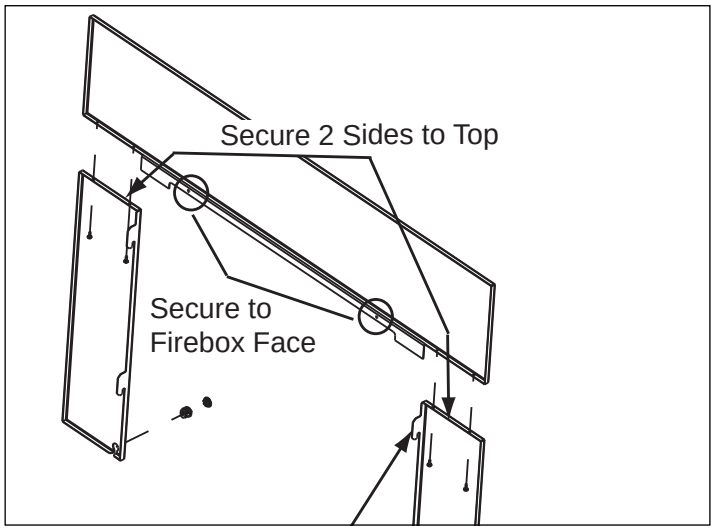


Figure 21.1

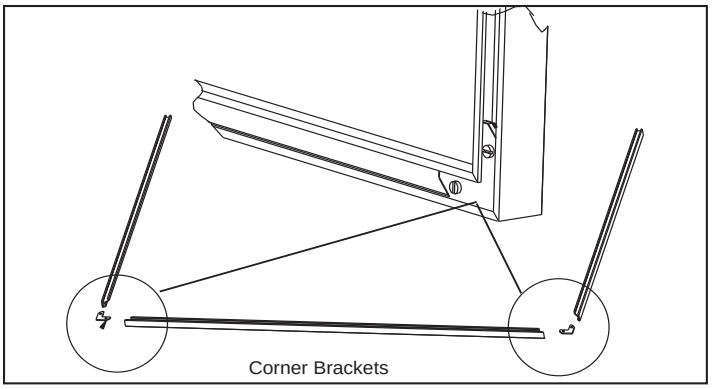


Figure 21.2

G. Standard Surround & Cast Trim Kit

Standard Size: 42-1/2 in. W x 30 in. H
Large Size: 48 in. W x 34 in. H

Included in Surround Kit: (2) side pieces, left and right; (1) l top piece; (1) fastener package; (1) heat deflector.

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 4 to 6 inches long Phillips head screw driver; pliers

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. Using a 4 to 6 inches long Phillips head screw driver attach the side surrounds to the top surround using (2) #8 sheet metal screws on each side provided with the kit
4. 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 21.1.**
5. 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.
6. Secure the magnet to the bracket and attach the magnet and bracket to each metal side piece at the bottom. The magnet is facing the front. **Figure 21.2.**
7. Place the cast footers under the metal sides aligning the top and bottom holes in the cast footers and metal sides.
8. The 9 mounting clips are shipped in one long strip. Hand break apart or use pliers.
9. 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 21.3.**
10. 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.
11. 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 21.4**.
12. Align the 2 screws in the top metal surround piece to the 2 alignment holes on the appliance top. Secure in place. **Figure 21.4.**

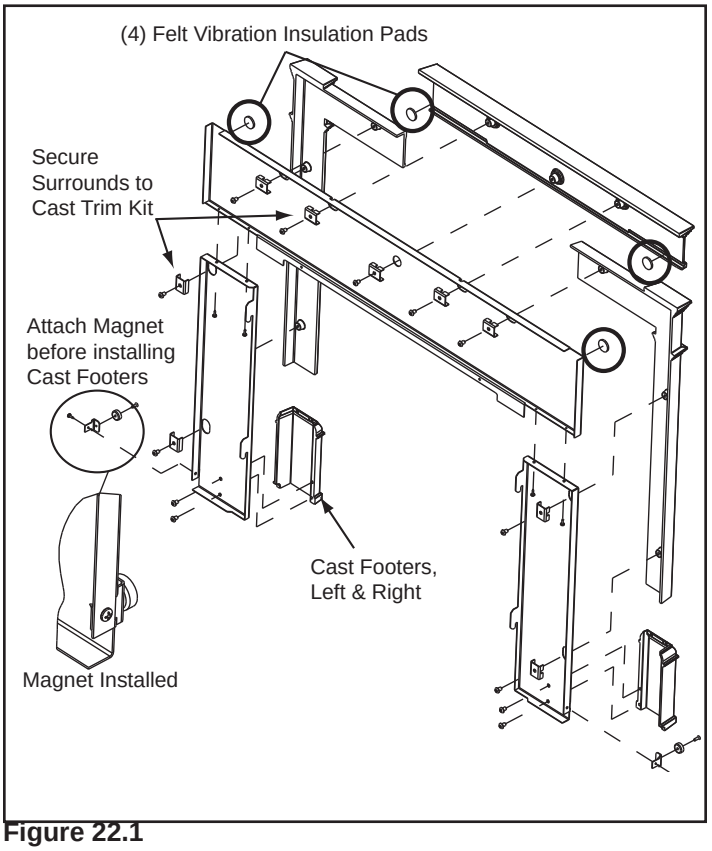


Figure 22.1

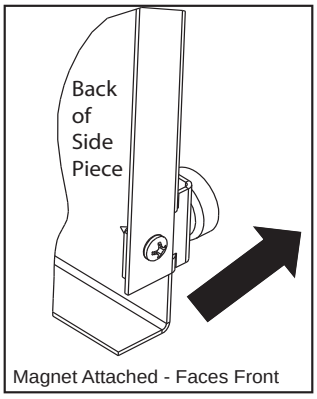


Figure 22.2

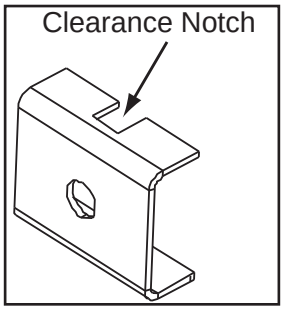


Figure 22.3

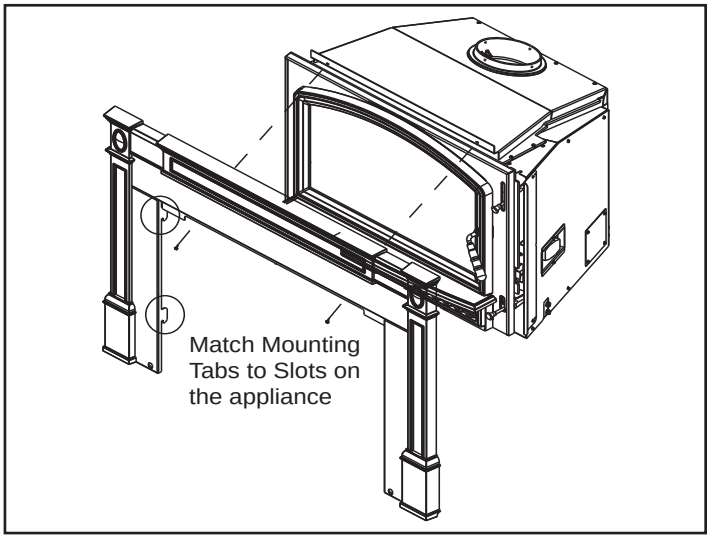


Figure 22.4

H. All Cast Surround Kit

Size: 44 in. W x 33 in. H

Included in Surround Kit: (2) side pieces, left and right; (1) l top piece; (1) fastener package.

Tools Needed: Powered 4 to 6 inches long Phillips head screw driver; pliers

1. Remove contents from box being careful not to scratch or damage the cast trim pieces.
2. Lay surround pieces face down on a protected surface to prevent scratching.
3. Align the bosses on the top piece to the holes on the side pieces. Secure the 3 pieces together.
4. Attach the mounting brackets to the side pieces included with the kit. **Figure 22.5.**
5. In order to get a tight seal for the surround, you must reposition a side shield. There are two holes on the shield and it will come from the factory secured in the first (left) hole. Remove the shield and re-install using the second (right) hole. **Figure 22.6.**
5. Position the trim on the appliance matching up the mounting brackets with the slots on the appliance.
6. Attach the surround to the appliance 2 screws.
   DO NOT OVERTIGHTEN SCREWS - MAY DAMAGE PORCELAIN FINISH.

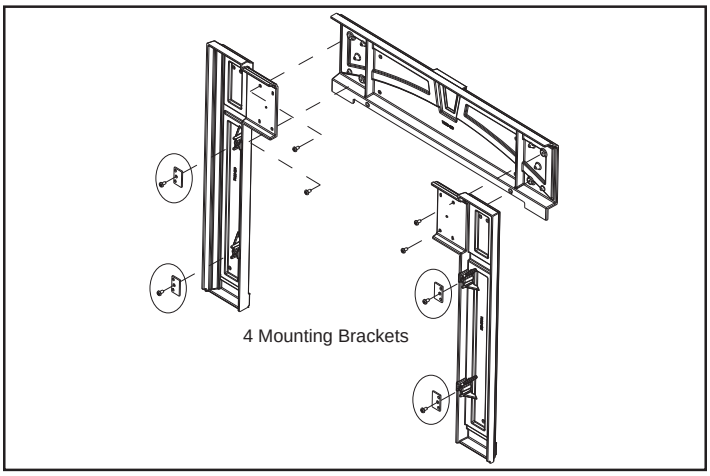


Figure 22.5

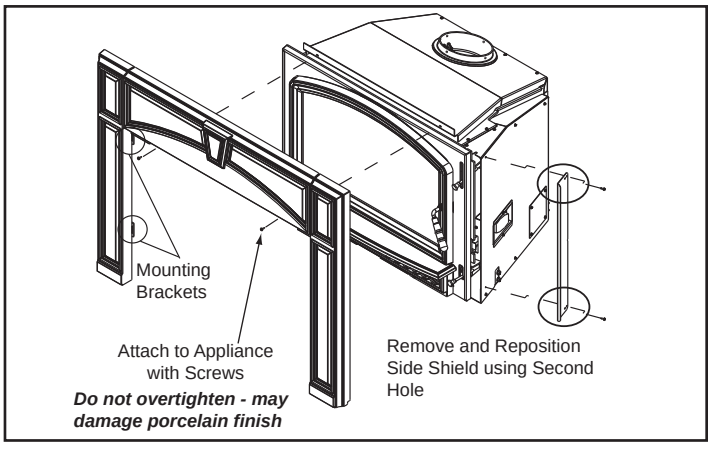
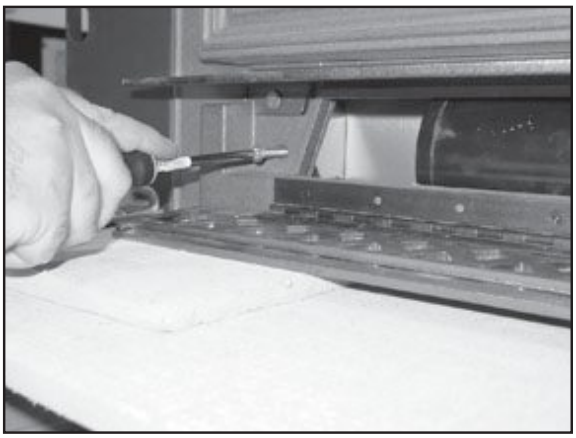


Figure 22.6

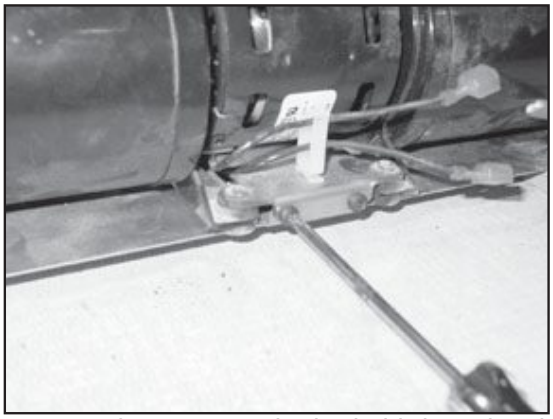
I. Blower Cord Installation on Left Side

The blower cord is shipped to be installed on the right side of the appliance. You may relocate the cord so it is on the left side.

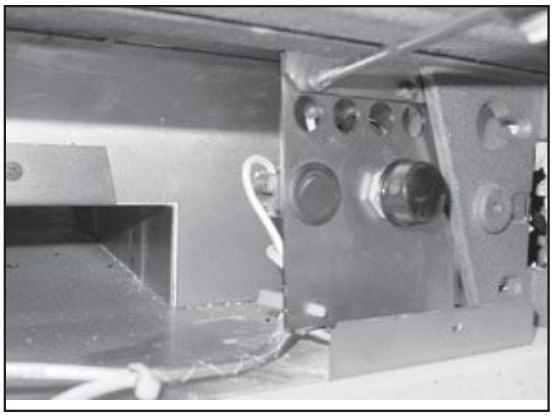
Overview: You are removing the power cord from the blower controls, re-routing the cord to the left side and re-installing the power cord to the blower controls. Refer to the exploded drawing on **page 24.**



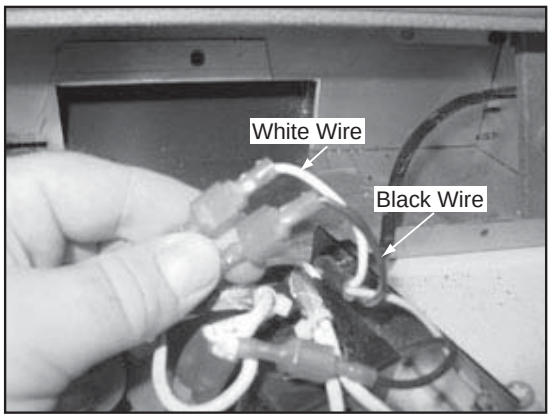
1. Swing the grille down to expose the 2 bolts, one at each end. Remove the bolts and pull blower access assembly away from appliance and store away from your work area.



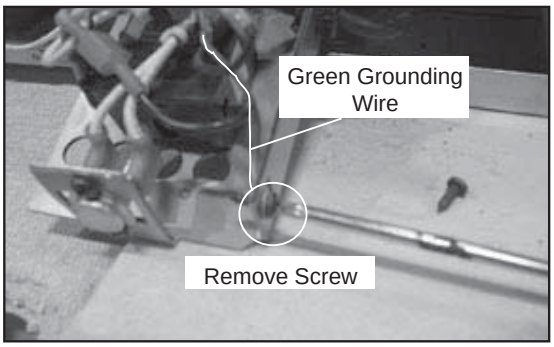
2. Remove the 2 screws in the hold down bracket in front of the blower assembly. You do not need to remove the blower from the hold down bracket.
3. Disconnect the 2 blower wires that are attached to the wire harness and pull the blower assembly away from the appliance.



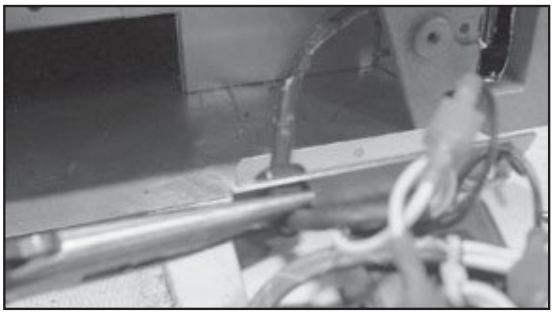
4. Remove the 2 screws at the top of the control plate. Push the bottom of the control plate to the inside of the appliance and partially remove the control plate assembly.



5. Locate the black and white wires that are part of the power cord and disconnect those wires from the wire harness.



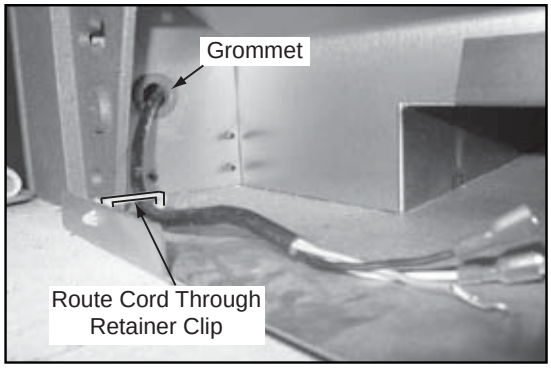
6. Remove the screw that is holding the ground lug to the control plate.



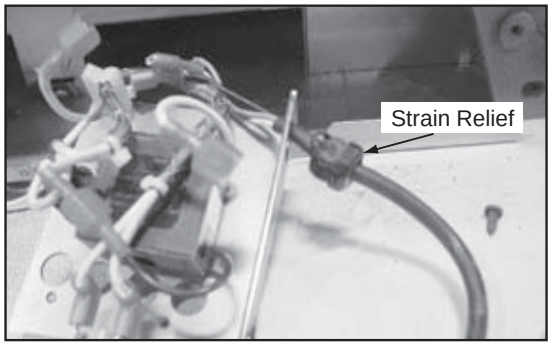
7. Use needle nose pliers to remove the strain relief that protects the power cord from the control plate.



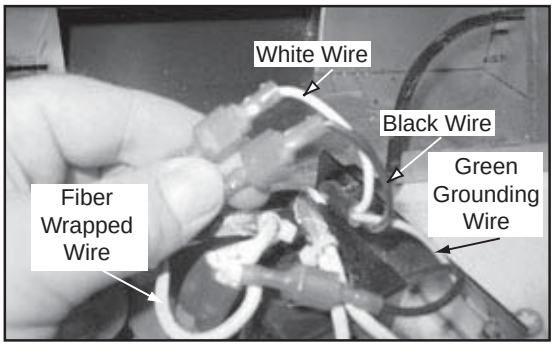
8. The power cord is now disconnected from the blower control plate. Pull the cord out through the right side of the appliance.



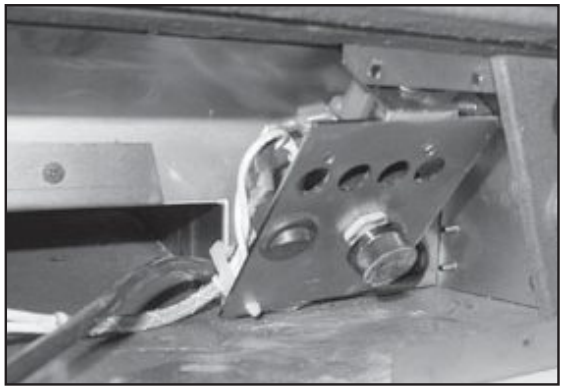
9. Insert the power cord through the left side of the appliance in the hole contains the grommet. Pull the connection ends to the right side. Route the power cord through the retainer clip.



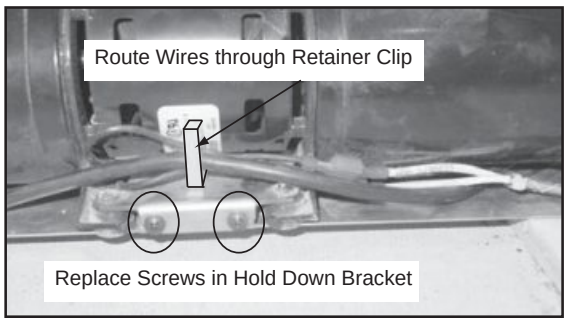
10. Replace the strain relief on the power cord in the same position as before. Locate the indentation on the cord made by the strain relief. Once replaced, push the strain relief back into the control plate.



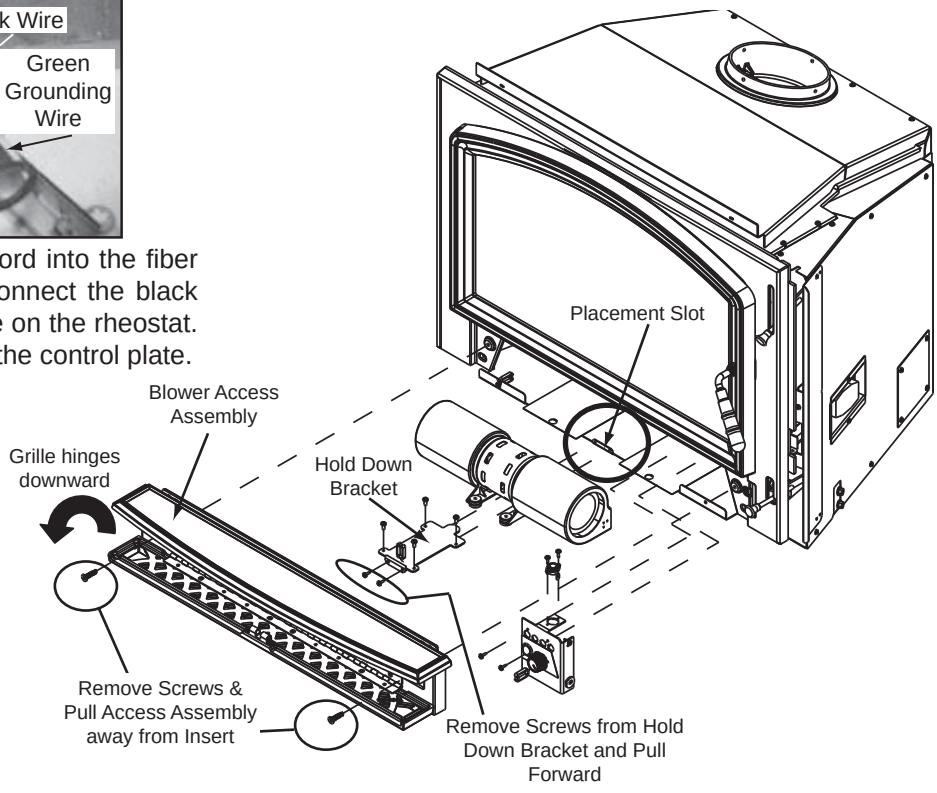
11. Connect the white wire on the power cord into the fiber wrapped wire on the wire harness. Connect the black wire on the power cord to the white wire on the rheostat. Re-attach the green ground terminal to the control plate.



12. Insert the control plate assembly back into the appliance as shown. Tilt the assembly forward and then lift up and rotate the bottom towards the front of the appliance at the same time ensure that the snap disc holder is properly seated. Secure plate to the appliance.



13. Push in the blower and hold down bracket into appliance matching up the tab on the bracket and placement slot on the appliance. Secure bracket and reconnect blower wires (no polarity to worry about) routing wires through the retainer clip.



6 Mobile Home Installation

1. An outside air inlet must be provided for combustion and must remain clear of leaves, debris, ice and/or snow. It must be unrestricted while unit is in use to prevent room air starvation which can cause smoke spillage and an inability to maintain a fire. Smoke spillage can also set off smoke alarms.
2. Unit must be secured to the mobile home structure at two attachment points. Remove bolts from each side of insert and use plumbers tape to secure to structure (a washer may be required). Re-install bolts.
3. Unit must be grounded with #8 solid copper grounding wire or equivalent and terminated at each end with N.E.C. approved grounding device.
4. The factory-built fireplace must meet (UM)84-HUD requirements for outside combustion air supply to the fireplace fire chamber and the chimney must be listed to UL103 HT or a listed UL-1777 full length six inch (152mm) diameter liner must be used. It must be equipped with a spark arrestor cap and the outside air must be installed on the insert.
5. Refer to **pages 7-8** of this manual for clearance to combustibles and floor protections requirements. All clearances must be followed precisely.
6. Use silicone to create an effective vapor barrier at the location were the chimney or other component penetrates to the exterior of the structure.
7. Follow the chimney and chimney connector manufacturer's instructions when installing the flue system for use in a mobile home.
8. Burn wood only. Other types of fuels may generate poisonous gases (e.g., carbon monoxide).
9. If unit burns poorly while an exhaust blower is on in home, (i.e., range hood), increase combustion air.
10. Installation shall be in accordance with the Manufacturers Home & Safety Standard (HUD) CFR 3280, Part 24.

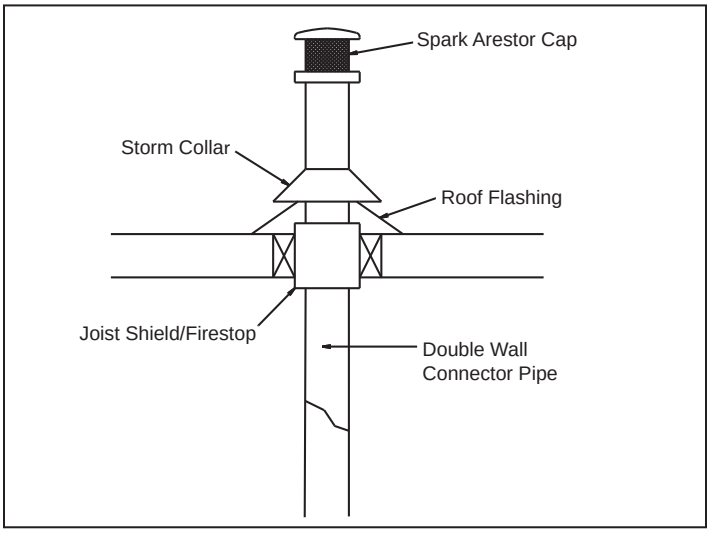


Figure 25.1

NOTICE:

- Offsets from the vertical, not exceeding 45°, are allowed per Section 905(a) of the Uniform Mechanical Code (UMC).
- Offsets greater than 45° are considered horizontal and are also allowed, providing the horizontal run does not exceed 75% of the vertical height of the vent.
- Construction, clearance and termination must be in compliance with the UMC Table 9C. This installation must also comply with NFPA 211.

NOTICE: Top sections of chimney must be removable to allow maximum clearance of 13.5 feet (411cm) from ground level for transportation purposes.

WARNING

Asphyxiation Risk.

- NEVER INSTALL IN A SLEEPING ROOM.

Consumes oxygen in the room.

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

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.

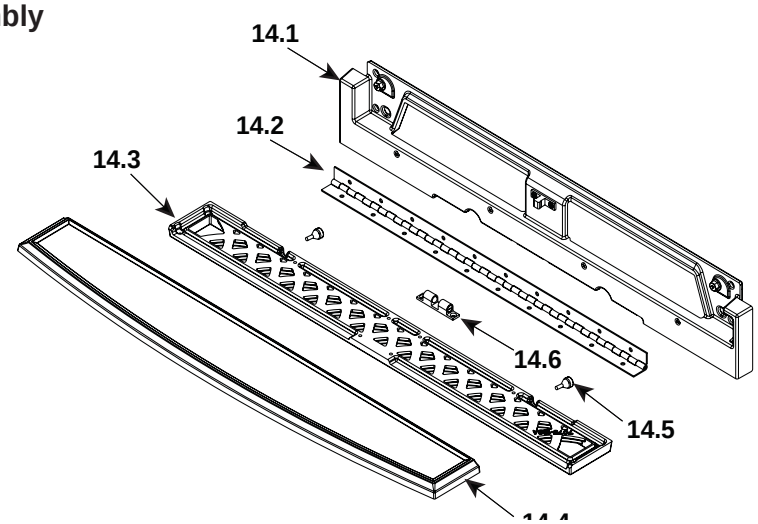
7 Accessory List

QUADRA-FIRE® Service Parts

VOYAGEUR - Grand

Beginning Manufacturing Date: Oct 2012
Ending Manufacturing Date: Active

#14 Access Assembly



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.

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
14	Access Assembly	Matte Black	SRV7075-010MBK	
		Porcelain Mahogany	SRV7075-010PMH	
	Bolt, Hwh Ser Flg 1/4-20 x 3/4	Pkg of 25	228-0120/25	Y
	Washer, Bonded 5/16 x 3/4	Pkg of 10	229-0910/10	Y
14.1	Front, Lower		SRV7063-125MBK	
	Bolt, Hwh Ser Flg 1/4-20 x 3/4	Pkg of 25	228-0120/25	Y
	Washer, Bonded 5/16 x 3/4	Pkg of 10	229-0910/10	Y
14.2	Hinge, Continous		7000-510	
	Screw, Flat Head Phillips 8-32 x 1/2	Pkg of 12	220-0490/12	Y
14.3	Access	Matte Black	SRV7075-127MBK	
		Porcelain Mahogany	SRV7075-127PMH	
	Screw, Flat Head Phillips 8-32 x 1/2	Pkg of 12	220-0490/12	Y
14.4	Ash Lip	Matte Black	SRV7075-135MBK	
		Porcelain Mahogany	SRV7075-135PMH	
	Bolt, Hwh Ser Flg 1/4-20 x 3/4	Pkg of 25	228-0120/25	Y
	Washer, Bonded 5/16 x 3/4	Pkg of 10	229-0910/10	Y
14.5	Bumper, Rubber	Pkg of 12	SRV224-0340/12	Y
14.6	Twin Ball Catch/ Striker		SRV7000-532	Y
	Screw, Flat Head Phillips 8-32 x 1/2	Pkg of 12	220-0490/12	Y
15	Blower Retainer		SRV7063-139	
	Screw, Pan Head phillips 8-32 x 3/8	Pkg of 40	225-0500/40	Y
16	Blower Assembly		SRV7044-210	Y

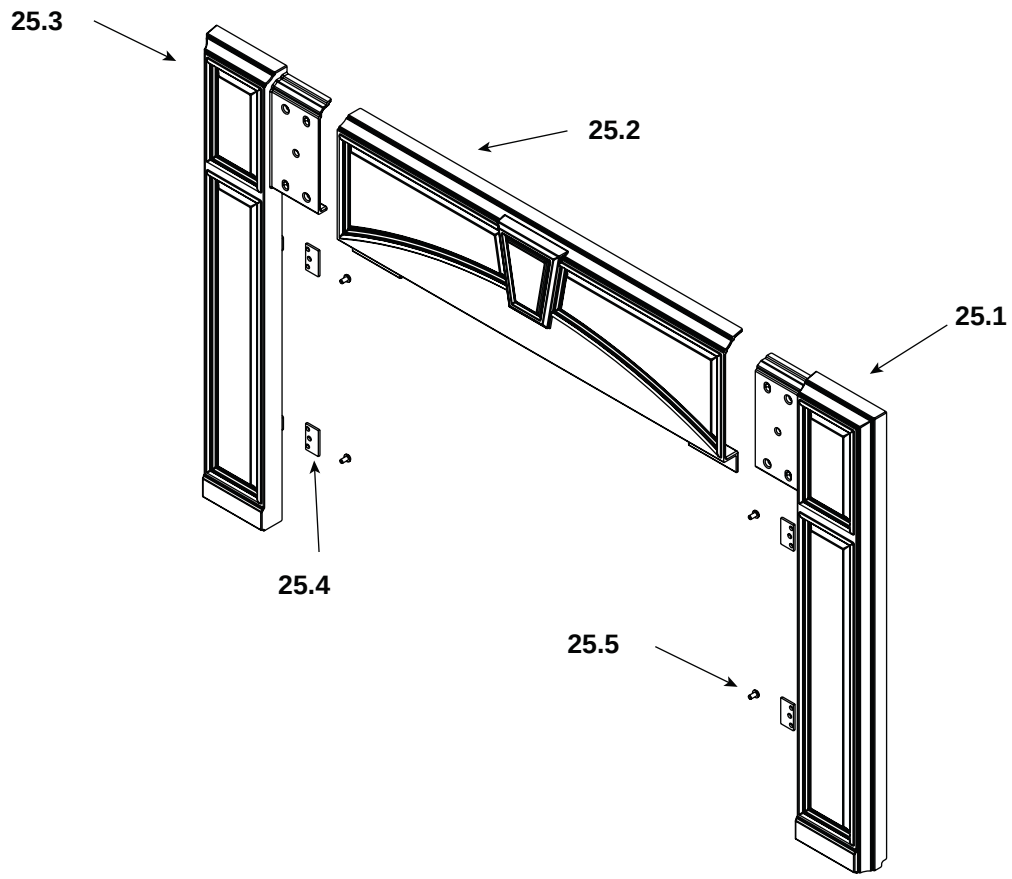
Additional service part numbers appear on following page.

QUADRA-FIRE® Service Parts

VOYAGEUR - Grand

Beginning Manufacturing Date: Oct 2012
Ending Manufacturing Date: Active

#25 Cast Surround Assemblies



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.

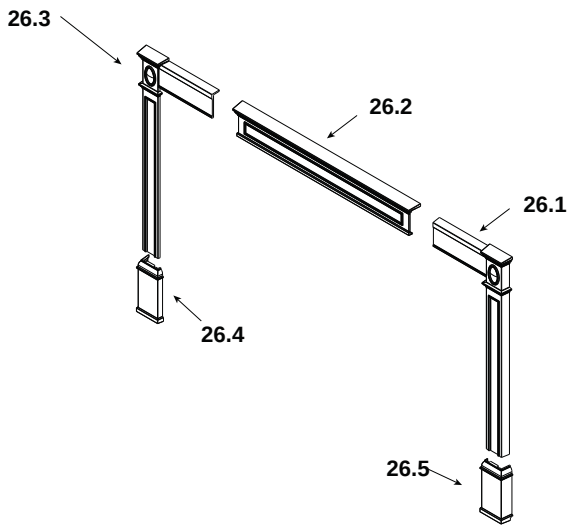
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
25	Surrounds, Cast	Matte Black	SP-GRAND-CC-MBK	
		Porcelain Mahogany	SP-GRAND-CC-PMH	
25.1	Surround Right	Matte Black	SRV7075-131MBK	
		Porcelain Mahogany	SRV7075-131PMH	
25.2	Surround Top	Matte Black	SRV7075-129MBK	
		Porcelain Mahogany	SRV7075-129PMH	
25.3	Surround Left	Matte Black	SRV7075-133MBK	
		Porcelain Mahogany	SRV7075-133PMH	
25.4	Surround Retainer	Qty 4 req	SRV7063-136	
25.5	1/4-20 x 50 Phillips Pan Head Screw	Pkg of 12	32281/12	**Y**
	Component Pack		SRV7063-054	

QUADRA-FIRE® Service Parts

VOYAGEUR - Grand

Beginning Manufacturing Date: Oct 2012
Ending Manufacturing Date: Active

#25 Metal Surround Assemblies



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.

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	Stocked at Depot
	Surrounds, Cast Metal	**No Longer Available**	SP-GRAND-CM-STD	
		No Longer Available	SP-GRAND-CM-LRG	
26.1	Trim Leg Right	Matte Black	414-7130MBK	
		Porcelain Mahogany	414-7130PMH	
26.2	Trim Header	Matte Black	414-7110MBK	
		Porcelain Mahogany	414-7110PMH	
26.3	Trim Leg Left	Matte Black	414-7120MBK	
		Porcelain Mahogany	414-7120PMH	
26.4	Trim Footer Left	Matte Black	414-7090MBK	
		Porcelain Mahogany	414-7090PMH	
26.5	Trim Footer Right	Matte Black	414-7100MBK	
		Porcelain Mahogany	414-7100PMH	
	Component Pack		SRV7063-055	
	Surrounds, Metal	Standard	SP-GRAND-STD	
		Large	SP-GRAND-LRG	
	Trim Kit	Black	TRIMKIT-4331-BK	
		Gold	TRIMKIT-4331-GD	
		Nickel	TRIMKIT-4331-NL	
	Trim Kit	Black	TRIMKIT-5134-BK	
		Gold	TRIMKIT-5134-GD	
		Nickel	TRIMKIT-5134-NL	
	Component Pack		SRV7063-056	
	Mantel Deflector		SRV7075-512	

QUADRA-FIRE®

NOTHING BURNS LIKE A QUAD

CONTACT INFORMATION

Hearth & Home Technologies
1445 North Highway
Colville, WA 99114
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.



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: _____

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