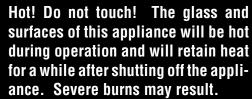


#### SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE



### WARNINGS





- Carefully supervise children in the same room as appliance.
- If small children are present in the home, it is recommended that this appliance be fitted with a firescreen kit.



Listed to standards: ULC-S610 and UL-127 Report No. 3092554

# INSTALLATION AND OPERATION INSTRUCTIONS

### **CAMBRIATM**

**Wood-Burning Fireplace** P/N 850,057M REV. E 06/2010



### MODEL

#### **CAMBRIA**

This installation manual will enable you to obtain a safe, efficient and dependable installation of your fireplace system. Please read and understand these instructions before beginning your installation or operating the fireplace.

CAUTION: Do not alter or modify the fireplace or its components under any circumstances. Any modification or alteration of the fireplace system, including but not limited to the fireplace, chimney components and accessories, may void the warranty, listings and approvals of this system and could result in an unsafe and potentially dangerous installation.

Lennox Hearth Products wood-burning fireplaces are designed for use as a supplemental heater. They are not intended for continuous use as a primary heat source.

### **WARNINGS**

- The fireplace cannot be operated without a door or firescreen. Consult your dealer to select the correct replacement door or firescreen.
- Important! To assure proper alignment of glass doors: Install this fireplace in a square and plumb condition, using shims as necessary at sides and/or bottom.
- Install the fireplace only as described in these instructions.



We recommend that our woodburning hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Woodburning Specialists or who are certified in Canada by **W**ood Energy Wood Energy Technical Technical Training www.nficertified.org Training (WETT).

IMPORTANT! GENERAL SAFETY PRECAUTIONS. READ AND UNDERSTAND THESE SAFETY RULES BEFORE YOUR FIRST FIRE.

### **WARNING**

The CAMBRIA™ fireplace must be installed with an outside air kit intake, which is included with the fireplace

### **A** WARNING

THE FIREPLACE MUST BE OPERATED WITH THE DOORS FULLY OPENED OR DOORS FULLY CLOSED. IF THE DOORS ARE LEFT PARTLY OPENED, GAS AND FLAME MAY BE DRAWN OUT OF THE FIREPLACE OPENING, CREATING RISKS OF BOTH FIRE AND SMOKE. IF THE UNIT IS OPERATED WITH THE DOORS FULLY OPENED, THE FIRE SCREEN MUST BE USED.

### **A** CAUTION

NEVER use gasoline, gasolinetype lantern fuel, kerosene, charcoal lighter fluid, naphtha, engine oil or similar liquids to start or "freshen up" a fire in this fireplace. Keep any flammable liquids a safe distance from the fireplace at all times.

### **A** WARNING

THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS OR A FIREPLACE INSERT. TO REDUCE RISK OF FIRE OR INJURY, DO NOT INSTALL AN UNVENTED GAS LOG SET OR FIREPLACE INSERT OR OTHER PRODUCTS NOT SPECIFIED FOR USE WITH THIS FIREPLACE.

### **A** WARNING

Never leave your fireplace unattended while it is burning.

### **A** CAUTION

Use care when selecting window treatments for windows located near the fireplace. Avoid using combustible flowing window treatments such as curtains on nearby windows that are of sufficient length to be blown in front of an open flame when the window is opened.

Keep any combustible furniture, materials or decorative pillows at least 48" (1219 mm) from the front fireplace opening.

### **A** WARNING

Never leave children unattended when there is a fire burning in the fireplace.

### A IMPORTANT

When burning wood, use SOLID NATURAL DRY WELL-SEASONED WOOD ONLY. Hardwoods are recommended (soft woods tend to burn very quickly).

- DO NOT burn treated wood, charcoal, coal, trash, cardboard, driftwood, woods dipped in tar, Christmas tree greens, pitch, pine tar, creosote, chemical chimney cleaners, flame colorants, polystyrene packaging, wood products with synthetic binders (i.e. plywood). Plywood, lumber and other misc. materials can produce abnormally high temperatures, sputtering and smoking fires and may contain hazardous chemicals to treat insects and fungus.
- Burning unapproved fuels can produce excessive temperatures (overfiring), beyond the design capabilities of the fireplace and may produce excess sparks or may contain hazardous chemicals. Burning unapproved fuels can result in a chimney fire, a house fire, personal injury, death or loss of property.

### **A** WARNING

To avoid the risk of damaging fireplace materials and increasing the risk of fire, do not use the fireplace to cook or warm food.

### **A** WARNING

Be careful adding wood fuel to the fire or handling fireplace tools such as shovels, tongs or pokers.

### **WARNING**

Never modify or alter your fireplace system in any way. To do so may create a potential fire hazard and void the limited warranty, listings and approvals of this system.

### **▲** WARNING

The bottom refractory can be cracked by excessive abuse such as tossing heavy logs onto the grate or gouging with fireplace tools. Exercise caution when adding wood to your fireplace.

### **A** WARNING

Neither the manufacturer nor the seller warrants "smoke free" operation nor are we responsible for inadequate system draft caused by mechanical systems, general construction conditions, inadequate chimney heights, adverse wind conditions and/or unusual environmental factors or conditions beyond our control.

### **A** WARNING

Always ensure that the air inlet to the fireplace is free from debris and any other obstructions that can block the entrance of air.

### **A** WARNING

For spectacular fire view and optimum efficiency of your fire-place, we recommend that the wood be placed as far back as possible in the fireplace.

#### CONGRATULATIONS!

When you purchased your new fireplace, you joined the ranks of thousands of individuals whose answer to their home heating needs reflects their concern for aesthetics, efficiency and our environment. We extend our continued support to help you achieve the maximum benefit and enjoyment available from your new fireplace.

Thank you for selecting a Lennox Hearth Products fireplace as the answer to your home supplemental heating needs.

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#### THE FIREPLACE

#### INTRODUCTION

The Cambria<sup>™</sup> wood-burning fireplace is a mid-efficient, heat radiating fireplace. You will receive a lifetime of comfort and enjoyment from your fireplace provided it is installed, maintained and operated properly.

- Please read these instructions and retain this manual for future reference.
- Before beginning the fireplace installation, consult the local authorities to obtain your building permit and check your local building codes. Install the fireplace only as described in these instructions and using only Lennox Hearth Products components.
- These appliances are not approved for Manufactured Home installations.
- When planning a fireplace installation the following information must be determined before beginning.
  - 1. Where the fireplace is to be installed.
  - 2. The configuration of the chimney.
  - 3. Optional components installation (fan, hot air ducting, etc).
  - 4. Electrical wiring.
  - 5. Framing and finish details.

#### **PARTS REQUIRED**

- Fireplace model: Cambria
- 10" diameter chimney Model Secure Temp ASHT+, or Nova Temp HTG103+ insulated stainless steel chimney or 10" (AC) air-cooled manu- factured by Security Chimneys International only, including:
  - Chimney lengths
  - Elbows (where necessary)
  - Associated components as per these installation instructions
- Outside air kit (included)

#### **OPTIONAL EQUIPMENT**

- 5" flexible venting system (central forced air kit) (see section 3.5.2)
- UZY5 blower. The blower installation requires that an electrical connection of a 120v electrical box located outside the fireplace be made prior to moving the fireplace in its final position. (see Optional Fireplace Blower on Page 13)
- Gravity venting system (see Central Forced Air Kit on Page 15)

#### **OPERATING THE FIREPLACE**

#### Fuel

USE SOLID NATURAL WOOD FUEL ONLY. The Cambria fireplace is designed to work best when fueled with seasoned cordwood. Hardwoods are preferred to softwoods since the energy content of wood is relative to its density. Hardwoods will result in a longer burning fire and less frequent refuelling. A moisture content of 15% to 20% (seasoned) is recommended. Wood that has been cut and split and let to dry under a cover for a period of one year will usually meet that criteria. The required drying time will vary depending on the climate. Wood that is packed tight together will take longer to dry. Seasoned wood is darker in color than wet wood and will have visible cracks in the grain on the ends. Excessively wet wood will be difficult to burn and will result in lower efficiency, increased creosoting and deposits on the glass and in the chimney. Excessively dry wood will burn well but will also have higher emissions and shorter burning time.

Do not burn scrap or garbage, treated wood or wood such as driftwood from the ocean which has been exposed to salt or other chemicals. Salt or chemicals can corrode the firebox and chimney. Do not burn large amounts of paper, cardboard, Christmas tree branches or building construction materials. Intense firing with these materials may overheat the fireplace, causing damage to the unit, a fire or even possibly igniting a chimney fire if the chimney is creosoted. Burning unapproved fuel, resulting in excessive pollutants being emitted, may be prohibited and subject to a fine or other penalty by the authority having jurisdiction in your area.

Processed firelogs can be used. Use only firelogs that have been evaluated for the application of fireplace and refer to firelog warnings and caution markings on packaging prior to use.

#### **First Fires**

Before using the fireplace make sure to remove the plastic wrapping on the door. Remove all remaining glue with mild soap. Make sure the doors are properly adjusted, thus avoiding color change to finish due to overheat.

The first 5 or 6 fires should be small fires of short duration (about 30 to 60 minutes). This will help cure the refractory bricks. During the first few fires of this appliance there may be some odor and smoke due to the curing of the paint, dust accumulation and burning off of lubricants used in the manufacturing process. It may set off a smoke alarm located in the same room. For this reason the room should be well ventilated for the first few fires.

#### **HEAT OUTPUT**

The Cambria™ fireplace is a mid-efficiency fireplace. In spite of the heat that the Cambria fireplace can deliver, it should not replace the main source of heat in your home. This fireplace will bring extra warmth and ambiance to your home by distributing its heat as described further in the manual.

FOR MAXIMUM HEAT OUTPUT, WE STRONGLY RECOMMEND THE INSTALLATION OF HOT AIR DUCTING SYSTEM (See *Page 14*).

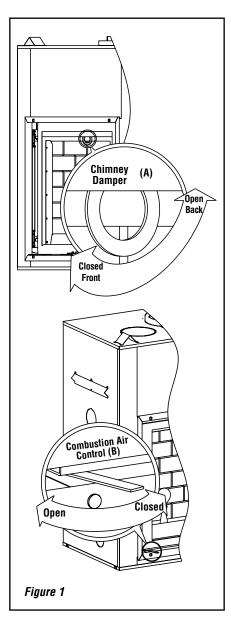
# Combustion Control and Chimney Damper

The Cambria fireplace includes a combustion air control that sets the flow of air entering the firebox and control the fire. The fireplace also includes a chimney damper that is not a combustion control. The chimney damper must always be in fully open position when the fireplace is used and should be closed only when all ashes are cold.

The chimney damper is controlled by the handle inside the firebox (see Figure 1-A). It is in closed position when the handle is visible (front) and in the open position when not visible (pushed back). The combustion air damper is controlled by the lower handle (see Figure 1-B). The control can be moved from open position at left all the way to the close position at right.

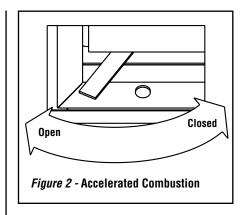
This air combustion control should be in the closed position when the fireplace is not in operation. This will minimize air infiltration. The combustion air control should be opened before opening the doors to minimize the possibility of back draft coming into the room (see Figure 1-A). Also see Smoking - Causes and Troubleshooting for more details (on Page 5).

WARNING: The air combustion control must be in the open position if the fire-place is operated with the doors open.



#### **Accelerated Combustion**

The maximum heat output for the Cambria fireplace is achieved by burning with the door closed and the combustion air opened. However, it will be necessary to reload with wood every hour. This is the least efficient method of burning the Cambria fireplace. Use caution when burning with the combustion air control wide open. Only burn cordwood in this manner. Small dry pieces of softwood will burn very intensely using this method and may damage the firebox.

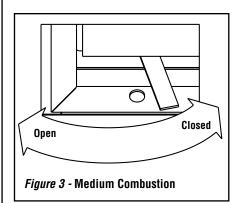


#### **Medium Combustion**

This is the recommended mode of operating the Cambria fireplace and should be the one normally used since it will deposit the least amount of creosote on the glass and in the chimney. The combustion air control must be 3/4 closed .The precise setting will depend on many factors, including chimney length and the moisture content of the wood.

For instance, a long chimney will necessitate closing the damper more. To obtain the proper combustion, close the damper completely, then open it about 1/4" to 1/2". Three medium size pieces of cordwood burning on a bed of hot coals will burn about 1-2 hours. Softwoods may be burned using this method but the combustion time will be substantially reduced.

FOR MAXIMUM HEAT OUTPUT, WE STRONGLY RECOMMEND THE INSTALLATION OF THE OPTIONAL HOT AIR DUCTING SYSTEM.



#### **Building a Fire**

- A) To start a fire, place several crumpled up balls of newspaper in the firebox. Place small dry pieces of kindling on top of the paper, criss-crossing the kindling so that there are air spaces in between. The kindling should be placed at the center of the firebox so as to allow for sufficient air circulation.
- B) Open the dampers and light the newspaper. Leave the doors partially opened (1 to 2 inches) to facilitate the start-up.
- C) Once kindling fire is well established, cordwood can be added. Close the doors and leave the combustion air control open in accelerated combustion position.
- D) When the fire burns well set the primary control to the desired burn level.

The unit will burn best with 2-3 pieces of cordwood spaced 1 to 2 inches apart and allowing air to get under the fuel. Crisscrossing or arranging the fuel so that air can get underneath will help the fire to get started easily. The unit should be operated with the air control fully open long enough to get the cordwood well ignited.

WARNING: The Cambria™ fireplace was designed to allow a spectacular view of the fire. The Cambria fireplace should never be filled in excess (five big logs or more). Excessive fire could damage the fireplace's hearth and refractory brick and void the warranty.

#### REFUELING FOR BEST PERFORMANCE

To reload the Cambria fireplace:

- A) Completely open the combustion air control (see *Figure 2*).
- B) Open the doors about 1" and wait 5 seconds until the airflow has stabilized. Then open the doors completely, put the logs in and close the doors.
- C) Set the combustion air control to the desired burn level.

#### Notes:

- For spectacular fire and optimization of the fireplace efficiency, we recommend that the wood load be placed as far back as possible.
- It may be necessary to turn off any blower(s) in operation during the refueling process in order to minimise smoking in the room. It is recommended to wait 15 to 30 minutes before turning the blower(s) back on to ensure successful rekindling.

#### SMOKING -Causes and troubleshooting

To reduce the likelihood of smoke coming into the room when opening the door, set the combustion air controls to the left ("Accelerated Combustion") before opening the door. Your fireplace has been designed and tested to provide smoke free operation. Occasionally, there may be a small amount of smoking upon lighting the fire until the chimney heats up. If the fireplace continues to smoke it is probably for one of the following reasons:

#### A. The doors are partially opened

When you open the doors, open them completely.

#### B. Negative pressure in the house

A fire needs air to burn. This air must be replaced through the outside air duct (see *Outside Air* on *Page 16*). When operating the Cambria fireplace, open a nearby window temporarily to check if there is adequate replacement air supply.

#### C. Fans operating (e.g.: range hood)

Fans such as range hoods or bath fans draw air out of the house and may actually cause a negative pressure in the house. Turn off all fans and open a nearby window to determine if this is the cause of the problem.

#### D. Wet wood

Wet or tarred wood will smoulder and smoke instead of burning properly. Your dealer can help you determine if you have properly seasoned wood for burning.

#### E. Dirty or blocked chimney

Check to make sure the chimney is clear and clean. If dirty call a certified chimney sweep or use a properly sized chimney brush to clean

#### F. Chimney not long enough

The minimum chimney height is 15 feet (4.6 m) not including the fireplace height. The chimney must extend at least 3 feet (915 mm) above its point of contact with the roof and at least 2 feet (610 mm) higher than any roof or wall within 10 feet (3 m) of it. When installed with offsets, the minimum chimney height is 18 feet (5.5 m). Additional height will increase draft and will decrease the tendency to smoke.

#### G. Poor chimney draft

With no fire, there should be sufficient draft to exhaust cigarette smoke introduced under the baffle. Chimneys installed against an outside wall without protection may generate back draft problems which will cause start-up problems. To prevent this, open a nearby window; roll up a piece of paper, light it and hold it in the upper part of the firebox to warm up the chimney. Wait until the draft is sufficient, then start the fire.

#### H. Blower for central forced air kit

Make sure that the blower is at the "off" position when you open the fireplace door for reloading.

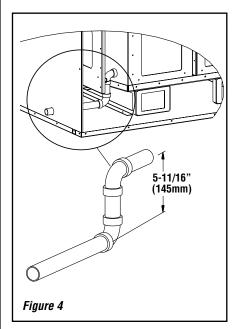
#### GAS LOG INSTALLATION

This fireplace is designed to allow the installation of a gas burner. In such a case, the installation must conform with the National Gas Code ANSI Z223.1 and Z21.60. Warning: When using a gas burner, it is mandatory to keep the chimney outside air register opened.

This fireplace has provision for the installation of a gas pipe and is intended only for connection to a <u>decorative gas appliance</u> incorporating an automatic shutoff device and complying with ANSI Z21.60-M96/CGA 2.26-M96, Standard for Decorative Gas Appliances for Installation in Solid-Fuel Burning Fireplaces (reference Clause 4.1.3 T).

- Remove the 1 inch knock-out on the right side of the fireplace and on the right side refractory.
- 2. Drill a one inch hole in the hearth right side coaxial to the refractory opening.
- Assemble a rigid 3/8" N.P.T. iron pipe with two 90° elbows. Make sure to have 5-11/16" clearance between the two pipes (see *Figure*4)
- 4. Through the hearth bottom or back openings insert the mounted pipe through the side of the firebox and the firebrick. Make sure the top elbow is as close as possible to the hearth to keep a minimum clearance to the retractable door.
- Insert a pipe through the 1 inch exterior knock-out and fix it to the 90° elbow already in place.

**Note:** In some regions, the use of a flexible gas pipe is allowed. Consult your local authority.



#### **IMPORTANT CAUTIONS**

- A. Do not block the hot air vents to the fireplace as this will cause the fireplace to overheat.
- B. Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or 'freshen up' a fire in this fireplace. Keep all such liquids well away from the fireplace while it is in use.
- C. Do not burn coal. The sulphur in coal will corrode the firebox and chimney.
- D. Keep combustible materials at least 48" (1.2 m) away from the front of the fireplace opening.
- E. Never leave children unattended when there is a fire burning in the fireplace.
- F. Do not use the CAMBRIA as an incinerator to burn paper, cardboard or construction material such as pressed wood, plywood or lumber. Use only untreated wood. Wood protectors, metallic paper, coal, plastic, waste, sulphur and/or oil will damage the fireplace.
- G. Do not burn driftwood which has been in the ocean or salt water. The salt will corrode the firebox and chimney.
- H. Do not burn wood in the area in front of the grate.
- Do not allow the wood to smoulder or burn without flame, since this will produce excessive creosote in the unit as well as increased particulate emissions.

#### **MAINTAINING YOUR FIREPLACE**

Creosote - Formation and Need for Removal When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the

flue lining. When ignited this creosote makes an extremely hot fire.

The chimney shall be inspected at least twice a year during the heating season to determine when a creosote buildup has occurred.

When creosote has accumulated it shall be removed to reduce the risk of a chimney fire.

When the creosote accumulation is large, a creosote fire in the chimney can damage the chimney and overheat the surrounding wood framing. Creosote formation in a chimney can be minimized by making sure there is always visible flame burning, avoid smouldering fires and by proper refuelling techniques.

Chimney Maintenance - Regular chimney inspection and maintenance combined with proper operation will prevent chimney fires. Keep your chimney clean. Do not allow more than 1/16" (1.6 mm) creosote build up in your chimney. The amount of creosote will depend on variables such as frequency of use and type of fire. We recommend that you:

- A. Initially inspect the chimney system weekly. From this, you will learn how often it will be necessary to clean your chimney.
- B. Have your chimney cleaned by a qualified chimney sweep. If you wish to clean it yourself, we recommend using a stiff plastic or non-metallic brush. If a metal brush is used, its size should be slightly smaller than the flue to avoid damaging the chimney. Do not use a brush that will scratch the stainless steel interior of the chimney.

Warning: The chimney damper must be opened when sweeping the chimney to avoid ash and creosote accumulation in the fireplaces air circulation area.

C. Do not expect chemical cleaners to keep your chimney clean. The rain cap can be removed for inspection and/or cleaning of the chimney. Using gloves, firmly grip the upper portion of the rain cap. Turn the cap and lift it off the chimney.

#### **Dealing With a Chimney Fire**

Regular chimney maintenance and inspection can prevent chimney fires. If you have a chimney fire, follow these steps:

- IMPORTANT: Close the fireplace door and the combustion air controls; this will stifle the fire.
- 2. Alert your family of the possible danger.
- 3. If you require assistance, alert your fire department.
- If possible, use a dry chemical fire extinguisher, baking soda or sand to control the fire. Do not use water as it may cause a dangerous steam explosion.
- 5. Ensure that sparks and hot embers coming out of the chimney are not igniting the roof.
- Do not use the fireplace again until your chimney and fireplace have been inspected by a qualified chimney sweep, your dealer, or a fire department inspector.

#### **DISPOSING OF ASHES**

Note: For better performances, we recommend leaving 1/2 inch of ashes in the firebox.

Remove ashes only when the fire is out and the ashes are cold (24 to 48 hours after the fire is out). Do not leave the ashes in the house as they give off carbon monoxide and other toxic gases.

### **A** WARNING

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

# Refractory Brick Replacement (refer to Figure 6)

The intense heat of the fire will normally cause hairline cracks in the refractory brick. These cracks can be minimized by proper curing as described in *First Fires* on *Page 4*. They will not normally diminish the effectiveness of the refractory brick. If large cracks develop, then the refractory should be replaced. To replace the refractory bricks, follow these steps:

- 1. Remove the front refractory bricks
- 2. Remove the andirons
- 3. Remove the side refractory supports
- 4. Remove the side refractory bricks
- 5. Remove the back refractory brick
- 6. Remove the bottom refractory brick

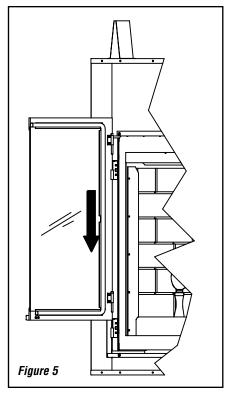
To install the new refractory bricks, follow the above steps in reverse.

#### **DOOR FRAME FINISH CARE**

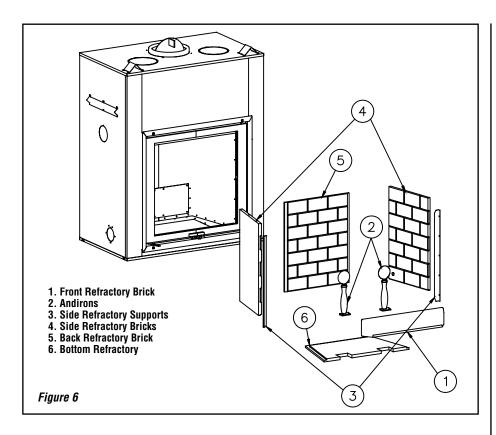
Use a glass cleaner and a soft cloth to polish the casing. Do not use abrasives such as steel wool, steel pads or an abrasive polish for they may scratch the frame's finish.

# Door Installation (refer to Figure 5)

The doors on the Cambria fireplace are factory installed. To remove the doors, remove the finishing trim, then simply pull them up from the hinges. The door adjustment has been set at the factory. If the fit is still not perfect, you can adjust the door using the hinge screws. (See *Figure 8*, #1)



NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.



### **WARNINGS**

- Use only a Lennox Hearth Products glass doors, specifically designed for the Cambria fireplace.
- The fireplace cannot be operated without door or firescreen.
   Consult your dealer to select the correct replacement door or firescreen.
- Important! To assure proper alignment of glass doors: Install this fireplace in a square and plumb condition, using shims as necessary at sides and/or bottom.

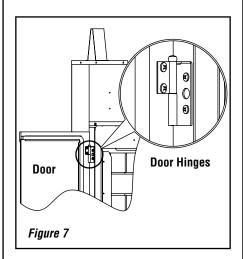
#### **DOOR ADJUSTMENT**

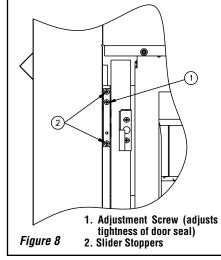
The doors are factory adjusted for proper air tightness and fit. They may need to be readjusted if the alignment has shifted in freight.

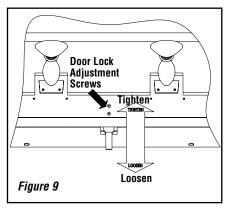
To readjust the door side to side position, unscrew the fireplace hinges or the door hinges. Move the doors side to side until the top of the two doors are aligned (*Figure 7*).

The gaskets' air-tightness can be adjusted using the adjustment screw located on the slider stoppers (see *Figure 8*). Turning the screws clockwise will shorten the travel of the slider and increase the pressure on the door side gaskets. This may lead to the doors being harder to lock, so a good adjustment must be found between a good gasket seal and easy door lock (see *Figure 8*, balloon #1).

The door lock can also be adjusted. Remove the front refractory brick and loosen the two screws in the middle front of the firebox bottom. Push or pull on the handle of the door lock. Pushing the handle will tighten the door seal in the center of the fireplace (see *Figure 9*).





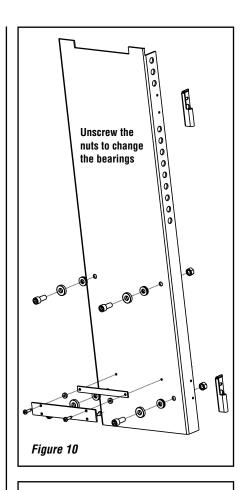


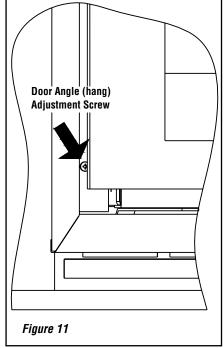
#### **Door Opening Adjustment**

The doors opening angle can be adjusted. This allows the doors to slide in the fireplace without interference or friction with the finishing facing, which could damage the paint. The screws located under the bottom hinges (*Figure 11*) are used as door opening stops. Tightening or loosening these screws will keep the door handle from hitting the finishing facing and won't allow friction between door gasket and hearth when the door is fully pushed in the fireplace.

#### **Bearing Maintenance**

The doors are assembled on retractable sliders using roller bearings for easy movement. Cambria fireplace has been designed to ensure that bearing maintenance is easy. Remove the decorative facing by unscrewing the four decorative caps and the four screws holding the facing. Remove the doors by lifting them up from the female hinges (see Figure 5). Remove the slider stoppers (see *Figure 8*) and take the slider bearing assembly out of the fireplace. Unscrew the nuts to change the bearings (see Figure 10). Original bearing contains no grease to resist heat. Adding grease or changing bearings with greased bearing may cause a malfunction of the slider. Please use Lennox Hearth Products replacement parts only (see Page 25 for part numbers).





#### **GLASS CARE**

#### **Glass Replacement**

The glass used for the Cambria<sup>™</sup> fireplace is a high temperature ceramic glass (1400°F). If the glass breaks or cracks, it must be replaced with an identical ceramic glass. Tempered glass or ordinary glass will not withstand the high temperatures of the Cambria fireplace. Replacement glass should be purchased from a Lennox Hearth Products dealer (see "Replacement Parts" on *Page 25*).

# Do not operate the unit with cracked or broken glass.

#### **Glass Cleaning**

The Cambria fireplace is designed to keep the glass clean under normal operating conditions. If the Cambria fireplace is operated continuously with the combustion air controls closed, the glass will tend to get dirty unless the fuel, firebox and glass are maintained at hot temperatures. To clean the glass, there are a number of specially designed cleaners to remove creosote. Your authorized Lennox Hearth Products dealer can recommend a suitable cleaner. Regular household glass cleaners will not clean creosote. Do not use abrasives such as steel pads, steel wool or oven cleaner as they will scratch the glass.

DO NOT USE CHEMICAL GLASS CLEANERS ON PAINTED SURFACES AS IT MAY CAUSE THE PAINT TO PEEL.

CAUTION: DO NOT ALLOW WINDOW CLEANER TO GET IN CONTACT WITH DOOR GASKET OR PAINT ON FACADE OR DOOR. ONCE CLOSED, CONTACT OF GLASS CLEANER WITH THE FIREPLACE FACADE CAN PROVOKE PAINT PEELING OFF.

#### **Gasket Replacement**

Remove the doors from the unit (see *Door Installation* on *Page 6*) and lay them on a clean nonabrasive surface. To replace the gasket, first remove all of the old gasket and gasket cement. Make sure that the surface is totally clean before applying new cement (a high temperature silicone caulking rated at 500°F/260°C, is suitable) or adhesion problems may result. Apply gasket cement to the gasket channel and install the new gasket. This replacement part is available from your Lennox Hearth Products dealer in the dimensions shown in *Table 1*.

Gasket	Part #	Dimensions	Qty
Around the door	PR-SR1823N	58-3/4" 5/8" dia.	2
Table 1			

#### **Andirons**

The Cambria fireplace is equipped with andirons designed to keep logs from falling into the door. It must be replaced only by Lennox Hearth Products andirons available from your dealer. No other andirons, log retainer or log support is sold or recommended by Lennox Hearth Products.

#### FIREPLACE INSTALLATION

#### **Locating The Fireplace**

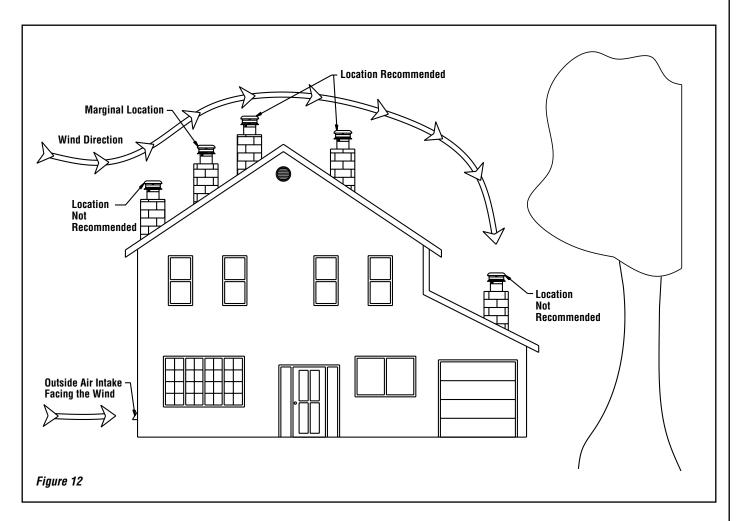
The best location to install your fireplace is determined by considering the location of windows, doors, and the traffic flow in the room where the fireplace is located, allowing space in front of the unit for the hearth extension and the mantel, and taking into consideration the location of the hot air ducts (optional), outside air kit and chimney. If possible, you should choose a location where the chimney will pass through the house without cutting floor or roof joists (see fireplace dimensions on *Page 11*).

Usually, no additional floor support is needed for the fireplace. The adequacy of the floor can be checked by first estimating the weight of the fireplace system. Weights are given on *Page 25*. Next, measure the area occupied by the fireplace. Note the floor construction and consult your local building code to determine if additional support is needed.

The Cambria<sup>TM</sup> fireplace may be installed directly on the floor or on a raised base but a minimum of 7 feet 6 inches (2.3 m) measured from the base of the appliance to the ceiling is required.

When selecting the location, the chimney outlet position and the direction of the wind are important factor affecting the chimney performance. To allow a maximum draft and to reduce wind turbulence, the chimney must:

- Penetrate the highest part of the roof.
- Be installed as far as possible of roof offsets, trees or any other obstructions that may cause wind turbulence and back drafts in the chimney.
- The least amount of offsets (elbows) possible.



#### Framing, Facing And Mantel

The construction of the framing, facing, and mantel must be in accordance with the standards and the following illustrations (*Figures* 15 through 20):

- A. Frame the fireplace using 2" x 3" or heavier lumber.
- B. WARNING: Combustible materials cannot be used in the space directly above the fireplace, except for the studs above the facade that support the facing and mantel. This area must remain empty for a height of 7 feet 6 inches (2286 mm) measured from the base of the appliance.
- C. Frame the fireplace with vertical studs at the sides of the fireplace running from floor to ceiling (see *Figure 15*). If combustible facing is to be used, position the studs back, from the front edge of the fireplace the thickness of the facing material so that the facing can be installed flush with the fireplace facing. Frame headers between the vertical studs only as follows:
  - Place 2" x 3" or 2" x 4" headers, only along the upper part of the front, side and back faces. Do not put wood or any combustible material within the area above the fireplace except on the front facing.
  - Place headers only as required to support the facing and mantel.
- D. WARNING: The fireplace must not be in contact with any insulation or loose filling material. Cover the insulation with drywall panels or any other rigid material around the fireplace.

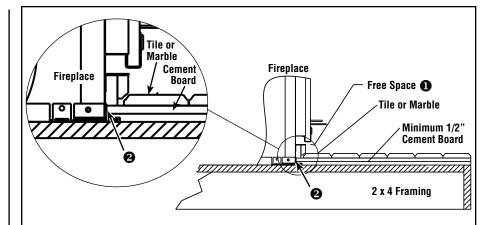
Hearth Extension Requirements - The Cambria™ fireplace may be installed directly on a combustible floor; however, the combustible floor in front of the fireplace must be covered with a 1/2 inch (13 mm) of non-combustible support material (cement board, cement block or other) before applying the finish material (tile, marble, stone, etc.) (see *Figures 13 and 14*).

WARNING: It is important not to cover the air ventilation opening below the facade trim. (free space - *Figure 13*).

# COLD CLIMATE INSTALLATIONS Climates where temperatures will fall below 32° F (0° C).

The heating performance of the appliance will vary depending upon the level of insulation, house design, how the appliance is operated, etc.

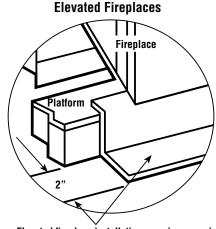
If this fireplace is being installed in a cold climate, it is especially important to seal all cracks around the fireplace and wherever cold air could enter the room with noncombustible material. Also, the outside air inlet duct should be wrapped with noncombustible insulation to minimize the formation of condensation. Do not place insulation materials directly against the chimney sections. We recommend that you use the insulated wall radiation shield since it will maintain the home's thermal barrier. AC chimney is NOT recommended in very cold climates (in areas with temperatures below 0°F (-18°C).



#### **WARNINGS:**

THE HEARTH EXTENSION IS TO BE INSTALLED ONLY AS ILLUSTRATED.

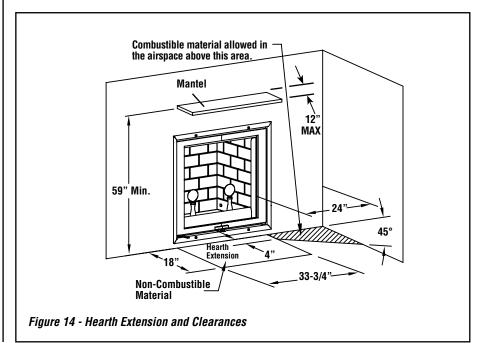
- DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS.
- THE CRACK BETWEEN THE FIRE-PLACE AND THE HEARTH EXTENSION MUST BE SEALED WITH A NON-COMBUSTIBLE MATERIAL SUCH AS A NON-COMBUSTIBLE SEALING STRIP OR SAND CEMENT GROUT IN THE AREA SPECIFIED ABOVE.



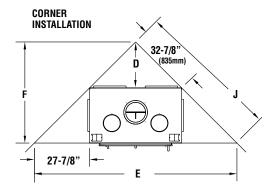
Elevated fireplace installations require a special "Z" Metal Safety Strips (field provided), in place of the safety metal strip shown above. The safety strip should extend the full width of the fireplace. When more than one safety strip is used they must overlap by a minimum of 1".

Hearth extension of an elevated fireplace must respect the same minimal dimensions than a fireplace installed directly on the floor.

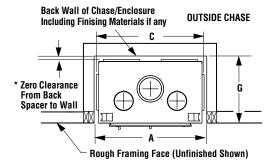
Figure 13 - Hearth Extension Requirements



### Framing Dimensions - Model Cambria™



#### PARALLEL / CHASE INSTALLATION



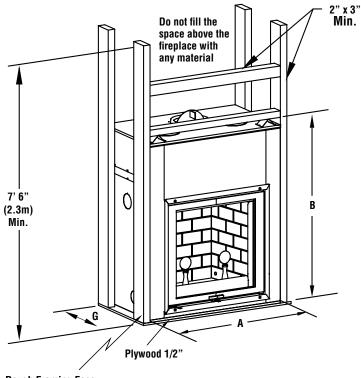
FRAMING DIMENSIONS Fireplace Opening Width				
A	48-3/4"	1238 mm		
В	59-3/8"	1508 mm		
C	48-1/2"	1232 mm		
D	23-1/4"	591 mm		
E	102-1/4"	2597 mm		
F	51-1/8"	1299 mm		
G	28-7/8"	733 mm		
J	72-5/16"	1837 mm		

#### Notes

Due to Lennox Hearth Products ongoing commitment to quality, all specifications, ratings and dimensions are subject to change without notice.

All framing dimensions calculated for 1/2" dry wall at the fireplace face. If sheathing the chase or finishing with other thickness materials, calculations will need to be made.

The fireplace must not be in contact with any insulation or loose filling material. Cover the insulation with Drywall panels around the fireplace.



Rough Framing Face (unfinished shown)

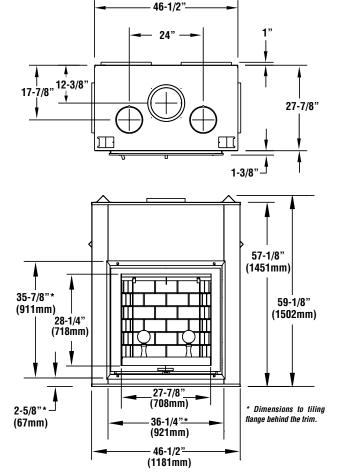
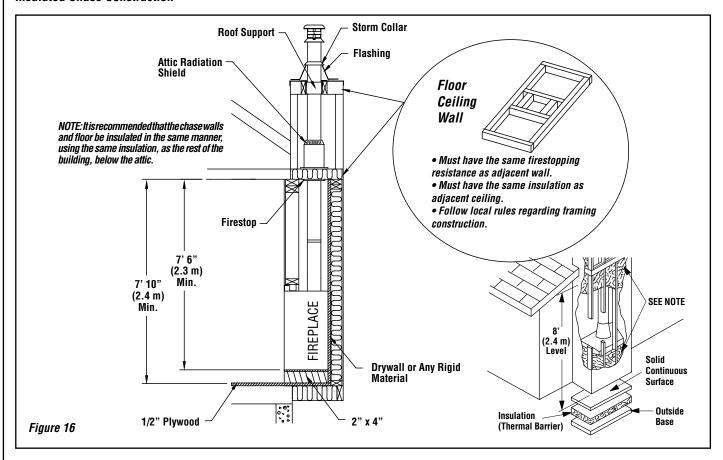


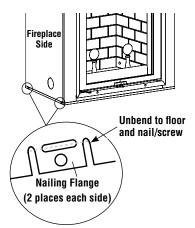
Figure 15 - Framing Dimensions

#### **Insulated Chase Construction**



#### **Nailing Flanges**

Four nailing flanges are provided to secure the fireplace to the floor (see figure below). Bend the nailing flanges down so that each flange is flush with the floor, then using nails or screws, secure the fireplace to the floor (2 places each side). The heads of the screws or nails must be large enough to completely cover the holes in the nailing flanges.



#### **MANTEL AND FACING**

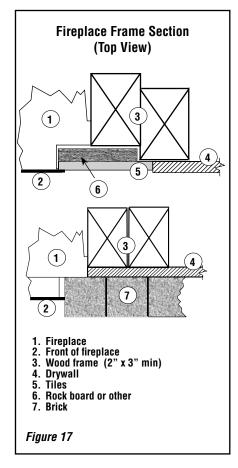
The mantel must be installed at least 59" (1500 mm) above the base of the fireplace (see *Figure 18*).

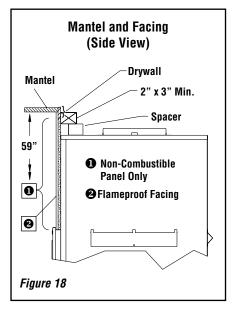
#### FACING

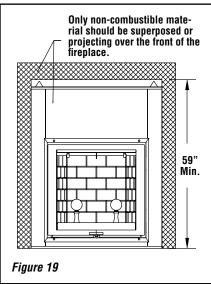
# ▲ IMPORTANT

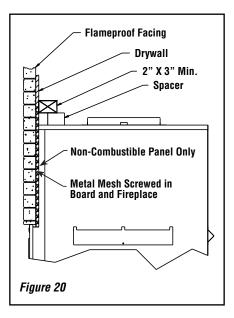
The facade must be removable once installed. The facade is designed to overlap any facing material installed on the front of the fireplace. If thicker material is installed, use the facade as a template and make sure it can be easily removed for servicing.

- Combustible material must be installed flush with the fireplace. It may not project in front of and on the fireplace (i.e. the steel facade of the fireplace) (see Figure 19).
- Non-combustible materials such as brick, stone or ceramic tile may project in front of and onto the fireplace facing (see *Figure* 20).









#### Optional Fireplace Blower (UZY5)

A heat activated blower is sold as an option. It is designed to be located in the back of the fireplace and increase the air flow around the firebox. It uses regular 120V and must be connected to the main electrical circuit by a qualified electrician. An electrical box must be installed outside the fireplace.

WARNING: Because of the fireplace size and obstructive air venting, we don't recommend the installation of the blower <u>unless the gravity</u> ducting is installed on the fireplace.

If you wish to adjust the blower speed, an optional variable speed control (VRUW) can be installed in line with the wiring. Again, use a qualified electrician for installation.

#### To install the blower,

- 1- Remove the refractory bricks and the andiron.
- 2- Remove the metal plates covering the bottom and back of the hearth firebox.
- 3- Disconnect the main electric cable from the blowers by unplugging its two quick connectors.
- 4- Remove the knock-out in the front right side of the fireplace outer casing.
- 5- Install a <u>metallic wire protector</u> and slide the blower main electrical cable from the outside to the inside of the unit.
- 6- Install the two blowers in the back of the fireplace through the holes in the back.

  Warning: Make sure there are no contact between the blowers and the door slider.
- 7- Reconnect the main cable quick connectors and stick (magnet) the heat activate switch under the right side of the firebox. Using aluminum tape, make sure no wiring touch the firebox by taping it to the bottom of the fireplace panel.
- 8- Install all plates, bricks and andiron.
- 9- Connect the blower plug into the electrical box located outside the fireplace.

#### HOT AIR DUCTING INSTALLATION (OPTIONAL)

Different hot air ducting systems can be installed with the Cambria<sup>™</sup> fireplace:

- Gravity kit
- · Forced air kit

The gravity kit is used when the rooms are on same level or floor as the fireplace or on an upper level or floor. If the heat to be distributed is on a lower level or floor, then the forced air kit MUST be used.

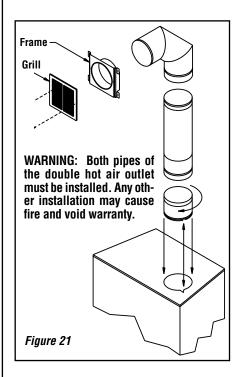
#### **Gravity Kit**

Double hot air outlet including: (See Figure 21)

- 2 ea. telescopic lengths, 8" I.D.
- 2 ea. 90° elbows, 8" I.D. 2 ea. hot air outlet kits (grill and frames)
- 2 ea. adaptors

See components list on Page 23.

Only the blower available with the fireplace can be used with the gravity kit.



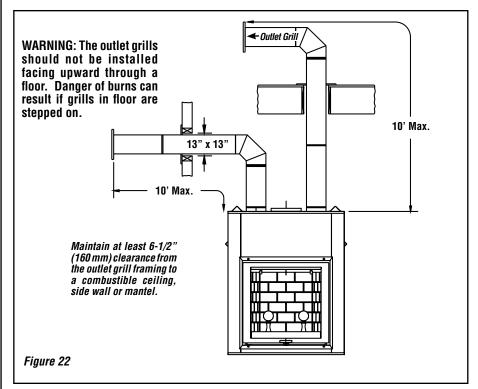
The safety rules for hot air ducting gravity kit installations are the following:

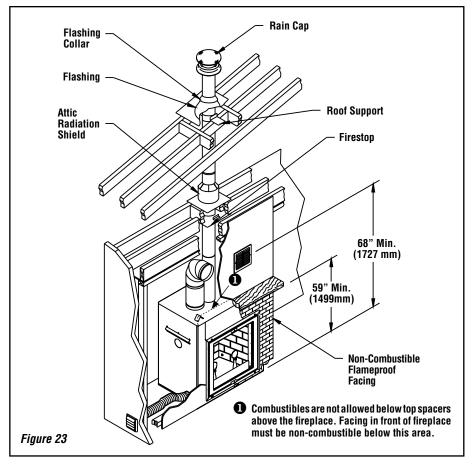
Minimum height\* 68" (1727 mm) Maximum length - See Figure 22

The height of the louver must be measured from the base of the Cambria fireplace to the middle point of the louver.

WARNING: Both pipe of the double hot air outlet must be installed. Any other installation can cause greater risk of fire and void the warranty.

When installing the double outlet system, the hot air outlets can be installed in the same room as the fireplace, or one or both of the outlets can be installed in adjacent or upper rooms. Installing the ducts at different elevations will tend to exhaust more heat out of the higher outlet (Figure 22).





The duct system must be installed respecting the following:

- Remove the plates closing up the 8" (203mm) diameter holes on top of the fireplace. Then, cut the insulation in order to obtain two 8" (203mm) diameter openings. Fix the adaptors on the fireplace openings by turning clockwise (see *Figure 21*).
- Maintain at least a 2" (50 mm) clearance between the ducts and any combustible material; the required hole size is 13" x 13" (330 mm x 330 mm).

Exception: For the grills, the framing can be 10-3/4" x 10-3/4" (275 mm x 275 mm) to provide the clearance as required by the integral spacers on the double outlet duct system.

- 3. The maximum number of elbows in a run of duct is two.
- 4. Maintain at least 6-1/2" (160 mm) clearance from the outlet grill framing to a combustible ceiling, side wall or mantel.
- When traversing a combustible wall or floor, a firestop must be installed at the wall or floor penetration. The hole size must be 13" X 13" (330 mm x 330 mm).
- 6. Do not connect the hot air ducts to a central heating system. Malfunction of the heating system's fan will cause the fireplace to overheat. A furnace duct is only single wall and not double wall as is required for the Cambria™ fireplace hot air exhaust.
- Use only Lennox Hearth Products grills and components as described in this manual. Other grills or registers may be too restrictive and may overheat the fireplace or ceiling.
- 8. Do not use insulated flexible ducts as they will overheat.
- 9. Do not use tees or any other components than the ones specifically listed here.
- 10. All ducts must extend upwards or horizontally. Never route the ducting downwards.
- 11. The hot air outlet grills must be installed with the louvers pointing downwards in order to prevent overheating adjacent ceilings.

#### **Central Forced Air Kit**

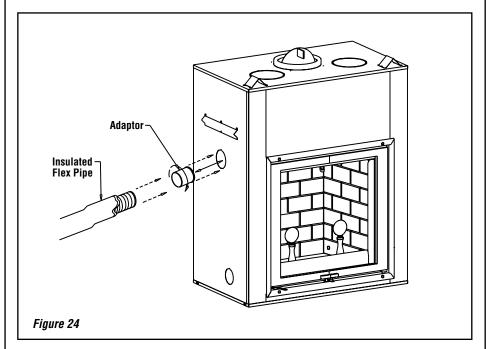
The knock-outs provided on the back and on the sides of the Cambria fireplace allow the connection of insulated flexible pipe which enables you to heat adjacent rooms up to 50 feet from the fireplace hot air outlet.

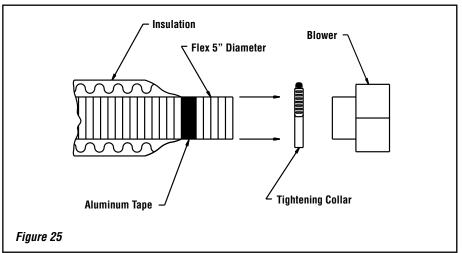
The ducting system must be installed as described below:

A) Fix the adaptor at the back and/or the side of the fireplace by twist-locking the adaptor to the fireplace. You can use more than one outlet on the fireplace (see Figure 24).

- B) Attach the 5" flexible pipe, using the collars provided. Important: Make sure that the plastic wrapping around the flexible pipe will not be in contact with the fireplace.
- C) Route the flexible pipe to the chosen location. The ducting system can be installed either in an upper room or in a lower room.
- D) Attach the flexible pipe to the blower, using the collars (Figure 25).
- E) Fix the back draft damper to the blower outlet.
- F) Attach a flexible pipe to the fan / flexible pipe adapter (square to round) and stretch it up to the location where the heat is required.
- G) At that point, the flexible pipe can be attached to any air distribution grill.
- H) Install the blower heating and cooling thermostat (HCTW) in that part of the house to be heated by the hot air duct. The thermostat can be switched to a cooling thermostat and installed in the same room as the unit. This thermostat will turn on the blower when the room where the fireplace is located becomes too hot.

This option requires electricity. Make sure that the connections to the blower have been made according to the local codes and comply with their requirements (see instruction provided with the thermostat). For more information regarding central forced air kit, refer to the BISFWK-1 installation sheet provided with the kit.





#### **OUTSIDE AIR**

It is mandatory to install an outside air connection to the Cambria™ fireplace. The following components are required and are included with the fireplace:

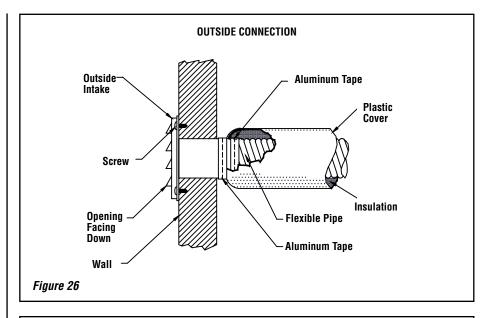
- Outside air kit
- 4" adapter for fireplace connection

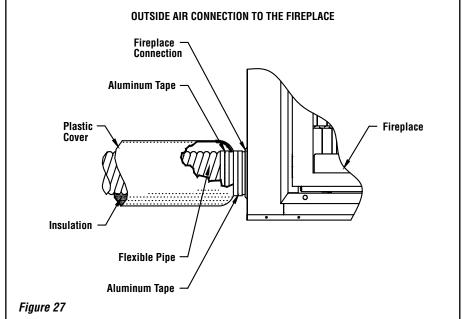
The outside air assembly must be installed according to the following requirements:

- A) Duct length should be kept to a minimum. The maximum length of a 4" interior diameter (100 mm) insulated flexible duct is 20 feet (6.1 m). The duct can be extended to a maximum of 40 feet (12 m) using a 6" interior diameter (150 mm) insulated flexible duct (See note below).
- B) The air intake register must not be installed more than 10 feet (3050 mm) above the base of the fireplace.
- C) The fresh air must come from outside the house. The air intake must not draw air from the attic. basement or garage.
- D) The air intake should be installed where it is not likely to be blocked by snow or exposed to extreme wind and away from automobile exhaust fumes, gas meters and other vents.
- E) The duct and register may be installed above or below floor level.

Make a 4-1/4" (110 mm) hole in the outside wall of the house at the chosen location. From outside, place the outside air register in the hole (open side down) and fasten the register to the wall with screws as shown (see Figure 26). Slip the pipe into the insulated sleeve. Place the insulated pipe over the register tube and over the fireplace's outside air connector (see Figure 27). At each end, carefully pull back the insulation and plastic cover exposing the flexible pipe. Using the aluminium tape provided, wrap the tape around the joint between the flexible pipe and the air inlets. Carefully push the insulation and plastic cover back over the pipe. Using aluminium tape, fasten the plastic cover in place.

**NOTE:** We recommend not to exceed 20 feet (6.1 meters) of 4" flexible pipe. If you require a longer length we recommend that you use a 5" diameter flexible pipe for the complete run up to 30 feet and a 6" diameter pipe for a run of up to 40 feet.

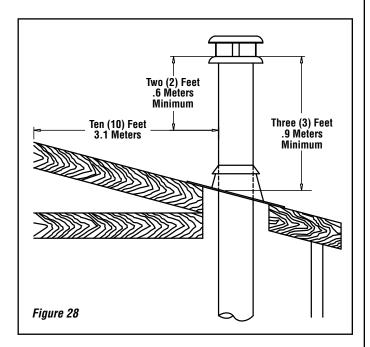




#### THE CHIMNEY SYSTEM

#### **Chimney Installation Notes**

- 1. If possible, install an interior chimney as it will provide better performance. In areas with continuous temperatures below 0°F (-18°C), the use of an exterior chimney increases the likelihood of operating problems such as low draft, high rate of creosoting, and poor start-up characteristics. Exterior chimneys are also prone to down-drafting and flow reversal. Installations which are located on lower floors in the house, such as in a basement, in combination with an outside chimney, are especially prone to flow reversal.
- 2. The Lennox Hearth Products fireplace model Cambria<sup>™</sup> fireplace is listed only with Security Chimneys International Ltd 10" dia. chimney systems model Secure Temp<sup>ASHT+</sup> / Nova Temp<sup>HT6103+</sup> or AC.
- 3. A chimney venting a fireplace shall not vent any other appliance.
- The minimum chimney height is 15 feet (4.6 m) excluding the fireplace.
- 5. All chimney installations must include at least one support in order to be able to take any lateral load. The maximum chimney length that can be supported by the fireplace is 12 feet (3.7 m) for Secure Temp<sup>ASHT+</sup> / Nova Temp<sup>HT6103+</sup> and 26 feet (8m) for AC chimney. In altitude, add 18" (450 mm) to the chimney for every 2000 feet (600 m) above sea level.
- The chimney must extend at least 3 feet (915 mm) above its point of contact with the roof and at least 2 feet (610 mm) higher than any wall, roof or building within 10 feet (3m) of it (Figure 28).
- 7. If the chimney extends higher than 5 feet (1500 mm) above its point of contact with the roof, it must be secured using a roof brace.
- 8. A rain cap must be installed on top of the chimney. Failure to install a rain cap may cause corrosion problems.
- 9. Cut and frame square holes in all floors, ceilings, and roof that the chimney will go through to provide a 2" (50 mm) clearance between the chimney and any combustible materials. Do not fill this 2" space with insulation or any other combustible material.
- 10. Portions of the chimney which may extend through accessible spaces must be enclosed to avoid contact with combustible materials or damage the chimney.



**Note:** 2" clearance to combustibles around chimney components required.

**Note:** Blown or fill type insulation materials must not be in contact with the fireplace or in the enclosure frame as described in "Enclosure" section.

**Note:** Local codes may not require firestopping at the ceiling levels for outside chase installations. However, it is recommended for safety and the reduction of heat loss.

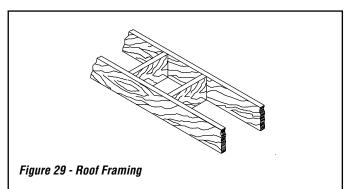
#### CHIMNEY INSTALLATION INSTRUCTIONS

 Cut and frame the holes in the ceiling, floor and roof where the chimney will pass (see *Figure 29*). Use a plumb-bob to line up the center of the holes. The sizes are indicated in *Table 2* for the floor and ceiling holes and *Table 3* (*Page 19*) for the roof holes.

CHIMNEY MODEL	SQUARE HOLE Size opening
Secure Temp <sup>ASHT+</sup> Nova Temp <sup>HT6103+</sup>	16-3/8 in. (416 mm)
AC:	17 in. (432 mm)

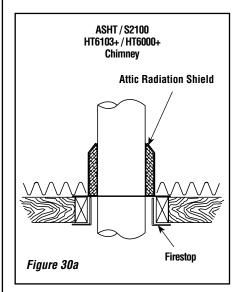
Note: See Table 3 for Sloped Roof Framing

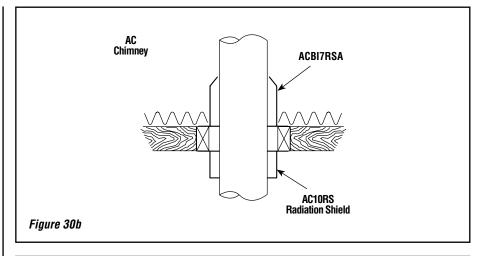
Table 2 - Flat Roof Framing

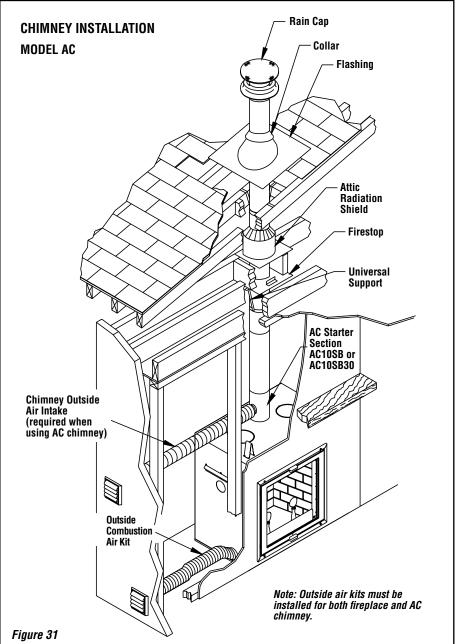


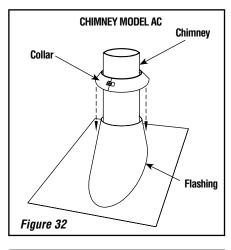
From below, install a firestop in each ceiling/ floor separation through which the chimney will pass. At the attic level, install an attic radiation shield from above (see **Figures 30a** and **30b**).

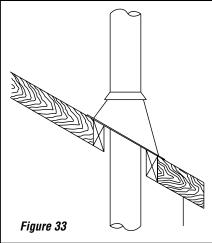
- 2. For Secure TempASHT+ / Nova TempHT6103+ chimneys, place the first chimney length on the fireplace. To lock it in place, turn 1/4 of a turn clockwise. With the AC chimney, you must use a starter section before installing the first chimney length (*Figure 31*). Continue installing chimney lengths making sure to lock each length in place.
- Every time the chimney passes through a ceiling or a wall, install the appropriate firestop.
   When you reach the desired height, install the roof support (refer to instructions included with the support). For an AC chimney use an universal support AC10SU (H3265).
- 4. Put the roof flashing in place and seal the joint between the roof and the flashing with roofing pitch (see *Figures 32 and 33*). For sloping roofs, place the flashing under the upper shingles and on top of the lower shingles. Nail the flashing to the roof, using roofing nails.
- 5. Place the storm collar over the flashing, and tighten it with the bolt supplied. Finally, seal the joint between the storm collar and the chimney, using silicone caulking.
- Install the chimney cap. Once the chimney cap is in place, the roof flashing can be washed with a solvent or vinegar and then painted with rust-proof paint.











Roof Down Slope Hole Size						
Degree Of Slope	Secure Temp <sup>ASHT+</sup> Nova Temp <sup>HT6103+</sup>	AC				
Roof Pitch	10"	10"				
0 *	16-3/8" (416 mm)	17" (432 mm)				
2/12	16-5/8" (422 mm)	17-1/4" (438 mm)				
4/12	17-1/4" (439 mm)	18" (457 mm)				
6/12	18-3/8" (466 mm)	19" (482 mm)				
8/12	19-3/4" (500 mm)	20-1/2" (520 mm)				
10/12	21-3/8" (542 mm)	22-1/8" (562 mm)				
12/12	23-1/8" (588 mm)	24" (611 mm)				

\* Cross Slope Hole Size
Put the chimney cap into place.
Wash the roof flashing with a solvent or vinegar,
then paint it with rust-proof paint.

Table 3

#### **OFFSET CHIMNEY INSTALLATION**

After reaching the location requiring the elbow, proceed as follows. The minimum chimney height when using elbows is:

Minimum Chimney Height When Using Elbows					
Fireplace Model Cambria™					
Chimney Model	Secure Temp <sup>ASHT+</sup> / Nova Temp <sup>HT6103+</sup> / AC				
Vertical Installation 15 feet (4.57 meters)					
Two (2) Elbows 18 feet (5.49 meters)					
Four (4) Elbows 20 feet (6.10 meters)					
Table 4					

#### Notes:

- Must return to vertical before penetrating ceiling or floor.
- A maximum of 2 offsets are allowed.

After reaching the location requiring the elbow, proceed as follows:

#### Secure Temp<sup>ASHT+</sup> / Nova Temp<sup>HT6103+</sup> Chimneys

- 1. Install the first elbow; turn it in the required direction. Fasten it to the chimney with the three (3) 1/2" (13 mm) metal screws provided with the elbow.
- 2. Install the necessary chimney lengths to achieve the required offset. Lock the chimney lengths together: it is recommended to use three (3) 1/2" (13 mm) screws. If the offset length is made of two (2) chimney lengths or more, use an offset support halfway up the offset. If penetrating a wall, install a wall radiation shield (see *Figures 36 and 37*).

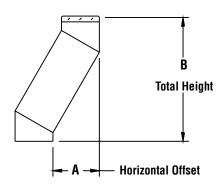
- Use another elbow to turn the chimney vertically. Secure the elbow, using three (3) 1/2" (13 mm) screws (provided with the elbow).
- Use a plumb-bob to line up the center of the hole. Cut a hole for the chimney in the ceiling/floor. Frame this hole as described previously (see *Chimney Installation Instruc*tions on *Page 17*).
- 5. From below, install a firestop (See *Figure* 30a).
- 6. A support (ST or SO) must be used on the first 15 feet section (5 m).
- 7. Continue with the regular installation.

#### **AC Chimney**

- Install the first elbow. Turn it in the required direction. To lock it in place, turn 1/8 of a turn. Fasten the straps attached to the elbow to the surrounding frame, using nails or drywall screws (Figure 35).
- Install the necessary chimney lengths to achieve the required offset. Lock the chimney lengths together. If penetrating a wall, use a wall radiation shield.
- Use another elbow to turn the chimney vertically. Lock it to the chimney. Fasten the straps attached to the elbow to the surrounding framing using nails or drywall screws.
- 4. Use a plumb-bob to line up the center of the hole. Cut a hole for the chimney in the ceiling. Frame this hole as described previously.
- 5. From below, install a radiation shield (see *Figure 30b*).
- 6. Continue with the regular installation.

Note: When using AC chimney, an AC10SB (H3776) starter section must be used before installing an elbow. When an offset is needed immediately off the top of the fireplace, a starter section H3777 is available.

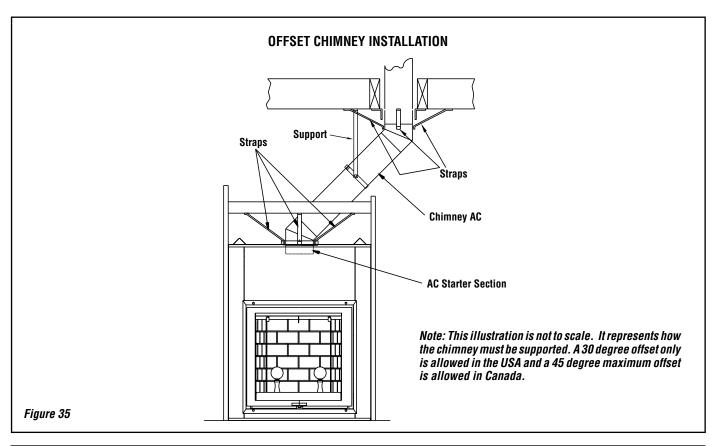
### **Offset Dimensions**

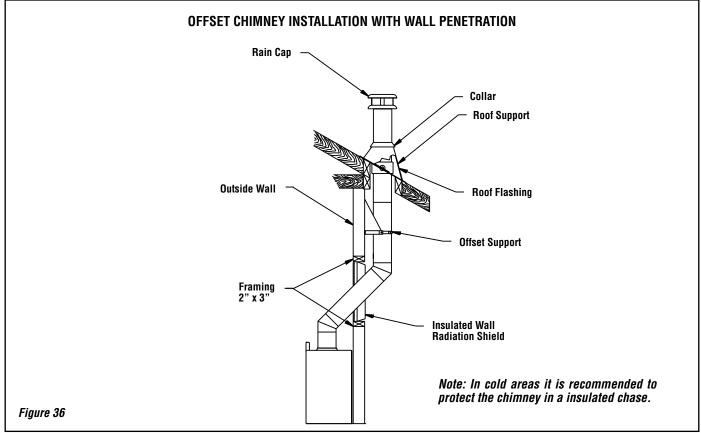


Chimney	Elbow	Offset &			ne Length B	etween Elb	DWS			Two Lengths Be			Between Elbows												
		Height	8"	12"	18"	24"	36"	48"	8" & 48"	12" & 48"	18" & 48"	24" & 48"	36" & 48"	48" & 48"											
	15°	A	3" (76mm)	4-1/4" (108mm)	5-3/4" (146mm)	7-1/4" (184mm)	10-1/4" (260mm)	13-1/4" (337mm)	15-1/4" (387mm)	16-1/4" (413mm)	17-3/4" (451mm)	19-1/4" (489mm)	22-1/2" (572mm)	25-1/2" (648mm)											
		В	16-1/2" (419mm)	20-1/4" (514mm)	26-1/4" (749mm)	32" (813mm)	43-1/2" (1105mm)	55-1/2" (1410mm)	62" (1575mm)	65-3/4" (1670mm)	71-1/2" (1816mm)	77-1/4" (1962mm)	89" (2261mm)	100-1/2" (2552mm)											
ASHT+ HT6103+	30°	30° A	7-1/2" (191mm)	9-1/2" (241mm)	12-1/2" (318mm)	15-1/2" (394mm)	21-1/2" (546mm)	27-1/2" (699mm)	31" (787mm)	33" (838mm)	36" (914mm)	39" (991mm)	45" (1143mm)	51" (1295mm)											
10"	00						•	3					В	20-3/4" (527mm)	24-1/4" (641mm)	29-1/2" (749mm)	34-3/4" (883mm)	45" (1143mm)	56-1/4" (1429mm)	62-1/2" (1588mm)	65-3/4" (1670mm)	71-1/4" (1810mm)	76-1/2" (1943mm)	86-3/4" (2203mm)	98" (2489mm)
	45° Canada	A	10-1/2" (267mm)	13-1/2" (343mm)	17-3/4" (451mm)	22" (559mm)	30-1/2" (775mm)	39" (991mm)	44" (1118mm)	46-3/4" (1187mm)	51" (1295mm)	55-1/4" (1403mm)	63-3/4" (1619mm)	72-1/4" (1835mm)											
	Only	В	18-1/2" (470mm)	21-1/4" (540mm)	25-1/2" (648mm)	29-3/4" (756mm)	38-1/4" (972mm)	46-3/4" (1187mm)	51-3/4" (1314mm)	54-3/4" (1391mm)	59" (1499mm)	63-1/4" (1607mm)	71-3/4" (1822mm)	80-1/4" (2038mm)											

Chimney	Elbow	Offset &			One Length Between Elbows			Two Lengths Between Elbows						
		Height	Height 12"		18"	36"	48"			12" & 48"	18" & 48"	36" & 48"	48" & 48"	
	15°	A		4-1/4" (108 mm)	5-3/4" (146 mm)	7-1/4" (184 mm)	10-1/4" (260 mm)		-	16-1/4" (413 mm)	17-3/4" (451 mm)	22-1/2" (572 mm)	25-1/2" (648 mm)	
AC		В		20-1/4" (514 mm)	26-1/4" (667 mm)	32" (813 mm)	43-1/2" (1105 mm)			65-3/4" (1670 mm)	71-1/2" (1816 mm)	89" (2261 mm)	100-1/2" (2553 mm)	
10"	30°	A		9-1/2" (241 mm)	12-1/2" (318 mm)	15-1/2" (594 mm)	21-1/2" (546 mm)			33" (838 mm)	36" (914 mm)	45" (1143 mm)	51" (1295 mm)	
		В		24-1/4" (641 mm)	29-1/2" (749 mm)	34-3/4" (883 mm)	45" (1143 mm)	1 1		65" (1651 mm)	70-1/4" (1784 mm)	85-3/4" (2178 mm)	96" (2438 mm)	

Figure 34





IF THE CEILING IS 9 FEET OR LESS THIS INSTALLATION CAN ONLY BE ACHIEVED USING 45° ELBOWS. SINCE ONLY 30° ELBOWS ARE ALLOWED. IN THE U.S. THE OFFSET MUST BE DONE ABOVE THE CEILING.

# ANGLED WALL RADIATION SHIELD (RSMI30, RSMI45, AC10RSMI30)

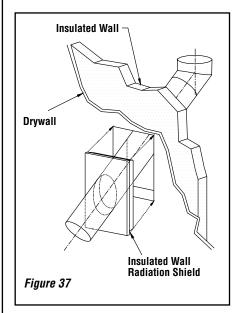
When traversing a combustible wall with the chimney at a 30° or 45° angle, an angled firestop or wall radiation shield must be installed. Only one is required.

#### Note: 45° angle for Canada only

In cold climate locations, we recommend that you use the insulated wall radiation shield since it will maintain the home's thermal barrier.

RSMI30, RSMI45, AC10RSMI30					
Angle	Hole Dimension				
30°	17-9/16" x 45- 3/4" (446 mm x 1162 mm)				
45° Canada only	17-1/2" x 30" (444 mm x 762 mm)				
30°	17" x 42-1/2" (432 mm x 1080 mm)				
	Angle 30° 45° Canada only				





#### 4.5 CHIMNEY SUPPORT INSTALLATION

#### **Universal Roof Support**

This support has three possible uses:

- 1. For Secure Temp<sup>ASHT+</sup> / Nova Temp<sup>HT6103+</sup>, it must be used on a roof to support the chimney.
- It may be used on a floor, ceiling or roof above an offset to support the chimney above the offset
- 3. It may be used on a floor, ceiling or roof as a supplementary support when the chimney height exceeds 12 feet (3.7 m).

**Table 6** gives maximum height of supported chimney.

**NOTE:** For the AC chimney, a support section (AC10SL) must be used every 20 feet (6 m) or an universal support every 15 feet (4.5 m) instead of the universal roof support (ST).

For roof support installation, refer to the instructions provided with the support.

#### **UNIVERSAL OFFSET SUPPORT**

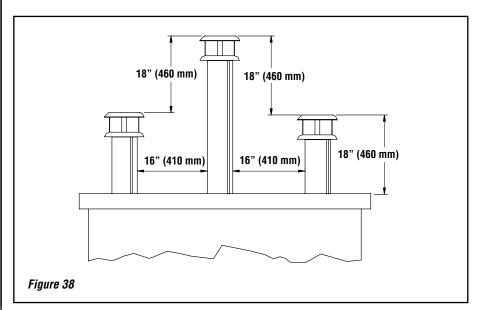
This support is used to support the chimney above an offset. When the chimney offset is used to traverse a wall this support may be used on the wall to support the chimney. The maximum heights are given in *Table 6*. For offset support installation, refer to the instructions provided with the support.

CHIMNEY	MAXIMUM HEIGHT OF SUPPORTED CHIMNEY						
10" diameter	Offset Support	Roof Support					
Secure Temp <sup>ASHT+</sup> Nova Temp <sup>HT6103+</sup>	14 Feet (4.3 meters)	20 Feet (6.1 meters)					
AC	30 Feet (9.15 meters)	40 Feet (12.16 meters)					
Table 6							

## CHIMNEY CHASE AND MULTIPLE TERMINATIONS

For the purpose of this manual, a chimney chase is considered a part of the chimney system rather than part of a building. The termination must be placed a minimum of 18" (460 mm) above the chase.

For installations where more than one chimney is located in the same chase or within the same area, we suggest that their terminations be separated by at least 16" (410 mm) horizontally, and 18" (460 mm) vertically. This separation is to prevent smoke migrating from one chimney to another (see *Figure 38*).



#### **OPTIONAL INSTALLATION ACCESSORIES**

Installation Accessories						
Description	Cat./Part No.					
Outside Air Kit (included with fireplace)						
Outside air kit, UZI	UZI					
UZI outside air kit fireplace adaptor, UZIAD	UZIAD					
Gravity Kit						
Gravity Kit, Complete double ducting system including: 2 elbows 90°, 2 telescopic lengths, 2 grill supports and 2 black grills, 7B30ZK-1	7B30ZK-1					
Gravity Kit Accessories						
Black grill with support, 7B30Z0	7B30Z0					
Brass grill (for 7B30ZK-1), 7B30ZGB	7B30ZGB					
Elbow 90°, 8" dia., 7B26ZE90	7B26ZE90					
Elbow 45°, 8" dia., 7B26ZE45	7B26ZE45					
Telescopic length, 8" dia., 7B26ZLA	7B26ZLA					
Adjustable length, 8" dia. (2" - 5"), 7B26ZL2A	7B26ZL2A					
Radiation shield (for grill), 7B26ZR	7B26ZR					
Central Forced Air Kit Accessories						
Central Forced Air Kit, Central forced air kit including: blower (BISZY), flex adaptor (BISAF), 2 clamps, variable speed control (VRUW), thermo-disk (VTU), fan to flexible pipe adapter (BISAVF), back draft damper (BISBD), aluminium tape, BISFWK-1	BISFWK-1					
Fireplace to Flex adaptor and 2 clamps, BISAF	BISAF					
Flexible pipe 5" I.D. x 15 ft. Long, 5FLEX15	5FLEX15					
Flexible pipe 5" I.D. x 30 ft. Long, 5FLEX25	5FLEX25					
Blower 250 CFM for central forced air kit, BISZY	BISZY					
Blower variable speed control with decorative wall plate for (BISZY), VRUW	VRUW					
Thermo-disk, on/off blower control (for BISZY), VTU	VTU					
Blower to flexible pipe adaptor, BISAVF	BISAVF					
Heating and cooling thermostat, 24 V, HCTW	HCTW					
Backdraft damper, BISBD	BISBD					
Fireplace Blower Kit						
Fireplace Blower Kil						

• 10" diameter chimney - AC (air cooled), Secure Temp™ ASHT+ (or Nova Temp™ HT6103+).

#### **CHIMNEY - PARTS AND COMPONENTS LISTS**

AC Chimney*				
(10" Diameter AC - Air Cooled)				
* AC Chimney is NOT recommended at elevations above 4,000 feet or in cold climates (climates where temperatures will fall below 32° F / 0° C).				
Description	Cat./Part No.			
One of the following adaptors is requi if installing an AC chimney system				
Starter Section, 10" Dia., AC10SB	H3776			
Offset Starter Section 30°, 10" Dia., AC10SB30	H3777			
The following outside air kit is required if installing an AC	chimney system			
Outside air kit (chimney) (flex, insulation, outside register and coupling), ACZI $$	H1967			
Lengths and Misc. Chimney Compo	nents			
12" Length, 10" Dia., AC10L12	H3765			
18" Length, 10" Dia., AC10L18	H3766			
36" Length, 10" Dia., AC10L36	H3767			
48" Length, 10" Dia., AC10L48	H3768			
15° Elbow, 10" Dia., AC10E15	H3760			
30° Elbow, 10" Dia., AC10E30	H3761			
Rain Termination Cap (regular), 10" Dia., AC10CPR	H3759			
Spark Arrester Screen, PE+	PE			
Wall Band, XBM	XBM			
Supports				
Support section (10"), AC10SL	H3778			
Universal support, AC10SU	H3265			
Roof Flashings	•			
Flat roof flashing (includes spacer & collar), ACBI7FR	H3275			
Roof Flashing, Adjustable, 1/12 - 7/12 (5° - 30°) (includes spacer & collar), ACBI7FAR	H3276			
Roof Flashing, Adjustable, 8/12 - 12/12 (30° - 45°) (includes spacer & collar), ACBI7FBR	H3277			
Misc.				
Firestop, AC10BF	H3758			
Radiation Shield, AC10RS	H3769			
Attic Radiation Shield, ACBI7RSA	H3270			
Telescopic Attic Radiation Shield, AC10RST	H3775			
Insulated Wall Radiation Shield 30°, AC10RSMI30	H3272			
Insulated wall radiation shield 45°, AC10RSMI45	H3774			
Outside air coupler for air kit, UACZI	H3274			
Storm Collar, AC10FC	H3278			

#### Notes:

- 1. (Projet NovaTemp) HT6103+ is equivalent to ASHT+
- 2. AC Chimney is Not recommended at elevations above 4000 feet or in cold climates where temperatures are likely to fall below 32° F (0° C). When using AC chimney, an AC10SB (H3776) starter section must be used before installing an elbow. When an offset is needed immediately off the top of the fireplace, a starter section H3777 is available.

#### **CHIMNEY - PARTS AND COMPONENTS LISTS**

Secure Temp ASHT+ 1" High Temp. Insulated Stainless Steel Chimney 10" I.D., Double-Wall Stainless Steel, Listed to CAN/UCL-S604 & UL-103HT		
Description	Part/Cat. No.	
Lengths and Misc. Chimney Components		
8" length, 10" Dia., 10L8-N	10L8-N	
12" length, 10" Dia., 10L12-N	10L12-N	
18" length, 10" Dia., 10L18-N	10L18-N	
24" length, 10" Dia., 10L24-N	10L24-N	
36" length, 10" Dia., 10L36-N	10L36-N	
48" length, 10" Dia., 10L48-N	10L48-N	
Adjustable Length 12", 10" Dia., 10LA	10LA	
15° elbow, 10" Dia., 10E15	10E15	
30° elbow, 10" Dia., 10E30	10E30	
Rain Termination Cap, 10" Dia., 10CC	10CC	
Spark Arrester Screen (universal spark arrester band), PE	PE	
Wall Band, XBM	XBM	
Supports		
Offset Support, XSO	XS0	
Roof Support, XST	XST	
Roof Brace, BS2	BS2	
Firestops		
Firestop, 10BF	10BF	
Radiation Shield, 10RS	10RS	
Insulated Attic Radiation Shield, 10RSA2	10RSA2	
Insulated Wall Radiation Shield, 10RSM	10RSM	
Insulated Wall Radiation Shield, 30°, 10RSMI30	10RSMI30	
Uninsulated Wall Radiation Shield, 30°, 10RSM30	10RSM30	
Roof Flashings		
Flat Roof Flashing, 10FR	10FR	
1/12 - 7/12 (5° - 30°), 10FAR	10FAR	
8/12 - 12/12 (30° - 45°), 10FBR	10FBR	
Storm Collar, 10FC	10FC	
Anchor Plate, 10SP	10SP	

#### **REPLACEMENT PARTS LIST**

Cambria™ - Replacement Parts		
Description	Cat./Part No.	
Front Edge Refractory Brick	PR-SR2693	
Back Refractory Brick	PR-SR2821	
Right Side Refractory Brick	PR-SR2823	
Left Side Refractory Brick	PR-SR2822	
Bottom Refractory Brick	PR-SR2692	
Wooden Door Handle	PR-SR2722	
Decorative Screw Caps (2)	PR-SACBTFBK2	
Ceramic Glass (1)	PR-SR2677	
Andiron (2)	PR-SR2824	
Black Metallic Paint "Forrest Paint" Can	H8159	
Door Gasket: 58-3/4" 5/8" Dia., (order 1 per door)	PR-SR1823N	
Right Door Assembly	PR-SR2678	
Left Door Assembly	PR-SR2679	
Finishing Facade	PR-SR2701	
Door Lock Tab	PR-SR2715	
Bearing	PR-SR2674	
Chimney Damper Control Handle And Rod	PR-SR2762	
Chimney Damper Plate And Pivot Rod	PR-SR2665	
Fire Screen	PR-SR2723	
Fire Screen Support Rod	PR-SR2779	
Left Slider Assembly	PR-SR2680G	
Right Slider Assembly	PR-SR2680D	
Slider Stopping Plate	PR-SR2714	
Right Hinge	PR-SR1800DLV	
Left Hinge	PR-SR1800GLV	
Fireplace Top Panel	PR-SR2661	
Fireplace Left Side Panel	PR-SR2659	
Fireplace Right Side Panel	PR-SR2660	
Fireplace Back Panel	PR-SR2658	

Contact an Authorized Lennox Hearth Products dealer to obtain any of these parts. Never use substitute materials not approved by Lennox Hearth Products. Use of non-approved parts can result in poor performance and safety hazards.

#### **SPECIFICATIONS**

Cat. No.	Model
H6998	Cambria

Product Reference Information		
Weight w/ crate	675 lbs	
Weight w/out crate and refractory bricks	500 lbs	
Height	59" (1499mm)	
Width	48-1/2" (1232mm)	
Depth	29" (737mm)	
Chimney weight ASHT+ (10" dia.)	8-1/2 lb/ft.	
Chimney weight AC (10" dia.)	4 lb/ft	

#### **CLEARANCE TO COMBUSTIBLES**

The following clearances meet the minimum requirements for a safe installation:

- Side wall (fireplace front): 24" (457 mm) measured from the fireplace door.
- Ceiling: 7' 6" (2286 mm) measured from the base of the fireplace
- Fireplace enclosure:

Bottom: 0"

Side: 0" to spacer

Back: 0" to spacer

Top: Do not fill the space above the fireplace with any material

(Except the wood framing. See Figure 15)

- Chimney: 2" (50 mm)
- Mantel: 59" (1422 mm) measured from the base of the fireplace.

#### WARRANTY

Your fireplace is covered by a limited warranty. Please read the warranty to be familiar with its coverage.

Retain this manual. File it with your other documents for future reference.

#### PRODUCT REFERENCE INFORMATION

We recommend that you record the following important information about your fireplace. Please contact your Lennox Hearth Products dealer for any questions or concerns. For the number of your nearest Lennox Hearth Products dealer, please call 1-800-9-LENNOX.

#### REPLACEMENT PARTS

See *Page 25* for a complete replacement parts list. Use only parts supplied from the manufacturer.

Normally, all parts should be ordered through your Lennox Hearth Products distributor or dealer. Parts will be shipped at prevailing prices at time of order.

When ordering repair parts, always give the following information:

- **1.** The model number of the appliance.
- 2. The serial number of the appliance.
- **3.** The part number.
- **4.** The description of the part.
- **5.** The quantity required.
- **6.** The installation date of the appliance.

If you encounter any problems or have any questions concerning the installation or application of this system, please contact your dealer.

LENNOX HEARTH PRODUCTS 1508 Elm Hill Pike, Suite 108 Nashville, TN 37210 Visit us at www.Lennox.com

Your Fireplace's Model Number
Your Fireplace's Serial Number
The Date On Which Your Fireplace Was Installed
Your Dealer's Name
Your Dealer's Phone Number



We recommend that our woodburning hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Woodburning Specialists or who are certified in Canada by Wood Energy Technical Training (WETT).



Nous recommandons que nos pôeles à bois soient installés et que l'entretien soit effectué par des professionnels certifiés, aux Etats-Unis par le National Fireplace Institute® (NFI) et au Canada, par le Wood Energy Technical Training (WETT).

Lennox Hearth Products reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products. Consult your local distributor for fireplace code information.

