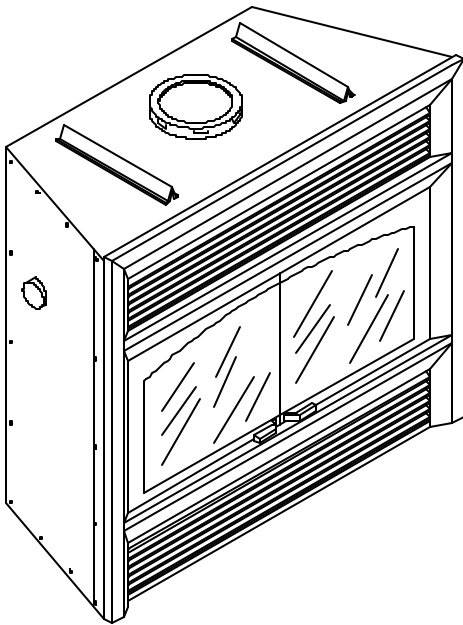




## ***Installation Instructions***

*for Security Fireplace  
Model SECURE HE43-1*



This installation manual will help you obtain a safe, efficient, dependable installation for your fireplace and chimney system. Please read and understand these installation instructions before beginning your installation.

**CAUTION:** Do not attempt to modify or alter the construction of the fireplace or its components. Any modification or alteration of construction may void the warranty, listings and approvals of this system. In that case, Security Fireplace will not be responsible for damages.

PLEASE RETAIN THIS MANUAL FOR  
FUTURE REFERENCE



SECURITY CHIMNEYS INTERNATIONAL LTD  
2125 Monterey St., Laval, Quebec, Canada, H7L 3T6 Phone: (450) 973-9999

# **CERTIFICATION LABEL**

## 25 YEAR LIMITED WARRANTY

Security Chimneys International Ltd. warrants to the original consumer-purchaser that the woodburning fireplace Model SECURE HE43-1 will be free from defects in material and workmanship, under normal use and service, for a period of twenty-five (25) years from the date of purchase.

This warranty shall be void if the fireplace is not installed in accordance with the installation instruction manual provided with the product and does not cover damage caused by misuse of the product. This 25 year warranty is limited to residential use of the product only.

### WARRANTY LIMITATIONS:

1. During the first year of the limited warranty, Security Chimneys International Ltd. will provide replacement parts at no charge and will also pay for reasonable labor costs for repair work. All repairs must be approved by an authorized company official before any work is done. Labor costs to be borne by Security Chimneys International Ltd. must not exceed the retail price of the parts replaced.
2. During the second through the fifth years of the limited warranty, Security Chimneys International Ltd. will provide replacement parts (if available) at no charge, except for the parts listed below. *Security Chimneys International Ltd. shall not be responsible for any labor costs.*

The following parts are guaranteed for *one (1) year*: Blowers, ceramic glass.

The following parts are guaranteed for *three (3) months*: Wood grate, refractories, firescreen, gaskets.

3. During the sixth through the twenty-fifth years of the limited warranty, Security Chimneys International Ltd. will provide replacement parts (if available) at 50% of the retail price, except the parts mentioned above. *Security Chimneys International Ltd shall not be responsible for any labor costs.*
4. The following parts *are not covered* by the warranty: Brass trims, panels, louvers.

This warranty may not be extended by our representatives in any manner whatsoever.

The warrantor makes no warranties express or implied, written or oral, other than those specifically stated in this 25 year limited warranty. The duration of any implied warranty including that of merchantability or fitness for any particular purpose shall be limited to 25 years from the date of purchase.

The remedy for damages as the result of any defect in this product which have been warranted herein is limited to replacement of defective parts and does not include any incidental or consequential damages or expenses sustained in connection with the product, including damage to property.

*Security Chimneys International Ltd. is not responsible for inadequate fireplace system draft caused by air conditioning, heating, mechanical system or general construction conditions which may generate negative pressure in the property.*

The chimney is covered by a separate limited warranty.

### FOR UNITED STATES ONLY :

Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

NOTE: *Dated proof of purchase is required for recognition of this warranty.*

## TABLE OF CONTENTS

	Page
Safety rules .....	4
<b>Fireplace maintenance</b>	
Creosote .....	5
Chimney maintenance .....	5
Chimney fires .....	5
Glass cleaning .....	6
Doors adjustment .....	6
Glass replacement .....	6
Removal of ashes .....	6
<b>Fireplace operation</b>	
Combustible .....	7
First fires .....	7
Building a fire .....	7
How to use the retractable doors and firescreens .....	8
How to use the outside air kit (fireplace) .....	8
<b>Fireplace installation</b>	
Recommendations .....	9
Tools and building supplies .....	9
Installation procedure .....	10
Locating the fireplace .....	10
Adjacent walls .....	10
Enclosure .....	10-11
Facing and mantel .....	12
Hearth extension .....	12
Outside air installation .....	12-13
UZY3 fan kit installation .....	14
Central forced air kit .....	15
<b>Chimney installation</b>	
General notes .....	16-17
Straight installation .....	17-18-19
Offset installation .....	21-22-23
Angled firestop installation .....	24
Roof support installation .....	25
Offset support installation .....	25
Termination cap .....	26
<b>Parts and components (chimney) .....</b>	<b>27</b>
<b>Appendix (Specifications, Clearances, Replacement parts, Options) .....</b>	<b>28</b>
<b>Fireplace Dimensions .....</b>	<b>29</b>

## **SAFETY RULES FOR OPERATING YOUR FIREPLACE MODEL SECURE HE43-1**

**Warning:** An outside air kit ***must be installed*** on the fireplace model SECURE HE43-1.

**Warning:** The fireplace must be operated with the doors fully opened or 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."

- Use only Security Fireplace glass doors, specifically designed for the model SECURE HE43-1 fireplace. (See Appendix for part number).
- Always keep the firescreen or the doors closed and the damper opened when using the fireplace. Keep the damper closed when the fireplace is not in use.
- The HE43-1 fireplace is sold with a cast-iron wood grate. If you have to replace it, we recommend for optimum efficiency, to replace it with an identical or similar model.
- A fireplace insert heating unit may be installed in the fireplace only if this unit has been certified with the HE43-1 fireplace.

**Caution:** Never use gasoline, 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 at all times.

**Caution:** Keep combustible materials at least 48 inches away from the front of the fireplace opening.

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

**Caution:** This appliance is designed for use with wood or certified processed solid fuel firelogs. "Do not poke or stir the logs while they are burning. Use only firelogs that have been evaluated for the application in fireplace and refer to firelog warnings and caution markings on packaging prior to use".

**WARNING:** THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS LOG SET. TO REDUCE RISK OF FIRE OR INJURY, DO NOT INSTALL AN UNVENTED GAS LOG SET INTO THIS FIREPLACE.

# **FIREPLACE MAINTENANCE**

## **CREOSOTE**

When wood is burned slowly, it produces tar and other organic vapors which combine with expelled moisture to form a black deposit called 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. If 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 small hot fires rather than slow burning, smouldering fires.

## **CHIMNEY MAINTENANCE**

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

1. Initially, inspect the chimney system weekly. By doing this, you will learn how often it will be necessary to clean your chimney.
2. 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 could scratch the stainless steel interior of the chimney.
3. Do not expect chemical cleaners to keep your chimney clean.

The raincap can be removed for inspection and/or cleaning of the chimney. Unscrew the braces which attach the raincap to the chimney. Using gloves, firmly grip the lower portion of the rain cap. Turn the cap 1/8 of a turn counterclockwise and lift it off the chimney.

## **CHIMNEY FIRES**

If you are having a chimney fire, follow these steps:

1. Close the glass doors and the air inlet.
2. Close the chimney outside air register.
3. Alert your family of the possible danger.
4. If you require assistance, alert your fire department.
5. If possible, use a dry chemical fire extinguisher, baking soda or sand to control the fire. Do not use water as it may cause dangerous steam explosions.
6. Watch for smouldering or fire on combustibles next to the fireplace and chimney. Check outside to ensure that sparks and hot embers coming out of the chimney are not igniting the roof.
7. Do not use the fireplace again until your chimney and fireplace have been inspected by a qualified chimney sweep or a fire department inspector.

## **DOOR FRAME CARE**

Use a glass cleaner and a soft cloth to polish the frame. Do not use abrasives such as steel wool or steel pads for they may scratch the door frame finish.

## **GLASS CLEANING**

The SECURE HE43-1 is designed to keep the glass clean under normal operating conditions. To clean the glass there are number of specially designed cleaners. Your authorized Security Dealer can recommend a suitable cleaner which is available in your area. 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.

## **DOORS ADJUSTMENT**

After a while, the doors might require an adjustment. To do so, loosen the fastening screws and move the door frame until you get the accurate adjustment (see figure 1 below).

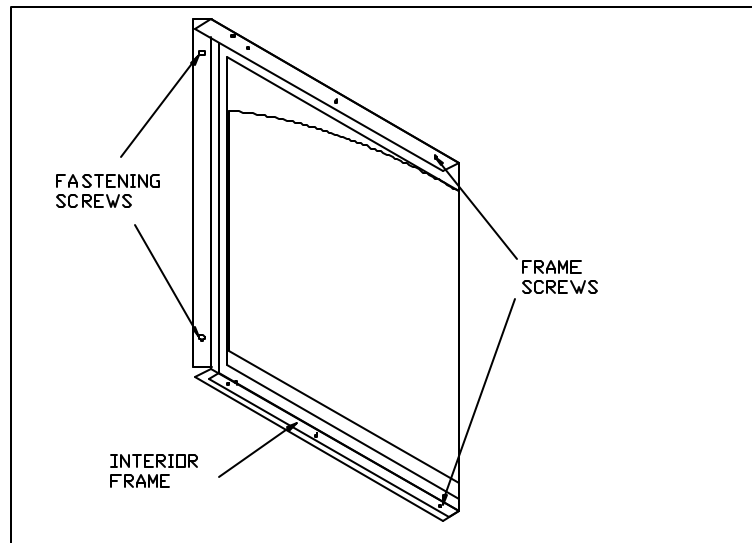


Figure 1

## **GLASS REPLACEMENT**

The glass used for the SECURE HE43-1 doors is a high temperature ceramic glass. If the glass breaks, it must be replaced with a ceramic glass such as Neoceram. Tempered or ordinary glass will not withstand the high temperatures of the SECURE HE43-1. Replacement glass should be purchased from Security Chimneys International Ltd. Do not operate the unit with cracked or broken glass. To remove the glass panel, unscrew the frame screws, remove the interior frame and the glass panel.

## **REMOVAL OF ASHES**

Remove ashes only when the fire is out and the ashes are cold. Lift the wood grate until it rests against the rear refractory; then remove the 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. Do not leave the ashes in the house as they give off carbon monoxide and other toxic gases.

## **OPERATING THE SECURE HE43-1**

### **FUEL**

The Secure HE43-1 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 refueling. A moisture content of 15% to 20% (seasoned) is preferred. Excessively wet wood will be difficult to burn and will result in lower efficiency and increased creosoting.

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 abuse the unit by burning large amounts of paper, cardboard, Christmas tree branches or building construction materials such as pressed wood, plywood or lumber. Intense firing with these may overheat the fireplace, causing damage to the unit, a fire, or even possibly igniting a chimney fire, if the chimney is creosoted.

### **FIRST FIRES**

The first 5 or 6 fires should be small fires of short duration (about 30-60 minutes). The first fire should be especially short. This will help cure the refractory bricks. The first fires may produce slight smoking due to drying of the paint and steel and any dust accumulated on the fireplace will be burn off at this time. For this reason the room should be well ventilated for the first few fires.

### **BUILDING A FIRE**

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, crisscrossing the kindling so that there are airspaces in between. Place larger pieces of kindling on top of the pile. Keep the fuel far back enough so that air can get underneath. Open the air control fully and light the newspaper. Once the kindling fire is well established, cordwood can be added.

The unit will burn best with a minimum of two pieces of cordwood spaced 1" to 2" 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.



## HOW TO USE THE RETRACTABLE DOORS AND FIRESCREENS

The Security Fireplace Model HE43-1 features retractable doors and firescreens in order to allow a wider view of the fire and save space when the doors are opened. To retract the doors, simply open them at 90° and push them into the opening on the side of the firebox. The same procedure applies for the retractable firescreens. (see Fig. 2).

**Note :** Do not operate the fireplace with both firescreen and doors closed at the same time.

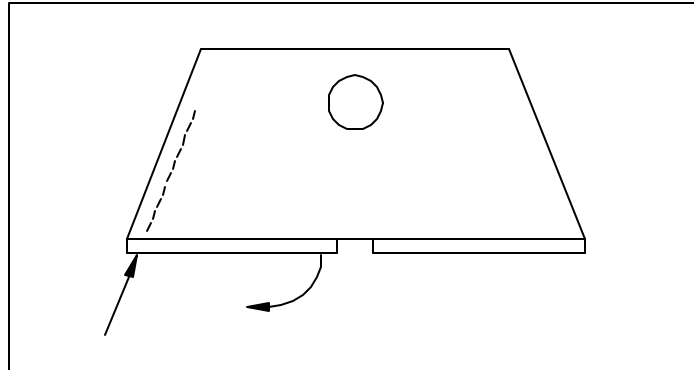


Figure 2

## HOW TO USE THE OUTSIDE AIR REGISTER (FIREPLACE)

The outside air register is located on the upper part of the top louver. The outside air register supplies oxygen to the fire and allows control of the fire when the doors are closed. The fresh air must come from outside the house (the air intake must not draw air from inside the house). This will minimize the risk of causing a negative pressure in the house. The more you slide the register to the left, the more fresh air into the firebox and the more accelerated combustion you will get (see Figure 3). When starting a fire, the register should always be fully opened.

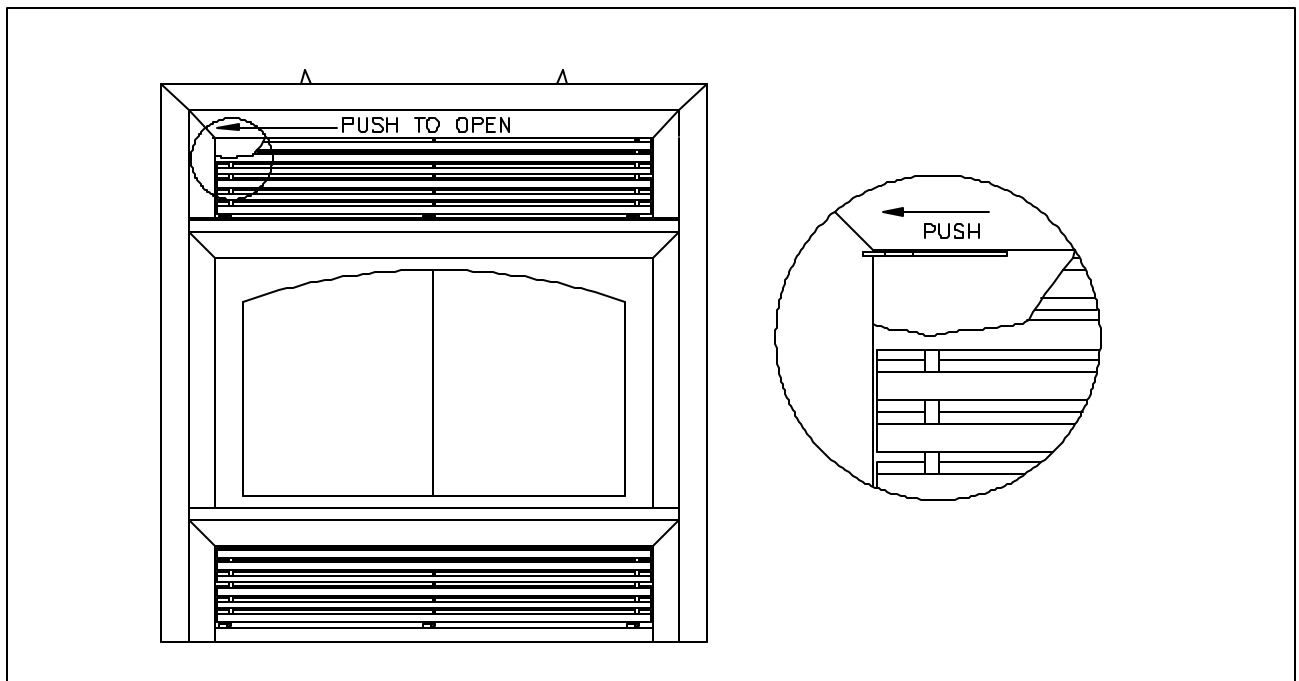


Figure 3

# FIREPLACE INSTALLATION

## ADVICES TO THE INSTALLER:

1. Before beginning the installation of your fireplace, read these safety tips and installation instructions carefully to be sure you understand them completely. Failure to follow them could cause a fireplace malfunction resulting in serious bodily injury and/or property damage.
2. Your Security Fireplace and its instruction manual have been tested and listed to UL and ULC standards by Warnock Hersey International Inc. These instructions were written to give you an outline for a fast and safe installation and troublefree operation. Failure to use parts manufactured by Security Chimneys International Ltd. or variations in techniques and construction materials described in this installation manual may create a serious fire hazard; it may void the Security Chimneys International Ltd. warranty and will void the WHI listing.
3. ***Always check your local building codes. The installation must comply with their regulations. Before beginning the installation, consult the local authorities and make sure your building permit complies with their requirements.***
4. This fireplace must be installed with a Security Chimneys International Ltd. chimney system model **ASHT+, S-2100+ or AC**, or an Oliver Macleod chimney system model **HT6000+, HT6103+, of 8" inside diameter**.
5. To maintain top efficiency and to prevent build-up of soot and creosote, inspect and clean the chimney periodically during the heating season.
6. To prevent possible hazards due to poor combustion and to avoid affecting other fuel burning appliances (furnace, wood stove, etc.), ensure that the outside air kit is properly installed.
7. 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.
8. This fireplace has provision for the installation of a gas pipe and is intended only for connection to a decorative gas appliance 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).
9. The fireplace model SECURE HE43-1 is sold with glass doors. **The outside combustion air kit is mandatory** and is included with the fireplace. The blowers and the decorative brass trims and panels are optional.

## TOOLS AND BUILDING SUPPLIES NORMALLY REQUIRED

### Tools:

Phillips screwdriver  
Slot style screwdriver  
Hammer  
Saw and/or Sabersaw  
Level  
Measuring tape  
Plumb line  
Electric drill and bits  
Pliers  
Square

### If gas pipe is used:

Pipe wrench  
Pipe cutter  
Pipe threader  
Pipe joint compound  
Pipe key valve

### Building supplies:

2" x 3" or heavier lumber  
Drywall panel or equivalent  
Silicone caulking (non-combustible)  
Overlay material for fireplace façade  
Hearth extension (non-combustible)

## **PRECAUTIONS!**

The most important areas of concern dealing with the fireplace installation are clearances to combustible materials, secure assembly of components parts, the height of the chimney system, the proper use of accessory equipment and the techniques used in using finishing materials applied to fireplace surrounds, hearth extensions and wall coverings. Each of these topics will be covered in greater detail throughout this manual. **Please give special attention to these instructions as you progress with your installation.**

### **FIREPLACE INSTALLATION PROCEDURE**

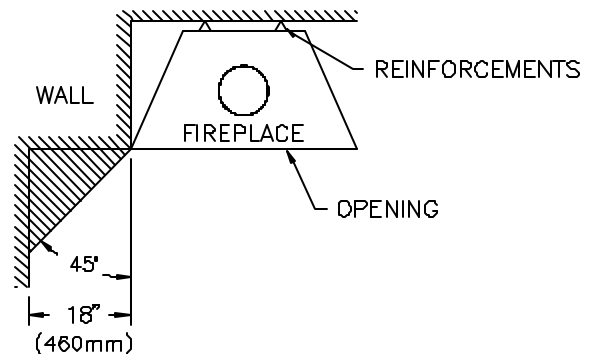
1. Move the fireplace into the desired position (follow the recommendations below for enclosure).
2. Install the outside air assembly (or assemblies) - refer to page 13.
3. Install the enclosure surrounding the fireplace (refer to the sections "Enclosure" below and "Facing and Mantel" on page 12).
4. Install the hearth extension (see page 12). Make sure the gap between the fireplace and the hearth extension is sealed.

### **LOCATING THE SECURITY FIREPLACE**

Do not place the fireplace on carpeting, vinyl or other soft surface floor coverings. It may, however, be directly placed on flat wood, plywood, particle board or other hard surface materials.

### **ADJACENT WALL**

A wall perpendicular to and in front of the fireplace front facing must be at least 18" (460 mm) from the fireplace opening. A wall at 45° to the front facing and starting at the fireplace's outer edge is permitted. Projections within this area are permitted. See figure 4.



**Figure 4**

### **ENCLOSURE**

1. **WARNING:** Do not place loose insulation or any other material in the space around the fireplace or the chimney. Insulation placed on or around the fireplace or chimney may cause adjacent wood to overheat and catch on fire.
2. The fireplace must be installed against a finished wall (like drywall finish). It must not be installed against a vapor barrier or exposed insulation (see figure 5).
3. The fireplace is zero clearance. Combustible materials like wood, plywood, particle board or drywall can be in direct contact with the fireplace reinforcements. **Two inch (50 mm) clearance to combustibles must be kept around the chimney.**
4. **WARNING:** The top of the fireplace is not zero clearance. Do not place any insulating material in the space above the fireplace for a height of 7 feet from the base of the fireplace.
5. Do not block the fireplace's hot air vents or air inlets as this will cause the fireplace to overheat.

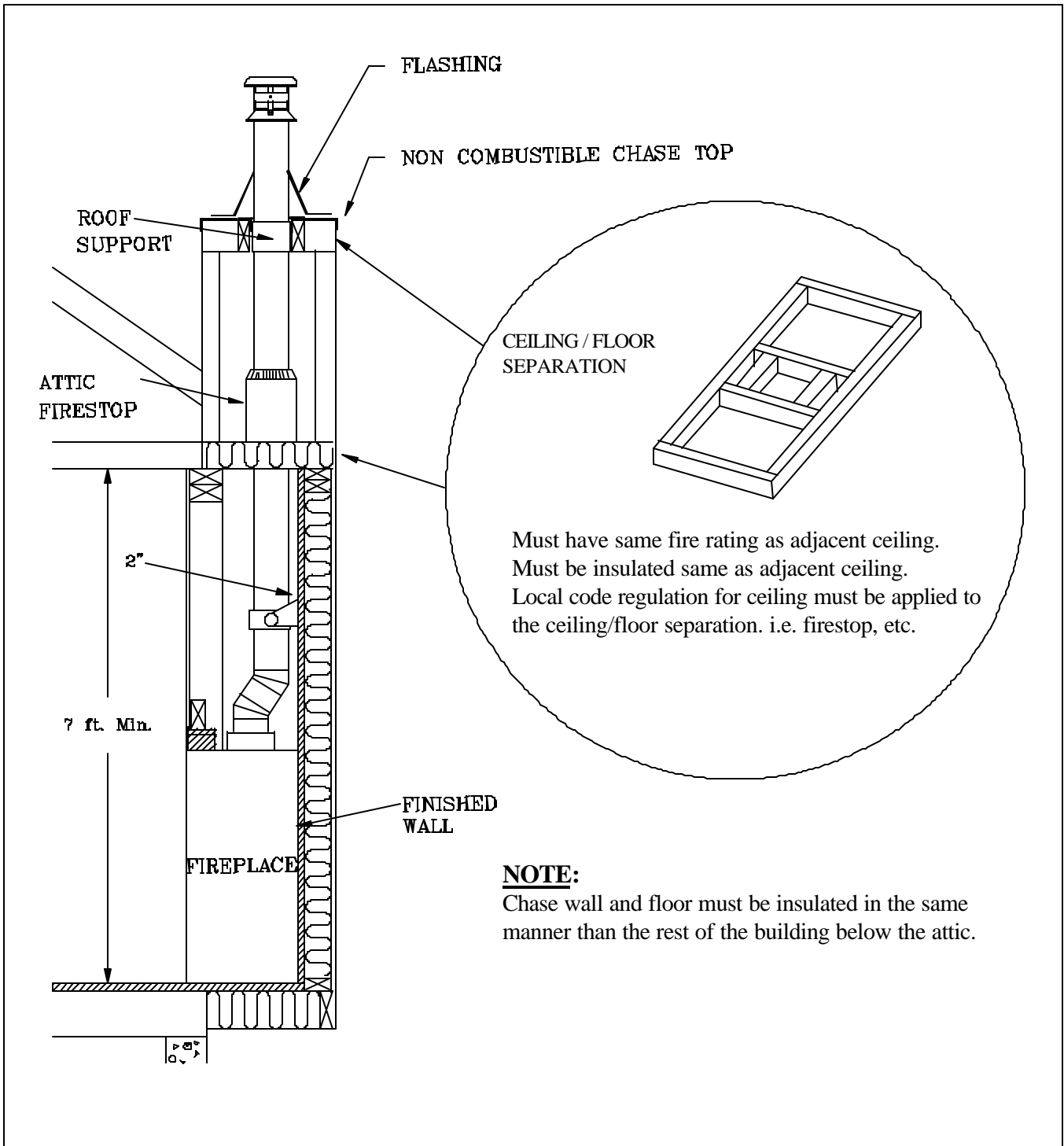


Figure 5

## FIREPLACE FACING

The fireplace should be framed using 2" x 3" (50 mm x 75 mm) or heavier lumber. Figure 6 shows the general framing layout.

Combustible materials must be installed flush with the fireplace facing. They may not project out in front of the fireplace. Non-combustible materials such as brick, stone or ceramic tile, may project in front of and/or on the fireplace facing.

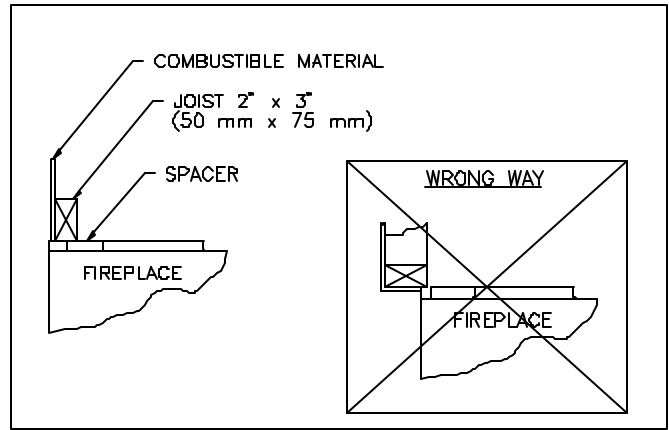


Figure 6

## WARNING:

The header should rest on top of the metal spacers. Do not alter the spacers or notch the header to fit around them. Do not block the air inlet or outlet as this will cause the fireplace to overheat.

## MANTEL

A wood mantel, if installed, must be at least 48" (1.2 m) above the base of the fireplace (see Figure 7). There is no restriction regarding the length or the width of the mantel.

## HEARTH EXTENSION REQUIREMENTS

A non-combustible hearth extension must be built in front of the fireplace and extend out on both sides. Hearth extensions must be constructed according to the following guidelines:

1. A layer of sheet metal 0.018" (0.45 mm) thick or 3/8" (9 mm) thick milboard or any other material (tiles, marble, granite) with equivalent heat resistance may be used. Check with the local building authorities before installing to determine what other materials are acceptable in your area.
2. The hearth extension should be secured to the floor. The gap between the fireplace and the hearth extension must be sealed with non-combustible caulking or cement.
3. On a raised base or raised hearth, a "Z" shape piece of metal must be fabricated to join the bottom of the fireplace to the floor.

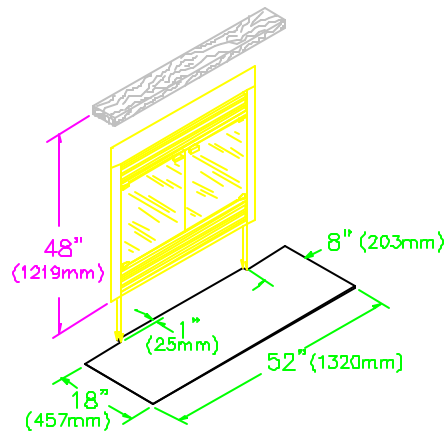


Figure 7

## OUTSIDE AIR ASSEMBLY (FIREPLACE AND AC CHIMNEY)

*The outside air assemblies are mandatory for the fireplace and the AC chimney.*

During operation, the fireplace requires air for combustion and draws air out of the house. It may starve other fuel burning appliances such as gas or oil furnaces. As well, exhaust fans and fan driven appliances may compete for air, causing a negative pressure in the home, resulting in smoke entering the home from the fireplace. This situation is aggravated in modern airtight houses. To overcome this potential problem, we **require the installation of an outside air assembly** to provide combustion air to the fireplace.

## OUTSIDE AIR INSTALLATION (FIREPLACE AND AC CHIMNEY)

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

1. The maximum length of 4" I.D.(100 mm) insulated flexible duct is 20 ft (6.1 m ). If a longer duct is required, use a 6" I.D (150 mm) insulated flexible duct. The maximum length is 40 ft (12 m ). Refer to figures 8b and 8c for connections.
2. The duct and register may be installed above or below floor level.
3. The outside air register must not be installed more than 7 feet (2.1 m) above the base of the fireplace.
4. The outside air assembly must draw air from outside the house. It must not draw air from the attic, the basement or a garage (see fig. 15 page 19).
5. Locate the outside register where it will be well away from automobile exhaust fumes or other vents.
6. The outside air register should be installed where it is not likely to be blocked by snow or exposed to extreme wind
7. It is recommended to install the outside air register at floor level. However, if you must raise the air register above the fireplace level, you will have to make a loop to the floor with the flexible pipe to prevent from causing a draught in the outside air register (see Figure 8a).

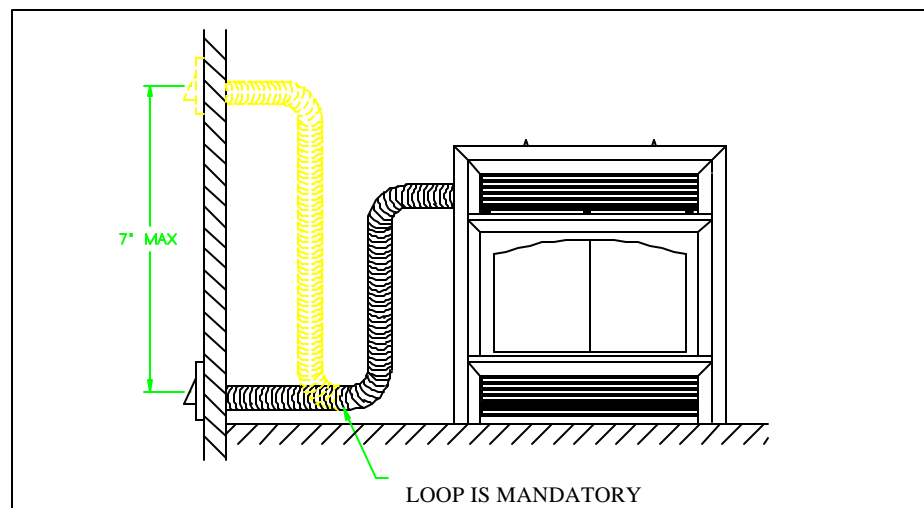


Figure 8a

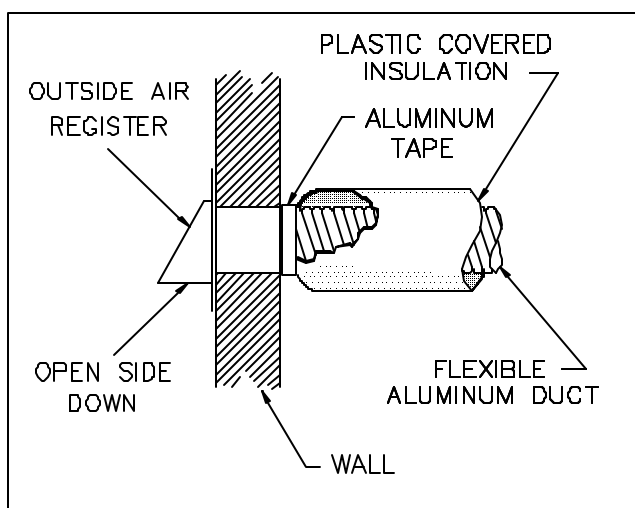


Figure 8b

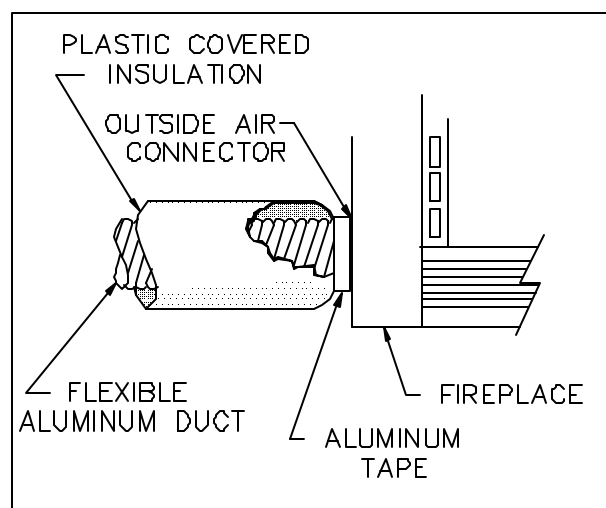
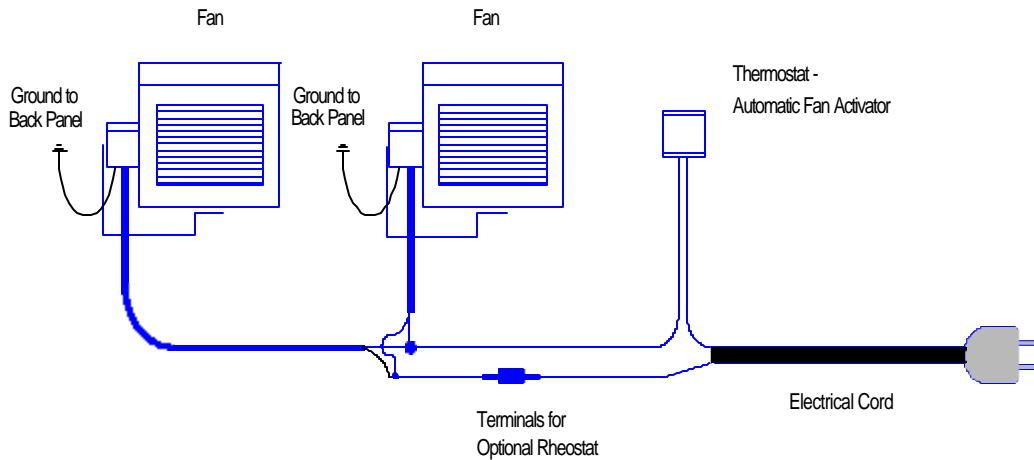


Figure 8c

## INSTALLATION OF THE FAN KIT MODEL UZY3

**Note:** *This fan kit can easily be installed when the fireplace has a pre-installed junction box. You just have to plug them in..*

Rating: 120 Volts, 60Hz, .63A.



The fans have magnetic blower mounts. The junction box (factory installed on approved fireplaces for the use of this fan kit) must be connected to 110 VAC service before permanently enclosing the fireplace. The access hole for connecting the 110 VAC is located on the lower right exterior side of the fireplace.

### INSTALLATION INSTRUCTIONS:

1. Open the bottom louver of the fireplace.
2. Place each fan kit into the fireplace side opening 1" from the back of the fireplace.
3. Install the automatic fan activator on the side of the firebox (the fan activator has a magnetic mount).
4. Plug the fan kit into the junction box.
5. Ground both fans to the back panel using the green screws.

**NOTE:** **The fireplace must be electrically connected and grounded in accordance with local codes or in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code.**

**For U.S.A. installations, follow local codes and the National Electrical Code ANSI/NFPA No 70.**

**CAUTION:** *Should this fan require servicing, the power supply must be disconnected.*

These fans do not need regular maintenance; however, periodic cleaning is required. Check the area in front of the fans and wipe or vacuum at least once a month during the operating season.

## CENTRAL FORCED AIR KIT

The knock-outs provided on the sides of the HE43-1 allow the connection of insulated flexible pipe which enables you to heat adjacent rooms up to 50 feet from the fireplace.

The ducting system must be installed as described below :

1. Fix the adaptor at the side of the fireplace by twist-locking the adaptor to the fireplace. You can use more than one outlet on the fireplace (figure 9).
2. 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.**
3. Route the flexible pipe to the chosen location. The ducting system can be installed either in an upper room or in a lower room.
4. Attach the flexible pipe to the fan, using the collars (figure 10).
5. Fix the decorative grill fan adaptor to the fan.
6. Attach a standard 3" x 10" grill to the adaptor.
7. Install the *blower thermostat* in that part of the house to be heated by the hot air duct. Do not install the blower thermostat in the room where the fireplace is located. A *cooling thermostat* can be 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 fan have been made according to the local codes and comply with their requirements. It is possible to connect a flexible pipe to a central heating system. Make sure the pipe will be connected to the warm air supply duct, not to the return air duct (figure 11). Contact your local furnace installer for installation guidelines.

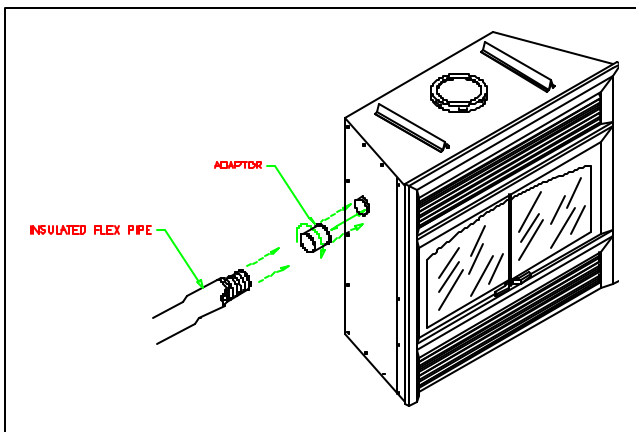


Figure 9

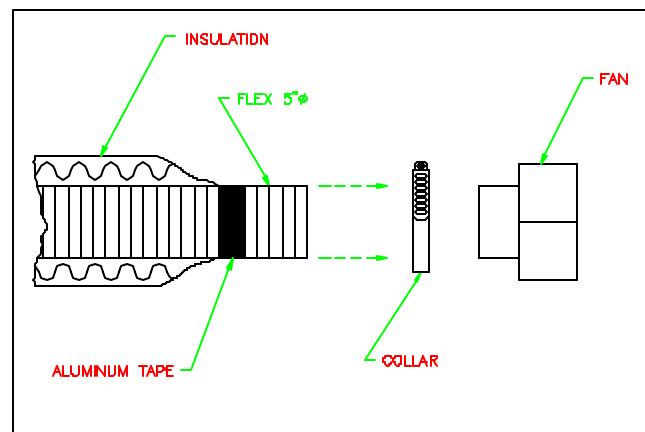


Figure 10

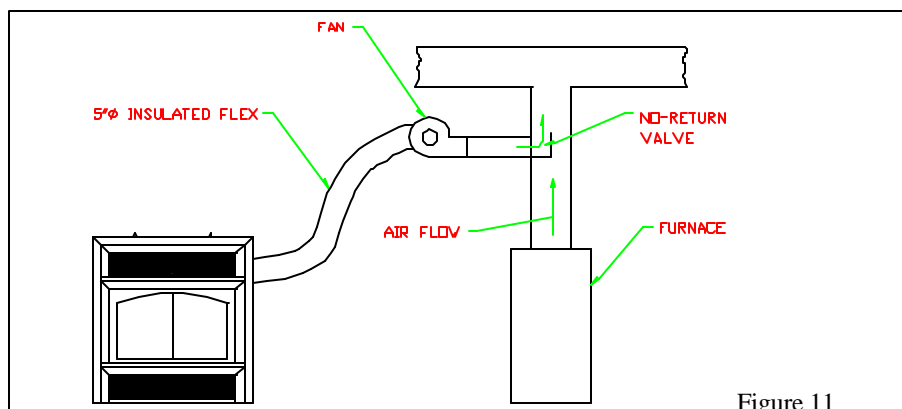


Figure 11



## CHIMNEY INSTALLATION

### GENERAL NOTES

1. The Security Fireplace Model SECURE HE43-1 is listed only with Security Chimneys International Ltd. chimney systems. ***Do not connect the fireplace to a masonry chimney, chimney liner, or other brand of factory-built chimney.***
2. The Oliver Macleod chimney models HT6103+ and HT6000+ are respectively equivalent to Security Chimneys International Ltd. chimney models ASHT+ and S2100+.
3. 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 located in a basement, in combination with outside chimneys, are especially prone to flow reversal. In cold areas, air cooled chimneys should not be used in an exterior installation.
4. A chimney venting a fireplace shall not vent any other appliance.
5. The minimum system heights are indicated in Table 1.
6. In altitude, add 18" (450 mm) to the chimney for every 2000 feet (600 m) above sea level.

MINIMUM HEIGHTS	
Fireplace Model	SECURE HE43-1
Chimney Model	ASHT+ / HT6103+ / S-2100+ / HT6000+ / AC
Vertical Installation	15 ft (4.57 m)
One Offset (2 elbows)	18 ft (5.49 m)
Two Offsets (4 elbows)	20 ft (6.10 m)

Table 1

NOTE: In areas where winter temperatures are normally below freezing, the air cooled chimney may produce condensation. This condensation may corrode the top of the fireplaces and is not covered under warranty. For optimum performance of your fireplace, Security Chimneys International recommends the use of an ASHT+ / HT6103+ or S2100+ / HT6000+ chimneys.

7. All chimney installations must include at least one support. The maximum length of chimney that can be supported by the fireplace is 12 ft. (3.6 m) for S2100+/HT6000+, 18 ft (5.4 m) for ASHT+/HT6103+ and 26 ft. (8 m) for AC chimney.

8. The chimney must extend at least 3 ft. (915 mm) above its point of contact with the roof and at least 2 ft. (610 mm) higher than any wall, roof or building within 10 ft. (3 m) of it (see Figure 12).

9. If the chimney extends higher than 5 ft (1500 mm) above its point of contact with the roof, it must be secured using a roof brace or guide wires.

10. A rain cap must be installed on top of the chimney. Failure to install a rain cap may cause the fireplace to corrode and operate inefficiently.

11. Cut and frame square holes in all floors and the roof to provide a 2" (50 mm) clearance between the chimney and any combustible materials. Do not fill this 2" (50 mm) space with any material (see Figure 13).

12. Portions of the chimney which may extend through accessible spaces must be enclosed to avoid contact with combustible materials or damage the chimney.

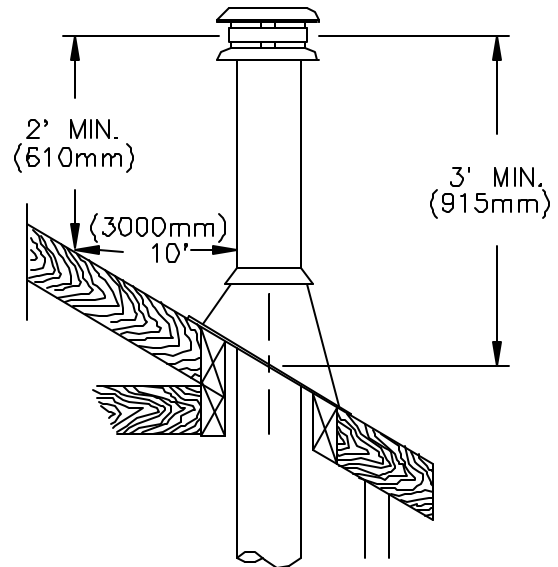


Figure 12

## CHIMNEY INSTALLATION INSTRUCTIONS

### STRAIGHT INSTALLATION

Cut and frame the holes in the ceiling, floor and roof where the chimney will pass (see Figure 13). Use a plumb bob to line up the center of the holes. The hole sizes are indicated in Table 2 for the floor and ceiling holes and Table 3 (page 20) for the roof holes.

CHIMNEY MODEL	SQUARE HOLE SIZE
ASHT+/HT6103+	365 mm (14 3/8")
S2100+/HT6000+	406 mm (16")
AC	380 mm (15")

Table 2

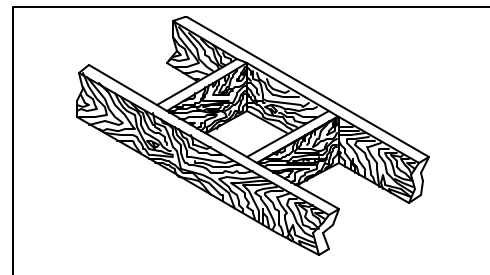


Figure 13

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 14a & 14b).

For ASHT+ / HT6103+ and S2100+ / HT6000+ chimneys, place the first chimney length on the fireplace. To lock it into place, turn ¼ of a turn clockwise. With the AC chimney you must use a starting section before installing the first chimney length (see Figure 15). Continue installing chimney lengths until you reach the desired height.

Every time the chimney passes through a roof or a wall, install the appropriate firestop. When you reach the desired height, install the roof support (see instructions included with the support).

Then, put the roof flashing in place and seal the joint between the roof and the flashing with roofing pitch. 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 (fig. 16a et 16b).

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.

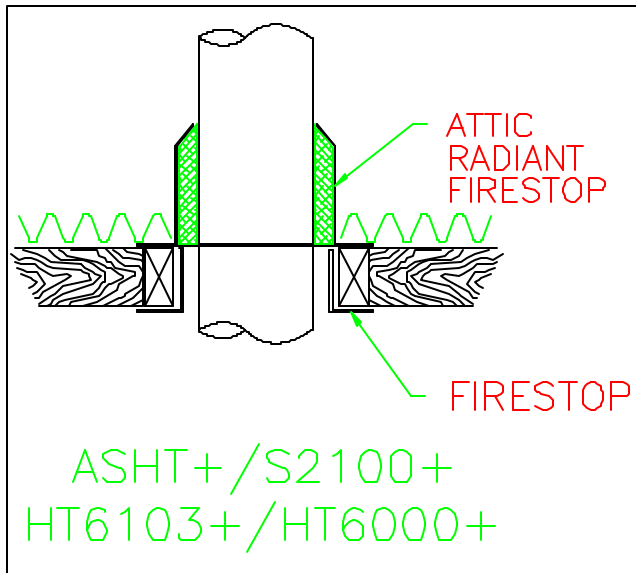


Figure 14a

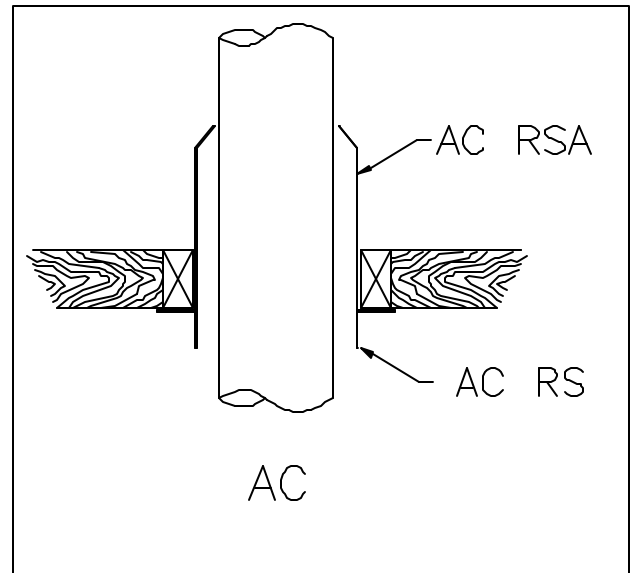


Figure 14b

AC MODEL (AIR COOLED INSULATED, GALVALUME CHIMNEY)

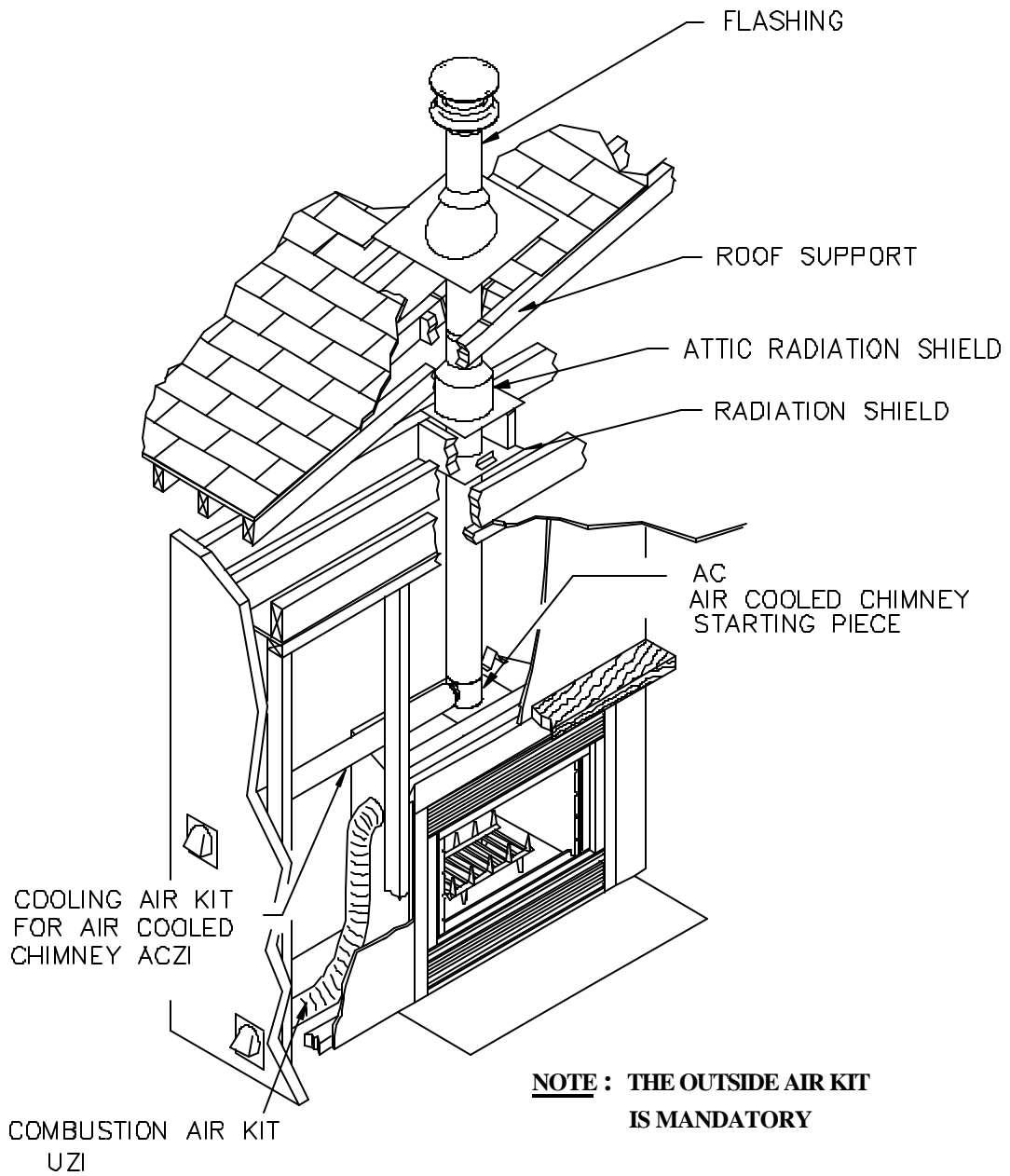
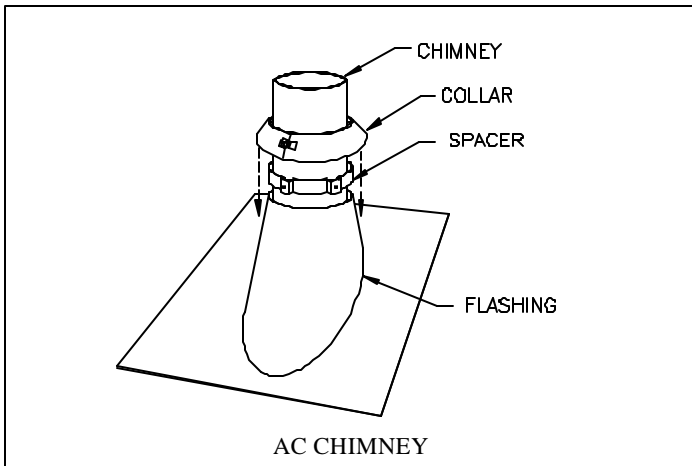
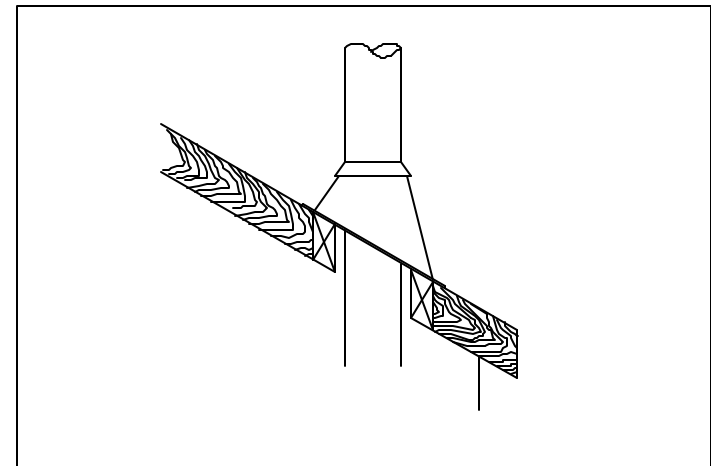


Figure 15



**Figure 16a**



**Figure 16b**

<b>ROOF DOWN SLOPE HOLE SIZE</b>			
<b>SLOPE</b>	<b>ASHT+/HT6103+</b>	<b>S-2100+/HT6000+</b>	<b>AC</b>
	<b>8"</b>	<b>8"</b>	<b>8"</b>
*	14 3/8" (365 mm)	16" (406 mm)	15" (380 mm)
2/12	14 5/8" (371 mm)	16 1/4" (413 mm)	15 3/8" (390 mm)
4/12	15 1/4" (387 mm)	16 7/8" (429 mm)	16 1/8" (410 mm)
6/12	16 1/8" (410 mm)	17 7/8" (454 mm)	16 7/8" (430 mm)
8/12	17 3/8" (441 mm)	19 1/4" (489 mm)	18 1/4" (465 mm)
10/12	18 3/4" (476 mm)	20 7/8" (530 mm)	19 5/8" (500 mm)
12/12	20 3/8" (518 mm)	22 5/8" (575 mm)	21 3/8" (545 mm)
<p><b>* CROSS SLOPE HOLE SIZE</b>  <b>PUT THE CHIMNEY CAP INTO PLACE.</b>  <b>WASH THE ROOF FLASHING WITH A SOLVENT OR VINEGAR, THEN PAINT IT WITH RUST-PROOF PAINT.</b></p>			

**Table 3**

## OFFSET CHIMNEY INSTALLATION

The minimum chimney height (including the fireplace) when using elbows is:

Fireplace Model	SECURE HE43-1
Chimney Model	8" ASHT+ / HT6103+ / S-2100+ / HT6000+ / AC
Vertical Installation	15 ft (4.57 m)
Two (2) Elbows	18 ft. (5.49 m)
Four (4) Elbows	20 ft. (6.10 m)

**Table 4**

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

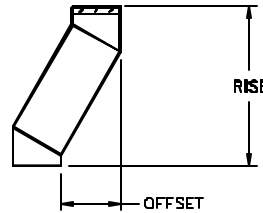
### **ASHT+/HT6103+/S2100+/HT6000+ Chimneys**

1. Install the first elbow. Turn it in the required direction. Fasten it to the chimney with the three (3) 1/2" (12 mm) metal screws provided.
2. Install the necessary lengths to achieve the required offset. Lock the chimney lengths together: it is recommended to use three (3) 1/2" (12 mm) screws. If the offset length is made of two (2) chimney lengths use an offset support halfway up the offset. If penetrating a wall, install a wall radiation shield (see Figure 19).
3. Use another elbow to turn the chimney vertically. Secure the elbow, using three (3) 1/2" (12 mm) screws.
4. Use a plumb bob to line up the centre of the hole. Cut a hole for the chimney in the ceiling. Frame this hole as described previously (see page 17).
5. From below, install a radiation shield (see Figure 14a).
6. A support (ST+ or SO+) must be used on the first 15' section (5 m).
7. Continue with the regular installation.

### **AC chimney**

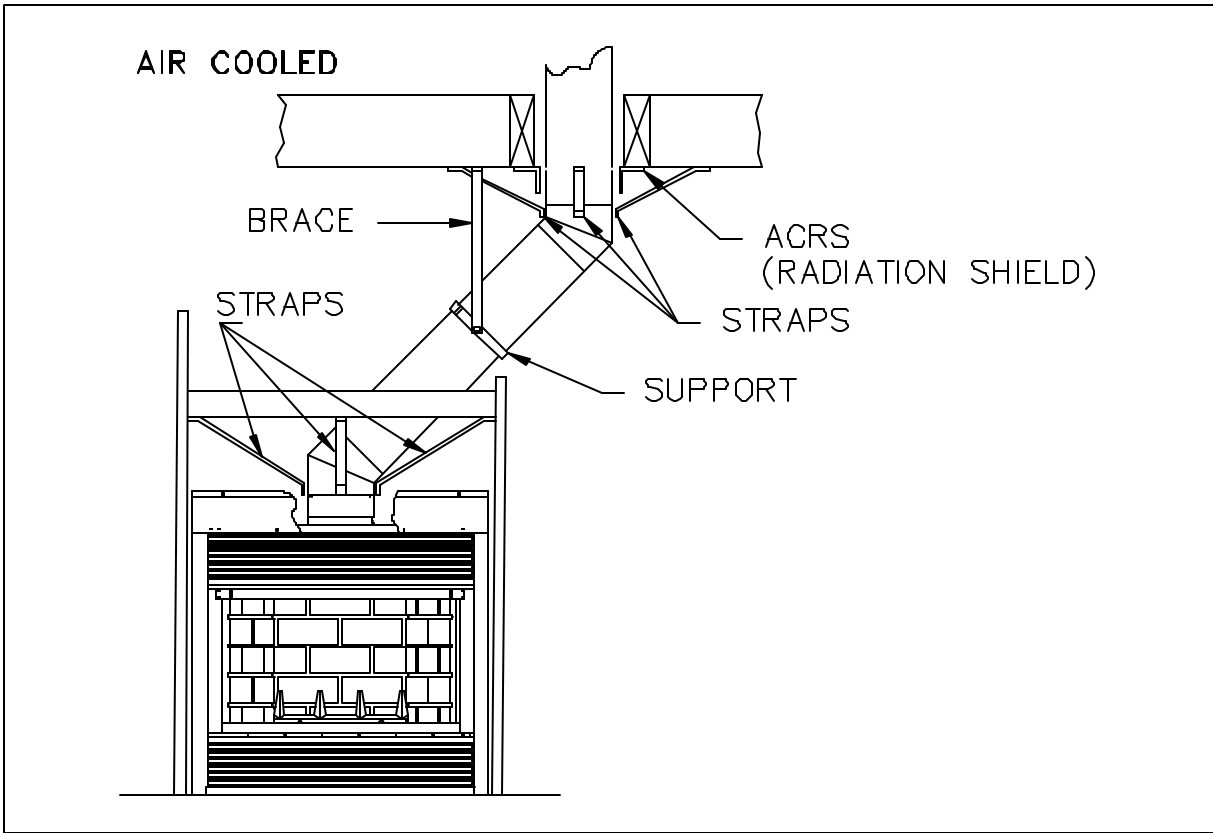
1. Install the first elbow. Turn it in the required direction. To lock it in place, turn 1/8 of a turn. Fasten the straps attached to the elbow to the surrounding framing using nails or drywall screws (Figure 17).
2. Install the necessary chimney lengths to achieve the required offset. Lock the chimney lengths together. If penetrating a wall, use a wall radiation shield.
3. 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 centre 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 14b).
6. Continue with the regular installation.

**N.B.:** An AC-SB starting section must be used before installing an elbow.

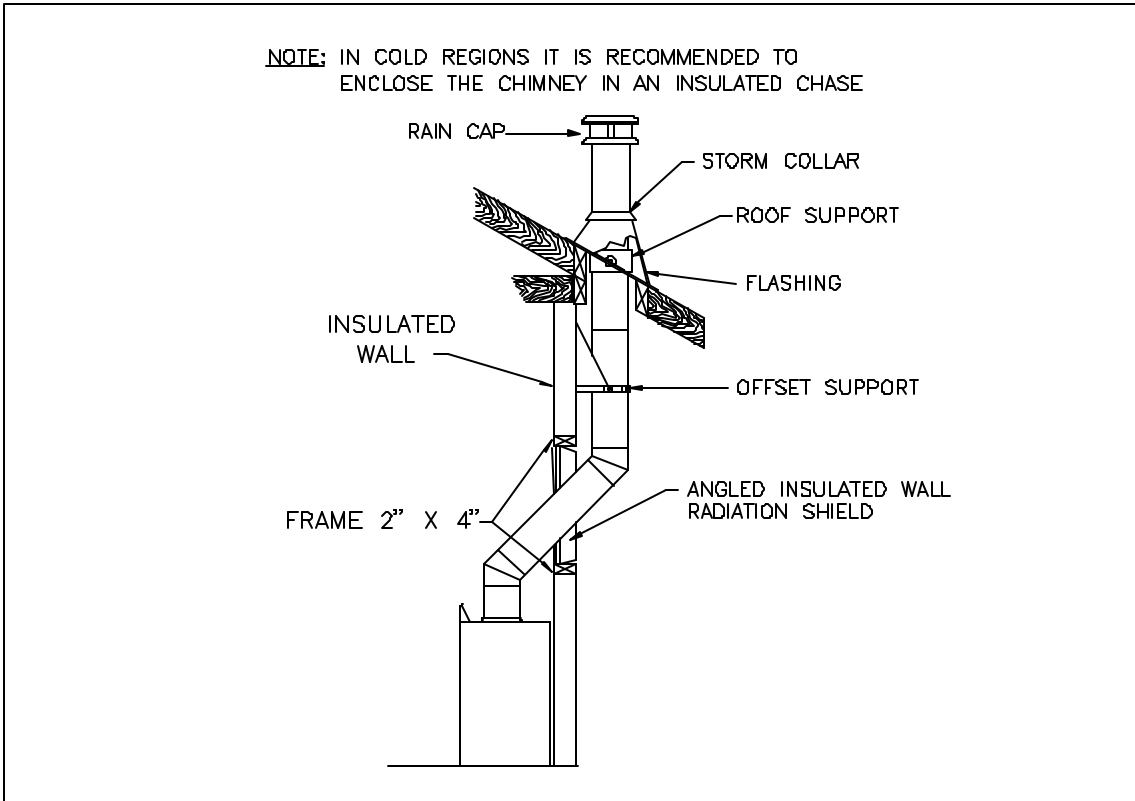


CHIMNEY	ELBOW	OFFSET & RISE	ONE LENGTH BETWEEN ELBOWS					TWO LENGTHS BETWEEN ELBOWS					
			8"	12"	18"	24"	36"	8' & 36"	12' & 36"	18' & 36"	24' & 36"	36' & 36"	
ASHT+ 8" HT6103+	15°	OFFSET	3" (76 mm)	4 1/4" (108 mm)	5 3/4" (146 mm)	7 1/4" (184 mm)	10 1/4" (260 mm)	12 1/4" (311 mm)	13 1/4" (337 mm)	14 3/4" (375 mm)	16 1/4" (413 mm)	19 1/2" (495 mm)	
		RISE	16 1/2" (419 mm)	20 1/4" (514 mm)	26 1/4" (667 mm)	32" (813 mm)	43 1/2" (1105 mm)	50 1/2" (1276 mm)	54 1/4" (1378 mm)	60" (1524 mm)	65 3/4" (1670 mm)	77 1/2" (1967 mm)	
	30°	OFFSET	7 1/2" (190 mm)	9 1/2" (241 mm)	12 1/2" (318 mm)	15 1/2" (394 mm)	21 1/2" (548 mm)	25" (635 mm)	27" (686 mm)	30" (762 mm)	33" (838 mm)	39" (991 mm)	
		RISE	20 3/4" (527 mm)	24 1/4" (614 mm)	29 1/2" (749 mm)	34 3/4" (883 mm)	45" (1143 mm)	51 1/4" (1302 mm)	54 3/4" (1391 mm)	60" (1524 mm)	65 1/4" (1657 mm)	75 1/2" (1918 mm)	
	45°	OFFSET	10 1/2" (267 mm)	13 1/2" (343 mm)	17 3/4" (451 mm)	22" (559 mm)	30 1/2" (775 mm)	35 1/2" (900 mm)	38 1/4" (972 mm)	42 1/2" (1080 mm)	46 3/4" (1187 mm)	55 1/4" (1403 mm)	
		RISE	18 1/2" (470 mm)	21 1/4" (540 mm)	25 1/2" (648 mm)	29 3/4" (756 mm)	38 1/4" (972 mm)	43 1/4" (1099 mm)	46 1/4" (1175 mm)	50 1/2" (1283 mm)	54 3/4" (1391 mm)	63" (1600 mm)	
S2100+ 8" HT6000+	15°	OFFSET	3" (76 mm)	4" (102 mm)	5 3/4" (146 mm)	7 1/4" (184 mm)	10 1/4" (260 mm)	12" (305 mm)	13 1/4" (337 mm)	14 3/4" (375 mm)	16 1/4" (413 mm)	19 1/4" (489 mm)	
		RISE	17 1/2" (445 mm)	21 1/2" (546 mm)	27 1/4" (692 mm)	33" (838 mm)	44 1/2" (1130 mm)	51 1/4" (1302 mm)	55 1/4" (1403 mm)	61" (1550 mm)	66 3/4" (1695 mm)	78 1/4" (1988 mm)	
	30°	OFFSET	5 3/4" (146 mm)	7 3/4" (197 mm)	10 3/4" (273 mm)	13 3/4" (349 mm)	19 3/4" (502 mm)	23 1/2" (597 mm)	25 1/2" (648 mm)	28 1/2" (724 mm)	31 1/2" (800 mm)	37 1/2" (953 mm)	
		RISE	22 3/4" (578 mm)	26" (660 mm)	31 1/4" (794 mm)	36 1/2" (927 mm)	47" (1194 mm)	52 3/4" (1340 mm)	56 1/4" (1429 mm)	61 1/2" (1562 mm)	66 3/4" (1695 mm)	77" (1956 mm)	
	AC 8"	15°	OFFSET	----	4 13/16" (122 mm)	6 1/8" (156 mm)	11" (280 mm)	14 1/8" (359 mm)	----	16 7/8" (429 mm)	18 7/16" (468 mm)	23" (584 mm)	26 3/16" (665 mm)
			RISE	----	27 11/16" (703 mm)	33 1/2" (851 mm)	50 7/8" (1292 mm)	62 1/2" (1588 mm)	----	72 5/8" (1845 mm)	78 7/16" (1992 mm)	95 3/4" (2432 mm)	107 3/8" (2727 mm)
30°		OFFSET	----	9 3/8" (238 mm)	12 3/8" (314 mm)	21 3/8" (543 mm)	27 3/8" (695 mm)	----	32 5/8" (829 mm)	35 5/8" (905 mm)	44 5/8" (1134 mm)	50 5/8" (1286 mm)	
		RISE	----	25 3/4" (654 mm)	31" (787 mm)	46 1/2" (1181 mm)	57" (1448 mm)	----	66" (1676 mm)	71 1/4" (1810 mm)	86 7/8" (2207 mm)	97 1/4" (2470 mm)	
Note. The AC chimney starting section on the fireplace is 6" high as to be used before beginning an offset.													

Table 5



**Figure 17**



**Figure 18**



## ANGLED WALL RADIATION SHIELD (RSM+, RSMI30, RSMI45)

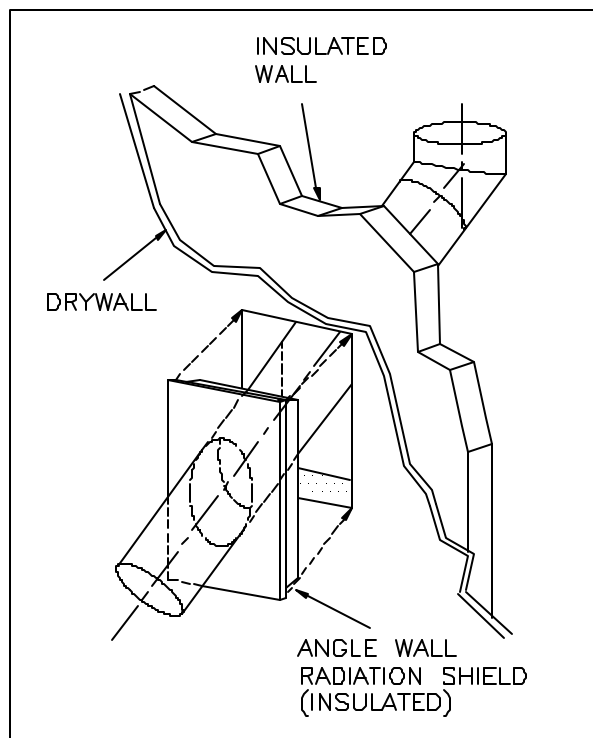
When traversing a combustible wall with the chimney at a 30° or 45° angle, an angled firestop and/or wall radiation shield must be installed. Only one is required.

*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.

RSM+ and RSMI30, RSMI45		
CHIMNEY MODEL	ANGLE	HOLE SIZE
ASHT+ / HT6103+ 8" I.D.	30°	14 3/8" x 36 1/2" (365 mm x 927 mm)
Canada only	45°	14 3/8" x 24 3/4" (556 mm x 629 mm)
S2100+/HT6000+ 8" I.D.	30°	16" x 40" (406 mm x 1016 mm)
Canada only	45°	16" x 27 1/4" (406 mm x 692 mm)
AC 8" I.D.	30°	15" x 38 1/4" (380 mm x 972 mm)

**Table 6**



**Figure 19**

## UNIVERSAL ROOF SUPPORT INSTALLATION

This support has three possible uses:

1. For ASHT+/HT6103+ and S2100+/HT6000+ chimneys, it must be used on a roof to support the chimney.
2. 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 15 ft. (4.6 m.).

**Table 7 gives maximum height of supported chimney.**

**NOTE: For the AC chimney, a support section (ACSL) must be used every 40' (12 m) instead of the ST.**

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

## UNIVERSAL OFFSET SUPPORT INSTALLATION

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 7. For offset support installation, refer to the instructions provided with the support.

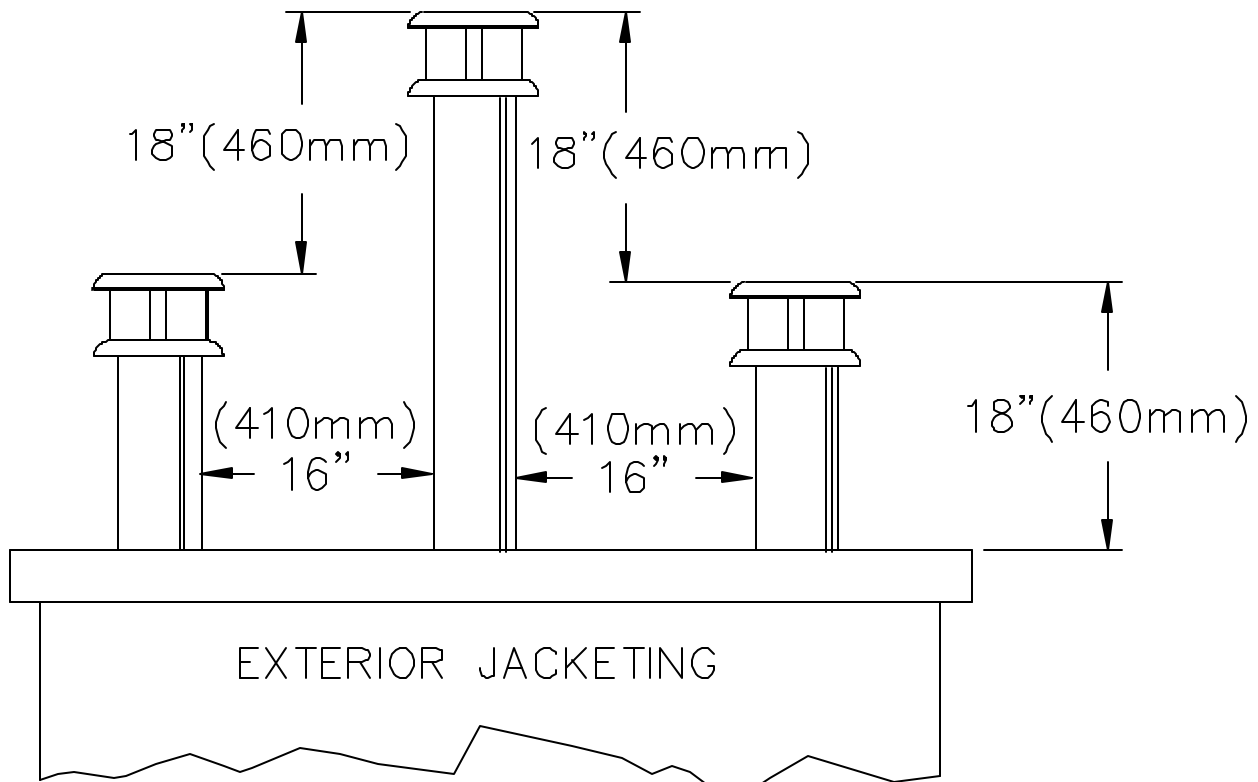
CHIMNEY MODEL	MAXIMUM HEIGHT OF SUPPORTED CHIMNEY	
	OFFSET SUPPORT	ROOF SUPPORT
ASHT+ / HT6103+ 8" I.D.	20 ft (6.10 m)	24 ft (7.32 m)
S-2100+ / HT6000+ 8" I.D.	14 ft (4.30 m)	16 ft (4.87 m)
AC 8" I.D.	40 ft (12.19 m)	50 ft (15.20 m)

**Table 7**

## 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 installation where more than one chimney is located in the same chase or within the same general 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 20).



**Figure 20**

## PARTS AND COMPONENTS LIST

	Part No.	
	<u>AC Chimney</u>	<u>ASHT+ Chimney</u>
<b>Lengths</b>	<b>8" diameter</b>	<b>8" diameter</b>
8" length		8L8+
12" length	AC 8L12	8L12+
18" length	AC 8L18	8L18+
24" length	--	8L24+
36" length	AC 8L36	8L36+
48" length	AC 8L48	--
15° elbow	AC 8E15	8E15+
30° elbow	AC 8E30	8E30+
45° elbow	AC 8E45	8E45+
Rain cap	AC 8CPR	8CC+
Spark arrester cap	AC 8CPE	
Spark arrester band	--	PE+
<b>Supports</b>		
Offset support	XSO+	SO+
Support section	AC 8SL	--
Roof support	XST+	ST+
Universal support	ACSU	--
Starting section	AC 8SB	--
Roof brace	XBS2+	BS2+
Wall band	XBM+	BM+
<b>Firestop</b>		
Firestop	ACBF	8BF+
Radiation shield	AC RS	8RS+
Attic radiation shield	AC RSA	8RSA+
Wall radiation shield 30°	AC RSM30	--
Insulated wall radiation shield 30°	AC RSMI30	8RSMI30
Wall radiation shield 45°		--
Insulated wall radiation shield 45°		8RSMI45
Outside air kit (chimney) (flex, insulation, outside register and coupling)	AC ZI	--
Flat roof flashing	ACF	8F+
<b>Adjustable roof flashings</b>		
1/12 - 7/12 (5° - 30°)	AC FA	8FA+
8/12 - 12/12 (30° - 45°)	AC FB	8FB+
12/12 - 21/12 (45° - 60°)	--	8FBB+
<b>Peak roof flashings</b>		
1/12 - 7/12 (5° - 30°)	--	8FP+
8/12 - 12/12 (30° - 45°)	--	8FPB+
Storm collar	AC FC	8FC+
Outside air kit (fireplace) (flex, insulation and outside register)	UZI	UZI
Fireplace coupling	UZIDF	

## APPENDIX

### SPECIFICATIONS

Weight	343 lbs
Height	42 ½"
Width	43"
Depth	26 5/8"
Chimney weight ASHT+	8.75 lb/ft.
Chimney weight S2100+	13.2 lb/ft

### CLEARANCE TO COMBUSTIBLES

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

Side wall:	18". (457 mm)
Ceiling:	7 ft. (2135 mm) measured from the base of the fireplace
Fireplace enclosure	Bottom: 0" Side: 0" Back: 0" Top: Do not fill the space above the fireplace with any material (7 ft. measured from the base of the fireplace)
Chimney:	2" (50 mm)
Mantel:	48" (1219 mm) from the base of the fireplace

### REPLACEMENT PARTS

Refractory	PR-SR2028
Back refractory	PR-SR2027
Right side refractory	PR-SR2025D
Left side refractory	PR-SR2025G
Bottom refractory	PR-SR1722
Front refractory ash lip	PR-SR2026
Log support	PR-HEL543
Top louver	PR-SR15P
Bottom louver	PR-SR15P
Louver hinges	PR-PIVOT
Rigid firescreen (left)	PR-PARETING-1
Rigid firescreen (right)	PR-PARETIND-1
Black door (left)	PR-SR2060GNO
Black door (right)	PR-SR2060DNO
Gold plated door (left)	PR-SR2060GOR
Gold plated door (right)	PR-SR2060DOR
Wooden handle	PR-SAC #69
Ceramic glass panel	PR-VC10
Door gasket assembly(including a tube of hi-temperature silicone glue)	PR-GASKPORTEHE-1
Damper	PR-DAMPER43

### OPTIONAL PARTS

Central forced air kit	BISFWK-1
Flex adaptor and 2 clamps	BISAF
Flexible pipe 5" D.I. x 30 ft. long	5FLEX25
Blower for central forced air kit	BISZY
Blower variable speed control with decorative wall plate	VRUW
Thermo-disk, on/off blower control	VTU
Back draft damper	BISBD
Flexible pipe fan adaptor with BISBD (for BISZY)	BISAVF

# DIMENSIONS

