



# WARNINGS

Hot! Do not touch! The glass and surfaces of this appliance will be hot during operation and will retain heat for a while after shutting off the appliance. Severe burn may result.



- Carefully supervise children in the same room as appliance.
- If small children are present in the home, it is recommended that this appliance be used with a fire screen kit. See page 35 for ordering information.



We suggest 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 Wood Energy Technical ww.nficertified.org Training (WETT).

## Installation and Operating Instructions

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 Chimneys International Ltd will not be responsible for damages. Install the fireplace only as described in these instructions.

#### SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

WARNING: The fireplace cannot be operated without a door. Consult your dealer to select the correct door model of vour choice.

This fireplace is also certified for use in mobile or manufactured homes



Listed to standards: ULC-S610,UL-127 Report # 3074084



SECURITY CHIMNEYS **INTERNATIONAL** 

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# 1. SAFETY RULES FOR OPERATING YOUR FIREPLACE MODEL BIS TRADITION<sup>TM</sup> CE

- Use only a Security Fireplace glass door, specifically designed for the model BIS TRADITION CE fireplace.
- When cleaning the fireplace, the 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 outside the house, 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.

## When installed in a mobile or manufactured home:

- Mobile or manufactured home installations must be installed in accordance with the requirements of the Department of Housing and Urban Development (HUD) "Mobile Home Construction and Safety standards" for US or Canada Mortgage and Housing Corporation (CMHC) for Canada.
- The fireplace must be fastened to the floor by unfolding and screwing the small tabs on both sides at the bottom of the fireplace.
- It is necessary to have access openings, for inspection purpose only, into built-in enclosures surrounding the fireplace installation. Such openings to require a household tool for access.
- The vapor barrier of the mobile home shall be as close as possible of the location where the chimney assembly penetrates the ceiling and roof structure with no interference to the required clearance to combustible material.
- When the mobile or manufactured home has a flat roof, the Attic Radiation Shield must be installed from below going through the roof (See figures 28a & 29a).
- Warning: Do not install in a sleeping room.

Warning:

The fireplace must be operated with the door fully opened or fully closed. If the door is left partly opened, smoke may be drawn into the room. If the unit is operated with the door fully opened, the optional firescreen must be used.

**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.

<u>Caution</u>: Never use gasoline, kerosene, charcoal lighter fluid or similar liquids to start or rekindle a fire in this fireplace. Keep all such liquids well away from the fireplace at all times.

<u>Caution</u>: Keep combustible materials at least 48 inches away from the front of the fireplace opening. Use special care when choosing the window treatments.

<u>Caution</u>: Never leave children unattended when there is a fire burning in the fireplace.

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

**WARNING:** The Bis Tradition<sup>TM</sup> CE fireplace must be installed with a outside air kit intake, which is included with the fireplace. Always ensure that the air inlet is free of debris or any other obstruction that can block the entrance of air.

# 2. CERTIFICATION LABEL

**COMBUSTIBLE HEARTH EXTENSION MUST BE NOT COMBUSTBLE BOOK SECULEARIES** **NON COMBUSTBLE HEARTH EXTENSION MUST BE NO TRANSPIRE AND COMBUSTBLE DOTT ETHER INSTALLIA AND COMBUSTBLE HEARTH EXTENSION MUST BE NOT COMBUSTBLE HEARTH EXTENSION MUST BE NOT COMBUSTBLE HEARTH EXTENSION MUST BE NOT COMBUST BY NOT BEEN THE OR HANDEN TO REAL OR SET INTO THE OR HANDEN TO SECURIARE BUT BY A STALL AND UNDERTED CAS LOG SET INTO THE THRETACE.  **ELECTRICAL BATTLY CAS LOG SET INTO THE NOT CHARMEN BY A STALL AND UNDER SET INTO THE THRETACE.  **ELECTRICAL BATTLY CAS LOG SET INTO THE NOT CHARMEN BY A STALL AND UNDER SET INTO THE NOT CHARMEN BY A STALL AND UNDER SET INTO THE NOT CHARMEN BY A STALL AND UNDER SET INTO THE NOT CHARMEN BY A STALL AND UNDER SET INTO THE NOT CHARMEN BY A STALL AND UNDER SET INTO THE NOT CHARMEN BY A STALL AND UNDER SET INTO THE NOT CHARMEN BY A STALL AND UNDER SET INTO THE NOT CHARMEN BY A STALL AND UNDER SET INTO THE NOT CHARMEN BY A STALL AND UNDER SET INTO THE NOT CHARMEN BY A STALL AND UNDER SET INTO THE NOT CHARMEN BY A STALL AND UNDER SET INTO THE NOT CORDANCE WITH BY AND UNDER SET INTO THE NOT CORDANCE WITH BY AND UNDER SET INTO THE NOT CORDANCE WITH BY AND UNDER SET INTO THE NOT CORDANCE WITH BY AND UNDER SET INTO THE NOT CORDANCE WITH BY AND UNDER SET INTO THE NOT CORDANCE WITH BY A STALL SET IN THE REPORT OF THE AND UNDER SET INTO THE NOT CORDANCE WITH BY A STALL SET IN THE REPORT OF THE AND UNDER SET INTO THE NOT CORDANCE WITH BY A STALL SET IN THE REPORT OF THE AND UNDER SET INTO THE S	INSTALL AND USE ORLY IN DISTANCE FROM OPENING IN MANUTACTURER'S INSTRUCTIONS AND LOCAL BUILDING CODES.  CHINGEY TYPE: USE ONLY LISTED CHINGEY MODEL ASTIT, S-2100+, HT0000+, HT0000+, HT0010+, AC, 6 in. DIAMETER.  SPECIAL METHODS ARE REQUIRED WHEN PASSING THROUGH A WALL OR EXPECTATIONS AND EXHINES COUNTEY CHINGEY CONNECTOR AND CHINGEY CONNECTOR THE LEMATERIAL:  THE MATERIAL:  HEARTH EXTENSION MATERIAL:  THE MATERIAL:  ONE DUITALENTS  CONSUBERABLE DISTANCE AWAY  ROOMED THE MATERIAL:  ONE DUITALENTS  HEARTH EXTENSION MATERIAL:  ONE DUITALENTS  ONE DUITALENTS  HEARTH EXTENSION MATERIAL:  ONE DUITALENTS  ONE DUITALENTS  HEARTH EXTENSION MATERIAL:  THE MATERIAL:  ONE DUITALENTS  ONE DUITALENTS  HEARTH EXTENSION MATERIAL:  THE MATERIAL:  ONE DUITALENTS  ONE DUITALENTS  ONE DUITALENTS
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## 3. THE FIREPLACE

### 3.1 INTRODUCTION

The BIS TRADITION<sup>TM</sup> CE fireplace is an energy efficient, heat circulating, close combustion 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 Security Chimneys International (CSIL) components.
- The BIS TRADITION CE is NOT intended for use with a gas log set. Do not use a fireplace insert or any other product with this fireplace unless it is specified by CSIL. For use with this appliance. Failure to follow these instructions will void the certification and the warranty of the fireplace and may result in an unsafe installation.
- These appliances are design to provide supplemental heat to the immediate area only. Therefore, it is advisable to have an alternate heat source when installed in a dwelling.

## 3.1.1 Parts Required

- Fireplace model BIS TRADITION CE
- Door
- Front facade kit
- UZY5 blower (included in the fireplace)
- VRUW blower speed control (included)
- Outside air kit (included with the fireplace)
- 6" diameter chimney model ASHT+, S-2100+, HT6000+, HT6103+ or AC manufactured by Security Chimneys International only, including:
  - Chimney lengths
  - Elbows (where necessary)
  - Associated components as per these installation instructions

## 3.1.2 Additional Equipment (optional)

- 5" flexible venting system (central forced air kit- Not EPA certified)
- Gravity venting system
- Rigid firescreen

## 3.2 OPERATING THE BIS TRADITION CE<sup>TM</sup>

#### 3.2.1 Fuel

The BIS TRADITION CE fireplace is designed to work best when fuelled 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. 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.

Processed firelogs can be used. Refer to warnings and cautions markings on the packaging prior to use.

#### 3.2.2 First Fires

Before using the fireplace make sure to remove the plastic wrapping on the door. Remove all remaining glue with mild soap.

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. The first fires may produce slight smoking due to drying of the paint and steel and any dust accumulated on the fireplace will burn off at this time. 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.

## 3.2.3 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, criss-crossing the kindling so that there are air spaces in between. Keep the fuel far back enough so that air can get underneath. Open the air controls fully and light the newspaper. Once the newspaper and the kindling is well ignited, close the door. Once the kindling fire is well established, cordwood can be added. (see Primary Air Combustion Control section for proper operation of the air controls)

The unit will burn best with 2-3 pieces of cordwood spaced 1 to 2 inches apart and <u>allowing air to get under the fuel</u>. Criss-crossing 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.

### 3.2.4 Primary Air and Air Boost Controls

There is no flue damper in the BIS TRADITION<sup>TM</sup> CE fireplace. As is common with air tight stoves, the combustion air control sets the flow of air entering the firebox. This allows for a more precise control of the fire. The combustion air control is located below the door on the left side. The main source of air (primary air) entering the firebox can be diminished by moving the air combustion control from left to right. The primary air is fully opened when the air control is completely moved to the left. The air control device can also be used to add an extra boost of air especially during fire start up and reloading of the unit. Pulling the air combustion control will induce an air boost at the base of the fire allowing an easier fire start up. When the fire is well established, the control can be pushed forward to shut down the air boost allowing for a longer burn time. The combustion air control should be in the closed position (primary air and air boost) when the fireplace is not in use. This will minimize air leakage up the chimney. The combustion air control should be opened before opening the door to minimize the possibility of back draft coming into the room.

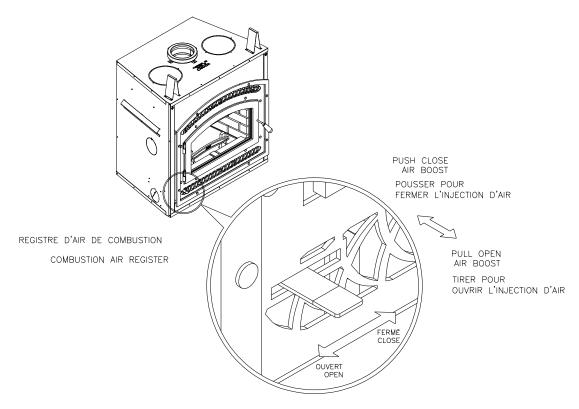


Figure 1

#### 3.2.5 Accelerated Combustion

The maximum heat output for the BIS TRADITION CE fireplace is achieved by burning with the door closed and the combustion air opened and pulled back. By this method, the BIS TRADITION CE fireplace can produce up to 55,000 BTU of heat per hour. However, it will be necessary to reload with wood every one or two hours. This is the least efficient method of burning the BIS TRADITION CE fireplace.

Use caution when firing with the combustion air control wide open. Only burn cordwood in this manner. Small dry pieces of softwood and construction scraps will burn very intensely using this method and may damage the firebox.

#### 3.2.6 Medium Combustion

This is the recommended mode of operating the BIS TRADITION<sup>TM</sup> CE 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 and pushed forward to close the air boost. 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 wood should be burning on a bed of hot coals. The heat output will be approximately 30,000 BTU per hour and the loading time will be about every 3-4 hours. Softwoods may be burned using this method but the time will be substantially reduced.

#### 3.2.7 Slow Combustion

When the air combustion control is completely closed, the fireplace is in a slow combustion phase. If the hearth is hot enough, slow combustion will not stop the fire, but there will be a noticeable change in the flame pattern. The flames will be slow and may appear dirty if the wood is too wet (moisture content of 20% and more). Do not allow the wood to burn without flame, since this will produce excessive crossote in the unit.

Creosote may accumulate on the glass door. This method of burning should be used only after operating the BIS TRADITION CE fireplace with the air control opened to produce a hot fire for about an hour or at medium pace for at least 3 hrs. Slow combustion can be used at night in order to reduce the heat output and to prolong the burn. The loading time will be between 6-8 hours.

## 3.2.8 Refuelling For Best Performance

The BIS fireplace will operate best if attention is given to operating the unit with the damper fully opened after refuelling in order to bring the firebox and the chimney system up to their optimum operating temperature. Combustion efficiency is relative to firebox temperature. A temperature of 500° C and up, with a visible flame, in the upper part of the firebox indicates a maximum efficiency. To obtain this temperature, the fireplace must be operated with the primary air and air boost controls fully opened during 10 to 20 minutes after reloading, depending on the heat and on the moisture content of the wood. Once you have reached the desired temperature, the air boost can be closed and the primary air set to a medium setting. You know you have reached the desired temperature when, closing the primary air control, you can see a flame at the top of the firebox. The benefit of this technique will be cleaner glass, less creosoting, greater efficiency and the most pleasing fire for your enjoyment. If your fireplace is equipped with a central forced air system, make sure the central blower is turned off during reloading to avoid smoking problems.

## 3.2.9 Smoking - Causes and Troubleshooting

To reduce the likelihood of smoking when opening the door, set the combustion air controls to the left 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 but this should not continue. If the fireplace continues to smoke it is probably for one of the following reasons:

#### A. Negative pressure in the house

As the fire burns, air goes up the chimney. This air must be replaced through leakage into the house or through the outside air duct. When operating the BIS TRADITION CE, open a nearby window temporarily to check if there is adequate air supply replacement.

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

These 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.

#### C. Wet wood

Wet or tarred wood will smoulder and smoke instead of burn properly.

#### D. Dirty or blocked chimney

Check to make sure the chimney is clear and clean.

#### E. Chimney not long enough

The minimum chimney height is 12 ft. 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 15 ft. Additional height will increase draught and will decrease the tendency to smoke.

#### F. Poor chimney draft

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

#### G. Blower for central forced air kit operating

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

#### **IMPORTANT NOTES**

- A. Do not block the hot air vents to the fireplace as this will cause the fireplace to overheat.
- B. Never start or 'freshen up' a fire using gasoline, kerosene, charcoal lighter fluid or any other combustible liquid. 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.
- D. Do not burn driftwood which has been in the ocean or salt water. The salt will corrode the firebox and chimney.
- E. Do not burn wood in the area in front of the grate.
- F. Do not abuse the unit by burning paper, or cardboard or construction material such as pressed wood, plywood or lumber.
- G. Do not allow the wood to smoulder or burn without flame, since this will produce excessive creosote in the unit.

## 3.3 MAINTAINING YOUR BIS TRADITION<sup>TM</sup> CE

#### 3.3.1 Creosote

When wood is burned slowly without a flame, it produces tar and other organic vapors which combine with expelled moisture to form a black deposit called creosote which 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 sure there is always visible flame burning, avoid smouldering fires and by proper refuelling techniques.

## 3.3.2 Chimney Maintenance

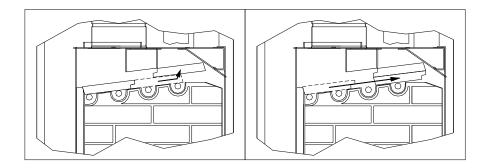
Regular chimney inspection and maintenance combined with proper operation will prevent chimney fires. Keep your chimney clean. Do not allow more than 1/16" creosote build up in your chimney. The amount of creosote will depend on variables such as frequency of use and type of fire. We recommend that you:

- 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.
- 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.

### 3.3.3 Top Baffle Removal Prior to Cleaning the Chimney

Before starting to clean your chimney, we recommend that you remove the top baffle to avoid creosote dust collection at the top of the baffle. Follow these steps to set the top baffle out of the way:

- 1. Remove the side refractory holder. They are located at the top of the refractory.
- 2. Lift the front baffle.
- 3. Slide the back baffle under the front baffle. You now have access to the chimney.



## 3.3.4 Dealing with a Chimney Fire

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

- 1. Close the fireplace door and the combustion air controls.
- 2. Alert your family of the possible danger.
- 3. If you require assistance, alert your fire department.
- 4. 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. Check outside to ensure that sparks and hot embers coming out of the chimney are not igniting the roof.
- 6. Do not use the fireplace again until your chimney and fireplace have been inspected by a qualified chimney sweep or a Fire Department Inspector.

## 3.3.5 Finish Door Casing 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 casing's finish.

#### 3.3.6 Ashes

Remove ashes only when the fire is out and the ashes are cold (24 to 48 hours after the fire is out).

## 3.3.7 Refractory Replacement

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

- 1. Remove the front refractories
- 2. Remove the bottom refractory
- 3. Remove the left side refractory
- 4. Remove the right side refractory
- 5. Remove the back refractory
- 6. Remove the front ceramic baffle
- 7. Remove the rear ceramic baffle

To install the new refractories, follow the above steps in reverse.

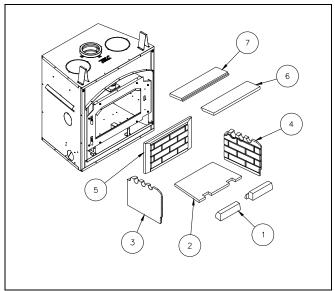


Figure 2

#### 3.3.8 Door Installation

The door must be installed only when the installation of the BIS TRADITION<sup>TM</sup> CE is completed. All you have to do is fit the male part of the hinge, already on the door, to the female part, which is on the fireplace.

To remove the door, simply pull the door 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.

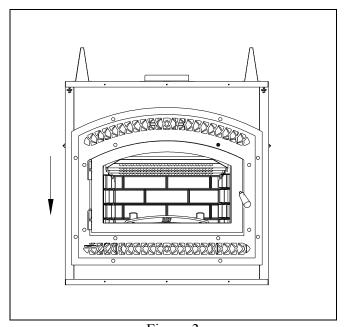


Figure 3

### 3.3.9 Door Adjustment

The door may need to be adjusted to be completely airtight. The gaskets' air-tightness can be adjusted using the adjustment screw located on the right side of the fireplace façade. (An Allen key #1/8 – not supplied - will be necessary for this adjustment)

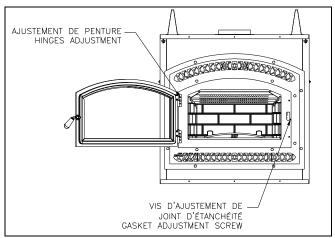


Figure 4

### 3.3.10 Glass Care - Replacement

The glass used for the BIS TRADITION<sup>TM</sup> CE is a high temperature ceramic glass (1400° F). If the glass breaks, it must be replaced with an identical ceramic glass. Tempered glass or ordinary glass will not withstand the high temperatures of the BIS TRADITION CE. Replacement glass should be purchased from a Security Chimneys International dealer (see "Replacement Parts", page 34). Do not operate the unit with cracked or broken glass.

#### 3.3.11 Glass Care - Cleaning

The BIS TRADITION CE is designed to keep the glass clean under normal operating conditions. If the BIS TRADITION CE 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 (see "Refuelling for best performance"). To clean the glass, there are a 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.

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

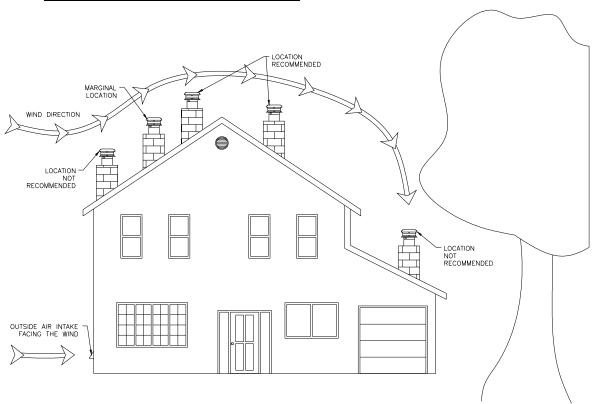
**CAUTION:** Do not allow window cleaner to get in contact with door gasket or paint on the facade. Once closed, contact of glass cleaner with the fireplace facade can provoke paint peeling off.

### 3.3.12 Gasket Replacement

Remove the door from the unit (see page 10) and lay them on a clean unabrasive 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 Security dealer in the following dimensions:

Gasket	<u>Length</u>	<b>Dimensions</b>	<u># Pièce</u>
Around glass	69"	$1 \times 3/16 \text{ po}.$	PR-SR1685D
On door frame	73"	5/8" dia.	PR-SR1823G
Around glass	69"	5/16 dia.	PR-SR1823H
On door frame	73"	5/8 dia.	PR-SR1823G

## 3.4 FIREPLACE INSTALLATION



## 3.4.1 Locating the BIS TRADITION<sup>TM</sup> CE

A. 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 page 13).

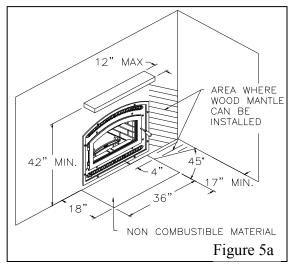
- B. Usually, no additional floor support is needed for the fireplace. The adequacy of the floor can be checked by first estimating the weight of the fireplace system. Weights are given in the appendix. Next, measure the area occupied by the fireplace which is normally 36" X 24 ½". Note the floor construction and consult your local building code to determine if additional support is needed.
- C. The BIS TRADITION CE may be installed directly on the floor or on a raised base (for proper guidelines, refer to "Hearth Extension Requirements") and a minimum of 6'8" measured from the base of the appliance to the ceiling is required.
- D. 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.

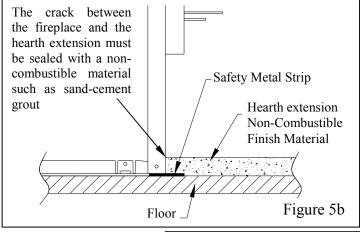
### 3.4.2 Hearth Extension Requirements

The BIS TRADITION<sup>TM</sup> CE fireplace may be installed directly on a combustible floor; however, the combustible floor in front of the fireplace must be covered with a non-combustible material (tile, marble, stone, etc.) (Figure 5a).

The supplied safety metal strip must be positioned as follows: One half under the front of the fireplace and the other half must extend on the floor over which the hearth extension will be built (figure 5b).

\* The safety metal strip must cover the entire width of the fireplace.

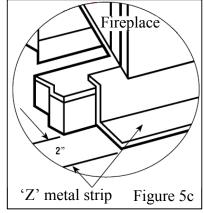




## **Elevated fireplace** (figure 5c)

Elevated fireplace installations require a special 'Z' metal safety strip (field provided) in place of the safety metal strip shown on figure 5b. 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 inch.

Hearth extension of an elevated fireplace must respect the same minimal dimensions as a fireplace installed directly on the floor (figure 5a).



### 3.4.3 Framing, Facing and Mantel

The construction of the framing, facing, and mantel must be in accordance with the standards and the following illustrations (figures 7 to 11):

- A. Frame the fireplace using 2" x 3" or heavier lumber.
- B. <u>WARNING</u>: 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 <u>a height of 6'8" (2032 mm)</u> 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 9). If combustible facing is to be used, position the studs back, from the front edge of the fireplace, a space 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. <u>WARNING</u>: The fireplace must not be in contact with any insulation or loose filling material. Cover the insulation with drywall panels or any rigid material around the fireplace.

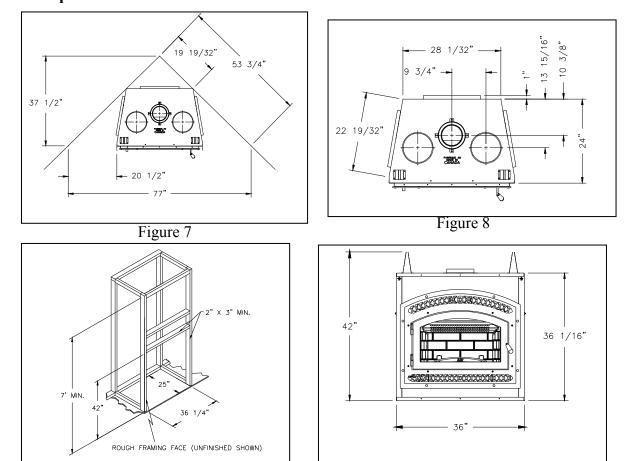


Figure 10

Figure 9

#### INSULATED CHASE CONSTRUCTION

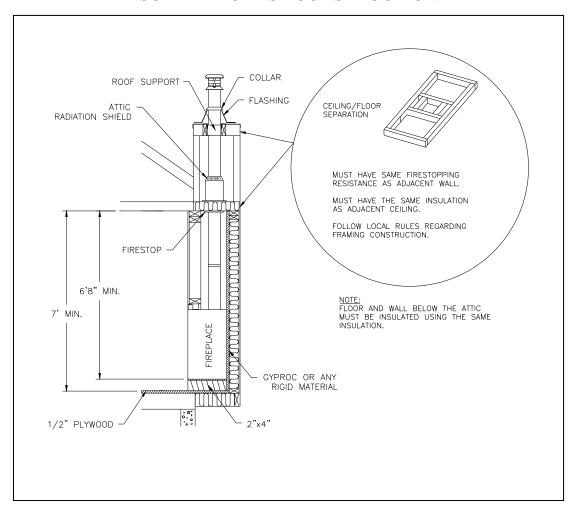
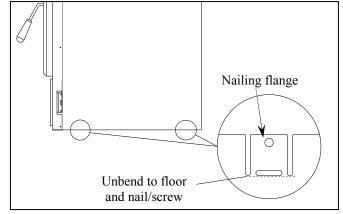


Figure 11

## Nailing flanges

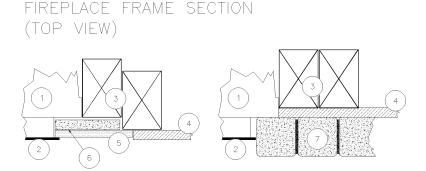
Four nailing flanges are provided to secure the fireplace on the floor (see figure beside). Bend the nailing flanges down so each flange is flush with the floor, then using nails or screws, secure the fireplace to the floor (2 places each side). The heads of the screws or nails must be large enough to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



## **Facing**

Note: 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.

- 1. 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) (figure 13b).
- 2. Non-combustible materials such as brick, stone or ceramic tile may project in front of and onto the fireplace facing (figure 13c).
- 1. Fireplace
- 2. Front of fireplace
- 3. Wood frame (2" x 3" min)
- 4. Drywall
- 5. Tiles
- 6. Rock board or other
- 7. Brick



#### Mantel

The mantel must be installed at least 42" (1067 mm) above the base of the fireplace (figure 12).

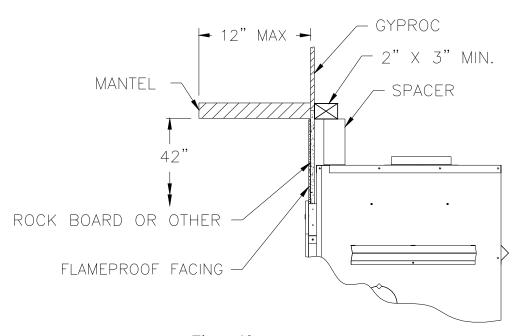


Figure 13a

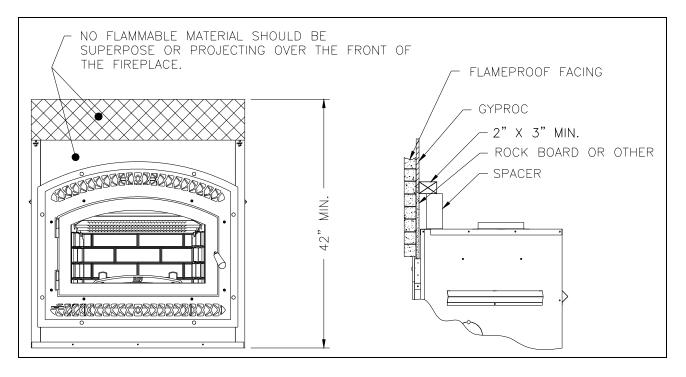


Figure 13b Figure 13c

## 3.4.4 Fireplace Blower

The fireplace comes equipped with a heat activated blower. It is located in the bottom of the fireplace, towards the back. It uses regular 120V and must be connected to the main electrical circuit by a qualified electrician. For connection, use the electrical box supplied with the unit located on the bottom right corner of 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.

If the blower requires servicing,

- 1- Remove the doors and the decorative facade
- 2- Remove the screw located below the blower motor that holds it to the back of the fireplace
- 3- Pull the blower out of the unit through the square hole located in the front bottom right corner.

## 3.5 HOT AIR DUCTING INSTALLATION

Different hot air ducting systems can be installed with the BIS  $\mathsf{TRADITION}^{\mathsf{TM}}$   $\mathsf{CE}$ :

- Gravity kit
- Forced air kit

### 3.5.1 Gravity Kit

<u>Double hot air outlet including</u>: (See Fig. 15)

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

NOTE: If the fireplace is vented using the AC chimney and the single hot air outlet is installed, the chimney must be offset towards the back using 2-30 deg. elbows back to back on the fireplace.

NOTE: For the double hot air outlet it is mandatory to install both outlet pipes. Any other installation can cause fire and void warranty.

See components list page 33.

The only fan that can be used with the gravity kit is the is the one sold with the fireplace.

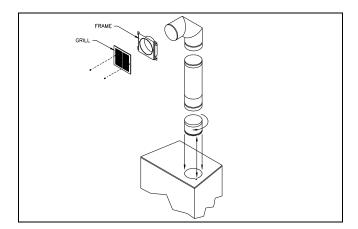


Figure 15

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

Minimum height\* 68" (1727 mm)

Maximum length See figure 16

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

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 16).

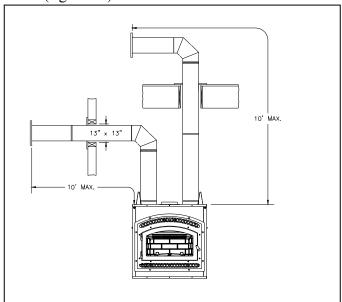
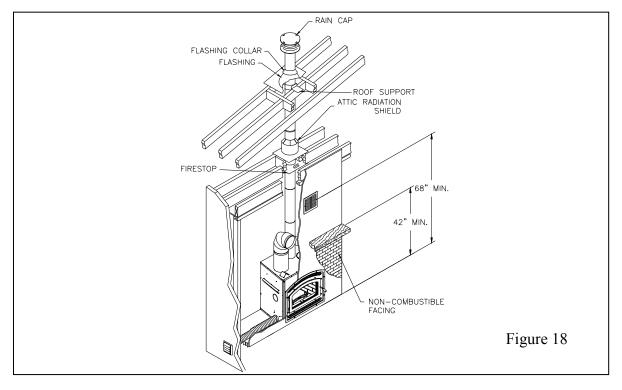


Figure 16



The duct system must be installed respecting the following:

- 1. Remove the top and bottom plates closing up the 8" dia. holes on top of the fireplace. Then, cut the insulation in order to obtain two 8" dia. free openings. Fix the adaptors on the fireplace openings by turning clockwise (figure 15).
- 2. 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 #1:** For the grills, the framing can be  $10 \frac{3}{4}$ " x  $10 \frac{3}{4}$ " (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 ½" (160 mm) clearance from the outlet grill framing to a combustible ceiling, side wall or mantel.
- 5. 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 BIS TRADITION<sup>TM</sup> CE fireplace hot air exhaust.
- 7. Use only Security Chimneys International grills and components as described in this manual. Other grills or registers, for example, 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.

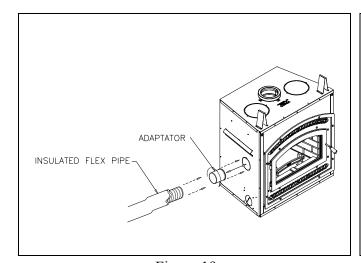
### 3.5.2 Central Forced Air Kit (Not tested under EPA certification)

The knock-outs provided on the back and on the sides of the BIS TRADITION<sup>TM</sup> CE fireplace 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:

- 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 (figure 19).
- B) Attach the 5" flexible pipe, using the collars provided. <u>Important</u>: 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 fan, using the collars (figure 20).
- E) Fix the backdraft damper to the fan 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. 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 21).
- 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 fan have been made according to the local codes and comply with their requirements (see instruction provided with the thermostat).



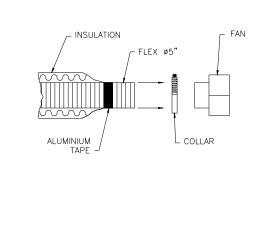


Figure 19

Figure 20

### 3.6 **OUTSIDE AIR KIT**

<u>It is mandatory</u> to install an outside air connection to the BIS Tradition<sup>TM</sup> CE fireplace. The following components are required and are included with the fireplace:

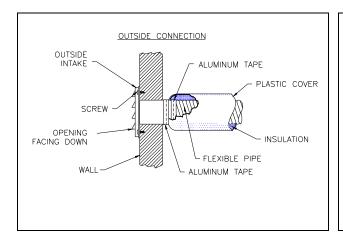
- Outside air kit
- 4" adapter for fireplace connection

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 ft. (6.1 m). The duct can be extended to a maximum of 40 ft. (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 ft. (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 ½" (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 24). 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 25). 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 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.



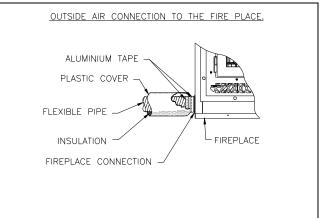


Figure 24 Figure 25

## 4. THE CHIMNEY

#### 4.1 CHIMNEY INSTALLATION NOTES

- 1. If possible, install an interior chimney as it will provide better performance. In areas with continuous temperatures below -18° C (0° F), the use of an exterior chimney increases the likelihood of operating problems such as low draught, 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 outside chimney, are especially prone to flow reversal.
  - 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 fireplace 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.
- 2. The Security fireplace model BIS TRADITION<sup>TM</sup> CE fireplace is listed only with Security Chimneys International Ltd <u>6" diameter</u> chimney systems.
- 3. A chimney venting a fireplace shall not vent any other appliance.
- 4. The minimum chimney height is 12 ft. (3.7 m). In altitude, add 18"(450mm) to the chimney for every 2000 feet(600mm) above sea level.
- 5. All chimney installations must include at least one support. Reducing the amount of chimney weight on the fireplace will help avoid the noise created when the fireplace expands. This can be achieved by having the chimney supported by the supports. The maximum chimney length that can be supported by the fireplace is 9 ft. (2.75 m) for S-2100+/HT6000+, 12 ft. (3.7 m) for ASHT+ / HT6103+ and 26 ft. (8 m) for AC chimney.
- 6. 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. (3m) of it (Figure 26).
- 7. 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.
- 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.

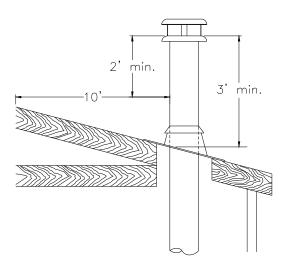


Figure 26

## 4.2 CHIMNEY INSTALLATION INSTRUCTIONS

1. Cut and frame the holes in the ceiling, floor and roof where the chimney will pass (see figure 27). Use a plumb bob to line up the center of the holes. The sizes are indicated in table 1 for the floor and ceiling holes and table 2 (page 24) for the roof holes.

CHIMNEY MODEL	SQUARE HOLE SIZE OPENING
ASHT+ / HT6103+	12 3/8" (314 mm)
S-2100+ / HT6000+	14 1/8" (359 mm)
AC	15 " (380 mm)

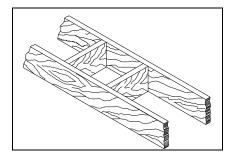


Table 1 Figure 27

- 2. 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 (figures 28 & 29).
- 3. For ASHT+ / HT6103+ and S-2100+ / HT6000+ chimneys, place the first chimney length on the fireplace. To lock it in place, turn ¼ of a turn clockwise. With the AC chimney, you must use a starter section before installing the first chimney length (figure 30). Continue installing chimney lengths making sure to lock each length in place.
- 4. 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).
- 5. Then, put the roof flashing in place and seal the joint between the roof and the flashing with roofing pitch (see figures 31 & 32). 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.
- 6. 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.
- 7. Install the chimney cap.

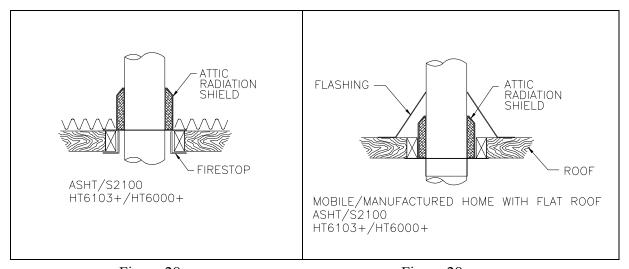


Figure 28 Figure 28a

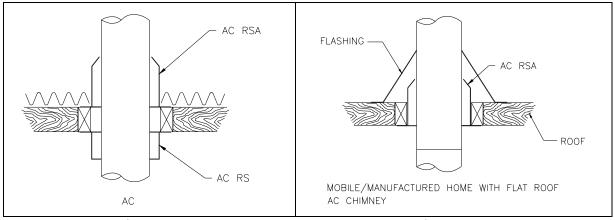


Figure 29 Figure 29a

# AC CHIMNEY INSTALLATION (AIR COOLED GALVALUME CHIMNEY)

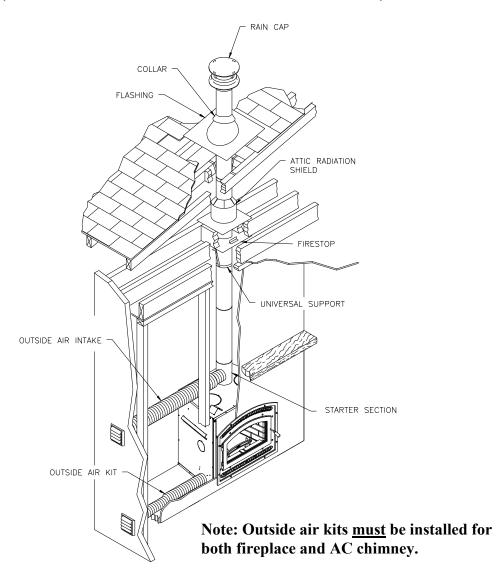


Figure 30

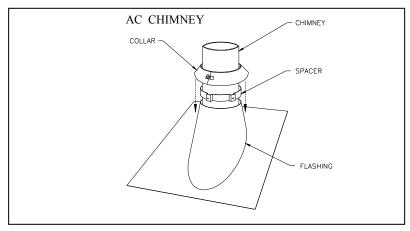


Figure 31

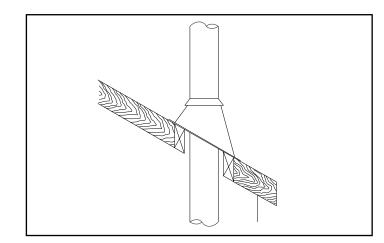


Figure 32

Table 2

ROOF DOWN SLOPE HOLE SIZE								
SLOPE	ASHT+ / HT6103+	S-2100+ / HT6000+	AC					
Roof Pitch	6"	6"	6"					
0 *	12 3/8" (314 mm)	14 1/8" (359 mm)	15" (380 mm)					
2/12	12 9/16" (319 mm)	14 3/8" (365 mm)	15 3/8" (390 mm)					
4/12	13" (330 mm)	14 7/8" (378 mm)	16 1/8" (410 mm)					
6/12	13 7/8" (352 mm)	15 <sup>3</sup> / <sub>4</sub> " (400 mm)	16 7/8" (430 mm)					
8/12	14 7/8" (378 mm)	17" (432 mm)	18 1/4" (465 mm)					
10/12	16 1/8" (410 mm)	18 3/8" (467 mm)	19 5/8" (500 mm)					
12/12	17 1/2" (445 mm)	20" (508 mm)	21 3/8" (545 mm)					
* CROSS SLOPE HOLE SIZE								

## 4.3 OFFSET CHIMNEY INSTALLATON

The minimum chimney height when using elbows is:

Fireplace model	BIS TRADITION <sup>TM</sup> CE
Chimney model	ASHT+ / HT6103+ / S-2100+ / HT6000+ / AC
Vertical installation	12 ft. (3.66 m)
Two (2) elbows	15 ft. (4.57 m)
Four (4) elbows	17 ft. (5.18 m)

Table 3

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

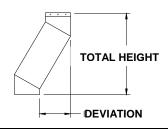
#### ASHT+ / HT6103+ / S-2100+ / HT6000+ Chimneys

- 1. Install the first elbow; turn it in the required direction. Fasten it to the chimney with the three (3) ½" (12 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) ½" (12 mm) screws. If the offset length is made of two (2) chimney lengths or more, use an offset or roof support halfway up the offset. If penetrating a wall, install a wall radiation shield (see figures 34 & 35).
- 3. Use another elbow to turn the chimney vertically. Secure the elbow, using three (3) ½" (12 mm) screws (provided with the elbow).
- 4. Use a plumb bob to line up the centre of the hole. Cut a hole for the chimney in the ceiling/floor. Frame this hole as described previously (refer to section 4.2).
- 5. From below, install a firestop (See figure 28).
- 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 frame, using nails or drywall screws (figure 32).
- 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 firestop. (see figure 29).
- 6. Continue with the regular installation.

**N.B.**: An AC-SB starter section must be used before installing an elbow. When an offset is needed immediately off the top of the fireplace, a starter section allowing a 4" offset (AC-SBO) is available.



Secure Temp <sup>ASHT+</sup> Nova 30°	DEVIATION HEIGHT	8" 3 5/16" (84mm)	<b>12</b> " 4 5/16"	18"	24"	36"	40"	211 2 4211		4000 0 400	0.411 0.4011	00" 0 40"	4011 0 4011
Secure Temp <sup>ASHT+</sup>		(84mm)	4 5/16"			30	48"	8" & 48"	12" & 48"	18" & 48"	24" & 48"	36" & 48"	48" & 48"
Secure Temp <sup>ASHT+</sup>		(84mm)		5 7/8"	7 7/16"	10 1/2"	13 5/8"	15 3/8"	16 7/16"	18"	19 1/2"	22 5/8"	25 3/4"
Secure Temp <sup>ASHT+</sup>	HEIGHT		(110mm)	(149mm)	(189mm)	(267mm)	(346mm)	(391mm)	(418mm)	(457mm)	(495mm)	(575mm)	(654mm)
	HEIGHT	15 11/16"	19 9/16"	25 3/8"	31 3/16"	42 3/4"	54 3/8"	60 15/16"	64 13/16"	70 9/16"	76 3/8"	87"	99 9/16"
		(398mm)	(497mm)	(645mm)	(792mm)	(1086mm)	(1381mm)	(1548mm)	(1646mm)	(1792mm)	(1940mm)	(2210mm)	(2529mm)
Nova 300	DEVIATION	7 7/16"	9 7/16"	12 7/16"	15 7/16"	21 7/16"	27 7/16"	30 13/16"	32 13/16"	35 13/16"	38 13/16"	44 13/16"	50 13/16"
	DEVIATION	(189mm)	(240mm)	(316mm)	(392mm)	(545mm)	(697mm)	(783mm)	(833mm)	(910mm)	(986mm)	(1138mm)	(1291mm)
Nova Temp <sup>HT6103+</sup> 30°	HEIGHT	20"	23 ½"	28 11/16"	33 7/8"	44 1/4"	54 11/16"	60 9/16"	64 "	69 1/4"	74 7/16"	84 13/16"	95 1/4"
	HEIGHT	(508mm)	(597mm)	(729mm)	(860mm)	(1124mm)	(1389mm)	(1538mm)	(1627mm)	(1759mm)	(1891mm)	(2154mm)	(2419mm)
	DEVIATION	10 5/16"	13 3/16"	17 3/8"	21 5/8"	30 1/8"	38 5/8"	43 7/16"	46 1/4"	50 1/2"	54 3/4"	63 1/4"	71 11/16"
450	DEVIATION	(262mm)	(335mm)	(441mm)	(549mm)	(765mm)	(981mm)	(113mm)	(1175mm)	(1283mm)	(1391mm)	(1607mm)	(1818mm)
	HEIGHT	17 13/16"	20 5/8"	24 7/8"	29 1/8"	37 5/8"	46 1/8"	50 15/16"	53 3/4"	58"	62 1/4"	70 3/4"	79 3/16"
		(452mm)	(524mm)	(632mm)	(740mm)	(956mm)	(1172mm)	(1294mm)	(1365mm)	(1473mm)	(1581mm)	(1797mm)	(2011mm)
CHIMNEY EL BOY	DEVIATION		ON	E LENGTH BE	TWEEN ELBO	ws			TWO	LENGTHS BE	ETWEEN ELBO	ows	
6" ELBOV	& HEIGHT	8"	12"	18"	24"	36"	48"	8" & 48"	12 & 48"	18 & 48"	24" & 48"	36" & 48"	48" & 48"
		3 5/16"	4 5/16"	5 7/8"	7 7/16"	10 1/2"	13 5/8"	15 1/2"	16 1/2"	18 1/16"	19 5/8"	22 3/4"	25 13/16"
150	DEVIATION	(84mm)	(110mm)	(149mm)	(189mm)	(267mm)	(346mm)	(394mm)	(419mm)	(459mm)	(498mm)	(578mm)	(656mm)
Secure Temp <sup>S2100+</sup>	UEIQUE	16"	19 7/8"	25 11/16"	31 1/2"	43 1/16"	54 5/8"	61 7/16"	65 1/4"	71 1/16"	76 7/8"	88 1/2"	100 1/16"
Temp <sup>S2100+</sup>	HEIGHT	(406mm)	(505mm)	(652mm)	(800mm)	(1094mm)	(1387mm)	(1561mm)	(1657mm)	(1805mm)	(1953mm)	(2248mm)	(2542mm)
Nova	DEVIATION HEIGHT	7 3/8"	9 3/8"	12 3/8"	15 3/8"	21 3/8"	27 3/8"	30 7/8"	32 7/8"	35 7/8"	38 7/8"	44 7/8"	50 7/8"
Nova Temp <sup>HT6000+</sup>		(187mm)	(238mm)	(314mm)	(391mm)	(543mm)	(695mm)	(784mm)	(835mm)	(911mm)	(987mm)	(1140mm)	(1292mm)
30-		20 11/16"	24 3/16"	29 3/8"	34 9/16"	44 15/16"	55 5/16"	61 3/8"	64 7/8"	70 1/16"	75 1/4"	35 5/8"	96"
		(525mm)	(614mm)	(746mm)	(878mm)	(1141mm)	(1405mm)	(1559mm)	(1648mm)	(1780mm)	(1911mm)	(2175mm)	(2438mm)
CHIMNEY	EL DOW DEVIATION CO				NE LENGTH BETWEEN ELBOWS				TWO LENGTHS BETWEEN ELBOWS				
CHIMNEY 6" ELBOV	& HEIGHT		12"	18"		36"	48"		12" & 48"	18" & 48"		36" & 48"	48" & 48"
			4 13/16"	6 1/8"		11"	14 1/8"		16 7/8"	18 7/16"		23"	26 3/16"
	DEVIATION		(122mm)	(156mm)		(280mm)	(359mm)		(429mm)	(468mm)		(584mm)	(665mm)
15º	50		,	` /		·	,		,	` ,		` ,	
	HEIGHT		27 11/16"	33 ½"		50 7/8"	65 ½"		72 5/8"	78 7/16"		95 3/4"	107 3/8"
AC 6"			(703mm)	(851mm)		(1292mm)	(1588mm)		(1845mm)	(1992mm)		(2432mm)	(2727mm)
	DEVIATION		9 3/8"	12 3/8"		21 3/8"	27 3/8"		32 5/8"	35 5/8"		44 5/8"	50 5/8"
	DEVIATION		(238mm)	(314mm)		(543mm)	(695mm)		(829mm)	(905mm)		(1134mm)	(1286mm)
30	HEIGHT		25 ¾"	31"		46 ½"	57"		66"	71 ¼"		86 7/8"	97 ¼"
	neign i		(654mm)	(878mm)		(1181mm)	(1448mm)		(1676mm)	(1810mm)		(2207mm)	(2470mm)

Table 4

\*\*\* NOTE : With the ACBI chimney, a starting length of 6" high must be used on top of the fireplace before installing \*\*\*

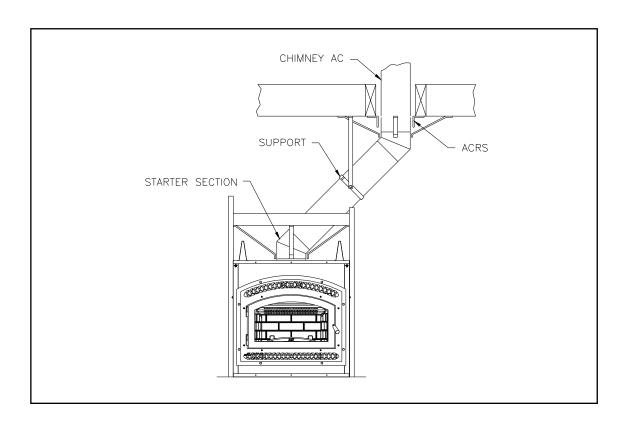


Figure 33

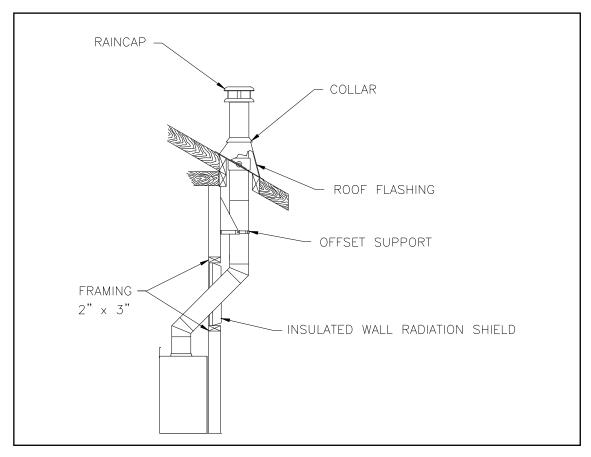


Figure 34

# 4.4 <u>ANGLED WALL RADIATION SHIELD</u> (RSM+, RSMI30, RSMI45)

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.

RSM+ and RSMI30, RSMI45					
CHIMNEY MODEL	ANGLE	HOLE SIZE			
ASHT+ / HT6103+ (6" dia.)	30°	283 mm x 781 mm (11 1/8" x 30 <sup>3</sup> / <sub>4</sub> ")			
Canada only	45°	283 mm x 518 mm (11 1/8" x 20 3/8")			
S-2100+ / HT6000+ (6" dia.)	30°	327 mm x 881 mm (12 7/8" x 34 11/16")			
AC (6" dia.)	30°	380 mm x 972 mm (15" x 38 ½")			

Table 5

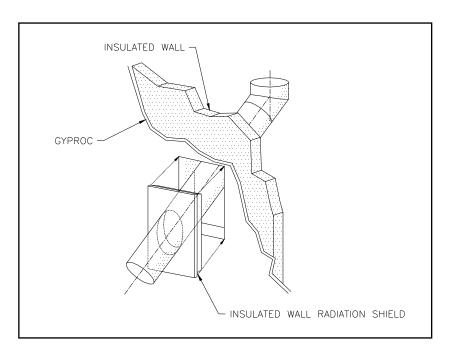


Figure 35

## 4.5 CHIMNEY SUPPORT INSTALLATION

#### **Universal Roof Support**

This support has three possible uses:

- 1. For ASHT+ / HT6103+ and S-2100+ / HT6000+, 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

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

NOTE: For the AC chimney, a support section must be used every 40 ft. (12 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 MODEL	MAXIMUM HEIGHT OF SUPPORTED CHIMNEY			
	OFFSET SUPPORT	ROOF SUPPORT		
ASHT+ / HT6103+ (6" dia.)	28 ft. (8.54m)	29 ft. (8.84 m)		
S-2100+ / HT6000+ (6" dia.)	18 ft. (5.49 m)	20 ft. (6.1 m)		
AC (6" dia.)	40 ft. (12.19 m)	50 ft. (15.20 m)		

Table 6

## 4.6 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 36).

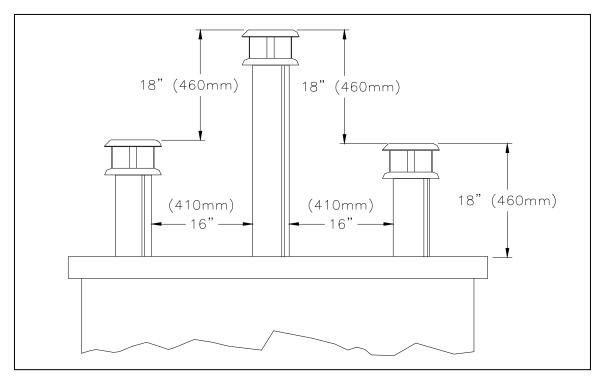


Figure 36

## 4.7 <u>CHIMNEY ADAPTOR</u> (S-2100+ / HT6000+)

The fireplace is normally supplied with a chimney adaptor suitable for the ASHT+ / HT6103+ chimney. If you want to install a S-2100+ / HT6000+ chimney, an adaptor is available (6UCA) (figure 37). A separate starter section will also be required if AC chimney is installed.

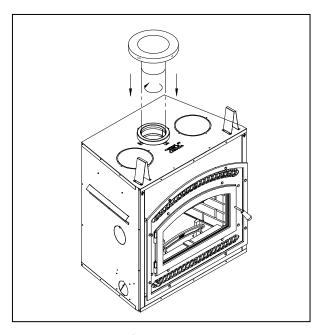


Figure 37

#### 4.8 INSTALLATION INSTRUCTIONS FOR MASONRY APPLICATION

# <u>WARNING</u>: Before starting the installation, the masonry chimney must be inspected by a qualified sweep.

The following requirements must be respected:

- 1. The chimney must be absolutely clear of any soot residue or creosote. Check for cracks, loose or missing bricks that could inhibit correct installation of the liner.
- 2. The clearance to combustible must be a minimum of 1" between the outside of the masonry and any wood framing or loose insulation.
- 3. The chimney must be built in accordance with the current building code.
- 4. No other appliance can be connected to the same chimney.
- 5. The clearances to combustible for the BISUMA or BISPMA and BISUMA30 or BISPMA30 connectors are 2" on the side and bottom and 16" at the top.
- 6. The connector parts are not necessary if the connection between the insulated length and the stainless steel liner is done within the masonry chimney.

#### Installation:

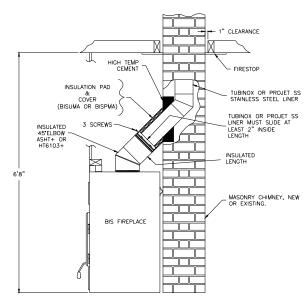
The chimney must be relined with a stainless steel liner model  $Tubinox^{TM}$  or Projet SS of the same diameter as the outlet of the fireplace.

For connection at 45° angle, a special connector (BISUMA for the BIS Ultra<sup>TM</sup> and BIS Tradition<sup>TM</sup> CE fireplaces or BISPMA for the BIS Panorama<sup>TM</sup> fireplace) must be used to connect the liner to the insulated chimney. For connection at 30°, use the BISUMA30 or BISPMA30 connectors.

#### Follow these steps:

- 1- Position the fireplace in its location. Temporarily install the ASHT+ elbow on the top of the fireplace and, using a level, mark with an oval the location where the flue liner will enter the masonry chimney.
- 2- In the middle of the oval, drill a hole in the masonry chimney at 45° or 30°.
- 3- Increase the size of the hole until a 45° or 30° Tubinox liner elbow can be easily slipped through.
- 4- Slide the liner down from the top of the masonry chimney until you reach the hole level.
- 5- Slip through the hole a 45° or 30° liner elbow and connect it to the liner.
- 6- Add a small liner section to the liner elbow which will allow the liner to extend at least 12" (measured at the top of the liner) from the masonry chimney.
- 7- Seal the opening around the liner with high temperature refractory cement.
- 8- The next steps must be done in the following order:

#### See typical installation illustrated below.



- A. Select the ASHT + length that will fit between the elbow and the liner so that it will slide at least 2" over the liner section. (You may need to cut the liner for a better fit).
- B. Take that section and the BISUMA or BISPMA (BISUMA30 or BISPMA30) cover and slide it over the liner. Make sure you have enough opening to be able to install the ASHT+ elbow without difficulty.
- C. Install the 45° or 30° elbow on the fireplace.
- D. Slide the length section back down on the elbow and twist lock the two together.
- E. Pull the cover down over the length and install the insulation pad over the liner; be careful to cover the liner completely.
- F. Slide back the cover over the insulation and fix it in place using the 3 metal screws supplied.

# 5. PARTS AND COMPONENTS LIST (AC Chimney)

Description	Part No.
Lengths	6" dia.
12" length 18" length 36" length 48" length	AC 6L12 AC 6L18 AC 6L36 AC 6L48
15° elbow 30° elbow	AC 6E15 AC 6E30
Rain cap Spark arrester screen	AC 6CPR PE+
Supports Offset support Support section Roof support Starter section Roof brace Wall band	XSO+ AC 6SL XST+ AC 6SB XBS2+ XBM+
Firestop Firestop Radiation shield Attic radiation shield Wall radiation shield 30° Insulated wall radiation shield 30° Wall radiation shield 45° Insulated wall radiation shield 45°	AC BF AC RS AC RSA AC RSM30 AC RSMI30 AC RSM45 AC RSMI45
Outside air kit (chimney) (flex, insulation, outside register and coupling)	AC ZI
Flat roof flashing	ACF
Adjustable roof flashings 1/12 - 7/12 (5° - 30°) 8/12 - 12/12 (30° - 45°) 12/12 - 21/12 (45° - 60°) Storm collar	AC FA AC FB AC FBB ACFC

## 6. OPTIONS

Gravity kit:	Part No.:
Complete double ducting system including: 2 elbows 90°, 2 telescopic lengths, 2 grill supports and 2 black grills	7B30ZK-1
Black grill with support	7B30ZO
Brass grill for 7B30ZK	7B30ZGB
Elbow 90°, 8" dia.	7B26ZE90
Elbow 45°, 8" dia.	7B26ZE45
Telescopic length, 8" dia.	7B26ZLA
Adjustable length 8" dia. (2" - 5")	7B26ZL2A
Radiation shield	7B26ZR
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), backdraft damper (BISBD), aluminium tape	BISFWK-1
Fireplace to Flex adaptor and 2 clamps	BISAF
Flexible pipe 5" I.D. x 15 ft. Long	5FLEX15
Flexible pipe 5" I.D. x 30 ft. Long	5FLEX25
Blower 250 CFM for central forced air kit	BISZY
Blower variable speed control with decorative wall plate for (BISZY)	VRUW
Thermo-disk, on/off blower control for (BISZY)	VTU
Fan to Flexible pipe adaptor	BISAVF
Heating and cooling thermostat  Fireplace:	HCTW
Rigid firescreen	BUCEBWZN
Masonry chimney adaptor	BISUMA

#### 7. APPENDIX

#### **SPECIFICATIONS**

 Weight
 300 lbs

 Height
 36"

 Width
 36"

 Depth
 24 1/2"

 Chimney weight ASHT+ (6" dia.) :
 6.25 lb/ft.

 Chimney weight S-2100+ (6" dia.) :
 10.8 lb/ft.

#### CLEARANCE TO COMBUSTIBLES

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

17" (324 mm) measured from the fireplace side

Ceiling: 6' 8" (2032 mm) measured from the base of the fireplace Fireplace enclosure: Bottom: 0" Side: 0" to spacers Back: 0" to spacer

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

the wood framing. See page 14, Figure 8)

Chimney: 2" (50 mm)

Mantel: 42" (1067 mm) measured from the base of the fireplace

#### REPLACEMENT PARTS

(for hammered facade)

Baffle refractory (2 pieces) PR-ISO2205 Back refractory PR-SR2618 Right side refractory PR-SR2619D Left side refractory PR-SR2619G Bottom refractory PR-SR2201 Front refractory, right side PR-SR2202D Front refractory, left side PR-SR2202G Secondary air tube PR-SR2271 Secondary air tube lock PR-SR2214 Cast-iron log supports (2) PR-SR2324 Log retainer bar PR-SR2620 Fireplace top PR-SR2591 Fireplace left side PR-SR2575 Fireplace right side PR-SR2576 Fireplace back PR-SR2589 Touch up spray paint black (SBMB6309) 70K99 Touch up spray paint charcoal PR-P6201

Door handle PR-SR1787
Door rod and lock PR-SR2118
Ceramic glass panel PR-SR2222-1
Steel door gasket PR-SR1823G
Steel door glass gasket PR-SR1685D

Cast iron door gasket PR-SR1823G
Cast iron door glass gasket PR-SR1823H
Hinges (door & fireplace) PR-SR2395TCE