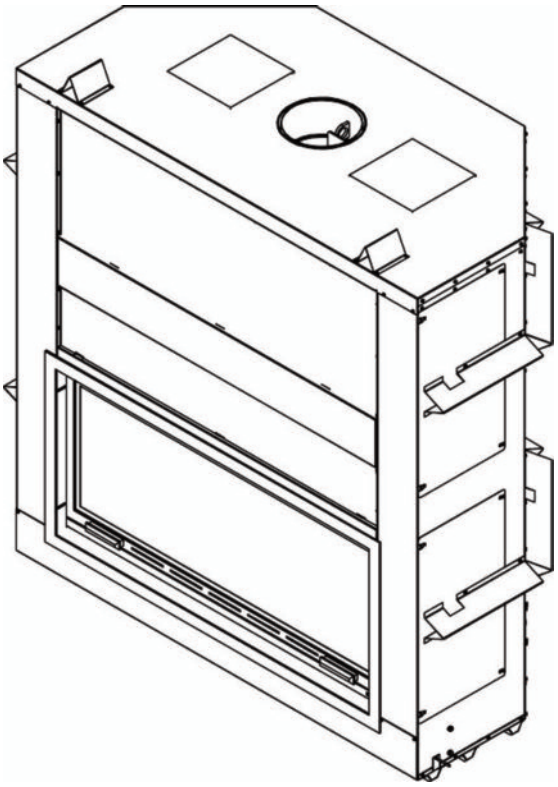
real flame

Leaders in Fireplace Technology



CALDOR WOODHEATER

INSTALLATION & OPERATING MANUAL

VERSION 2

FOREWARD

THANK YOU FOR CHOOSING THIS WOOD INBUILT

We want to congratulate you on your purchase and wish to help you get maximum satisfaction from your wood inbuilt. In the pages that follow, we will give you advice on wood heating as well as technical specifications regarding installation, operation and maintenance of the model you have chosen.

The instructions pertaining to the installation of your wood inbuilt comply with AS/NZS 4012/4013 and AS/NZS 2918 standards.

Please read this entire manual before you install and use your new wood inbuilt. Failure to follow instructions may result in property damage, bodily injury, or even death . It is important that you follow the installation guidelines exactly.

Consult your local city, borough or shire council about restrictions and installations requirements in your area and the need to obtain a permit.

This heating unit is designed to serve as a supplementary heat source. We recommend that a primary heat source also be available in the home. The manufacturer cannot be responsible for costs associated with the use of another heating system.

KEEP THIS MANUAL FOR FUTURE REFERENCE.

PLEASE NOTE THAT THE PICTURES SHOWN IN THIS MANUAL ARE GENERIC AND MAY NOT MATCH EXACTLY THE LOOK OF YOUR ZERO CLEARANCE WOOD INBUILT.

CONTENTS

INSTALLATION

Install the zero clearance wood inbuilt only as described in these instructions and using only components from the list below.

Parts Required

- BF16 zero clearance wood inbuilt;
- Flue:
  - Flue lengths,
  - Elbows (where necessary),
  - Associated components as per these installation instructions.

Required Component (sold separately)

- Moulded bricks (SFA0080);
- Black straight narrow trim (SFA0085);

or

- Black straight masonry trim (SFA0087).

Options (sold separately)

- Air diffuser kit (SFA0086).

Safety Information

WARNING

- THE APPLIANCE AND FLUE-SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH AS/NZS 2918 AND THE APPROPRIATE REQUIREMENTS OF THE RELEVANT BUILDING CODE OR CODES.
- APPLIANCES INSTALLED IN ACCORDANCE WITH THIS STANDARD SHALL COMPLY WITH THE REQUIREMENTS OF AS/NS 4013 WHERE REQUIRED BY THE REGULATORY AUTHORITY, I.E. THE APPLIANCE SHALL BE IDENTIFIABLE BY A COMPLIANCE PLATE WITH THE MARKING 'TESTED TO AS/NZS 4013'.
- ANY MODIFICATION OF THE APPLIANCE THAT HAS NOT BEEN APPROVED IN WRITING BY THE TESTING AUTHORITY IS CONSIDERED AS BREACHING AS/NZS 4013.

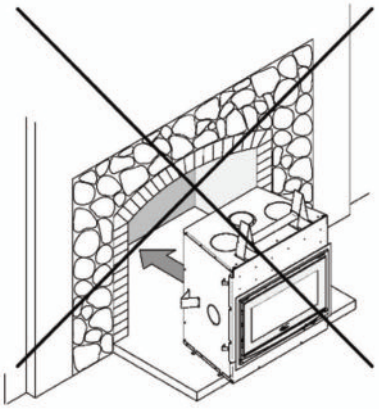
CAUTION

- MIXING OF APPLIANCE OR FLUE SYSTEM COMPONENTS FROM DIFFERENT SOURCES OR MODIFYING THE DIMENSIONAL SPECIFICATION OF COMPONENTS MAY RESULT IN HAZARDOUS CONDITIONS. WHERE SUCH ACTION IS CONSIDERED, THE MANUFACTURER SHOULD BE CONSULTED IN THE FIRST INSTANCE.
- CRACKED AND BROKEN COMPONENTS e.g. GLASS PANELS OR CERAMIC TILES, MAY RENDER THE INSTALLATION UNSAFE.
- A CARBON MONOXIDE (CO) DETECTOR/ALARM IS REQUIRED IN THE ROOM IN WHICH THE ZERO CLEARANCE WOOD INBUILT IS INSTALLED. THE CO DETECTOR WILL PROVIDE WARNING IF, FOR ANY REASON, THE APPLIANCE FAILS TO FUNCTION CORRECTLY.

INSTALLATION (Continued)

NOTICE

- The information given on the certification label, affixed to the appliance, always overrides the information published in any other media (owner's manual, catalogues, flyers, magazines or web sites).
- Connect this wood inbuilt only to a triple skin flue system as per AS/NZS 2918, APPENDIX B, or any flue system tested to and past the requirements of AS/NZS 2918, APPENDIX F, for use with solid fuel.
- If required, a supply of combustion air shall be provided to the room.
- Do not connect to, or use in conjunction with any existing air distribution ductwork unless specifically approved with the appliance.
- Do not connect this unit to a flue serving another appliance.
- This zero clearance wood inbuilt has not been tested to be installed inside a masonry chimney.



Regulations Covering Zero Clearance Wood Inbuilt Installation

When installed and operated as described in these instructions, the Caldor zero clearance wood inbuilt is suitable for use in residential installations. The Caldor zero clearance wood inbuilt is not intended for installation in a bedroom.

The zero clearance wood inbuilt is not approved for use with a so-called "positive flue connection" to the clay tile of a masonry flue system.

CAUTION

- THIS CALDOR ZERO CLEARANCE WOOD INBUILT SHOULD BE INSTALLED ONLY BY A LICENSED ACCREDITED INSTALLER. FAILURE TO USE AN AUTHORIZED INSTALLER MAY VOID YOUR HOME & CONTENTS INSURANCE POLICIES. PLEASE REFER TO YOUR RETAILER TO LOCATE AN INSTALLER.

INSTALLATION (Continued)

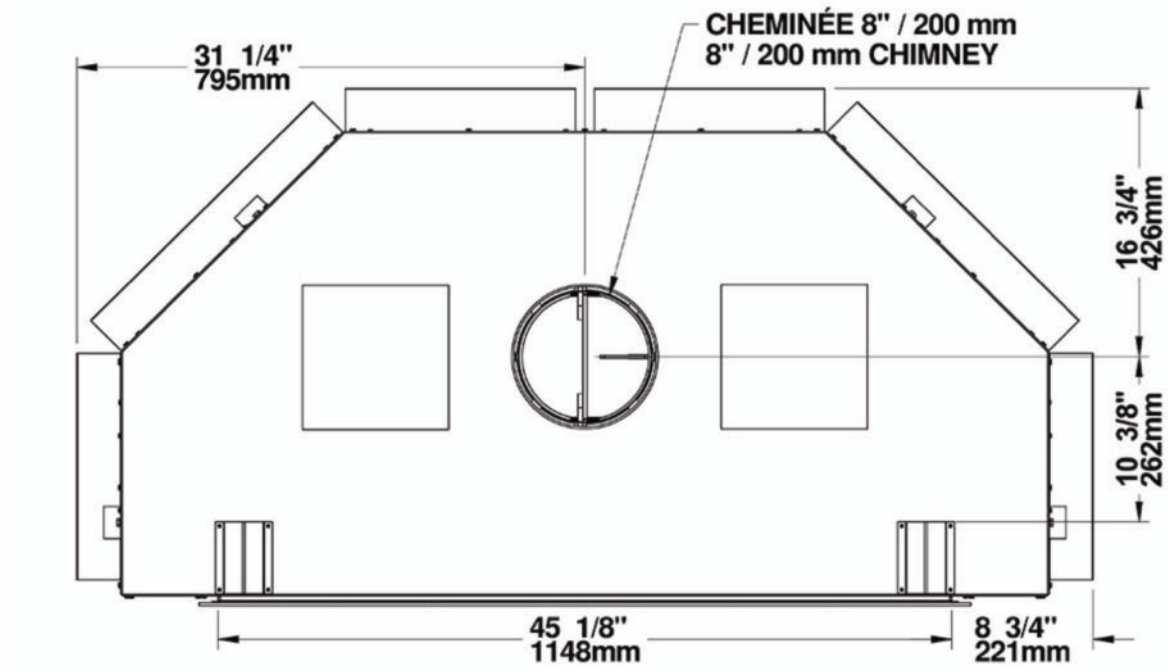
General Information

Model #	SF00400
Colour	Metallic black
Combustible	Hardwood
Recommended heating area*	< 93 m^2
Test Standards (safety)	AS/NZS 2918
Test Standard (emissions)	AS/NZS 4012 & 4013 (exempt**)
Flue Spigot Diameter	200 mm
Flue system	Triple skin flue system
Ceramic glass thickness	4 mm
Maximum Log Length	760 mm
Firebox Volume	0,181 m^3
Shipping Weight	347 kg

** Heating capacity may vary subject to location in home, flue system draft, flue system diameter, locality, heat loss factors, climate, fuels and other variables.*

*** This unit is tested as a central system because it can be hooked-up to hot air distribution ducts. It is therefore exempt from emissions testing.*

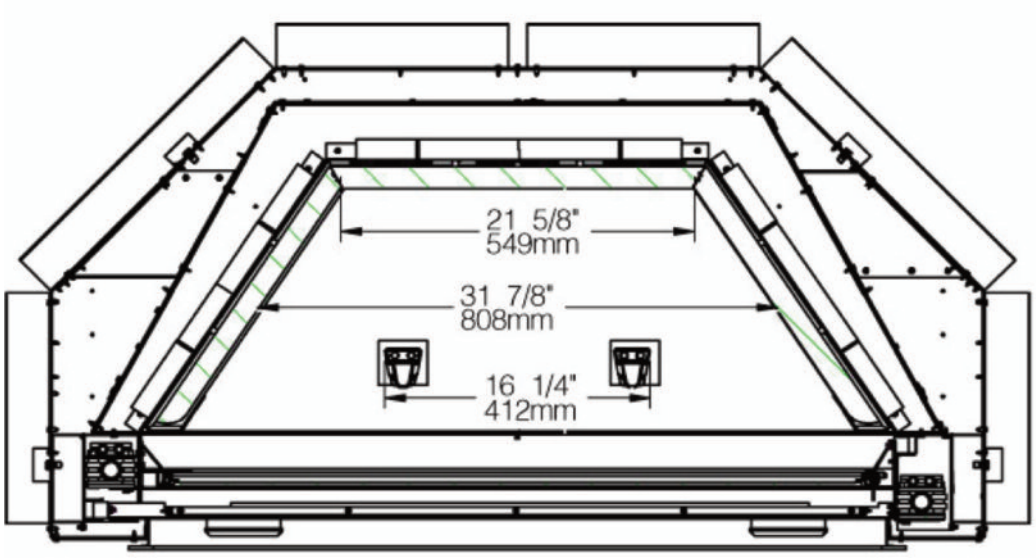
Dimensions



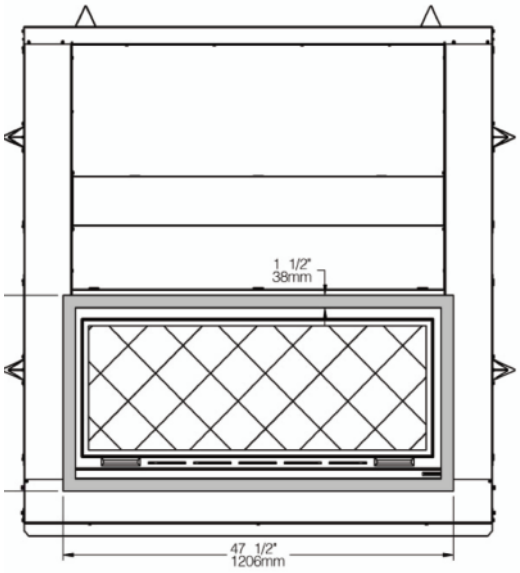
Top view

INSTALLATION (Continued)

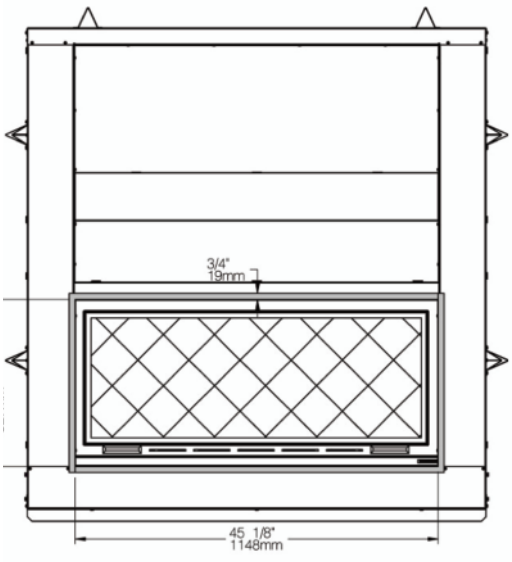
Dimensions (continued)



Combustion chamber



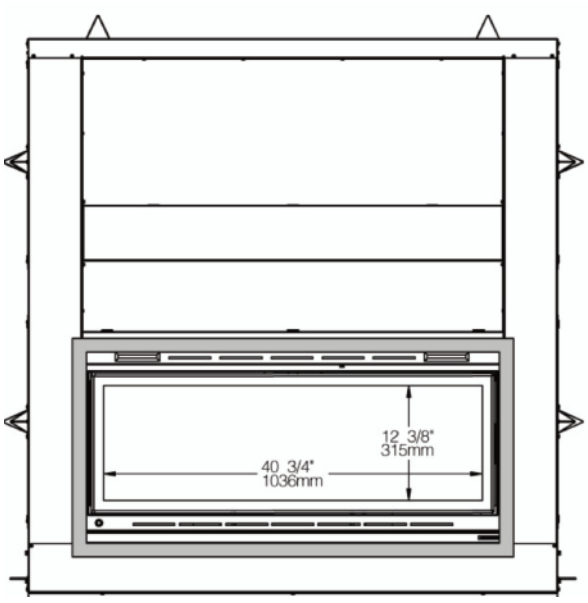
Black straight narrow trim



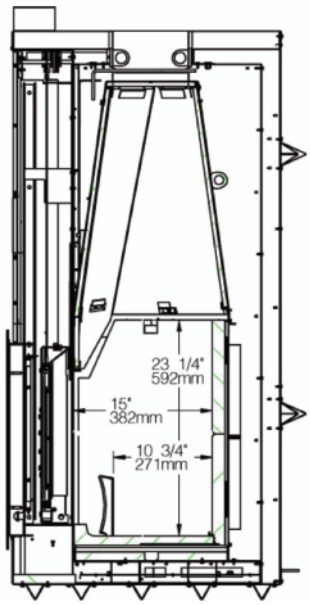
Black straight masonry trim

INSTALLATION (Continued)

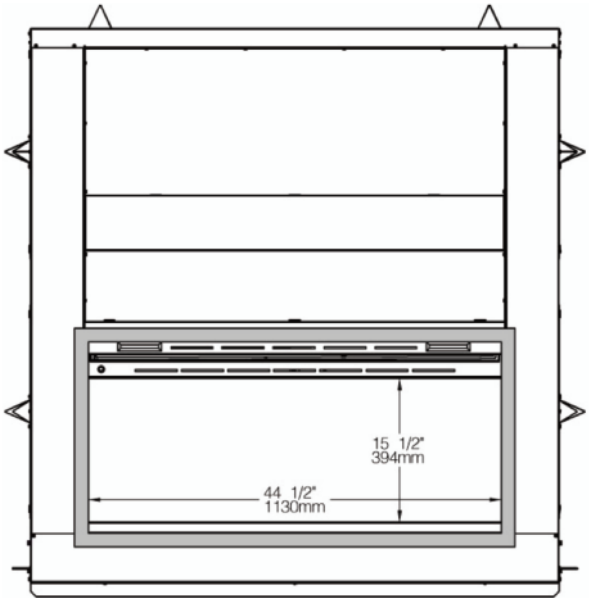
Dimensions (continued)



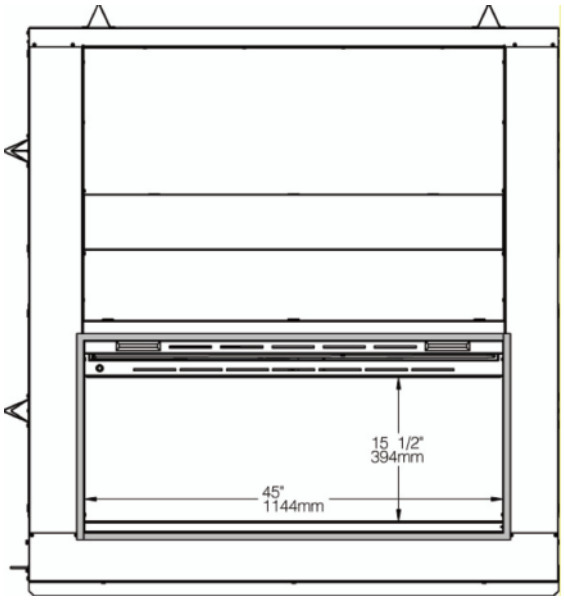
Glass surface



Combustion chamber



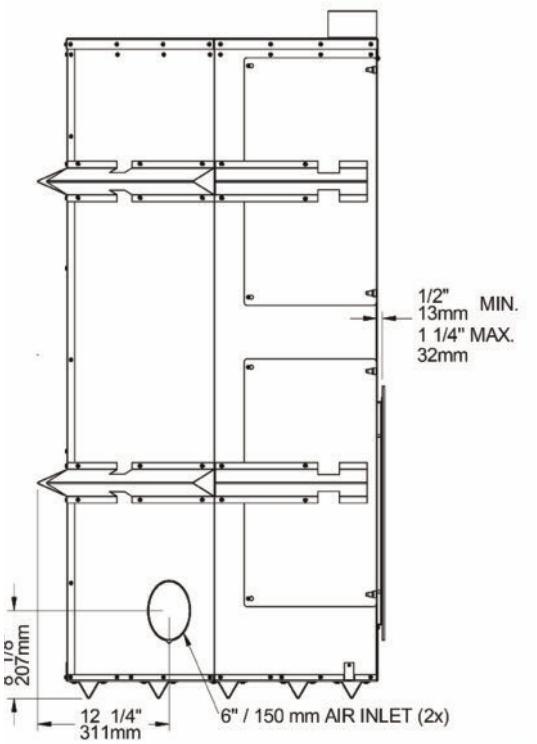
Door opening black straight narrow trim



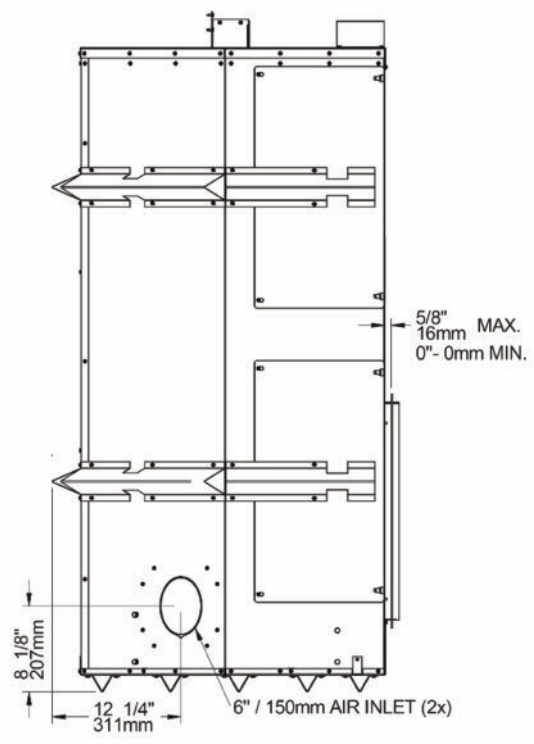
Door opening black straight masonry trim

INSTALLATION (Continued)

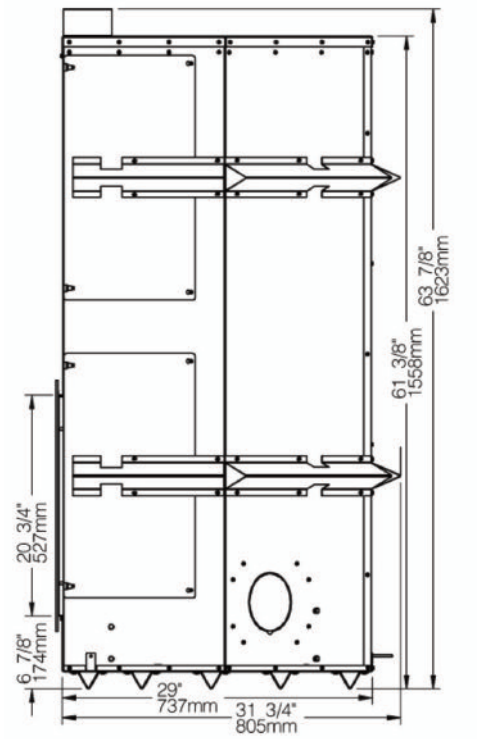
Dimensions (continued)



Left side black straight narrow trim



Left side black straight masonry trim

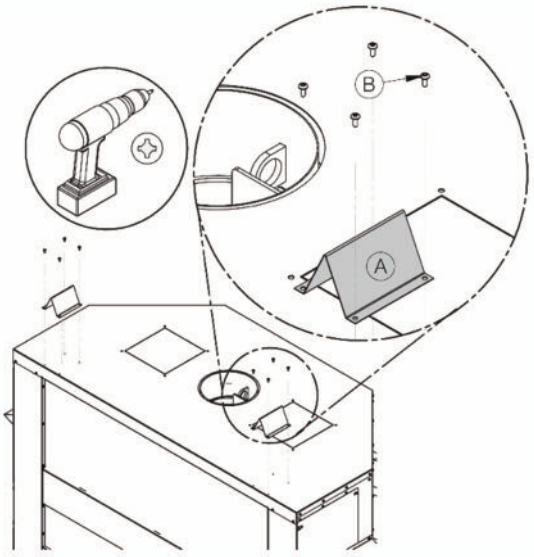


Right side

INSTALLATION (Continued)

Standoff Installation

Before installing the zero clearance wood inbuilt, two standoffs must be secured to the top of the appliance. These parts are required to maintain proper clearances to heat sensitive materials. You will find the standoffs in the firebox and the screws in the owner's manual kit. Align the holes of the spacers (A) with the pre-drilled holes on top of the zero clearance wood inbuilt and secure them with 8 screws provided (B), as shown.



Carrying the Zero Clearance Wood Inbuilt

To facilitate transportation of the Caldor before its installation, we have designed handling grips (AC09200, sold separately). The moulded bricks are in a box you can carry separately. We suggest you install the bricks after the setting up of the zero clearance wood inbuilt. To install the bricks, see section Moulded Refractory Brick Panels Installation.

Locating the Caldor

The best location to install your zero clearance wood inbuilt is determined by considering the location of windows, doors and the traffic flow in the room. Figure some space in front of the unit for the hearth extension and the mantel and clearances to other combustible materials. If possible, choose a location where the vent will not interfere with any truss, roof beams, wall studs, water pipes or electrical wiring. It may be easier to relocate the appliance than to rework the building structure. Also choose a location that allows installing the least number of offsets in the flue.

Usually, no additional floor support is needed for the zero clearance wood inbuilt. The adequacy of the floor can be checked by first estimating the weight of the zero clearance wood inbuilt. Weights are given in the section General Information. Next, measure the area occupied by the zero clearance wood inbuilt. Note the floor construction and consult your local building code to determine if additional support is needed.

THE ZERO CLEARANCE WOOD INBUILT MUST BE INSTALLED ON A LEVEL AND STRAIGHT (NOT UNEVEN) SURFACE.

INSTALLATION (Continued)

Location of the Certification Label

Since the information given on the certification label affixed to the appliance always overrides the information published in any other media (owner's manual, catalogues, flyers, magazines or web sites) it is important to refer to it to have a safe and compliant installation. In addition, you will find information about your zero clearance wood inbuilt (model, serial number, etc.). You can find the certification label inside the wood inbuilt, on the right side when facing it.

We recommend that you note the wood inbuilt's serial number on this manual, since it will be needed to precisely identify the version of the appliance in the event you require replacement parts or technical assistance.

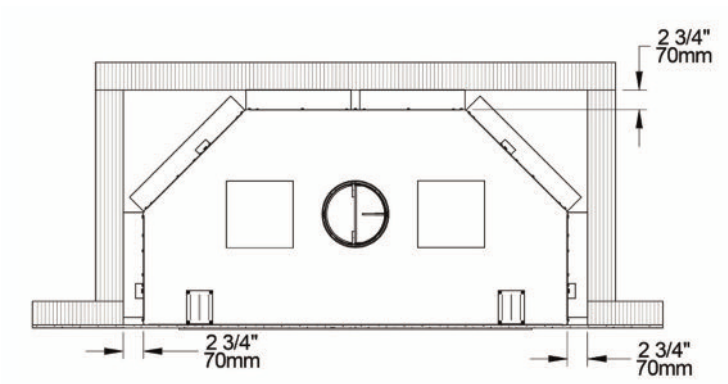
Clearances to Heat-Sensitive Materials

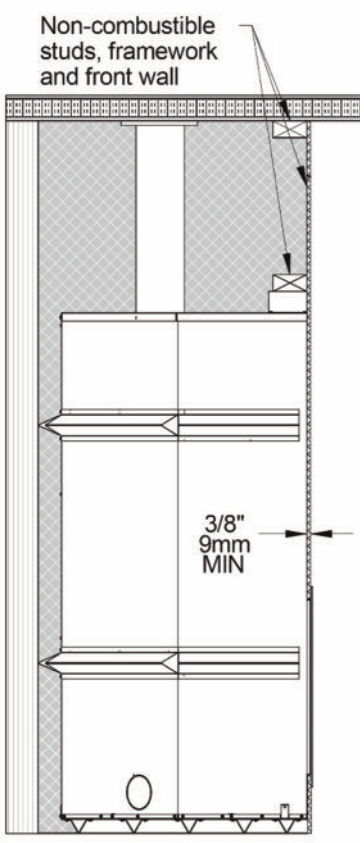
The clearances shown in this section have been determined by test according to procedures set out in safety standards AS/NZS 2918:2001. When the zero clearance wood inbuilt is installed so that its surfaces are at or beyond the minimum clearances specified, combustible surfaces will not overheat under normal and even abnormal operating conditions.

WARNING

- NO PART OF THE ZERO CLEARANCE WOOD INBUILT MAY BE LOCATED CLOSER TO COMBUSTIBLES THAN THE MINIMUM CLEARANCE FIGURES GIVEN.

The appliance must be built into an enclosure with the front wall made from a minimum 9 mm non-combustible material (Bellis board or similar), the side and rear walls, which can be made from combustible material, shall be a minimum of 70 mm from the side and rear of the appliance outer case.

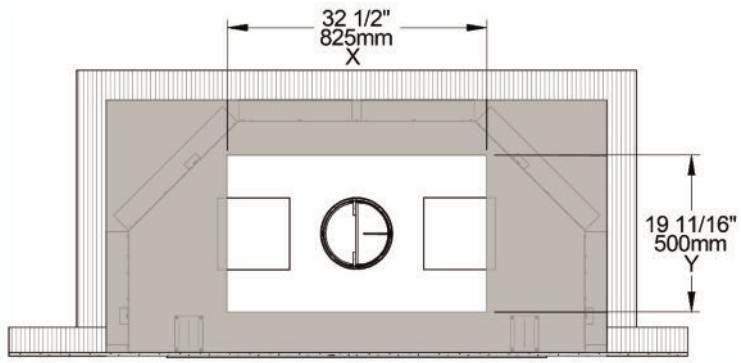


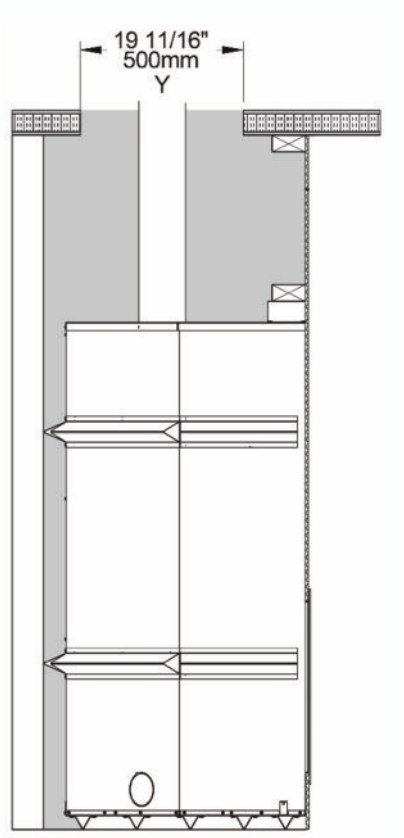


INSTALLATION (Continued)

Clearances to Heat-Sensitive Materials (continued)

The roof of the enclosure must have a minimum of 400,000 mm² for example : 825 mm (X) • 500 mm (Y) = 412 500 mm²) of venting to the ceiling cavity and a minimum of 50 mm clearance around the flue system and hot air ducts (the 50 mm clearance can be included in the 400,000 mm² of venting).





CAUTION

BEFORE CLOSING THE WALLS, MAKE SURE THAT THE FLUE DAMPER AND THE DOOR MECHANISM WORKS PROPERLY. SEE SECTIONS Chimney Damper AND Access Door for Counterweight.

INSTALLATION (Continued)

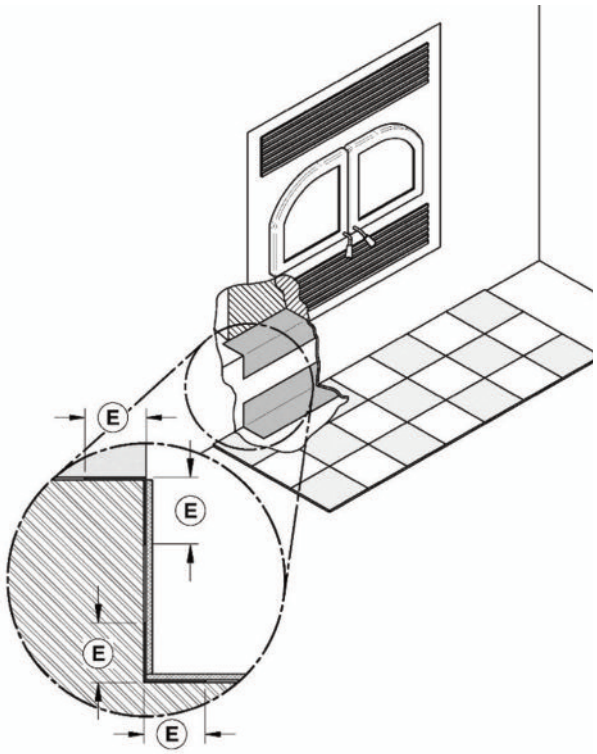
Hearth Extension Construction Configuration

The Caldor may be installed directly on the floor or on a raised combustible or non-combustible base.

A. Raised Base Installation

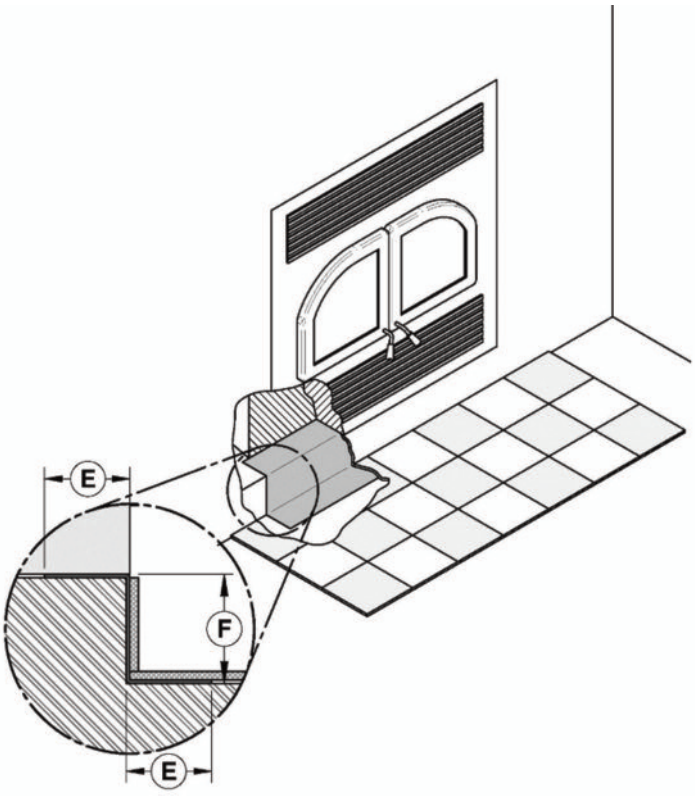
More than 100 mm

When installed with a more than 100 mm raised base, the upper and lower angle, for the full width of the floor protection, must be protected 50 mm horizontally and 50 mm vertically (E) by a piece of sheet metal (not included). Apart from these two corners, the sheet metal does not have to cover the rest of the wall between the base of the wood inbuilt and the floor.



100 mm

In the case where (F) would be equal to 100 mm, it is suggested that the sheet metal between the base of the zero clearance wood inbuilt and floor be in one piece.



INSTALLATION (Continued)

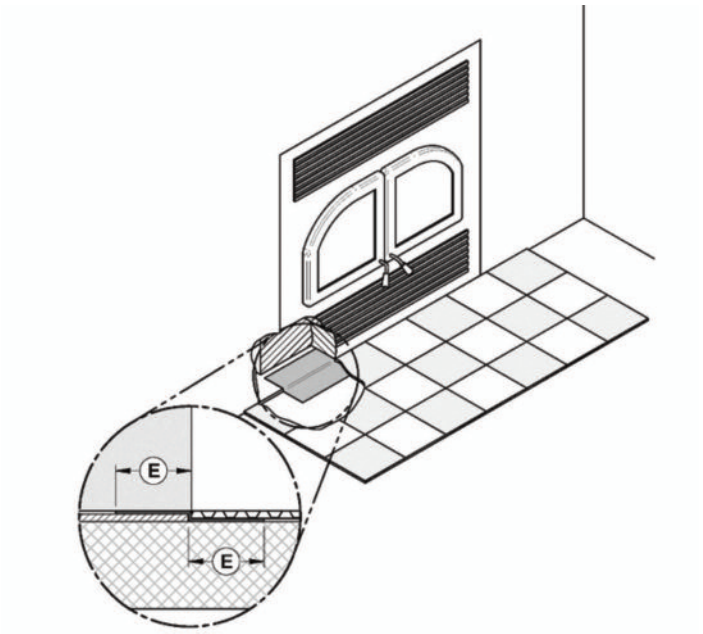
Hearth Extension Construction Configuration (continued)

B. Directly On the Floor

In the case where the zero clearance wood inbuilt is installed directly on the floor, the joint between the hearth extension and the zero clearance wood inbuilt (E) must also be protected by a non-combustible material. For example, a piece of sheet metal (not included).

We also advise using adhesive glue to secure the hearth where possible instead of metal nails, to minimize thermal conduction into frame materials, if mounting the unit above floor level.

Note that the floor under of the zero clearance wood inbuilt should match or exceed the height of the floor protection.

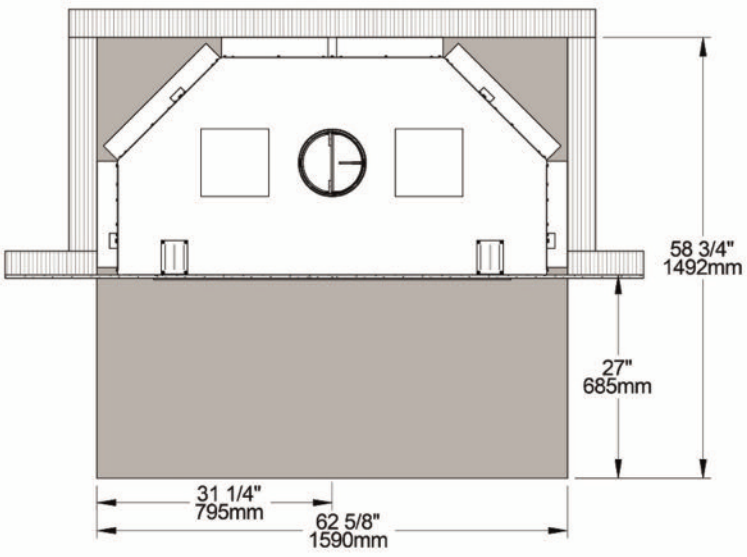


Floor Protection

A minimum of 1492 mm deep x 1590 mm wide x 18 mm thick floor protector (Bellis Board) must be used under and in front of the appliance base when installing the appliance.

The floor protector should extend 685 mm in front of the appliance door and be placed centrally in the 1590 mm width. The thermal conductivity of the floor protector is 0.1m².K/W minimum for 9 mm thick sheets.

REFER TO AS 2918 – 1990 CLAUSES 2.2, 3.3.1, 3.3.2 AS THERE ARE VARIATIONS TO THE CONSTRUCTION OF HEARTHS.



NOTICE

DO NOT LEAVE CARPET UNDER THE FLOOR PROTECTION.

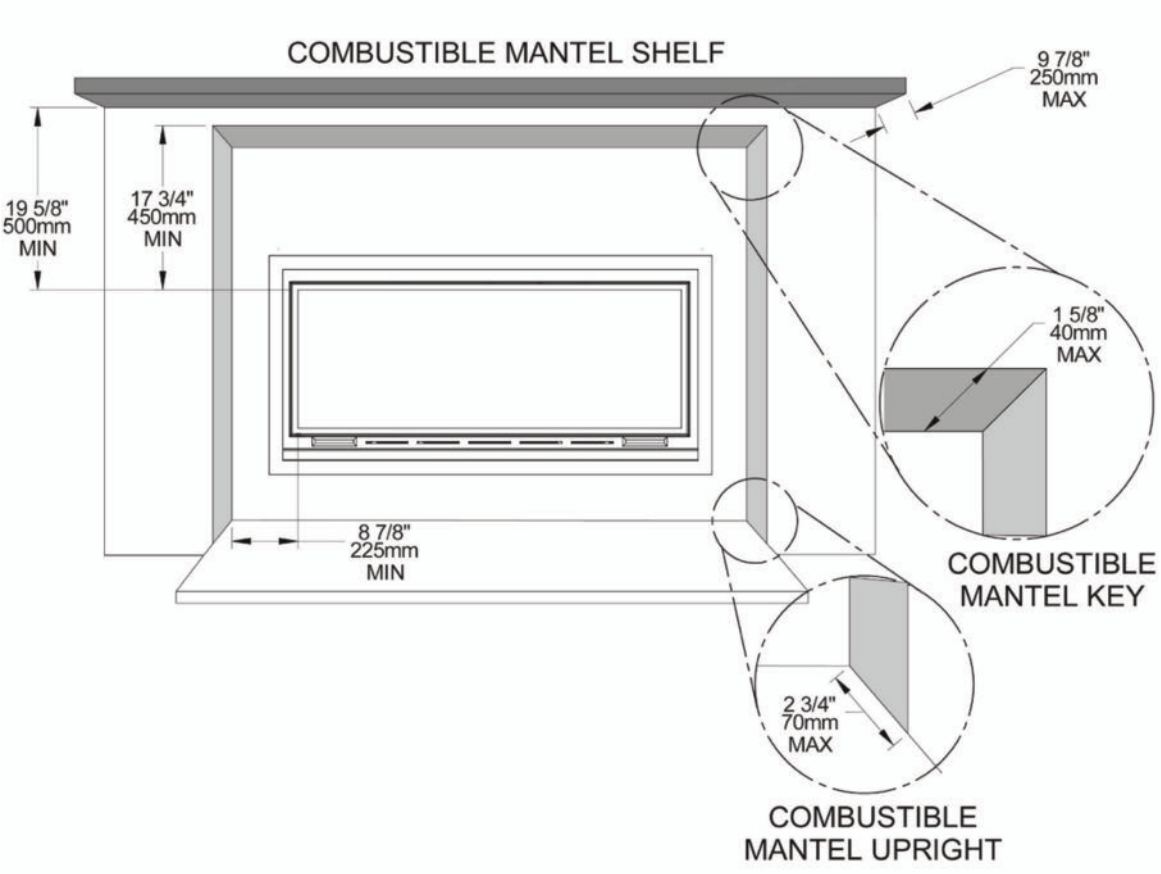
INSTALLATION (Continued)

Compliance of a Combustible Mantel and Mantel Shelf

The mantle shelf shall be a minimum of 500 mm above the appliance door opening and extend no further than 250 mm into the room.

The mantle key shall be a minimum of 450 mm above the appliance door opening and no thicker than 40 mm.

The mantle upright shall be no closer than 225 mm from the side of the appliance door and extend no thicker than 70 mm.



Trim Installation

In order to complete the zero clearance wood inbuilt installation, you must install either the black straight narrow trim (SFA0085) or the black straight masonry trim (SFA0087). Installation instructions can be found in the trim kit.

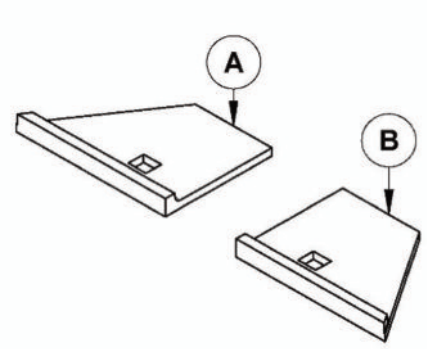
NOTICE

THE FACING OF THE TRIM SHOULD NEVER COME IN CONTACT WITH MASONRY PRODUCTS SUCH AS MORTAR, ACID OR ANY OTHER PRODUCTS CONTAINING ABRASIVES. DAMAGES AND DISCOLOURATION CAUSED BY THESE PRODUCTS WILL NOT BE COVERED BY THE WARRANTY.

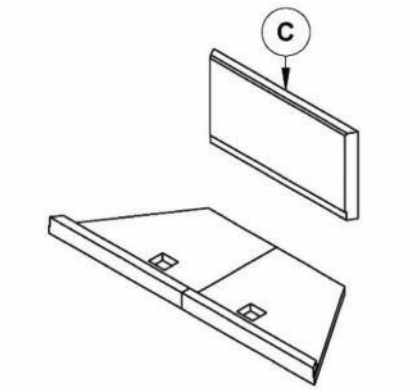
INSTALLATION (Continued)

Moulded Refractory Brick Panels Installation

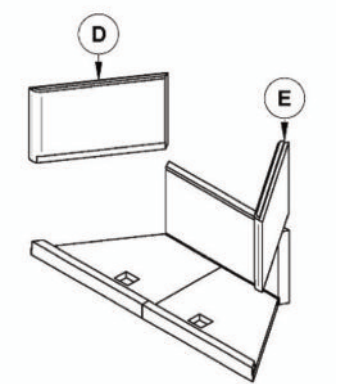
a) Place the bottom refractory panels (A) and (B) at the bottom of the firebox and pull them toward the front of the unit to help positioning the sides and back refractory panels.



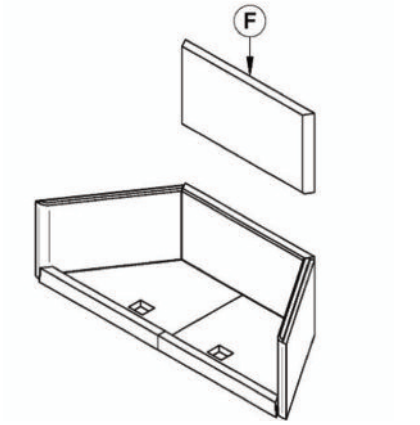
b) Place the lower back refractory panel (C). Install it on the floor of the firebox, behind the bottom refractory panels.



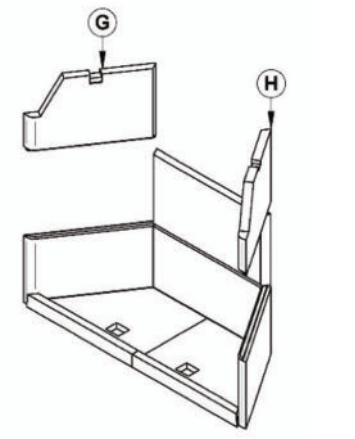
c) Place the left and right lower refractory panels (D) and (E). Set them on the floor of the firebox, as shown.



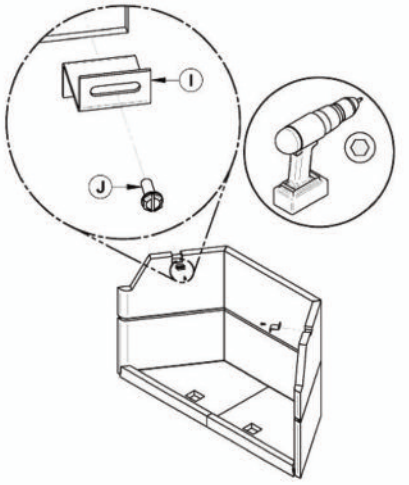
d) Lay the upper back refractory panel (F) on top of the middle back refractory panel.



e) Place the upper left and right refractory panels (G) and (H) onto the notches of the middle left and right refractory panels.



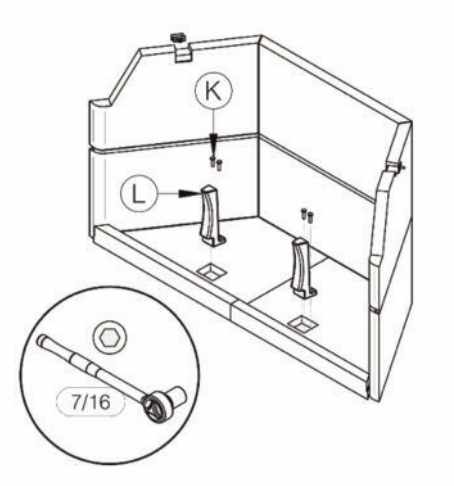
f) Secure the upper refractory panels retainers using the screws provided with the owner's manual kit.



INSTALLATION (Continued)

Moulded Refractory Brick Panels Installation (continued)

g) Install the andirons and secure them with anchor bolts.



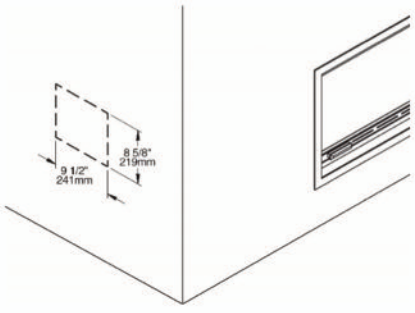
Hot Air Gravity System

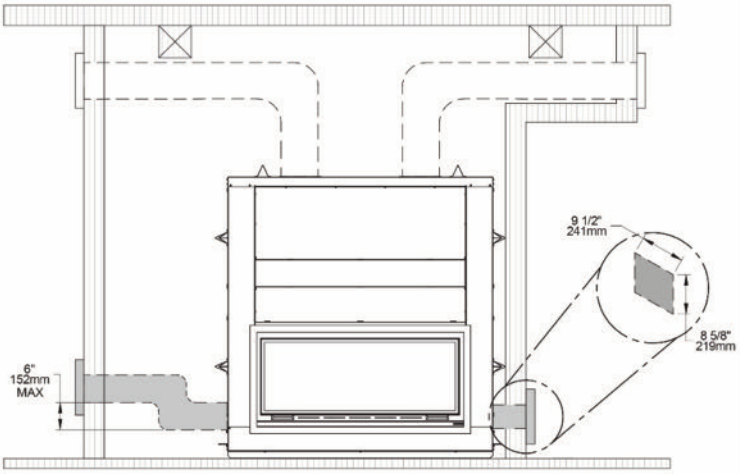
A hot air gravity system can be installed by fitting the air diffuser kit SFA0086, sold separately. This kit includes four air diffusers. The two small air diffusers must be installed as air intakes at the bottom of the wood inbuilt. The two larger air diffusers must be installed as hot air diffusers, at the top of the wood inbuilt. Ducts are not included and must be purchased separately. Adapters can be found in the firebox of the wood inbuilt. **When installing the kit, all four air diffuser must be used.**

A. Air Intake Diffusers Ducts

Ducts for air intake must be 150 mm in diameter, flexible or rigid, insulated or not, with a zero clearance to heat sensitive materials. They should also be as short as possible.

For an optimal air circulation, install the air intake diffusers on both sides of the wood inbuilt enclosure. Diffuser's framing should be 241 mm X 219 mm. The air intake diffusers should be located less than 152 mm higher than the centre of the air intake of the wood inbuilt.

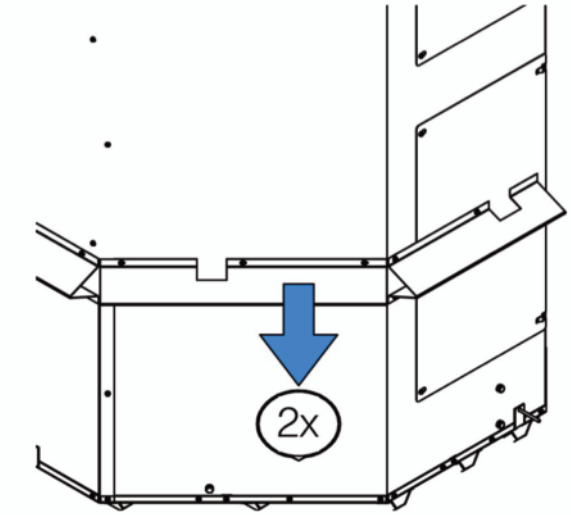




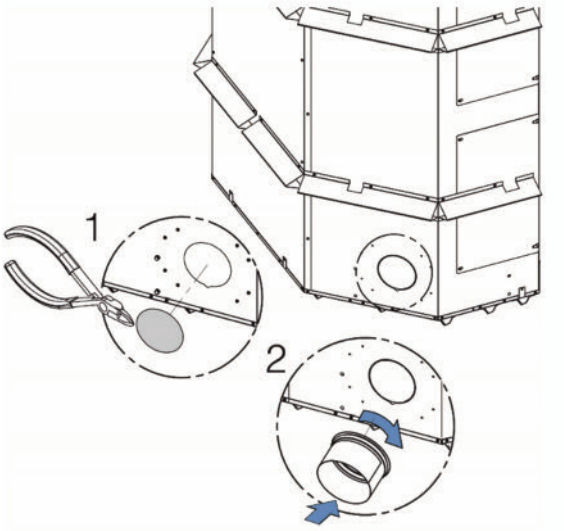
INSTALLATION (Continued)

A. Air Intake Diffusers Ducts - Assembly and Installation

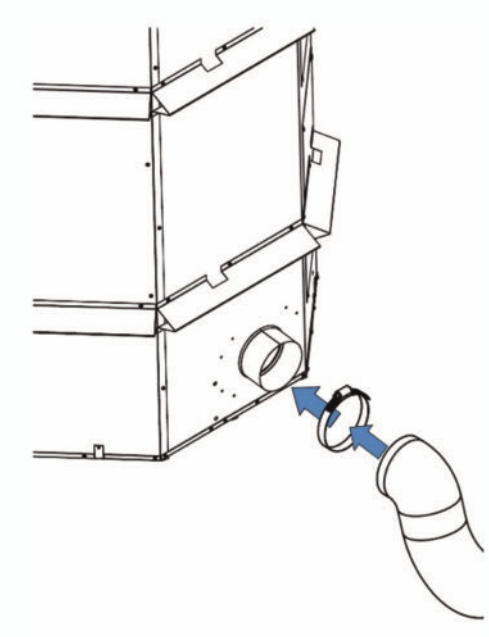
a) To install the air intake diffusers, locate the holes (2) on each side of the wood inbuilt.



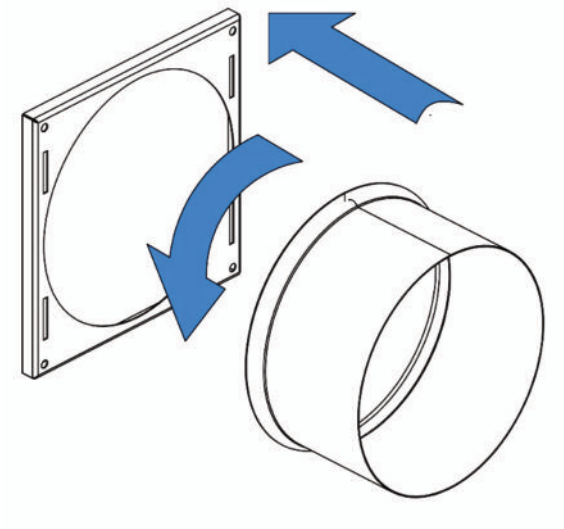
b) Remove the knockout on both side of the wood inbuilt, using pliers. Install the adapter, by aligning the adapter notch with the wood inbuilt fresh air inlet notch and turn until the flange is fully inserted. The adapter is well in place when its flange is completely inserted, and the adapter can rotate freely.



c) Install one end of the duct to the wood inbuilt adapter using an adjustable clamp.



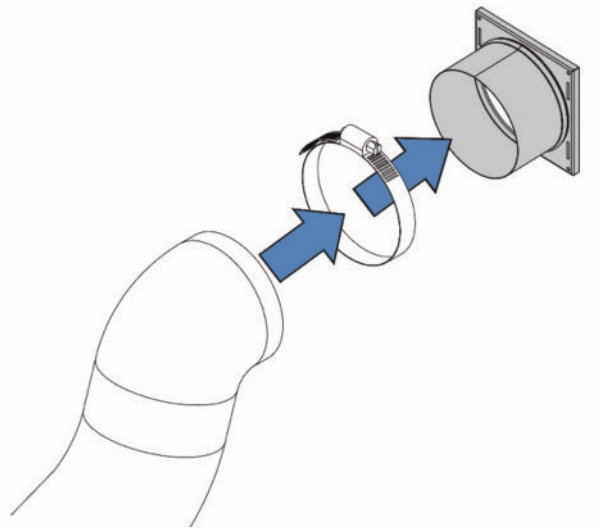
d) Install the air diffuser adapter on the diffuser inner plate.



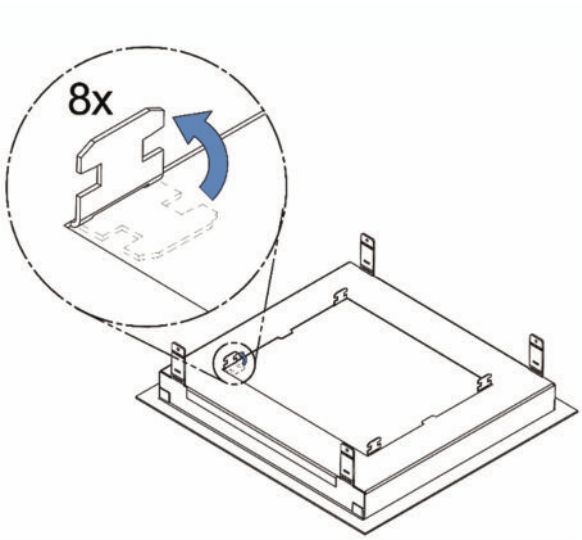
INSTALLATION (Continued)

A. Air Intake Diffusers Ducts - Assembly and Installation

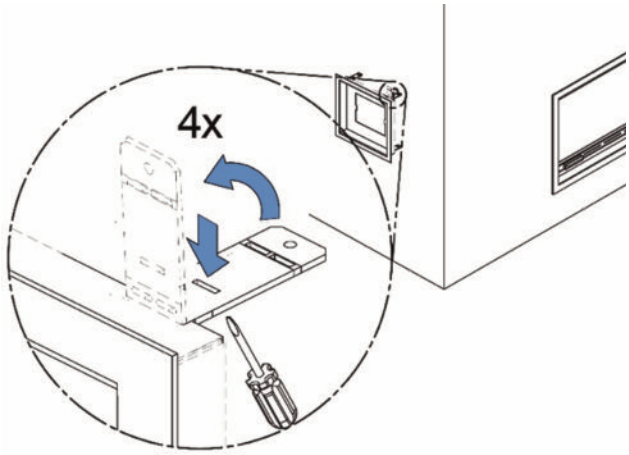
e) Secure the other end of the duct to the air intake diffuser inner plate using a second adjustable clamp.



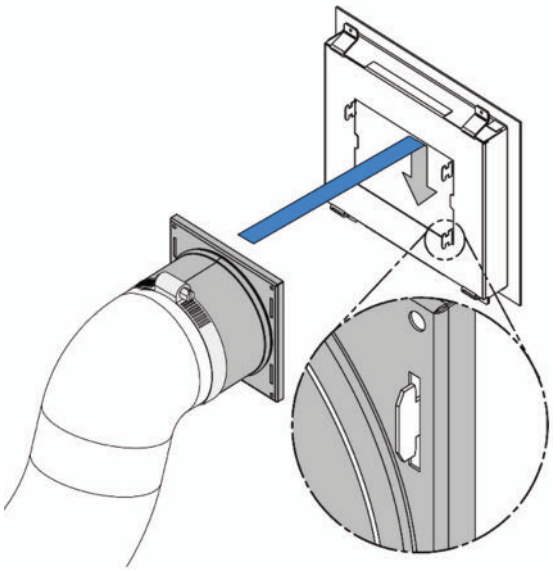
f) Bend the inside tabs on both air diffuser.



g) Cut a hole on each side of the wood inbuilt enclosure following the dimensions mentioned above. Install both air diffuser and, using a flat screwdriver, bend the four tabs to secure the diffusers in place inside the wall.



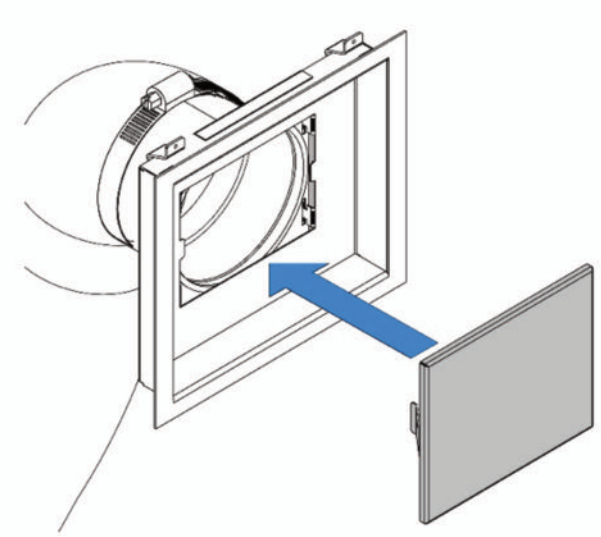
h) Reach inside the air diffuser and grab the inner plate with the duct already installed on it. Hook it on the air diffuser plate.



INSTALLATION (Continued)

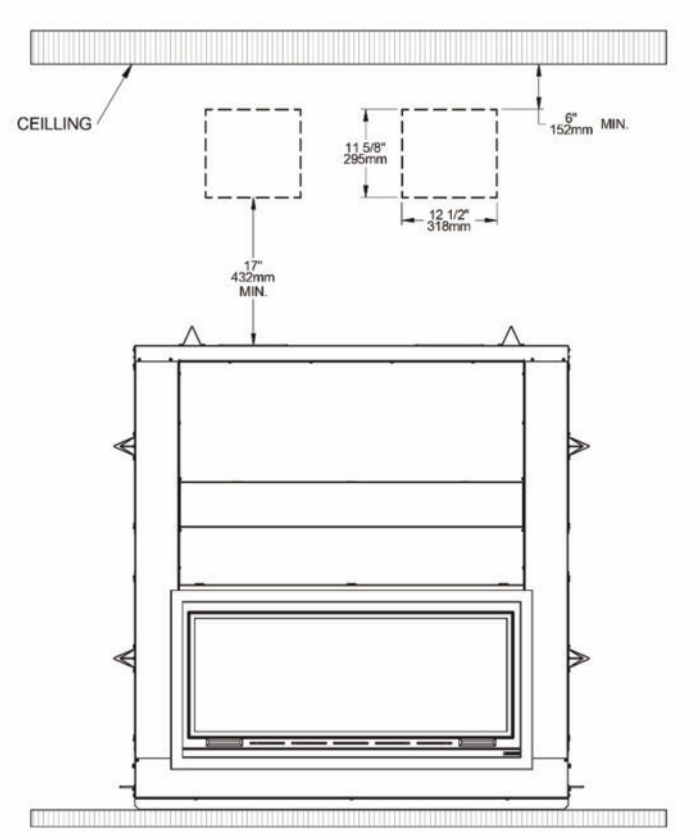
A. Air Intake Diffusers Ducts - Assembly and Installation

i) Install the decorative plate by pressing on both sides of the plate.



B. Hot Air Diffusers Ducts

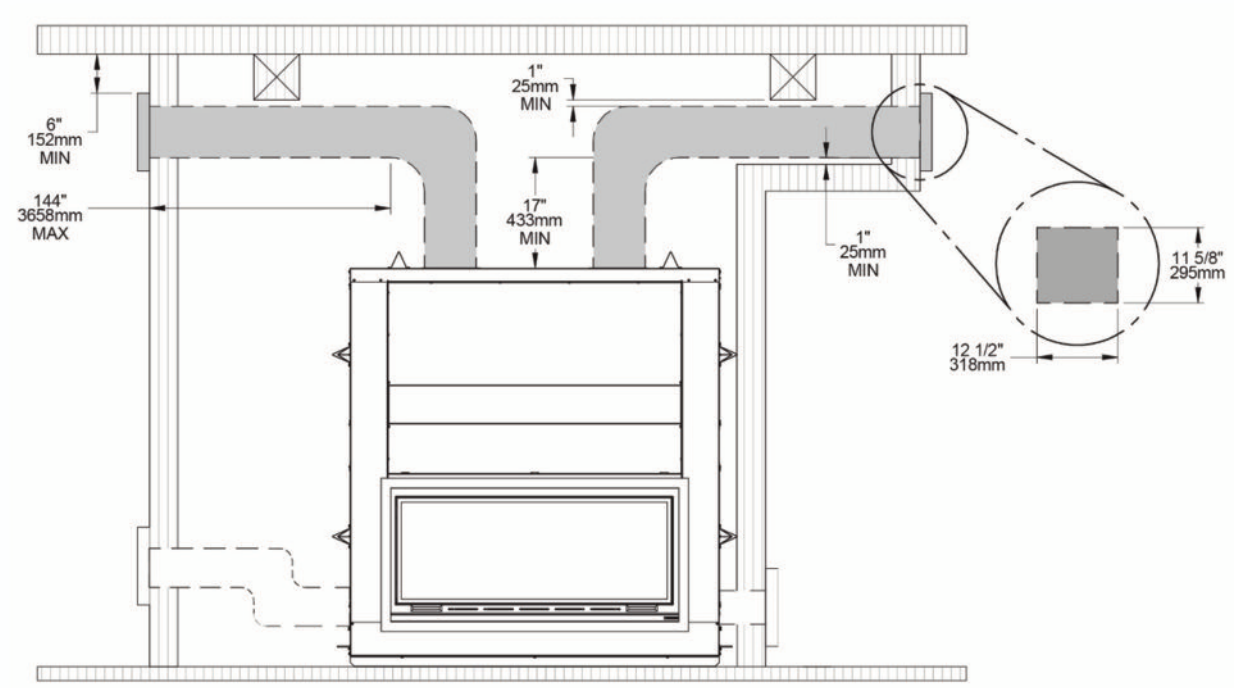
Ducts for the hot air diffusers must be 200 mm in diameter, flexible or rigid (rigid is highly recommended), insulated or not, with a 25 mm clearance to heat sensitive materials. Total length of duct must not exceed 4 meters. Hot air diffusers must have a 152 mm clearance to heat sensitive materials. Hot air diffuser's framing should be 318 mm X 295 mm.



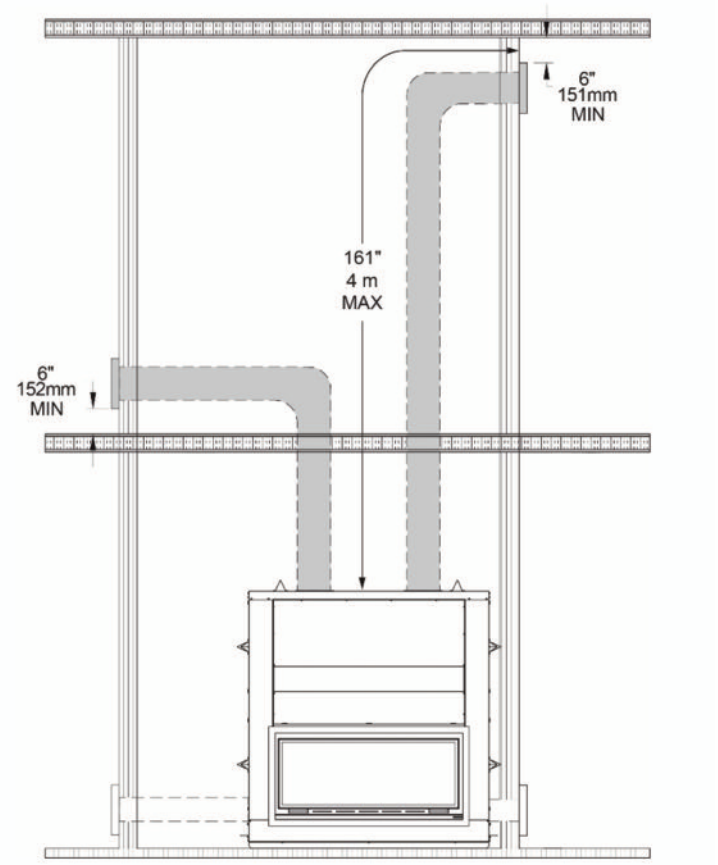
INSTALLATION (Continued)

B. Hot Air Diffusers Ducts

Refer to the image below for ducting heat to other rooms on the same floor.



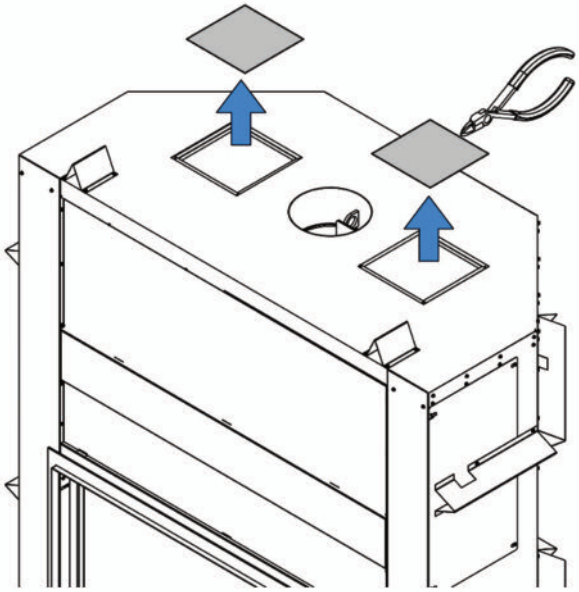
Refer to the image below for ducting heat to an upper floor.



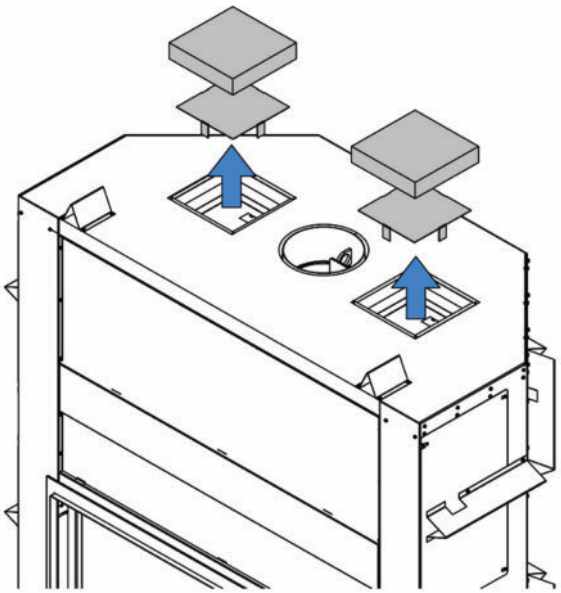
INSTALLATION (Continued)

B. Hot Air Diffusers Ducts - Assembly and Installation

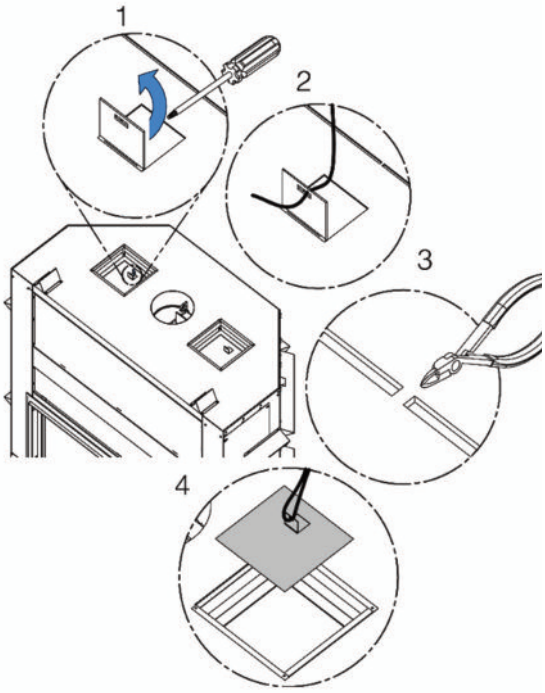
a) Remove the top knockouts with a pair of pliers.



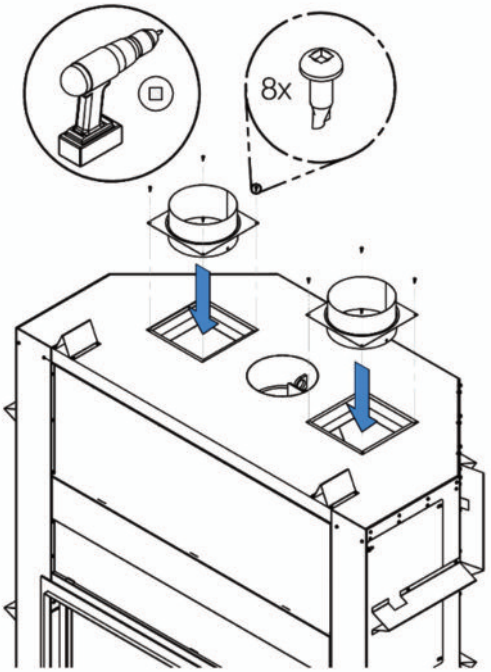
b) Remove the insulation and the bottom plate.



c) Pull on the second bottom plate with a screwdriver. Pass a thread in the plate and remove the plate with pliers. Pull on the thread and put the plate away.



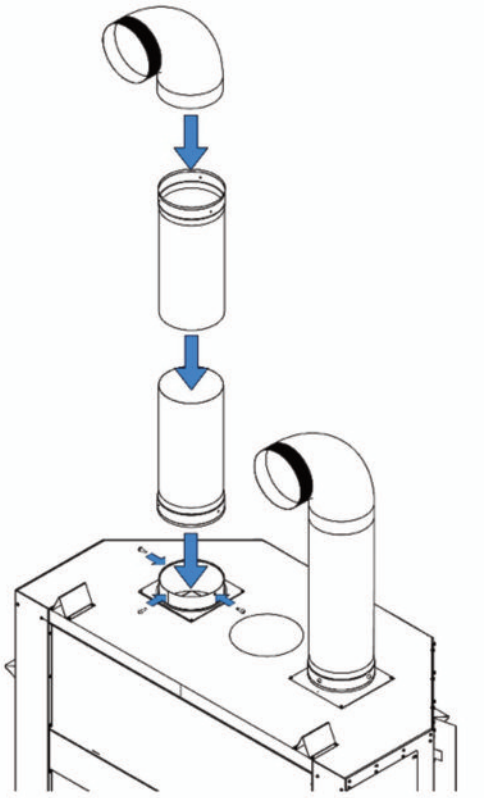
d) Install both adapter, which can be found in the wood inbuilt firebox.



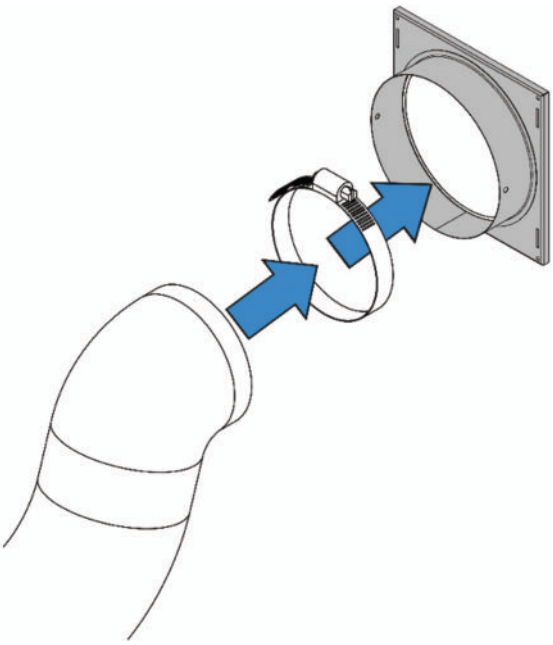
INSTALLATION (Continued)

B. Hot Air Diffusers Ducts - Assembly and Installation

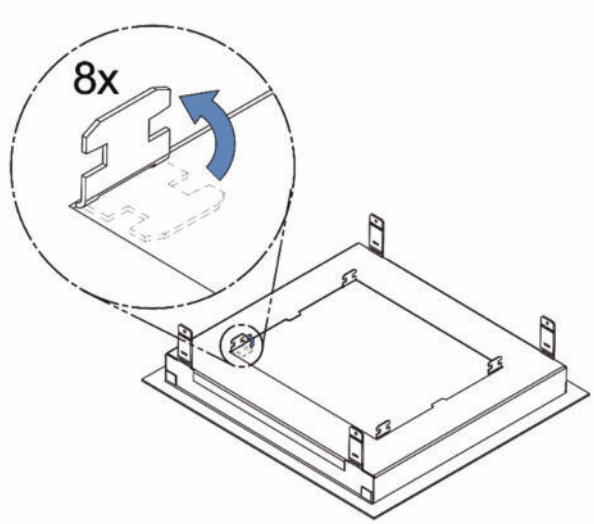
e) Install the ducts on the adapter.



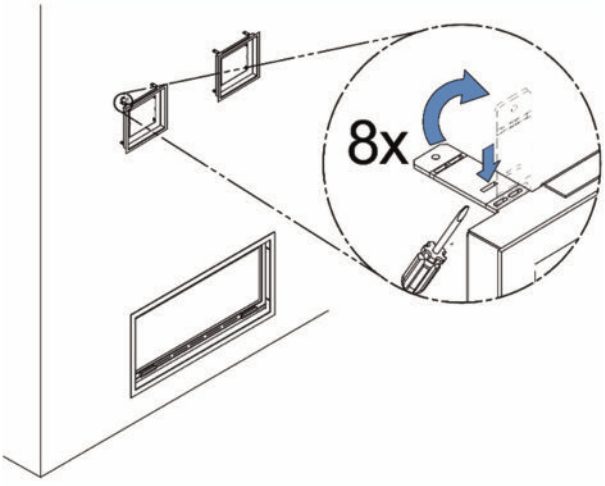
f) Secure the other end of the duct to the air intake diffuser inner plate, using an adjustable clamp, if necessary.



g) Bend the inside tabs on both air diffuser.



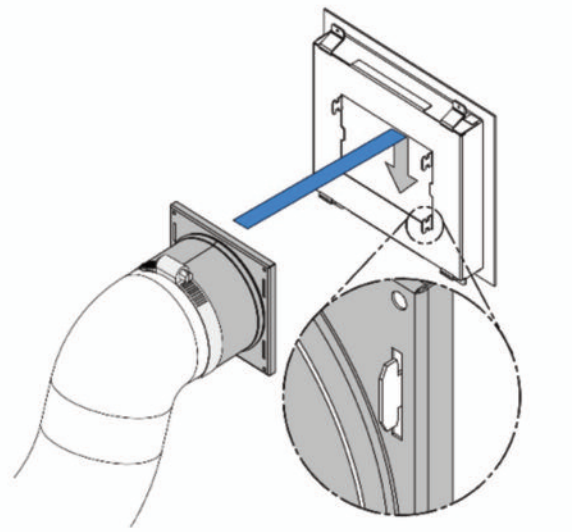
h) Cut two holes at the chosen location following the dimensions mentioned above. Install both air diffuser and, using a flat screwdriver, bend the four tabs to secure the diffusers in place inside the wall.



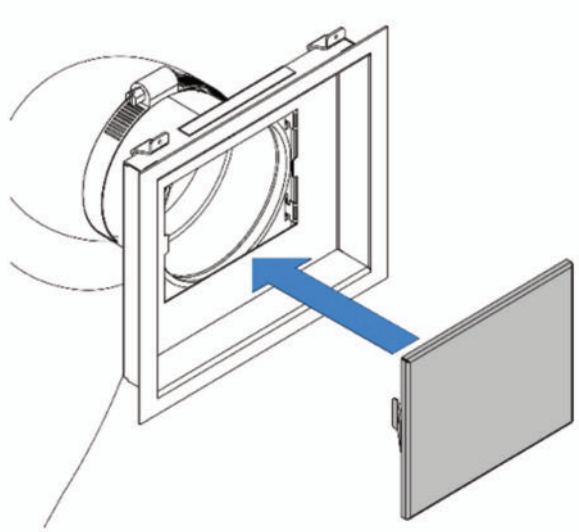
INSTALLATION (Continued)

B. Hot Air Diffusers Ducts - Assembly and Installation

i) Reach inside the air diffuser and grab the inside plate with the pipe already installed on it. Hook it on the air diffuser plate.



j) Install the decorative plate by pressing on both sides of the plate.

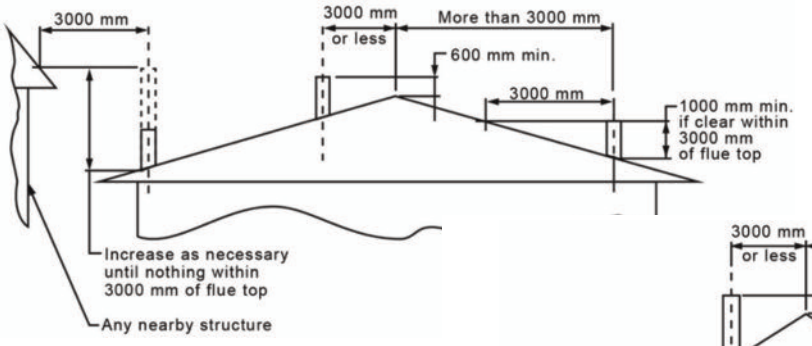


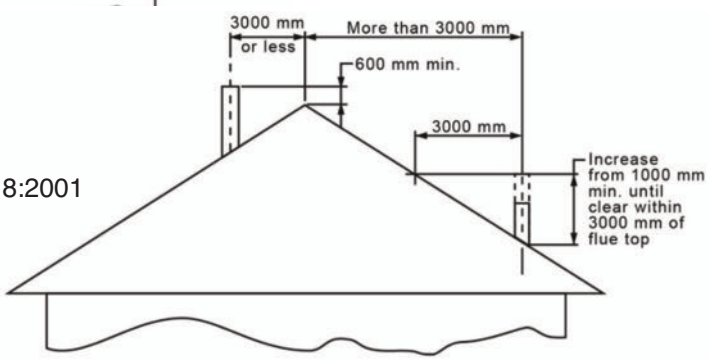
THE FLUE SYSTEM

General

The flue system acts as the engine that drives your wood heating system. Even the best zero clearance wood inbuilt will not function safely and efficiently as intended if it is not connected to a suitable flue system. The heat in the flue gases that pass from the zero clearance wood inbuilt into the flue system is not waste heat. This heat is what the flue system uses to make the draft that draws in combustion air, keeps smoke inside the zero clearance wood inbuilt and safely vents exhaust to outside. You can think of heat in the flue gas as the fuel the flue system uses to make draft.

Minimum Flue System Height





Flue heights and lengths from AS/NZS 2918:2001

THE FLUE SYSTEM (Continued)

Minimum Flue System Height

The top of the flue system should be tall enough to be above the air turbulence caused when wind blows against the house and its roof.

The flue exit shall be located outside the building in which the appliance is installed so that:

a) The flue shall extend not less than 4.6 m above the top of the floor protector;

b) The minimum height of the flue system within 3 m distance from the highest point of the roof shall be 600 mm above that point;

c) The minimum height of the flue system further than 3 m from the highest point of the roof shall be 1000 mm above roof penetration;

d) No part of any building lies in or above a circular area described by a horizontal radius of 3 m about the flue system exit.

Suitable Flue Systems

Your zero clearance wood inbuilt will provide optimum efficiency and performance when connected to a 200 mm diameter flue.

The Relationship Between the Flue System and the House

Because the flue system is the engine that drives the wood heating system, it must have the right characteristics. The signs of bad system design are cold backdrafting when there is no fire in the zero clearance wood inbuilt, slow kindling of new fires, and smoke roll-out when the door is opened for loading.

OPERATION AND MAINTENANCE

Safety Information

WARNING

- ANY MODIFICATION OF THE APPLIANCE THAT HAS NOT BEEN APPROVED IN WRITING BY THE TESTING AUTHORITY IS CONSIDERED AS BREACHING AS/NZS 4013.
- DO NOT USE FLAMMABLE LIQUIDS OR AEROSOL TO START OR REKINDLE THE FIRE.
- DO NOT USE FLAMMABLE LIQUIDS OR AEROSOL IN THE VICINITY OF THIS APPLIANCE WHEN IT IS OPERATING.
- DO NOT STORE FUEL WITHIN HEATER INSTALLATION CLEARANCES.
- WHEN OPERTAING THIS APPLIANCE AS AN OPEN FIRE, USE A FIRE SCREEN.
- DO NOT USE MATERIALS OTHER THAN THOSE LISTED IN THE REPLACEMENT PARTS SECTION DURING INSTALLATION AS THEY MAY BE SAFETY HAZARDS AND A FIRE COULD RESULT.
- NEVER OVERFIRE YOUR WOOD INBUILT. IF ANY PART OF THE WOOD INBUILT STARTS TO GLOW RED, OVER FIRING IS HAPPENING.

OPERATION AND MAINTENANCE (Continued)

Safety Information

CAUTION

- USING A ZERO CLEARANCE WOOD INBUILT WITH CRACKED OR BROKEN COMPONENTS, SUCH AS GLASS OR FIREBRICKS OR BAFFLES MAY PRODUCE AN UNSAFE CONDITION AND MAY DAMAGE THE ZERO CLEARANCE WOOD INBUILT.
- THIS APPLIANCE SHOULD BE MAINTAINED AND OPERATED AT ALL TIMES IN ACCORDANCE WITH THESE INSTRUCTIONS.
- THE USE OF SOME TYPES OF PRESERVATIVES-TREATED WOOD AS A FUEL CAN BE HASARDEOUS.
- DO NOT OBSTRUCT AIR INLETS. THIS ZERO CLEARANCE WOOD INBUILT NEEDS AIR FOR ITS GOOD OPERATION.
- DO NOT BLOCK THE HOT AIR VENTS TO THE ZERO CLEARANCE WOOD INBUILT AS THIS WILL CAUSE THE ZERO CLEARANCE WOOD INBUILT TO OVERHEAT.

- Hot while in operation, keep children, clothing and furniture away. Contact may cause skin burns. Gloves may be needed for zero clearance wood inbuilt operation.
- Operate only with glass door fully closed or fully open with screen door always closed. If door is left partially open, gas and flame may be drawn out of the opening, creating risks from both fire and smoke. Never leave the zero clearance wood inbuilt unattended when in use.
- This zero clearance wood inbuilt has been tested for use with open door in conjunction with screen door always closed. The screen door may be opened only during lighting procedures or reloading. Always close the screen door after ignition.
- Do not install the zero clearance wood inbuilt outdoors.
- Do not store fuel within heater minimum installation clearances.
- Burn seasoned hardwood only.
- Do not burn:
  - Garbage of any kind,
  - Coal or charcoal,
  - Treated, painted or coated wood,
  - Plywood or particle board,
  - Fine paper, coloured paper or cardboard,
  - Salt water driftwood,
  - Manufactured logs containing wax or chemical additives,
  - Railroad ties or
  - Liquids such as kerosene or diesel fuel to start a fire.
- This appliance should be maintained and operated at all times in accordance with these instructions.
- Do not elevate the fire by means of grates, and irons or other means.

OPERATION AND MAINTENANCE (Continued)

Fuel

What is Good Firewood?

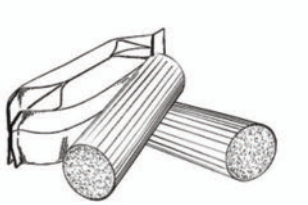
Good firewood has been cut to the correct length for the wood fire, split to a range of sizes and stacked in the open until its moisture content is reduced to 11 to 16 per cent.

Tree Species

The tree species the firewood is produced from is less important than its moisture content. The main difference in firewood from various tree species is the density of the wood. Hardwoods such as gums, Manuka or ironbark are denser than softwoods. Hard wood will produce long-lasting coal beds combined to more heat and longer burn cycles.

Manufactured Logs

Do not burn manufactured logs made of wax impregnated sawdust or logs with any chemical additives. Manufactured logs made of 100% compressed sawdust can be burned, but use caution in the number of these logs burned at one time. Start with one manufactured log and see how the wood inbuilt reacts.



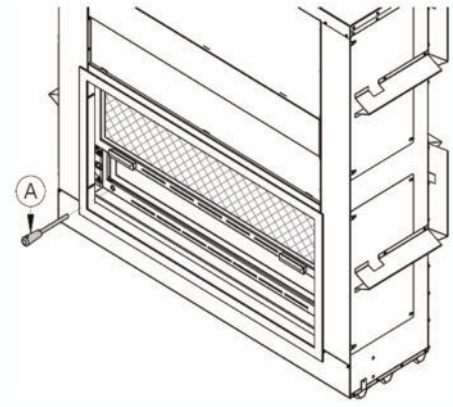
Operating Your Zero Clearance Wood Inbuilt

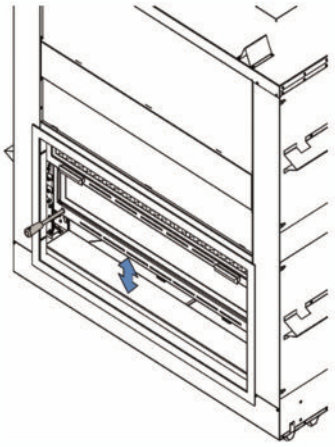
CAUTION

- WHEN IN USE, THE FIREPLACE CHIMNEY DAMPER MUST BE SET IN THE FULLY OPEN POSITION.

Opening the Glass Door

For transportation purposes, you will find the removable handle (A) that allows you to open the glass door of the zero clearance wood inbuilt inside the combustion chamber. Simply insert it into the opening, in the lower left corner of the glass door. This handle has to be removed when the zero clearance wood inbuilt is firing.





Your First Fires

Two things will happen as you burn your first few fires; the paint cures and the internal components of the zero clearance wood inbuilt are conditioned.

OPERATION AND MAINTENANCE (Continued)

Your First Fires

As the paint cures, some of the chemicals vaporize. The vapours are not poisonous, but they do smell bad. Fresh paint fumes can also cause false alarms in smoke detectors. So, when you first light your zero clearance wood inbuilt, be prepared by opening doors and/or windows to ventilate the house.

As you burn hotter and hotter fires, more of the painted surfaces reach the curing temperature of the paint. The smell of curing paint does not disappear until you have burned one or two very hot fires.

Burn one or two small fires to begin the curing and conditioning process. Then build bigger and hotter fires until there is no longer any paint smell from the zero clearance wood inbuilt.

Building a Fire

To start a fire, place several crumpled up balls of newspaper in the firebox behind the andiron. Place small dry pieces of kindling on top of the paper, criss-crossing the kindling so that there are air spaces in between. Open the chimney damper fully and light the newspaper. Once the newspaper and the kindling are well ignited, you may close the glass door for a few minutes so that the firebox and chimney of your fireplace can heat up enough for optimal operation. When this heating period is done and the kindling fire is well established, you can operate the fireplace with the fire screen or the glass door depending on your preference and add wood as needed.

The unit will burn best with 2-3 pieces of cordwood spaced 25 mm to 51 mm apart and allowing air to get under the fuel. Criss-crossing or arranging the fuel so that air can get underneath, will help the fire to get started easily.

WARNING

- NEVER PUT CORDWOOD IN FRONT OF THE ANDIRONS.

CAUTION

- THE CHIMNEY DAMPER MUST BE KEPT FULLY OPEN UNTIL THE WOOD INBUILT HAS COOLED DOWN.

Maintaining the Fire

Once the wood has been consumed (or partially consumed) and you have obtained a good bed of embers, you can reload the unit. In order to do so, proceed by opening the glass door or the screen door for you to have enough free space to reload safely.

Your BF16 will work best if a thick bed of hot embers is maintained in the bottom of the firebox and a minimum of two large pieces of seasoned fuel are added. Combustion efficiency is largely related to establishing a hot ember bed, and hot firebox temperatures. The quicker the fireplace and chimney (flue) get up to normal operating temperatures, the better. Use a poker to make an air channel in the embers below the wood. This will allow air to flow under the wood for a more efficient burn.

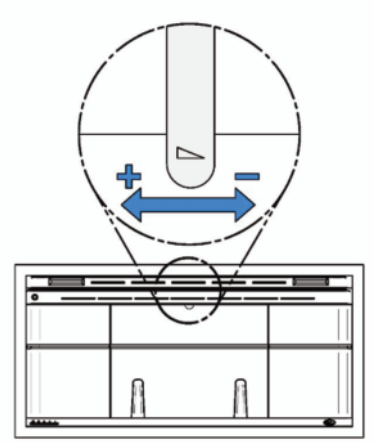
Ash Removal

Ashes should be placed in a tightly covered metal container, they should be taken outside immediately. 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. Ashes normally contain some live charcoal that can stay hot for several days. 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. Other waste should not be placed in this container.

OPERATION AND MAINTENANCE (Continued)

Chimney Damper

When in use, the fireplace chimney damper must be set in the fully open position (Position +).The chimney damper should be in the closed position (Position -) when there has not been any wood or embers in the fireplace for a few hours. This will minimize cold air leakage from the chimney.



Maintaining Your Wood Heating System

Plated Finish Maintenance

If your appliance has a plated finish, use a metal polish and a soft cloth to clean it. Do not use abrasives such as steel wool, steel pads or an abrasive cleaner as they may scratch the finish.

Glass Door Cleaning

Under normal conditions, your door glass should stay relatively clear. If your firewood is dry enough and you follow the operating instructions in this manual, a whitish, dusty deposit will form on the inside of the glass after a week or so of use. This is normal and can be easily removed when the zero clearance wood inbuilt is cool by wiping with a damp cloth or paper towel and then drying.

Never try to clean the glass when the zero clearance wood inbuilt is hot.

Do not use abrasives to clean your zero clearance wood inbuilt's door glass.

Cleaning and Painting the Zero Clearance Wood Inbuilt

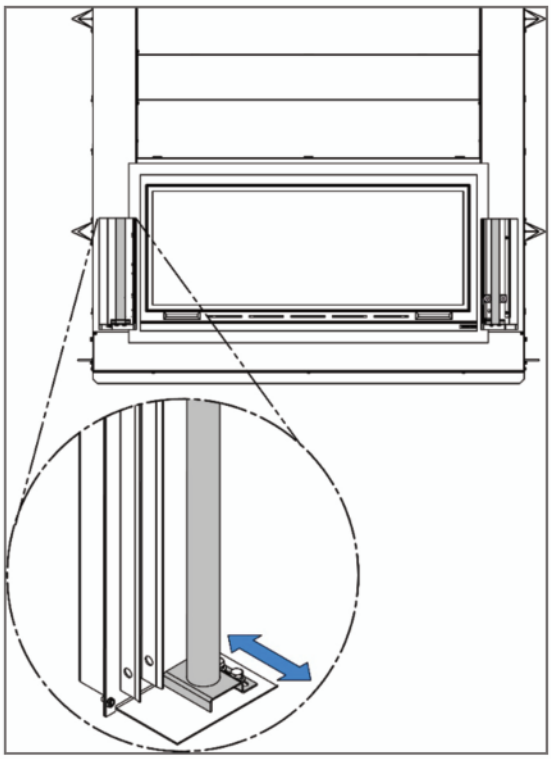
Do not attempt to clean or paint the zero clearance wood inbuilt when the unit is hot. Painted surfaces can be wiped down with a damp cloth.

If the paint becomes scratched or damaged, you can give your zero clearance wood inbuilt a brand new look by repainting it with heat-resistant paint. Before painting, roughen the surface with fine sand paper, wipe it down to remove dust, and apply two thin coats of paint. For best results, use the same paint that was originally used on the zero clearance wood inbuilt, which is available in spray cans. See your dealer for details.

OPERATION AND MAINTENANCE (Continued)

Door Adjustment

Screen door



1. Lift the screen and the glass door completely to the top.
2. Unscrew one of the two bolts which are located in the lower right corner of the screen door.
3. Loosen the other bolt to allow adjustments of the door.
4. Move down the screen door to the bottom.
5. To adjust, move the door to the left or right as needed.
6. Without changing the performed adjustment, move up about 6” the screen door.
7. Tighten the 2 bolts.

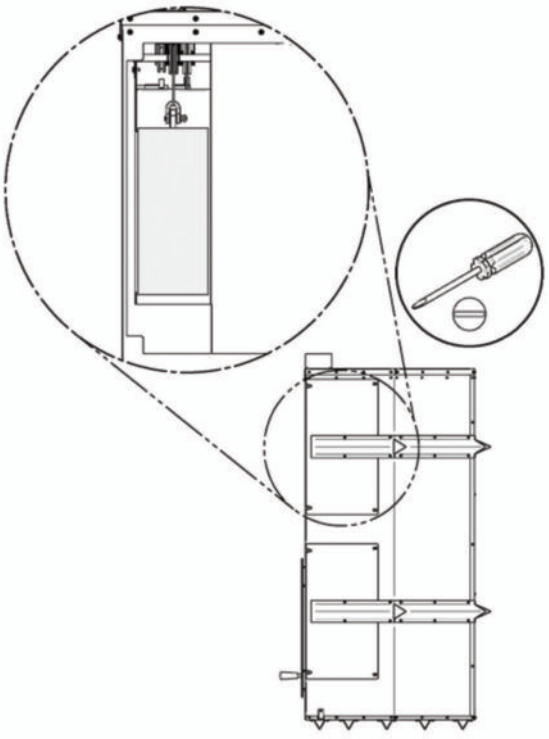
Glass door

1. Move the screen door completely to the top.
2. Move down the glass door to the bottom.
3. Unscrew the two bolts which are located in the lower left corner of the door.
4. To adjust, move the door to the left or right as needed.
5. Tighten the 2 bolts.

Access Door for Counterweight

It is possible to access the zero clearance wood inbuilt counterweight by opening access doors on each side of the zero clearance wood inbuilt.

NOTE : Do not lubricate pulleys.



OPERATION AND MAINTENANCE (Continued)

Refractory Panel Replacement

WARNING

DO NOT USE THE WOOD INBUILT WITH A BROKEN OR MISSING REFRACTORY PANEL.

When replacing the refractory panels, it is possible that the insulation paper behind them detached from the walls of firebox. You must properly position the insulation paper or get a new one from your dealer before putting the new refractory panels.

Replacing the Glass

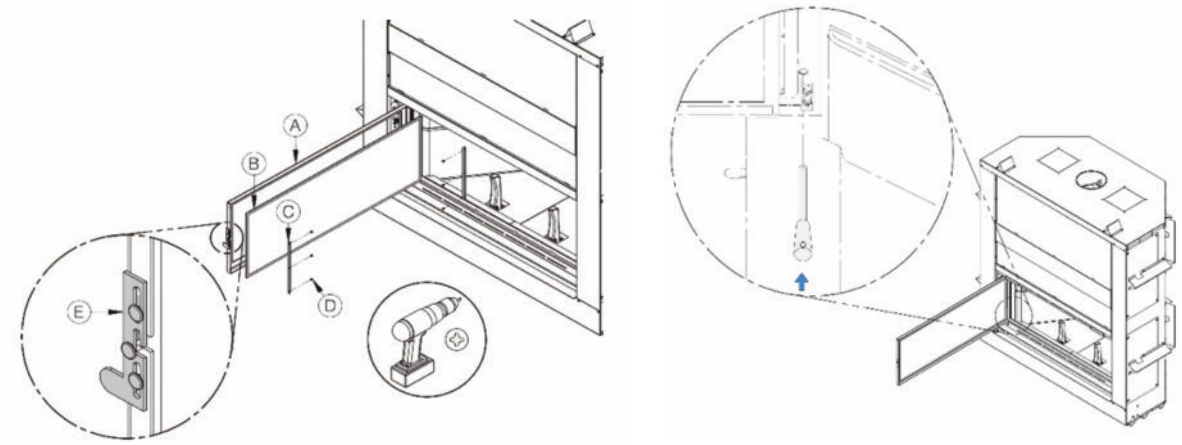
The glass used in the Caldor is ceramic glass 4 mm thick having dimensions of: 315 mm x 1036 mm and tested to reach temperatures up to 1400 °F. If the glass breaks, it must be replaced with one having the same specification. Contact your dealer to obtain a genuine replacement part.

WARNING

- TEMPERED GLASS OR ORDINARY GLASS WILL NOT WITHSTAND THE HIGH TEMPERATURES OF THE CALDOR.
- DO NOT ABUSE THE GLASS DOOR BY SLAMMING IT AGAINST THE WOOD INBUILT.
- DO NOT OPERATE THE WOOD INBUILT WITH A CRACKED OR BROKEN GLASS.

WHEN YOU REMOVE THE GLASS FROM ITS FRAME, DUE TO ITS WEIGHT, THE DOOR WILL SEEK TO GO UPWARDS QUICKLY.

1. Open the glass door (A) by lifting the lock located (E) on right side of the glass door.
2. Insert the removable handle that allows you to open the zero clearance wood inbuilt's glass door, in the bottom left corner of the door frame (see below).
3. Remove the 8 screws (D) that secure the 4 glass retainers (C).
4. Remove all debris from the frame.
5. Use only 4 mm ceramic glass.
6. Slide the new window (B) into the frame (A) and fasten it in place with the screws removed earlier (D) and the glass retainers (C).
7. Handle the glass with care to avoid injury.



OPERATION AND MAINTENANCE (Continued)

Flue and Flue Liner Maintenance

Why Flue System Cleaning is Necessary

Wood smoke can condense inside the flue and flue system, forming a combustible deposit called creosote. If creosote is allowed to build up in the flue system, it can ignite when a hot fire is burned in the wood inbuilt and a very hot fire can progress to the top of the flue system. Severe flue system fires can damage even the best flue systems. Smouldering, smoky fires can quickly cause a thick layer of creosote to form. When you avoid smouldering so the exhaust from the flue system is mostly clear, creosote builds up more slowly. Your new wood inbuilt has the right characteristics to help you to burn clean fires with little or no smoke, resulting in less creosote in the flue system.

How Often Should You Clean the Flue System?

It is not possible to predict how much or how quickly creosote will form in your flue system. It is important, therefore, to check the build-up in your flue system monthly when getting used to the new wood inbuilt until you determine the rate of creosote formation. Even if creosote forms slowly in your system, the flue system should be cleaned and inspected at least once each year.

Cleaning the Flue System

Flue system cleaning can be a difficult and dangerous job. If you don't have experience cleaning flue systems, you might want to hire a professional flue system sweep to clean and inspect the system for the first time. After having seen the cleaning process, you can decide if it is a job you would like to take on.

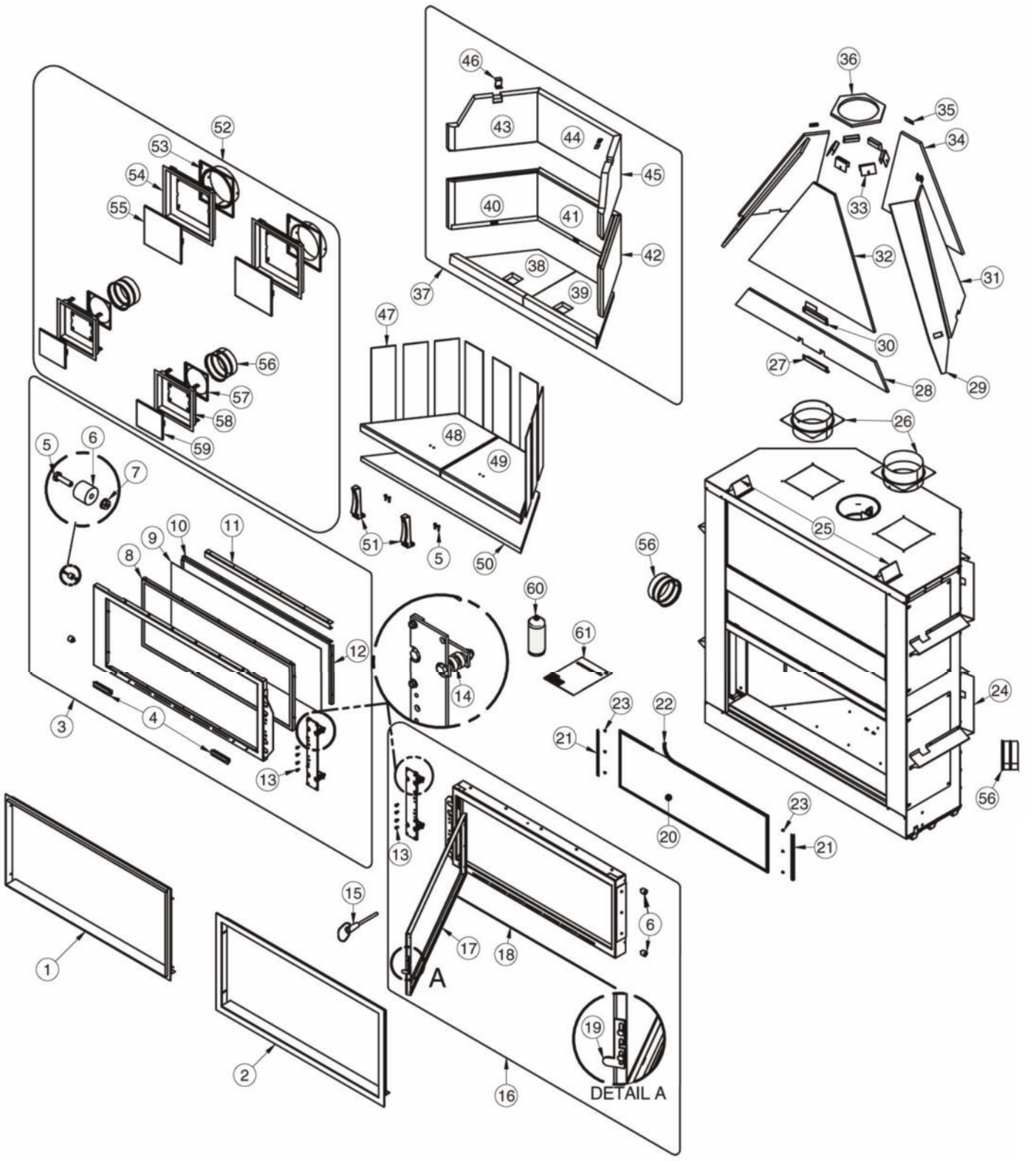
The most common equipment used are fiberglass rods with threaded fittings and stiff plastic brushes. The brush is forced up and down inside the flue system to scrub off the creosote. The flue system should be checked regularly for creosote build-up.

Flue System Fire

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

1. Close the zero clearance wood inbuilt door;
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 like 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 flue are not igniting the roof;
6. Do not use the zero clearance wood inbuilt again until your flue system and zero clearance wood inbuilt have been inspected by a qualified flue system sweep or a Fire Department Inspector.

EXPLODED DIAGRAM AND PARTS LIST



EXPLODED DIAGRAM AND PARTS LIST (Continued)

IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your zero clearance wood inbuilt, please provide the model number and the serial number. We reserve the right to change parts due to technology upgrade or availability. Contact an authorized dealer to obtain any of these parts. Never use substitute materials. Use of non-approved parts can result in poor performance and safety hazards.

#	Item	Description	Qty
1	SFA0085	BLACK STRAIGHT NARROW TRIM FOR BF16	1
2	SFA0087	BLACK STRAIGHT MASONRY TRIM FOR BF16	1
3	SE63936	FIRE SCREEN DOOR ASSEMBLY	1
4	30728	BLACK WOODEN DOOR HANDLE	2
5	30109	BOLT HEX 1/4 - 20 X 1"	9
6	30585	SLIDING DOOR GUIDE	4
7	30220	FLANGED LOCKNUT 1/4-20	4
8	PL63918	SCREEN FRAME	1
9	PL63937	DOOR SCREEN (16.125"SWD x 42.375"LWD)	1
10	PL63537	TOP OR BOTTOM FIRESCREEN RETAINER	2
11	PL63570	TOP FIRE SCREEN DOOR STIFNER	1
12	PL63538	LEFT OR RIGHT FIRESCREEN RETAINER	2
13	30060	THREAD-CUTTING SCREW 1/4-20 X 1/2" F HEX STEEL SLOT WASHER C102 ZINC	8
14	30555	DOOR MECHANISM BEARING	8
15	SE64628	REMOVABLE WOODEN HANDLE WITH ROD	1
16	SE63929	GLASS DOOR FRAME ASSEMBLY	1
17	PL63930	GLASS FRAME	1
18	AC06815	BLACK GASKET AND SILICONE KIT 3/16" X 5'	1
19	PL64542	GLASS DOOR LOCK	1
20	SE63940	CERAMIC GLASS WITH GASKET 13 13/16" X 42"	1
21	PL63914	GLASS RETAINER	2
22	AC06400	3/4" (FLAT) X 6' BLACK SELF-ADHESIVE GLASS GASKET	1
23	30354	THREAD SCREW 8-32 X 5/16" TYPE F TRUSS QUADREX STEEL C1022 ZINC	6
24	PL63951	CLEARANCE SPACER	4
25	PL63581	TOP SPACER	2
26	SE66647	ANCHOR PLATE OR COUPLER 8"	2
27	PL63576	SMOKE FUNNEL INSULATION BOTTOM SUPPORT	1
28	21373	FRONT BOTTOM SMOKE FUNNEL INSULATION	1
29	21372	FRONT CORNER SMOKE FUNNEL INSULATION	2
30	PL63575	SMOKE FUNNEL INSULATION MIDDLE SUPPORT	1
31	21371	SIDE SMOKE FUNNEL INSULATION	2
32	21374	FRONT TOP SMOKE FUNNEL INSULATION	1
33	PL64619	SMOKE FUNNEL INSULATION TOP SUPPORT	6
34	21368	REAR SMOKE FUNNEL INSULATION	1
35	PL64621	SMOKE FUNNEL INSULATION TOP REAR SUPPORT	1
36	21370	TOP SMOKE FUNNEL INSULATION	1
37	VA16071M	CONTEMPORARY MOULDED REFRACTORY BRICK PANELS	1
38	22199	LEFT FLOOR REFRACTORY PANEL	1
39	22207	RIGHT FLOOR REFRACTORY PANEL	1

EXPLODED DIAGRAM AND PARTS LIST (Continued)

#	Item	Description	Qty
40	22212	LEFT BOTTOM REFRACTORY PANEL	1
41	22214	BACK BOTTOM REFRACTORY PANEL	1
42	22213	RIGHT BOTTOM REFRACTORY PANEL	1
43	22248	FP16 LEFT TOP REFRACTORY PANEL	1
44	22211	BACK TOP REFRACTORY PANEL	1
45	22247	TOP RIGHT REFRACTORY PANEL	1
46	PL64601	REFRACTORY PANEL RETAINER	2
47	21394	SIDE AND REAR REFRACTORY PANEL INSULATION	9
48	PL63952	LEFT DOUBLE BOTTOM	1
49	PL63953	RIGHT DOUBLE BOTTOM	1
50	21304	FLOOR REFRACTORY INSULATION	1
51	VA7070	PAINTED CAST IRON ANDIRON	1
52	SFA0086	AIR DIFFUSER KIT	1
53	SE63978	REAR GRILL CONNECTOR	2
54	SE63976	8" TROMPE L'OEIL GRILL	2
55	PL63979	FRONT PANEL	2
56	PL63985	6" SHORT ADAPTATOR	2
57	PL63983	ATTACHMENT PLATE	2
58	SE63980	6" TROMPE L'OEIL GRILL	2
59	PL63984	FRONT PANEL	2
60	AC05963	METALLIC BLACK STOVE PAINT - 85 g (3oz) AEROSOL	1
61	SE45913	REAL FLAME BF16 FIREPLACE INSTRUCTIONS MANUAL KIT	1

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