



FILIOFOCUS 1600 WALL VERSION

DESIGN INSTALLATION & OPERATING MANUAL



Tested by OMNI-Test Laboratories, Inc. and approved to
UL 737-2011 And ULC S627-00

US EPA exempt

Report Number: 0304WF010S

This document was packed with the appliance.
KEEP THESE INSTRUCTIONS FOR FUTURE USE



Table of contents

Introduction

Introduction	2
Specifications	3
■ CHARACTERISTICS	3
■ ROOF OUTLET REQUIREMENT	4
■ CHIMNEY REQUIREMENT	4
■ STRUCTURAL REQUIREMENT	5
■ CONNECTORS	5
■ FRESH AIR INTAKE	5
■ CLEARANCES TO COMBUSTIBLES	6
A. FLOOR PROTECTION	
B. INSULATED BASEPLATE ASSEMBLY DETAILS	
C. CLEARANCES TO BACK WALLS	
D. CLEARANCES TO SIDE WALLS	
E. CLEARANCES TO FLOOR AND CEILING	
Installation	9
■ INCLUDED PARTS, MATERIALS AND REQUIRED TOOLS FOR INSTALLATION	9
■ OPTIONS	9
■ ASSEMBLY DETAILS	9
■ STAINLESS STEEL CHIMNEY SYSTEM: COVER DISC SETUP AND CONNECTIONS	12
Operating instructions	13
■ STORAGE / USE OF FLAMMABLE LIQUIDS	13
■ FIRE-DOGS	13
■ ASHES	13
■ FUEL	14
■ BEFORE LIGHTING YOUR FIRST FIRE	14
■ BUILDING, STARTING AND MAINTAINING THE FIRE	15
■ PROTECTIVE GLOVE AND SEPARABLE HANDLE	16
■ DAMPER OPERATION AND USE	16
Maintenance	17
■ TAKING OUT THE ASHES	17
■ INSPECTION, MAINTENANCE AND CLEANING OF THE CHIMNEY	17
A. REFERING TO FOCUS STEEL FLUE	
B. REFERING TO CHIMNEY PIPE	
■ SURFACES	18
■ DIRECTIONS AND REASONS FOR CLEANING GLASS	18
■ REPLACEMENT PARTS	18
Warranty	19
Annex	20
■ FRECH AIR INTAKE	20
■ HOW TO DETERMINE IF ALTERNATE FLOOR PROTECTION MATERIALS ARE ACCEPTABLE	21
A. PROCEDURE	
B. DEFINITION	

Please read this entire manual before you install and use your focus fireplace. Failure to follow instruction may result in property damage, bodily injury or even death. When this room heater is not properly installed, a house fire may result. To reduce the risk of fire, follow the installation instructions. Contact local building or fire officials about restrictions and installation inspection requirements in your area.

This fireplace is approved for use as a wood burning fireplace or for use with a vented gas log listed to ANSI Z21.60 standard having an input rate of 65,000 Btu or less.

KEEP THIS MANUAL HANDY FOR EASY REFERRAL.

All **WARNING** and **CAUTION** statements will appear in bold font and upper case letters: **THEY SHOULD BE STRICTLY OBSERVED.**

Thank you for choosing focus fireplaces.

Appliance designation: filiofocus 1600 wall version

Manufacturer:

Focus - Atelier Dominique Imbert
Le fort – 34380 Viols le fort – France.

Specifications

▲ CAUTION

DO NOT INSTALL IN A MOBILE HOME. NOT FOR EXTERIOR INSTALLATION!

DO NOT CONNECT TO OR USE IN CONJUNCTION WITH ANY AIR DISTRIBUTION DUCTWORK!

NOT TO INSTALL WITH MASONRY CHIMNEY SYSTEM.

DO NOT INSTALL IN SLEEPING ROOM.

- The authority having jurisdiction (such as municipal building department, fire department, fire prevention bureau, etc.) Should be consulted before installation to determine the need to obtain a permit.
- Using make-shift compromises during installation can cause damage . Such installation is not covered under focus limited warranty.
- When this room heater is not properly installed, a house fire may result. To reduce the risk of fire, follow the installation instructions. Contact local building or fire officials about restrictions and installation inspection requirements in your area.

■ CARACTÉRISTIQUES

• Hearth 44-1/8-inch (1.12 m) diameter; Weight: 374 lbs (170 kg)

• Flue diameter : 8-5/8-inch (219 mm) ; length custom-made

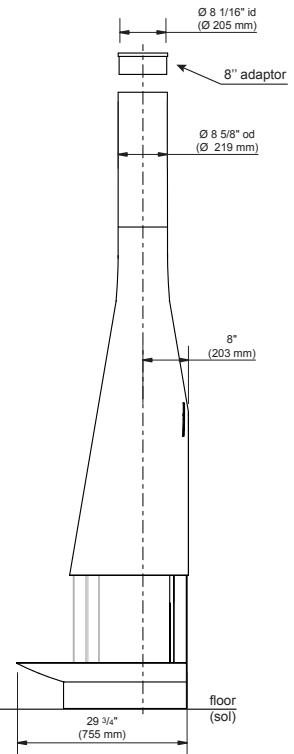
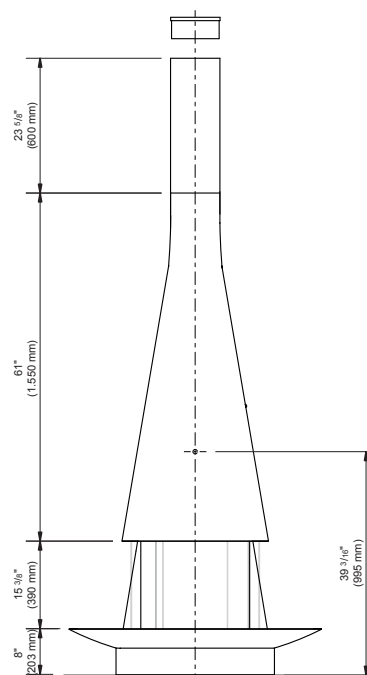
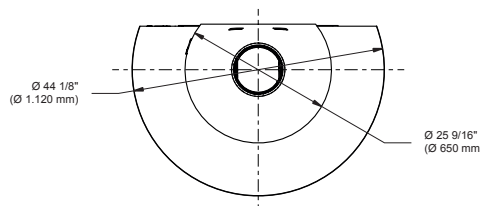
• Flue weight : 35 lbs per foot (16 kg per meter)

• Cover disc with collar weight: 24 lbs (11 kg)

• 1/8-inch (3 mm) thick steel

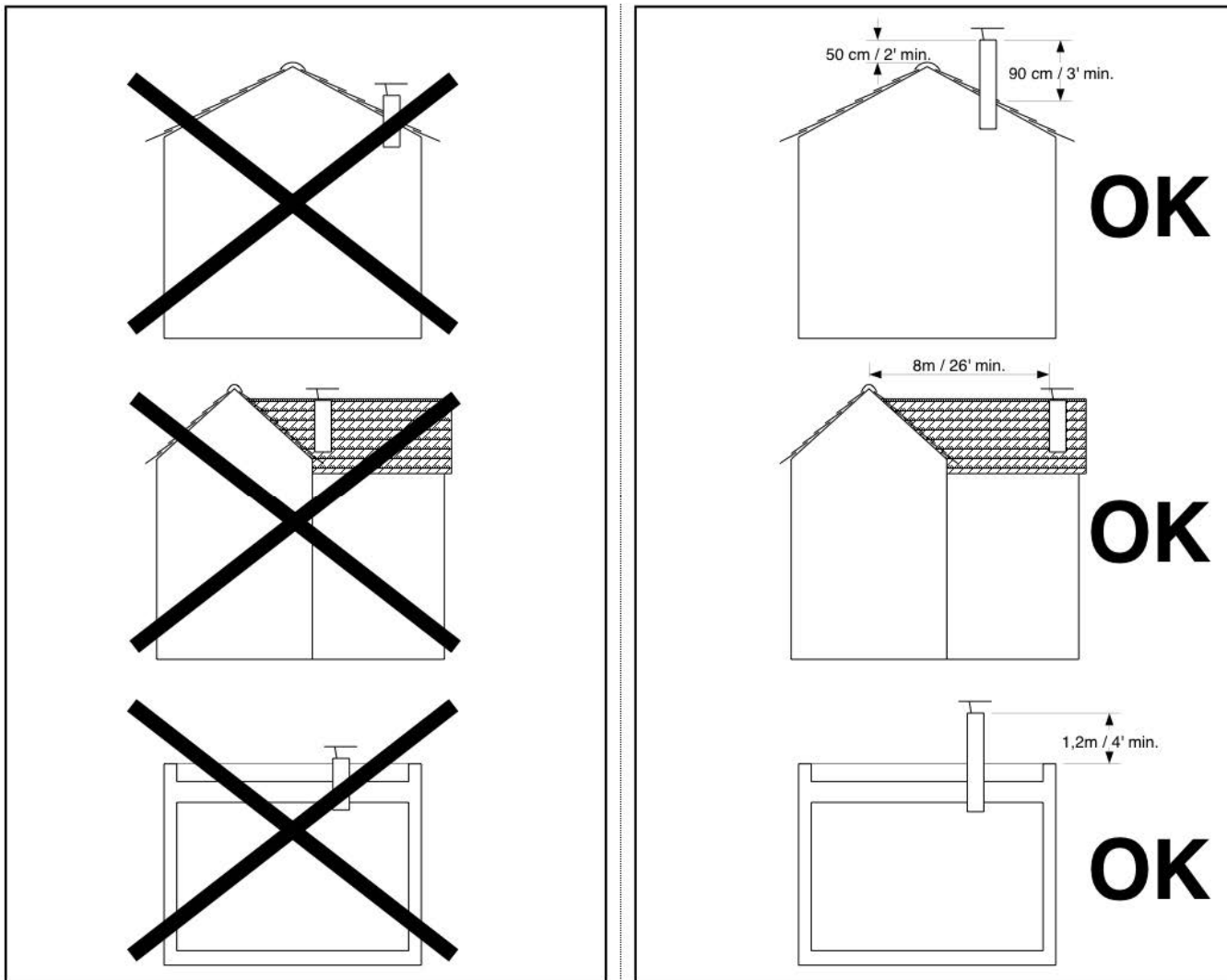
• Insulated baseplate

• High heat resistant matte paint



Specifications

■ ROOF OUTLET REQUIREMENT



■ CHIMNEY REQUIREMENT

Do not connect this unit to a chimney flue serving another appliance !

Filiofocus 1600 wall version requirement: the floor to top of chimney length must be 17 feet minimum (20 feet for an installation less than 3 miles from the ocean or if a 30° elbow is necessary). Elbows should not be more inclined than 30° (USA) or 45° (Canada) from vertical and with maximum number of 2. Maximum inside + outside height : 30 feet.

The filiofocus must be connected to a chimney complying with the requirements for Type HT chimneys in the standard for Chimneys, Factory-built, Residential Type and Building Heating Appliance, UL 103/ULC S629. For example, a class A insulated stainless steel flue chimney system with an 8-inch minimum inside diameter.

Specifications

■ STRUCTURAL REQUIREMENT

▲ CAUTION

THE SUPPORT OF THIS UNIT (FLOOR) MUST BE SIZED IN CONGRUENCE WITH THE FIREPLACE STATIC AND DYNAMIC CHARGES (WEIGHT). THE SIZE CALCULATION FOR THE SUPPORT IS NOT THE RESPONSIBILITY OF FOCUS OR ITS AFFILIATES. IT IS YOUR RESPONSIBILITY TO CONSULT WITH AN ENGINEER OR ARCHITECT FOR YOUR PROJECT.

■ CONNECTORS

Connectors are all non-insulated chimney parts including focus flue, focus 8" universal adaptor and the chimney manufacturer finishing collar with adapter.

To avoid heat traps the chimney connector shall not pass through an attic or roof space, closet or similar concealed space, or a floor, or ceiling.

Passage through an attic, roof frame floor, or ceiling must be done using an insulated chimney respecting all chimney manufacturer clearances. For Canada the installation should conform to CAN/CSA-B365.

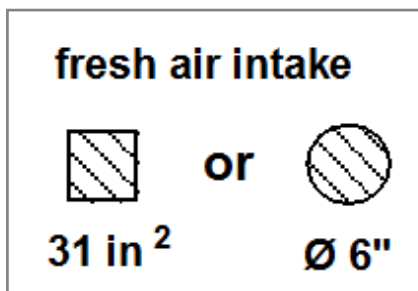
▲ CAUTION

PASSAGE THROUGH A WALL OR PARTITION OF COMBUSTIBLE CONSTRUCTION IS NOT AN APPROPRIATE INSTALLATION FOR THIS FOCUS FIRE.

■ FRESH AIR INTAKE

To balance room air pressure with outdoors air pressure, focus recommends a fresh air intake in the room (ideally emerging under the fire bowl). Fresh air intake shall only take combustion air from outdoors and not terminate in attic spaces. We recommend Ø6" deflect-O ID0625 UL listed 181 class 1 insulated air duct.

Minimum fresh air intake size :



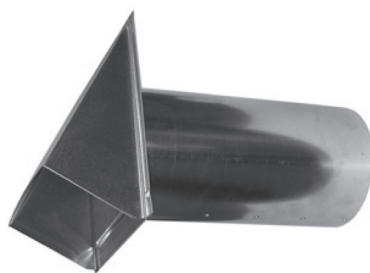
IMPORTANT

this fresh air intake is compulsory when operating venting appliances such as kitchen hoods, permanent air extractors or any appliances creating an air depression in the habitation. A lack of air intake may alarm smoke detectors. Duct maximum length :30 feet (9 meters).

Specifications

Guidance on how to seal at the penetration of the building envelope :

Installation of the combustion air inlet system will require a 6" diameter penetration through the wall and then insert the passive air vent with pipe extension through this opening. Take note that proper caulking is to be used between the vent and exterior wall to insure no air leaks in or out of building envelope. For in depth detail refer to your local building code having jurisdiction. For vertical external façade building termination, we recommend Deflect-O fresh air intake galvanized hood and pipe with screen ref. GFAI6 (see image hereunder and technical specs at the end of this manual).



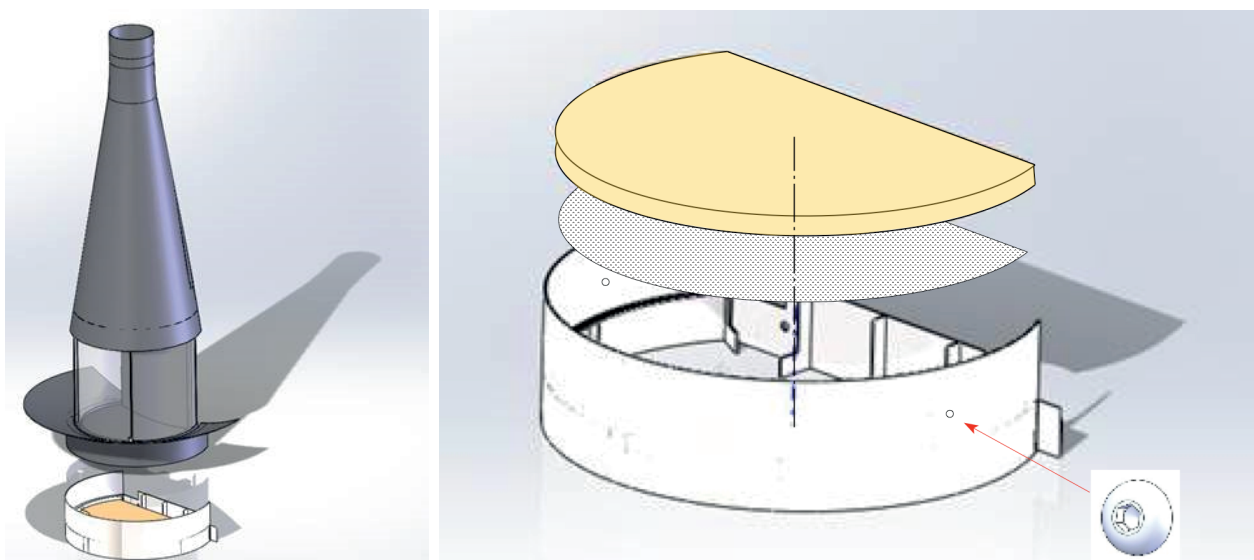
■ CLEARANCES TO COMBUSTIBLES

Minimum floor to ceiling height: 113".

A. FLOOR PROTECTION

The insulated baseplate is a compulsory, integral component required on all combustible floors and proper care is to be used when permanently attaching this component to the Fireplace Hearth Base. Improper installation or failure to install could result in floor being exposed to high temperatures and resulting in a fire or possibly death. Please read and follow instructions carefully using all fasteners as indicated.

B. INSULATED BASEPLATE ASSEMBLY DETAILS



Baseplate must be secured to the fireplace using 2 hexagon headless bolts

Specifications

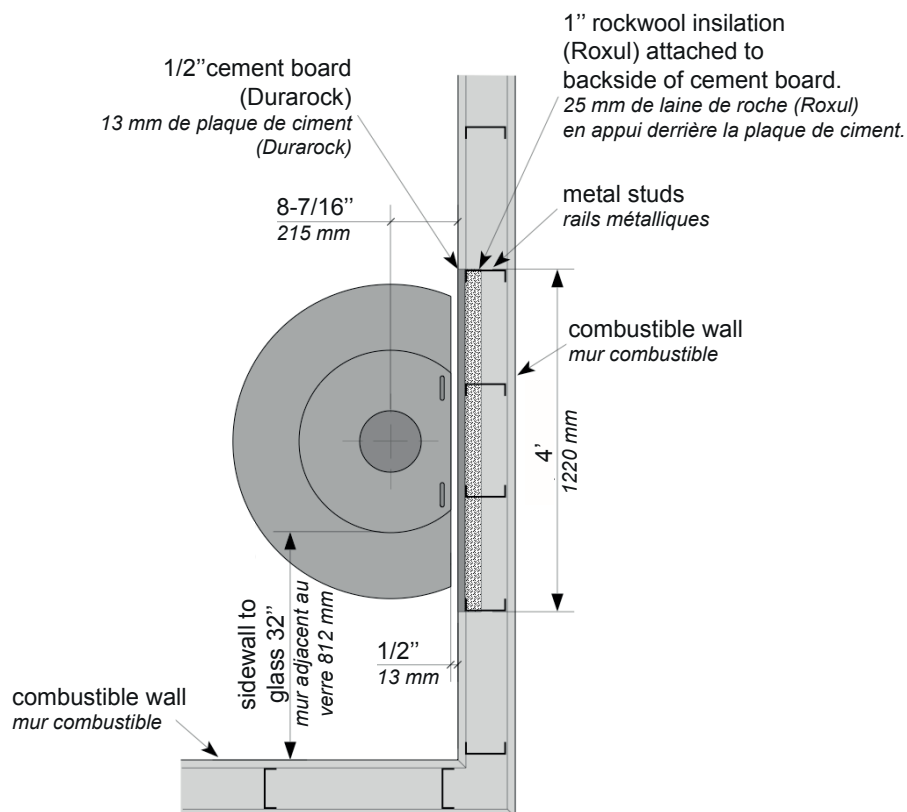
C. CLEARANCES TO BACK WALL

Fireplace must be maintained at 1/2" off the back wall in order to maintain ventilation and air circulation in this area. Back wall must be insulated from floor to ceiling with 1/2" cement board and 1" rock wool. Supporting studs must also be non combustible. Back wall protection requires to extend 24" to either side of the centerline of the unit.

D. CLEARANCES TO SIDE WALLS

▲ CAUTION

THE DISTANCE TO A COMBUSTIBLE SIDE WALL MUST BE MAINTAINED AT 32" FROM THE GLASS PANEL OF THE FIREPLACE. PROPERTY DAMAGE OR DEATH CAN OCCUR IF THIS DISTANCE IS NOT MAINTAINED. DRYWALL PRODUCTS LINED WITH PAPER SUCH AS SHEETROCK ARE COMBUSTIBLE. CLEARANCES AS INDICATED FURTHER APPLY.



IMPORTANT

Manufacturer specifications :

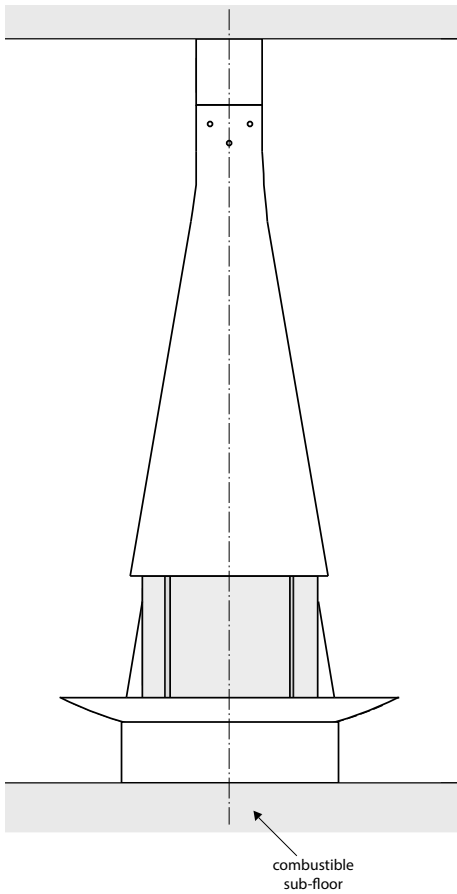
- To avoid premature aging of your painted walls, only use mineral or acrylic paints. With other paints, above clearances apply.
- Fire clearance from window glass to hearth glass: 3 feet.
- Fire clearance to vinyl windows: refer to window technical specifications.

Clearances may only be reduced by means approved by the regulatory authority.

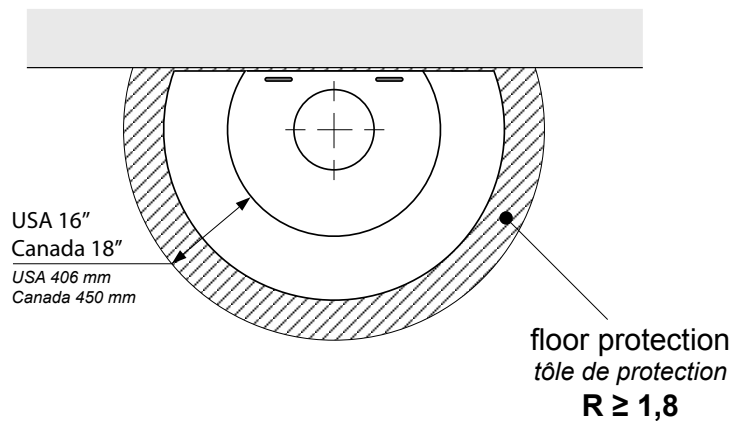
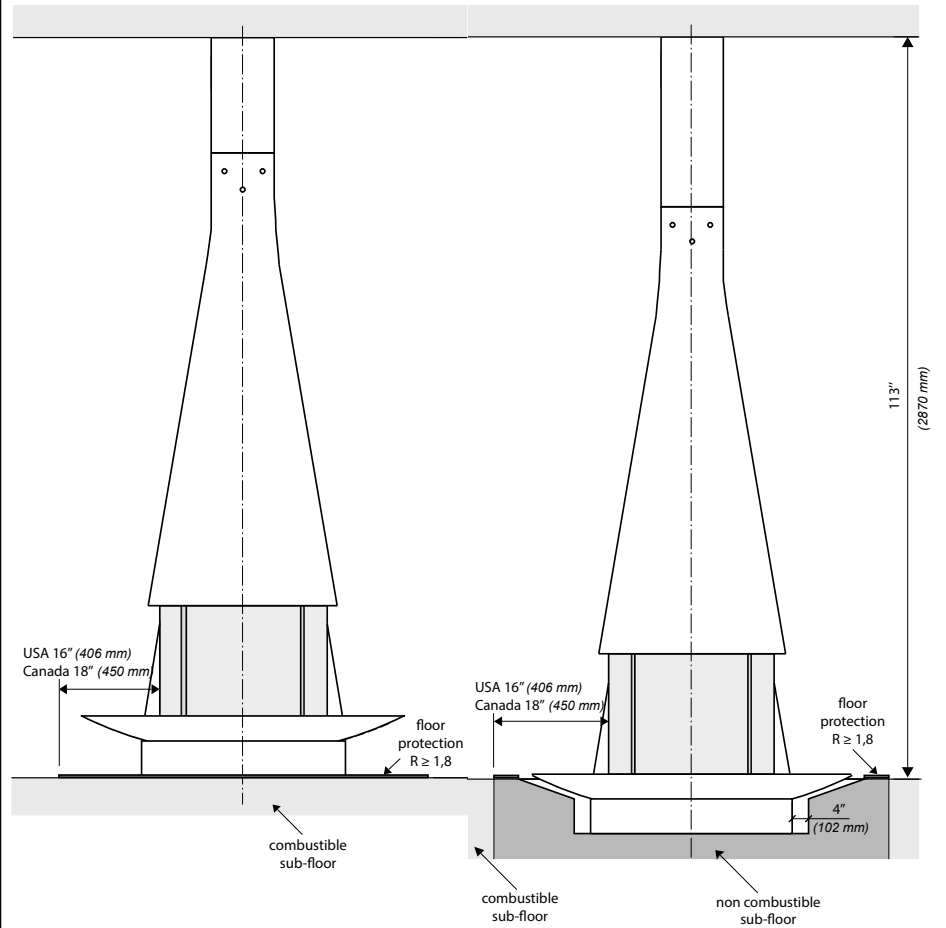
Specification

E. CLEARANCES TO FLOOR AND CEILING

• With insulated baseplate



• Without insulated baseplate



Installation

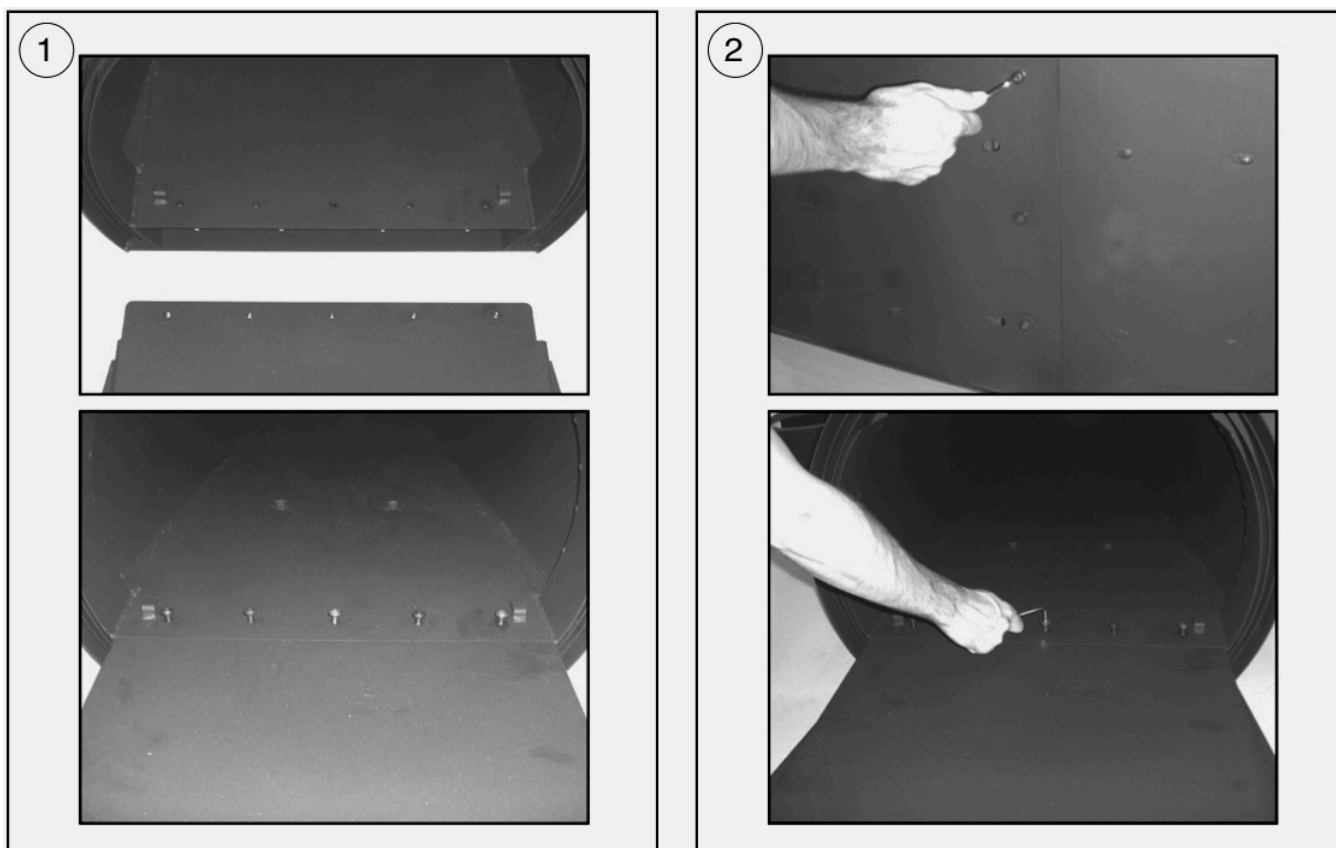
■ INCLUDED PARTS, MATERIALS AND REQUIRED TOOLS FOR INSTALLATION

- Appliance and designated parts are : hearth, steel flue pipe, 3 curved glass panels, cold handle, and focus kit (heat protective glove, mounting gloves, can of touch-up paint, manual).
- Required tools : drill, M8 allen key, level, screw drivers, M12 key, scaffolding (up to underceiling height), refractory compound.
- 2 persons minimum are required for installation.

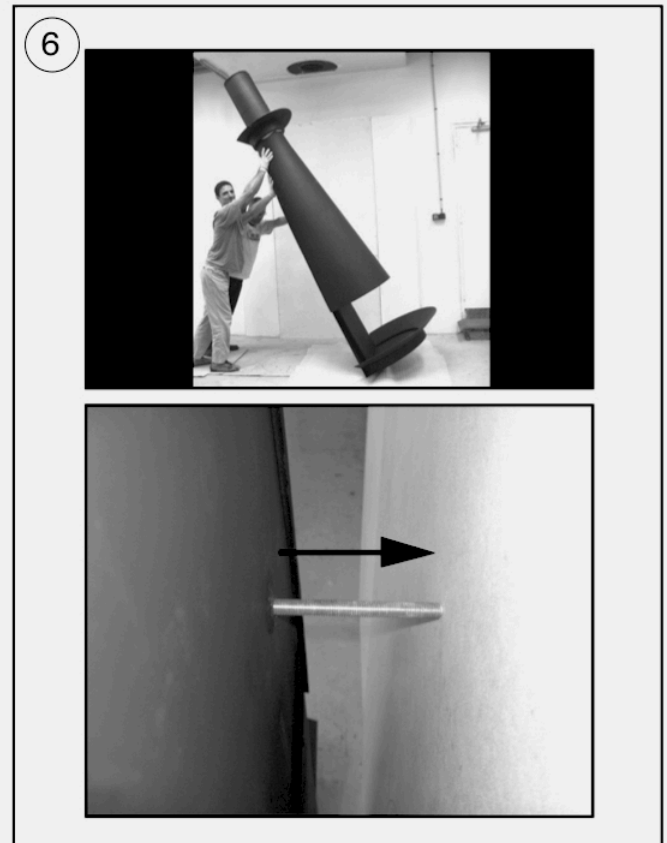
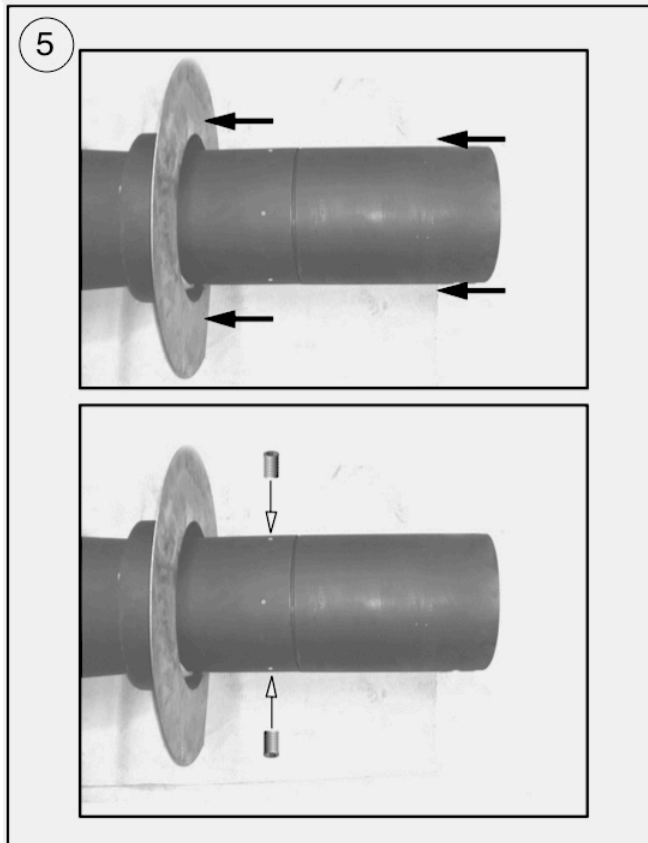
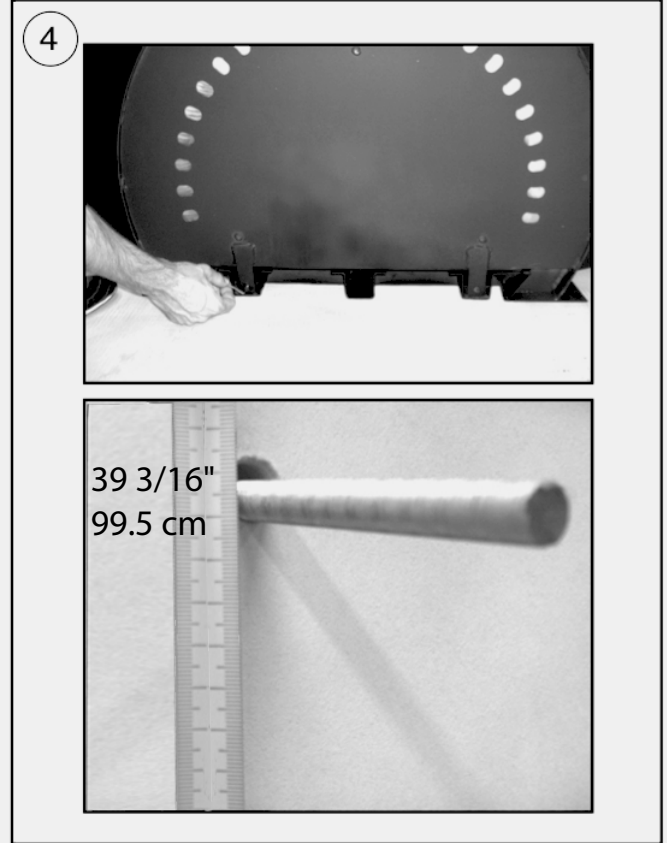
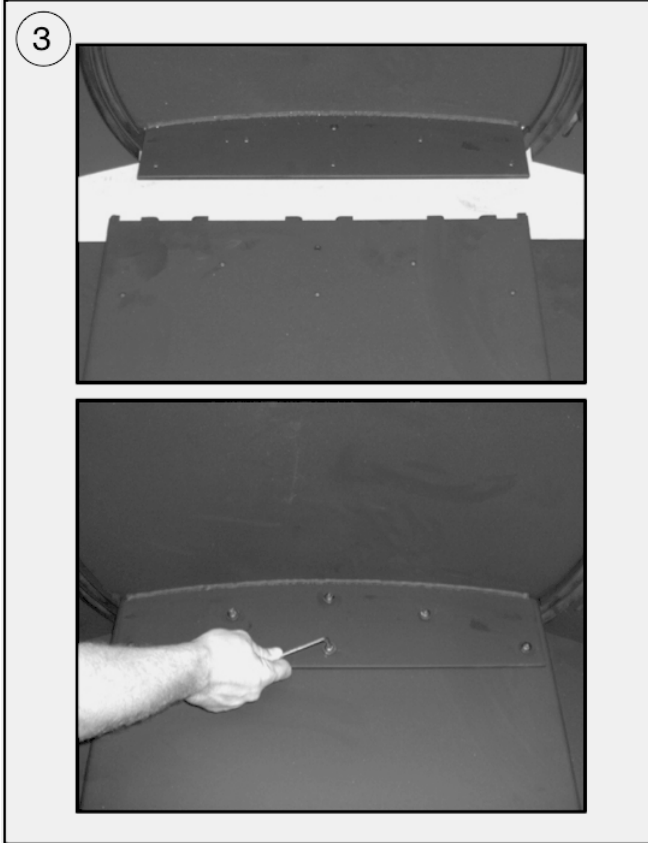
■ OPTIONS

- Custom ceiling cover disc (steel disc)
- Focus steel flue extension
- Insulated baseplate

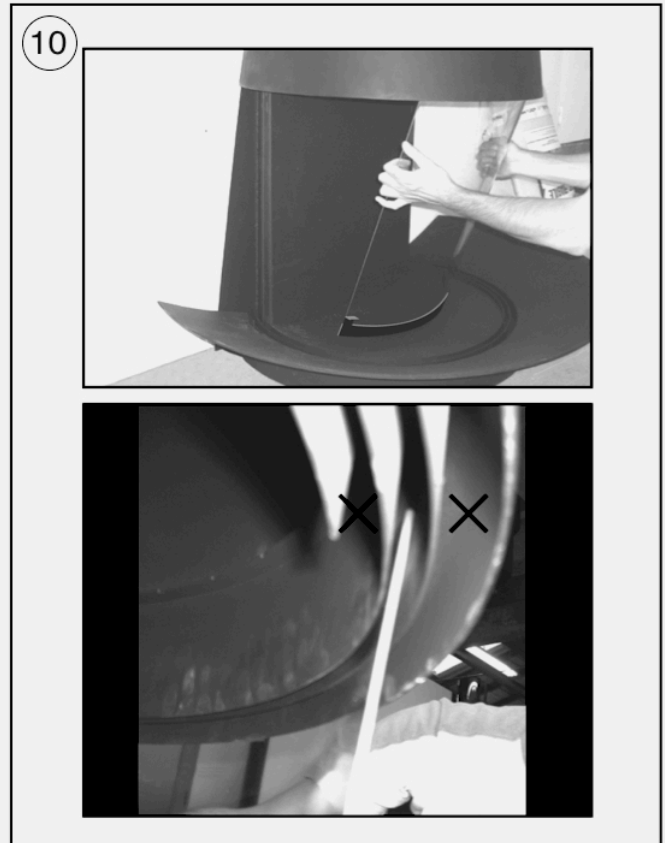
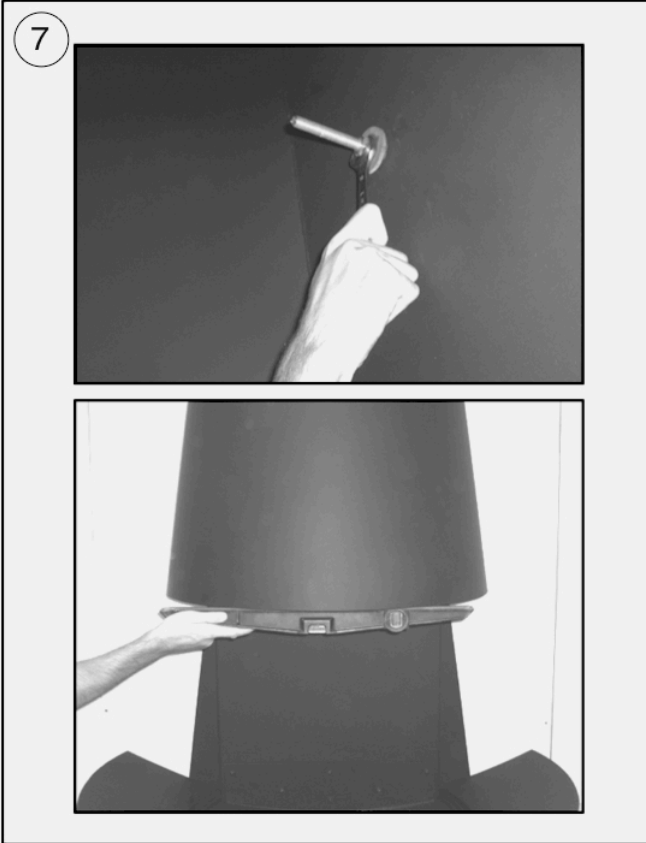
■ ASSEMBLY DETAILS



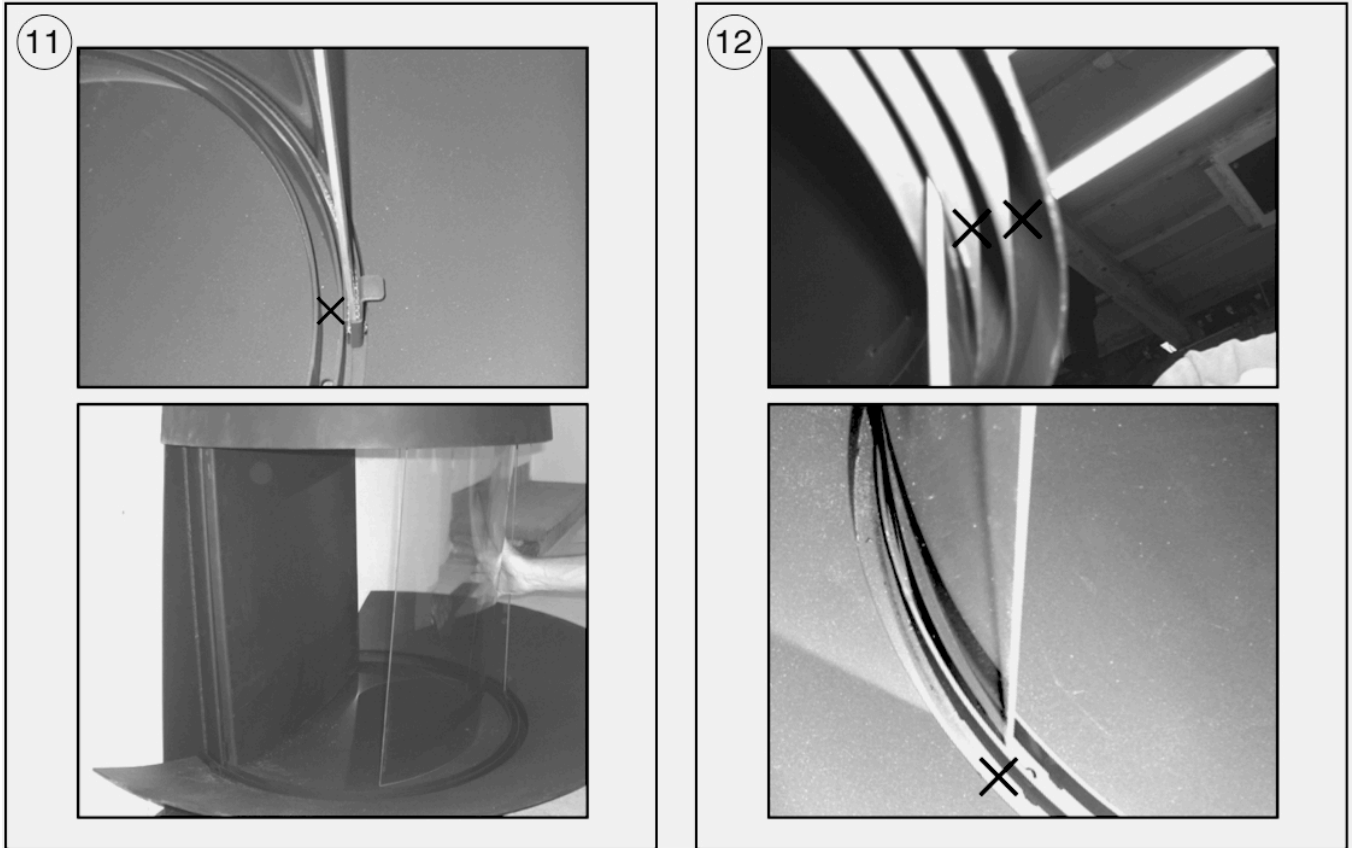
Installation



Installation

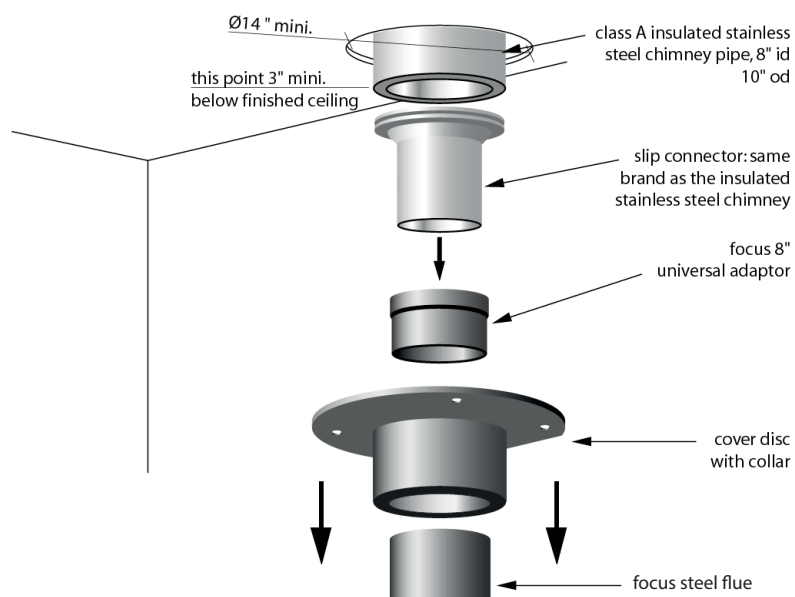


Installation



Cracked or broken glass should be replaced. To remove a glass, take steps back from 12 to 10.

■ STAINLESS STEEL CHIMNEY SYSTEM: COVER DISC SETUP AND CONNECTIONS



Hearth extensions must be installed only as illustrated

Operating instructions

▲ CAUTION

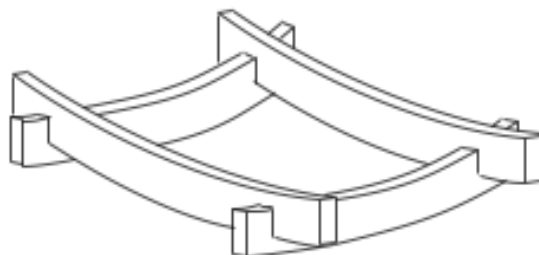
HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.

■ STORAGE / USE OF FLAMMABLE LIQUIDS

Never use chemicals or fluids, gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or « freshen up » a fire in this heater. Keep all such liquids well away from the heater while it is in use.

■ FIRE-DOGS

The fire-dogs item is located inside the fireplace. It must not be removed except for cleaning, once all cinders have thoroughly cooled. Fire must only be built on the fire-dogs.



■ ASHES

DISPOSAL OF ASHES

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

Operating instructions

■ FUEL

▲ CAUTION

DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA OR ENGINE OIL. DO NOT STORE THE FUEL WITHIN THE SPACE HEATER INSTALLATION CLEARANCES OR WITHIN THE SPACE REQUIRED FOR REFUELING AND ASH REMOVAL.

Only burn dry, natural, untreated well-seasoned wood. Wood moisture content should not be more than 20%. We recommend using 2 year dry stored wood. For the best efficiency use a covered storage. Hazards may occur with some fuels (e.g., charcoal). Such fuels may generate dangerous gas like carbon monoxide.

▲ WARNING

THE WINDOWED FILIOFOCUS HAS BEEN TESTED FOR USE WITH GLAZED SCREENS FULLY CLOSED. IF PANELS ARE LEFT PARTLY OPEN, GAS AND FLAME MAY BE DRAWN OUT OF THE FIREPLACE OPENING, CREATING RISKS FROM BOTH FIRE AND SMOKE. TO REDUCE THE RISK OF FIRE INJURY, DO NOT INTEND TO REMOVE GLAZED SCREENS!

■ BEFORE LIGHTING YOUR FIRST FIRE

For all focus models it is necessary to clean off (with a damp sponge and/or a dry cloth) any dirt collected during transport or installation.

Actual scratches on painted designs can be retouched solely with the expressly provided focus paint. If this is necessary, ventilate the area thoroughly before lighting your fire to disperse any fumes generated in the spraying process. The first fire should be a modest one; do not use packing material or pallet wood for fuel.

The paint finish we use, oven baked at 250°C for 30 minutes, is thermo-plastic. Because of the very gradual polymerisation of the components, the unit may give off a light smoke the first few times the fire is lit. The painted surfaces nearest the fire may, while hot, acquire a certain viscosity, or slight stickiness perceptible to the touch.

We advise therefore:

- Not to be alarmed at possible smoking or residual odors. This is normal on the first fires and will rapidly subside.
- Not to touch, rub or try to clean the fireplace while it is still hot.

To avoid thermal shocks, we strongly advise against throwing buckets of water on a very vigorous fire to try to put it out.

Operating instructions

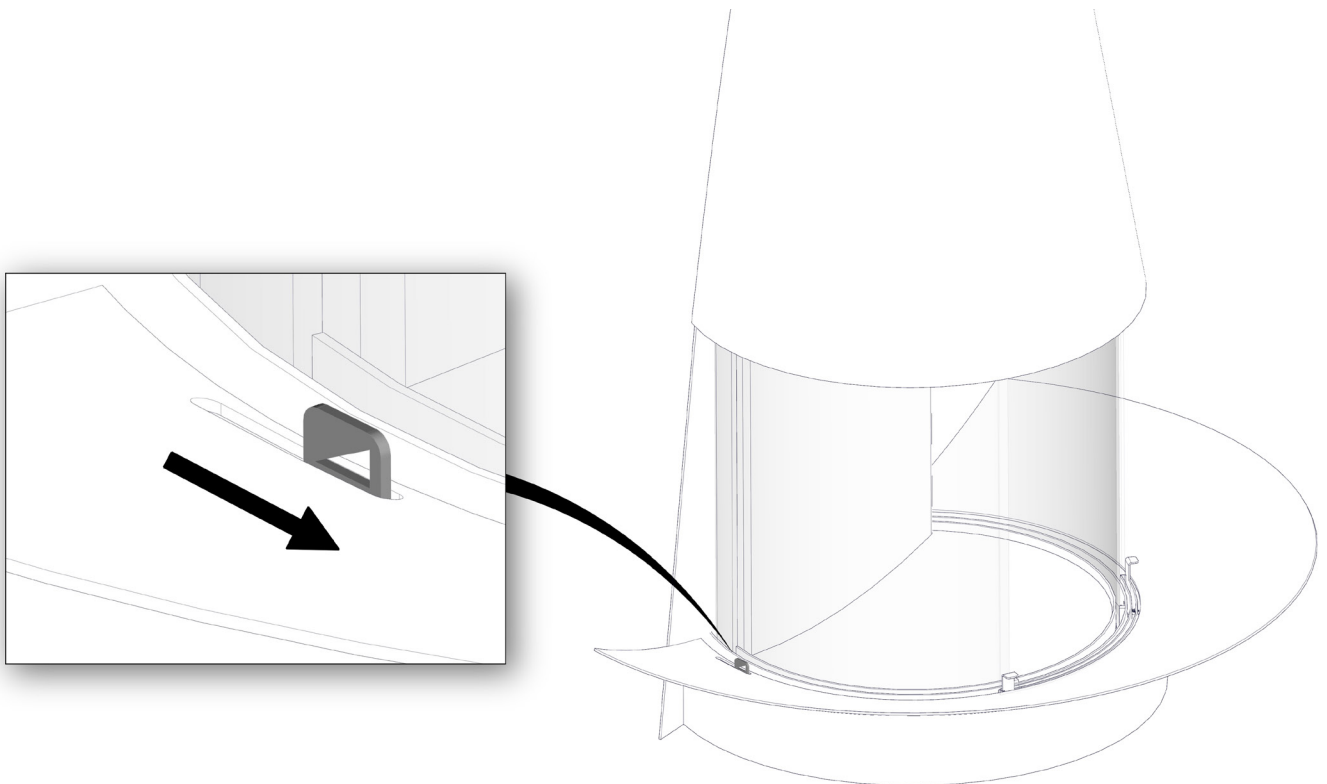
■ BUILDING, STARTING AND MAINTAINING THE FIRE

▲ CAUTION

DO NOT LIGHT OR FUEL A FIRE USING CARDBOARD OR PLASTIC OR ANY UNSTABLE OR VOLATILE FUEL SOURCE OR WITH FIRE BRICKS REMOVED, AS THIS WILL PRODUCE OVER-FIRING OR HOUSE FIRE. DAMAGE CAUSED FROM NON-OBSERVANCE OF THIS CAUTION IS NOT COVERED UNDER FOCUS LIMITED WARRANTY.

Do not overload your focus fireplace to avoid over-firing.

Build the fire without elevating it, directly on the fire-dogs, not too close to the glasses. For starting the fire, we recommend using a small amount of fire starter with enough kindling (small logs or mill ends) to establish a primary fire. Fresh air intake must be fully open (push the handle in direction of the large side of the triangle, see hereunder illustration) :



After a few minutes, and making sure the primary fire is well started, add larger wood (between 3 and 7 pieces, depending on their size), directly on top, making sure not to smother the fire. Leave some spaces between the logs for air intake. Adapt the air intake position in order to avoid spillage of smoke.

To maintain or refuel your fire, add when needed (see note), a few larger logs.

NOTE : For the same weight of fuel, 10 logs will burn more intensely (and faster) than 3 logs, but you will get the same heat power at the end. The log size you buy will determine the heating and refueling time.

Operating instructions

■ PROTECTIVE GLOVE AND SEPARABLE HANDLE

The use of the focus special protective glove supplied with our models is required upon handling the cold handle, glass panels, fresh air controls, fire-dogs, etc. The separable handle must be hung to the side of the lower lip.

■ DAMPER OPERATION AND USE

Use of supplied cold handle tool or protective glove is recommended to operate the damper. Do not touch the damper handle without protection when a fire is operating.

The filiofocus 1600 wall version damper has four positions. The damper is in the same direction as the handle: when the handle is vertical, the damper is fully open. Handle can rotate at 30°, 60° and 90° (horizontal : closed). In closed position the damper obturates by 75% the flue section. To modify the damper position, first pull the handle, then rotate and push again the handle in order to lock on a preset position.

▲ CAUTION

NEVER ADJUST THE DAMPER HANDLE ON AN INTERMEDIATE POSITION !

The damper position must be adapted to the fire intensity : during the lighting it must be fully open. Then it must be adjusted in order to reduce the smoke flow, so the heat efficiency will be optimal. If the smoke spills out it means the damper is too obstructive : re-open the damper at the first signs of spillage.

Maintenance

■ TAKING OUT THE ASHES

▲ CAUTION

BE SURE THE FIRE IS OUT AND THE FIREPLACE BODY COLD BEFORE REMOVING ASHES!

To remove ashes we recommend to remove the fire-dogs and use a brush and a shovel. Dispose of ashes in an appropriate ash container (not supplied). After cleaning, be sure to secure the fireplace properly!

■ INSPECTION, MAINTENANCE AND CLEANING OF THE CHIMNEY

▲ CAUTION

CHEMICAL SWEEP NOT PERMITTED: ONLY MECHANICAL SWEEP ALLOWED!

A. REFERING TO FOCUS STEEL FLUE

It must absolutely be swept with a nylon brush. Never use metal brushes! Damage caused from non-observance of this caution is not covered under the focus limited warranty.

B. REFERING TO CHIMNEY PIPE

Creosote formation and need for removal :

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire. The chimney and chimney connector should be inspected at least once every two months during the heating season to determine if a creosote buildup has occurred. If a significant layer of creosote has accumulated (3mm or more) it should be removed to reduce the risk of a chimney fire. In that case, call a professional chimney sweeper or buy a brush at your local focus retailer and clean the chimney this way:

Remove rain cap, use appropriately sized brush and sweep the entire system to remove all debris or refer to chimney manufacturer recommendations.

Communicate with the authorities (municipal, regional or provincial fire protection agency) to obtain all instructions concerning the measures to be taken when or before there is a risk of chimney fire.

Keep firing and de-ashing doors closed and maintain all seals in good condition.

Maintenance

■ SURFACES

▲ CAUTION

DO NOT SCRUB !

The outer surfaces can be wiped with a soft, dry rag (making sure the metal is cool). For continued use of the touch-up paint can, following its initial usage, invert the can (spray head down) and spray into a balled up newspaper until the can sprays clear. Clean the spray can bottom with a dry rag and store out of the reach of children.

■ DIRECTIONS AND REASONS FOR CLEANING GLASS

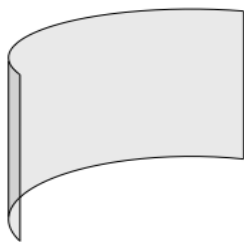
Do not clean the glass when hot. Glass doors should not be struck or banged.

The outer surfaces can be wiped with a soft, dry rag and a standard glass cleaner product (making sure the glass is cool). Do not use abrasive cleaners. The inner surfaces can be cleaned with a special insert glass product.

■ REPLACEMENT PARTS

Do not use substitute materials.

3 Glass Panels



Cold handle

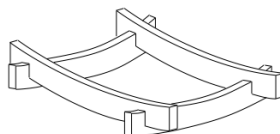


For ordering replacement parts, please contact the focus North American exclusive importer :

Touch-up can



Chenets



2 Stationary pyroceramic sides:

Thickness 5/32" (4 mm)
Height : 20-7/8" - 530 mm
Radius ext. : 11-1/4" - 286 mm
Developed length : 18-1/8" - 460 mm

1 pyroceramic glass door:

Thickness 5/32" (4 mm)
Height : 20-7/8" - 530 mm
Radius ext. : 12" - 305 mm
Developed length : 17-27/32" - 453 mm



30 Log Bridge Road
Building 300 – Suite 303
Middleton, MA 01949
T: 781-324-8383
www.europeanhome.com

Warranty

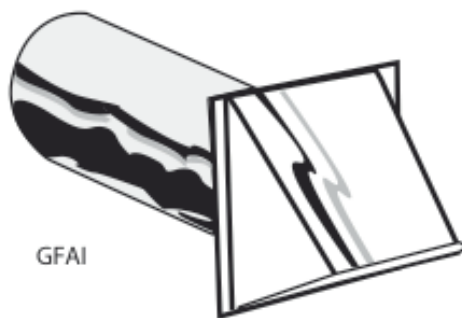
All of our Focus models are guaranteed against any defect in design, construction, or manufacture, and guaranteed to function properly for 5 years from date of order. Our product guarantees are applicable only when our fireplaces have been installed with respect to all local building codes and with strict attention to the technical details outlined in our Plan Study as well as our installation, maintenance, and users manuals. Our guarantee excludes accidental damages such as those occurring during transport without written notification upon receipt, damages incurred during installation, and damages resulting from improper use.



Fresh Air Intake Technical Product Specification

Fresh Air Intake – Galvanized Hood and Pipe with Screen

Model	Description	Screen Size
GFAI4	4" hood, pipe & screen	1/4"x1/4" mesh
GFAI5	5" hood, pipe & screen	1/4"x1/4" mesh
GFAI6	6" hood, pipe & screen	1/4"x1/4" mesh
GFAI7	7" hood, pipe & screen	1/4"x1/4" mesh
GFAI8	8" hood, pipe & screen	1/4"x1/4" mesh



GFAI

Performance Data

For Fresh Air Intake Hoods

HOOD

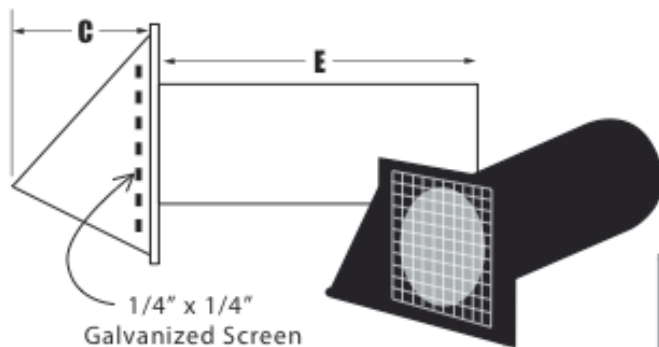
- Galvanized metal
- Galvanized metal 1/4"x1/4" screen

PIPE

- Galvanized

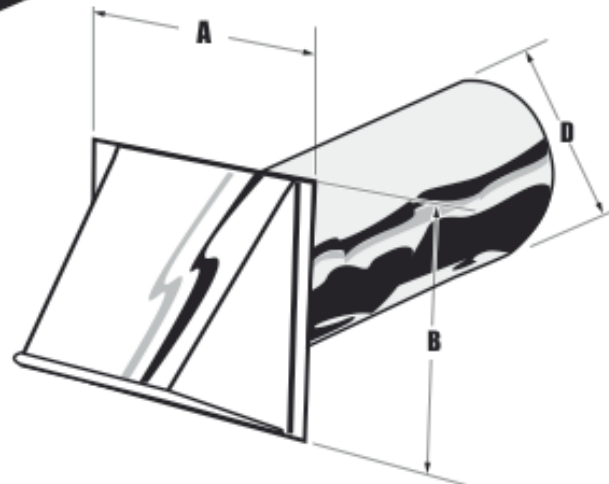
General Information

- 4" - 8" (10-20 cm) wide mouth vent design
- Screen keeps out unwanted animals
- Galvanized metal screen protects against rust



1/4" x 1/4"
Galvanized Screen

Model	A	B	C	D	E
GFAI4	6"	6"	3 1/2"	4" dia.	12"
GFAI5	8"	9 3/8"	4 1/2"	5" dia.	12"
GFAI6	8"	9 3/8"	4 1/2"	6" dia.	12"
GFAI7	10"	11 7/8"	5 3/4"	7" dia.	12"
GFAI8	10"	11 7/8"	5 3/4"	8" dia.	12"



5/09

© 2009

DEFLECTO Canada Ltd. • St. Catharines, Ontario • Canada L2M 3Y2 • www.advp-deflecto.com

DEFLECTO CORPORATION • P.O. Box 50057 • Indianapolis, IN 46250 • www.deflecto.com

Deflecto's policy is one of continual product improvement in design and manufacturing wherever possible, therefore all specifications and designs are subject to change without notice and without incurring obligations.

GFAItps-A

■ HOW TO DETERMINE IF ALTERNATE FLOOR PROTECTION MATERIALS ARE ACCEPTABLE

All floor protection must be non-combustible (i.e., metals, brick, stone, mineral fiber boards, etc.). Any organic materials (i.e., plastics, wood paper products, etc.) are combustible and must not be used. The floor protection specified includes some form of thermal designation such as R-value (thermal resistance) or k-factor (thermal conductivity).

A. PROCEDURE

1. Convert specification to R-value:

I. R-value given - no conversion needed.

II. k-factor is given with a required thickness (T) in inches:

$$R = \frac{1}{k} \times T$$

III. K-factor is given with a required thickness (T) in inches

$$R = \frac{1}{K \times 12} \times T$$

IV. r-factor is given with a required thickness (T) in inches:

$$R = r \times T$$

2. Determine the R-value of the proposed alternate floor protector.

I. Use the formula in step (1) to convert values not expressed as "R".

II. For multiple layers, add R-values of each layer to determine overall R-value.

3. If the overall R-value of the system is greater than the R-value of the specified floor protector, the alternate is acceptable.

EXAMPLE: The specified floor protector should be 3/4-inch thick material with a k-factor of 0.84. The proposed alternate is 4" brick with an r-factor of 0.2 over 1/8" mineral board with a k-factor of 0.29.

Step (a): Use formula above to convert specification to R-value.

$$R = \frac{1}{k} \times T = \frac{1}{0.84} \times 0.75$$

Step (b): Calculate R of proposed system.

4" brick of r = 0.2, therefore:

$$R_{\text{brick}} = 0.2 \times 4 = 0.431$$

1/8" mineral board of k = 0.29, therefore

$$R_{\text{mineral board}} = \frac{1}{0.29} \times 0.125 = 0.431$$

$$R_{\text{total}} = R_{\text{brick}} + R_{\text{mineral board}} = 0.8 + 0.431 = 1.231$$

Step (c): Compare proposed system R_{total} of 1.231 to specified R of 0.893. Since proposed system R_{total} is greater than required, the system is acceptable.

B. DEFINITIONS

$$R = \frac{(\text{ft}^2)(\text{hr})(^\circ\text{F})}{\text{Btu}}$$

$$k = \frac{(\text{Btu})(\text{in})}{(\text{ft}^2)(\text{hr})(^\circ\text{F})} = K \times 12$$

$$K = \frac{(\text{Btu})(\text{ft})}{(\text{ft}^2)(\text{hr})(^\circ\text{F})}$$

$$r = \frac{(\text{ft}^2)(\text{hr})(^\circ\text{F})}{(\text{Btu})(\text{in})} = \frac{1}{k}$$

Note

A series of horizontal dotted lines for writing notes.

Note

A series of horizontal dotted lines for writing notes.

