



Bathyscafocus

Design Installation & Operating Manual v.4.1 EN

Tested by OMNI-Test Laboratories, Inc. and approved to

UL 737-1996 & ULC S627-00



report number: 304-F-07-2

US EPA exempt

-this document was packed with the appliance fire chamber-

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1 – INTRODUCTION:

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.

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: *bathyscafocus*

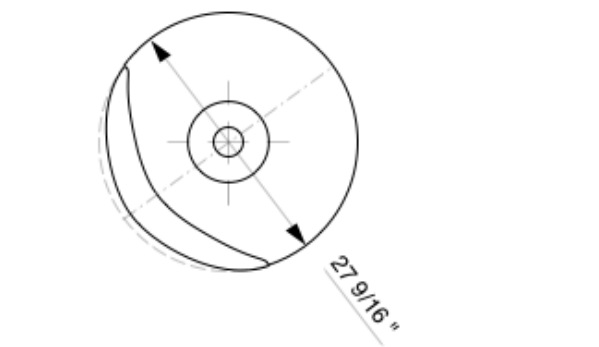
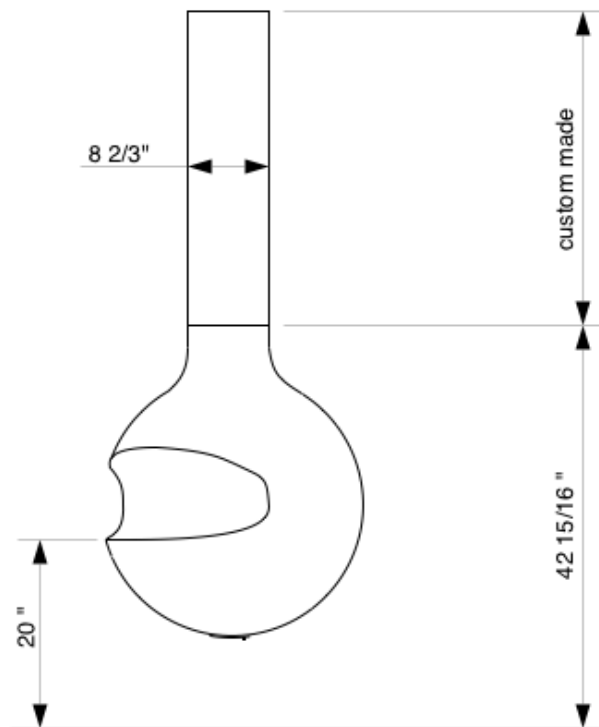
Manufacturer: *focus - atelier dominique imbert – le fort – 34380 viols le fort – France.*

2 – SPECIFICATIONS:

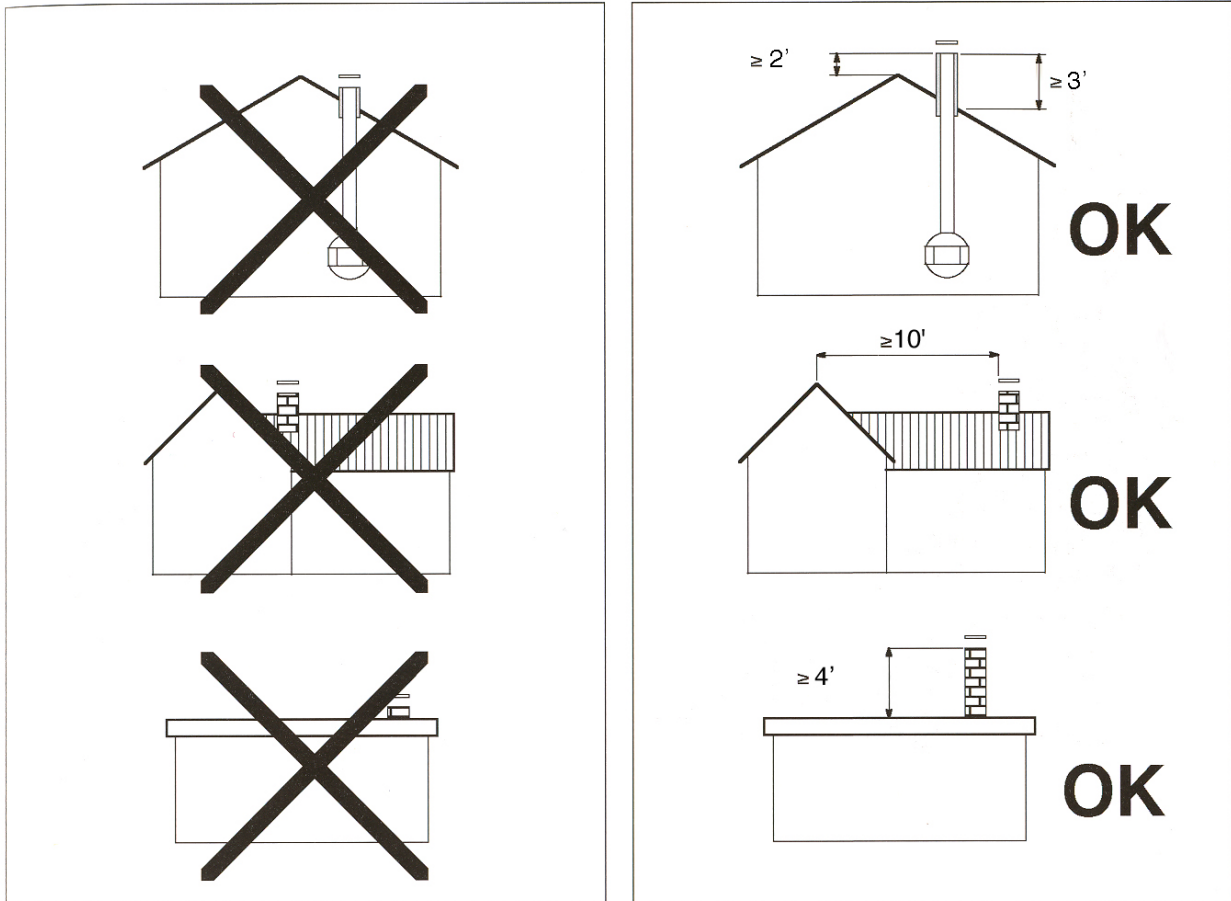
- **NOT FOR MOBILE HOME INSTALLATION!**
- **DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM!**
- THE AUTHORITY HAVING JURISDICTION (SUCH AS MUNICIPAL BUILDING DEPARTMENT, FIRE DEPARTMENT, FIRE PREVENTION BUREAU, ETC.) SHOULD BE CONSULTED BEFORE INSTALLATION TO DETERMINE THE NEED TO OBTAIN A PERMIT.**
- 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.**

a) Characteristics:

- Hearth weight: 45 kg (99 lbs)
- Flue diameter: 219 mm (8-5/8 inch); length custom made
- Flue weight: 16kg per meter (11 lbs per foot)
- Anchor plate weight: approx. 19 kg (41 lbs)
- 2.5 mm (1/10-inch) thick steel
- High heat resistant matte black paint
- Guaranteed efficiency with a minimum flue length (interior and exterior) of 3.00m (10 feet)



b) Roof outlet requirement:



c) Chimney requirement:

DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE!

Bathyscafocus requirement: the total length of flue (inside + outside) must be 10 feet minimum (13 feet for an installation less than 3 miles from the ocean or if a 30° elbow is necessary).

The bathyscafocus 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. For example, a class A insulated stainless steel flue chimney system with an 8-inch minimum inside diameter.

d) Structural requirement:

CAUTION: THE SUPPORT OF THE ANCHOR PLATE (ROOF STRUCTURE, SLAB, ETC.) MUST BE SIZED IN CONGRUENCE WITH THE FIREPLACE STATIC AND DYNAMIC CHARGES. 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.

e) Connector:

Connectors are all non-insulated chimney parts including focus black flue, focus 8" universal adaptor and the chimney manufacturer single wall slip adaptor.

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.

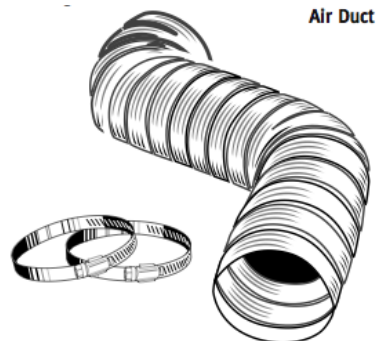
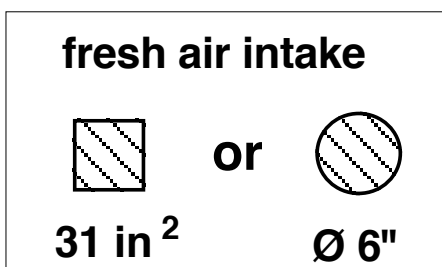
Passage through an attic, roof frame floor, or ceiling must be done using an insulated chimney respecting all chimney manufacturer clearances.

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

Refractory compound must be used to seal each connection. Please refer to installation details in this manual.

f) Fresh air intake:

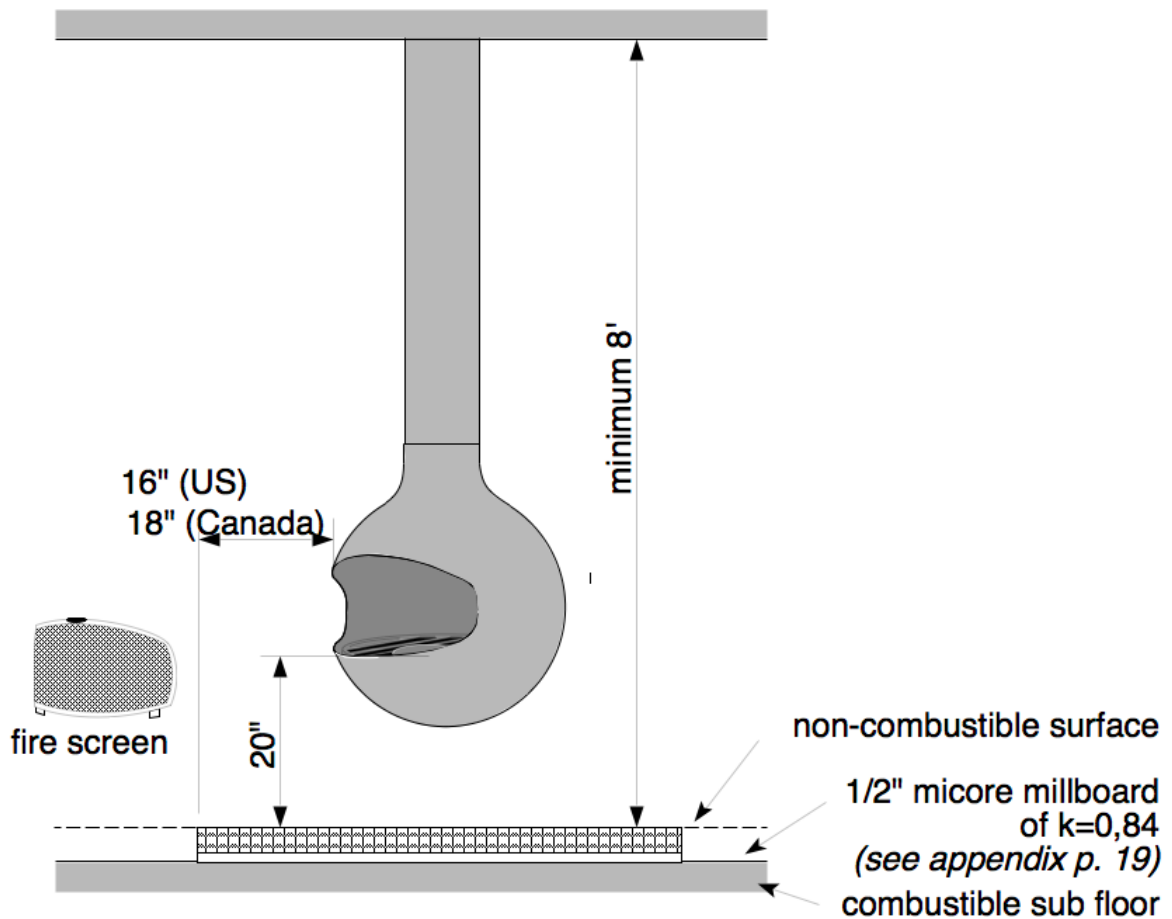
For optimum functioning, focus recommends a fresh air intake in the room (ideally under of the fire). We recommend deflect-O A0684 semi rigid aluminium duct. Minimum fresh air intake size:



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.

g) Clearances to combustibles:

- Clearances to floor and ceiling:

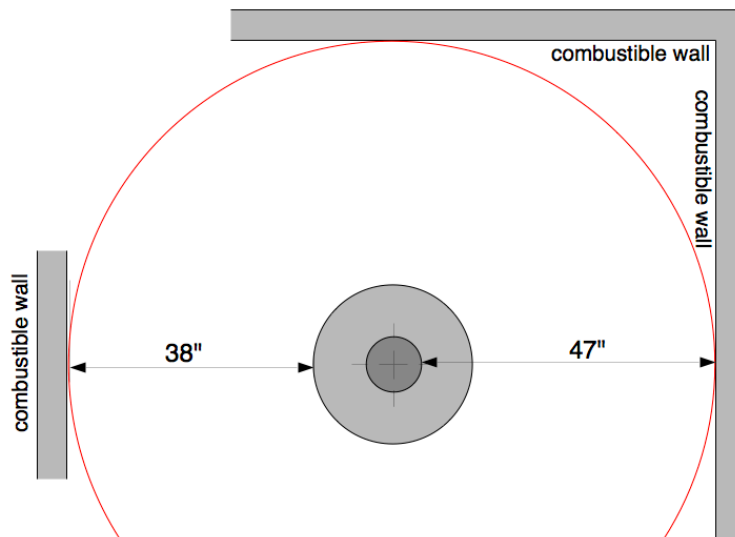


USE OF PROVIDED FIREBOX INSULATOR UNDER THE GRATE (FIRE BRICKS OR VERMICULITE) IS COMPULSORY.

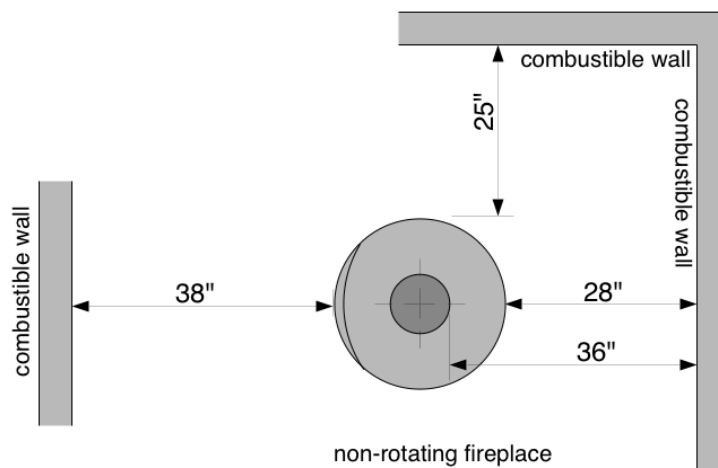
- Clearances to walls:

CAUTION: THE DISTANCE TO A COMBUSTIBLE WALL MUST BE MAINTAINED AT 38 inches. 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.

- Wall clearances with 360° rotation fireplace:



- Wall clearances with optional blocking mechanism:



Important - manufacturer specifications:

- When placed close to a non-combustible wall leave a minimum of 4" for proper ventilation. To avoid premature aging of your painted walls, only use mineral paint. With other paints, above clearances apply.
- Fire clearance to glass (from hearth): 31-1/2".
- Fire clearance to tempered glass (from hearth): 20".
- Fire clearance to vinyl windows: refer to window technical specifications.

CLEARANCES MAY ONLY BE REDUCED BY MEANS APPROVED BY THE REGULATORY AUTHORITY.

3 – INSTALLATION:

a) Included parts, materials and required tools for installation:

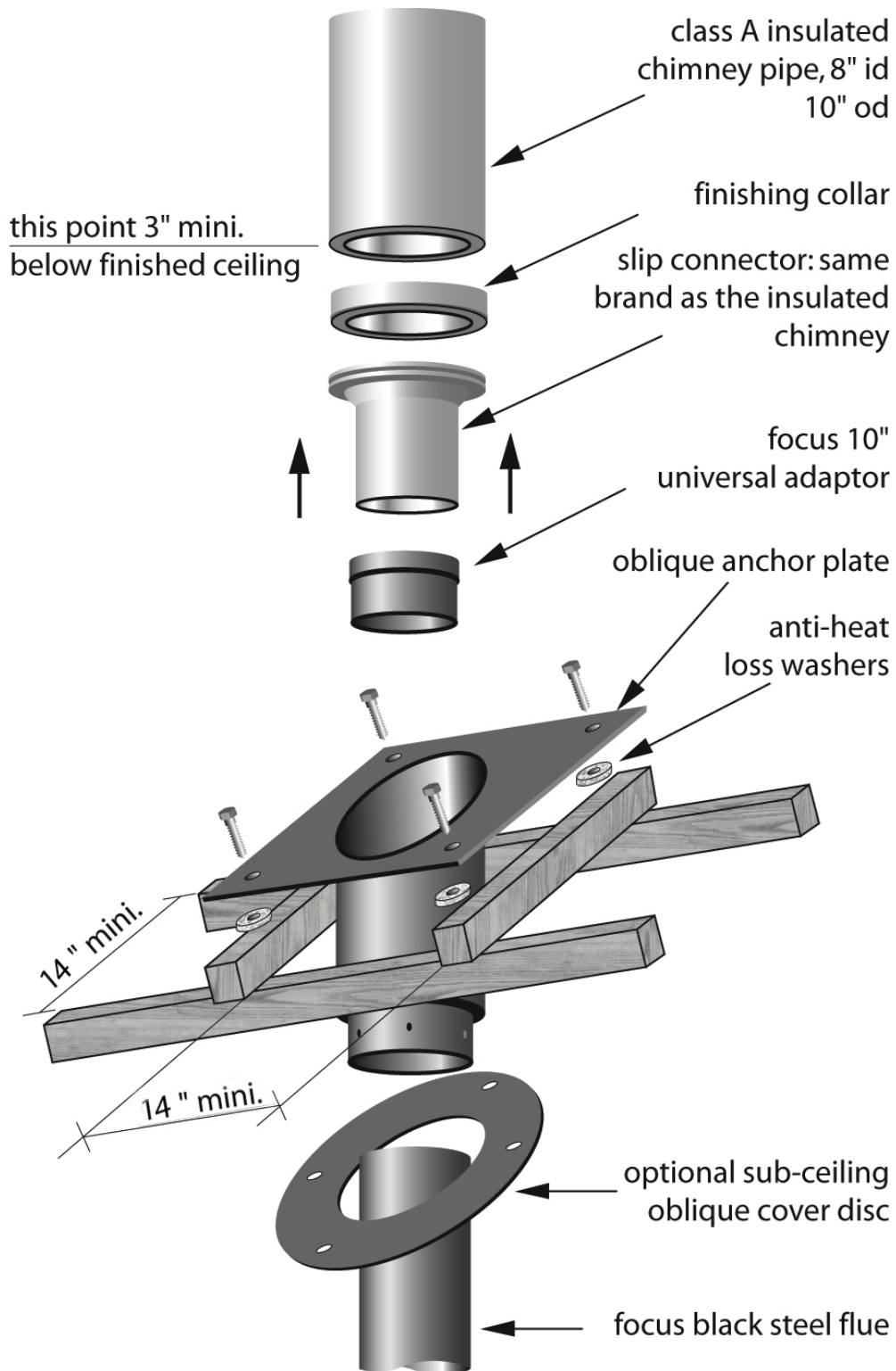
- Appliance and designated parts are the fire box, anchor plate, black steel flue pipe, focus kit (protective glove, mounting gloves, can of touch-up paint, ash removal hatch), and insulating washers.
- Required tools: drill, M8 allen key, level, screwdrivers, M12 key, scaffolding (up to underceiling height), refractory compound.
- 2 persons minimum are required for installation.

b) Options:

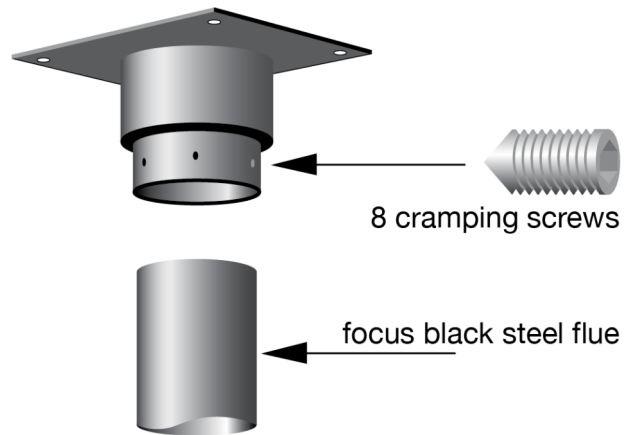
- custom ceiling cover disc (steel disc)
- custom anchor steel plate (inclined...)
- focus black steel flue extension
- anthracite grey paint

c) Assembly details:

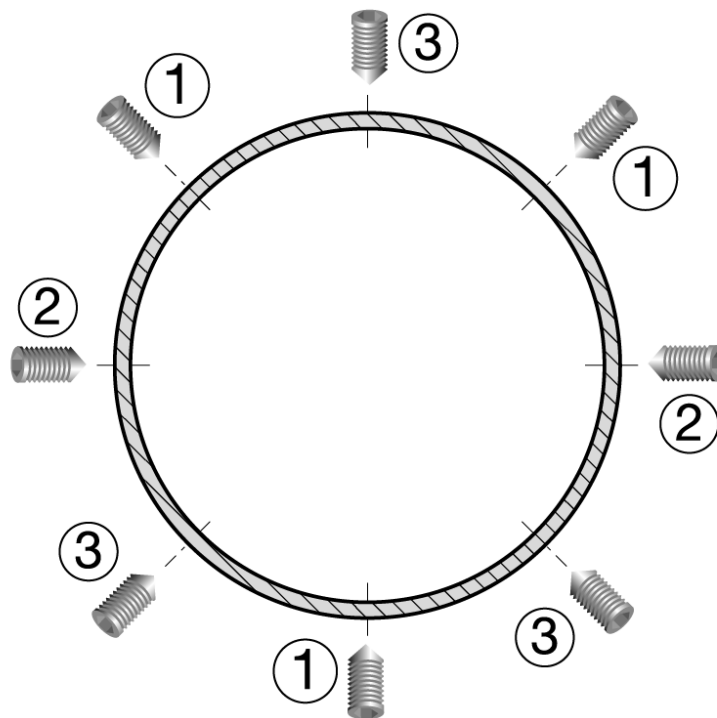
- 1 - stainless steel chimney system plate setup and connection:



- flue attachment to anchor plate:

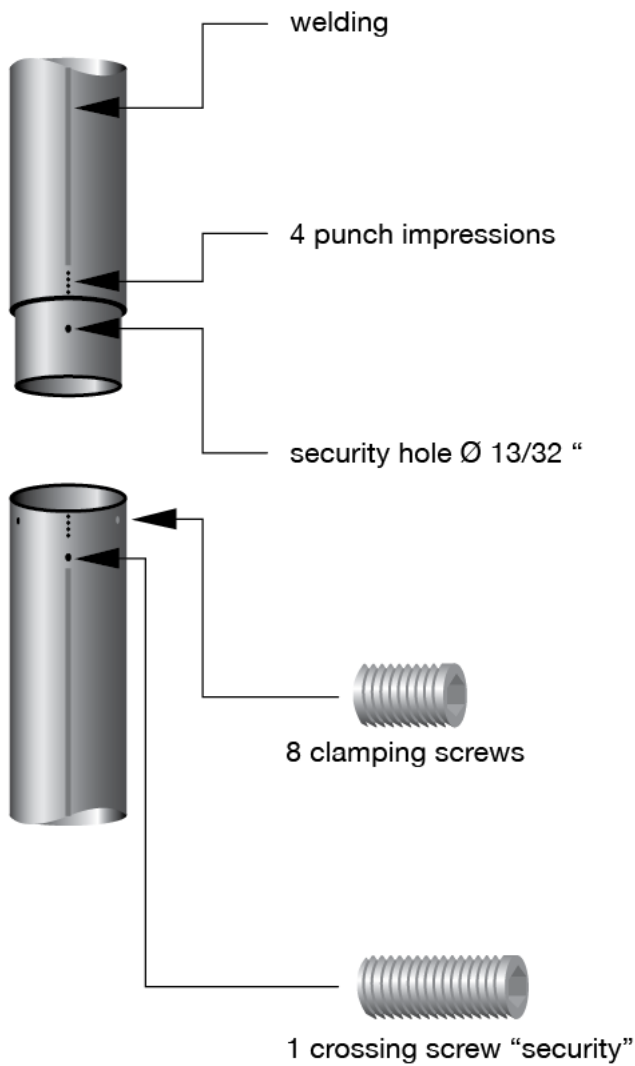


- order in which to tightening the plate screws (to secure progressively) :

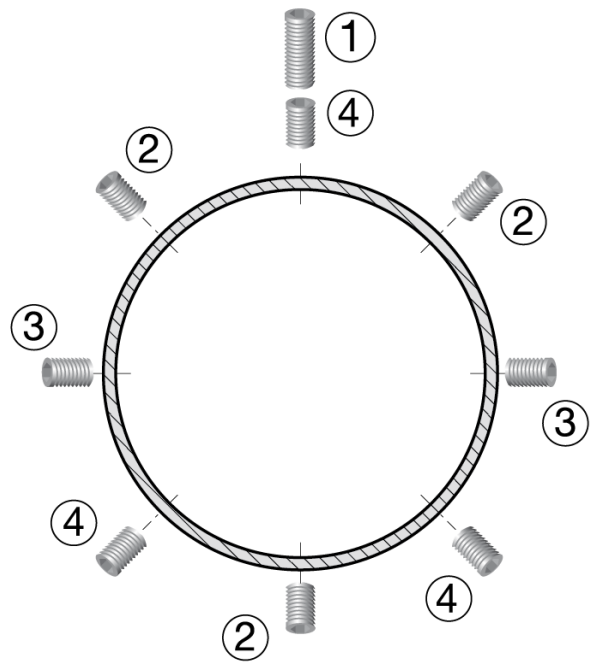


- 3 – junction sleeve detail:

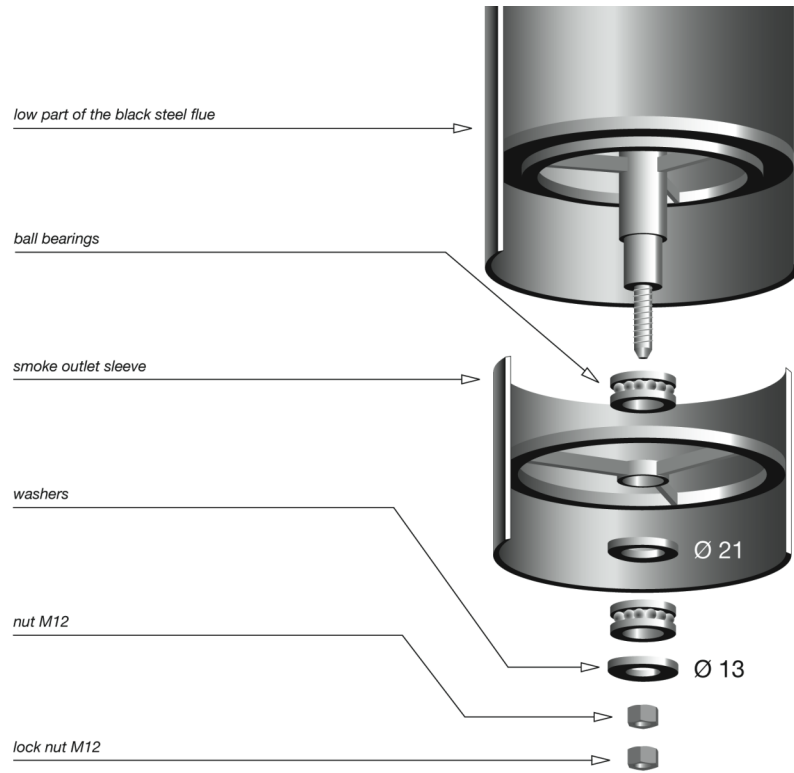
Note: the junction sleeves are provided only when the floor to ceiling height in the room requires several focus pipe in several parts.
 (you may not find junction sleeves on 9 feet or less ceiling heights)



the order for tightening the screws (to secure progressively)



- 4 – rotating mechanism detail:



4 – OPERATING INSTRUCTIONS:

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

a) Storage/use of flammable liquids:

Never use 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.

b) Stationary fire plate:

The cast-iron grate 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 grate.

c) Ashes:

DISPOSAL OF ASHES – ASHES SHOULD BE PLACED IN A METAL CONTAINER WITH A TIGHT FITTING LID. THE CLOSED CONTAINER OF ASHES SHOULD BE PLACED ON A NON-COMBUSTIBLE FLOOR OR ON THE GROUND, WELL AWAY FROM ALL COMBUSTIBLE MATERIALS, PENDING FINAL DISPOSAL. IF THE ASHES ARE DISPOSED OF BY BURIAL IN SOIL OR OTHERWISE LOCALLY DISPERSED, THEY SHOULD BE RETAINED IN THE CLOSED CONTAINER UNTIL ALL CINDERS HAVE THOROUGHLY COOLED.

d) 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 CHARGING AND ASH REMOVAL.

Only burn dry, natural, 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.

WARNING: THIS FIREPLACE HAS NOT BEEN TESTED FOR USE WITH DOORS, TO REDUCE THE RISK OF FIRE INJURY, DO NOT INSTALL DOORS!

e) Before lighting your first fire:

For all designs 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 can. 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.

f) Building, starting and maintaining the fire:

DO NOT OVERLOAD YOUR FOCUS FIREPLACE TO AVOID OVER-FIRING.

Build the fire without elevating it, directly on the grate. 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.

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.

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.

g) Protective glove:

The use of the focus special protective glove supplied with our models is required upon handling the damper, fresh air controls, fire irons, etc.

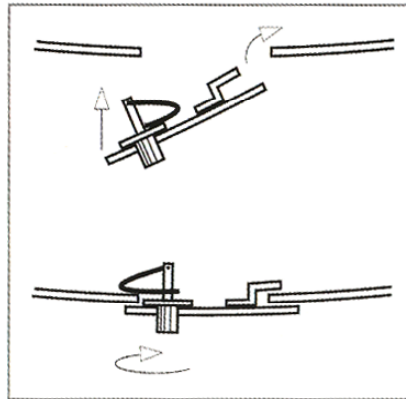
5 – MAINTENANCE:

a) Taking out the ashes:

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

The ash removal hatch located below the grate is designed to make cleaning easier. Dispose of ashes in an appropriate ash container (not supplied). The hatch is removed by turning the handle. After cleaning, be sure to secure the hatch back properly!

CAUTION: DO NOT LIGHT A FIRE WITH ASH REMOVAL HATCH 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.



b) 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.

c) Sweeping your chimney:

CAUTION: CHEMICAL SWEEP NOT PERMITTED: ONLY MECHANICAL SWEEP ALLOWED!

The focus black steel flue, stainless steel flue liner or insulated stainless steel flue chimney system absolutely must be swept with a nylon head sweeper. Never use metal head sweepers! Damage caused from non-observance of this caution is not covered under focus limited warranty.

d) 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 focus 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.



6 – WARRANTY:

All of our focus models are guaranteed against any defect in design, construction, or manufacture, and guaranteed to function properly for 10 years from installation. 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 user's 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.

Appendix.

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).

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.

$$R = \frac{1}{k} \times T = \frac{1}{0.84} \times 0.75 = 0.893$$

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.

DEFINITIONS:

$$R = \frac{(\text{ft}^2)(\text{hr})(^{\circ}\text{F})}{\text{Btu}} \quad k = \frac{(\text{Btu})(\text{in})}{(\text{ft}^2)(\text{hr})(^{\circ}\text{F})} = K \times 12 \quad K = \frac{(\text{Btu})(\text{ft})}{(\text{ft}^2)(\text{hr})(^{\circ}\text{F})} \quad r = \frac{(\text{ft}^2)(\text{hr})(^{\circ}\text{F})}{(\text{Btu})(\text{in})} = \frac{1}{k}$$

