barbas wood fires

INSTALLATION INSTRUCTIONS & MANUAL FOR ANNUAL MAINTENANCE

CUATRO-3 70

Wood-burning insert/built-in appliance

Barbas wishes you many cosy evenings with your new fire

This document is an essential part of your fire.
Read it carefully before installation and maintenance
of the gas fire and keep it in a safe place!

CE

Version number: 05 - 336146

Date: 22-11-2017

Serial number:

Production date:

interfocos

Declaration of Performance

According to regulation (EU) 305/2011

No. 1.109.002-1 - CPR-2013/07/01

1.	Unique identification code of the product-type	Barbas Cuatro-3 70 - 1.109.002-1' Room heater without hot water supply EN13229:2001/A2:2004/AC:2007
2.	Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4)	Barbas Cuatro-3 70 - 1.109.002-1
3.	Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer	Room heater without hot water supply
4.	Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5)	Interfocos BV; Hallenstraat 17; 5531 AB Bladel; The Netherlands
5.	Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2)	Not applicable
6.	System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V	System 3 and system 4
7.	In case of the declaration of performance concerning a construction product covered by a harmonised standard	The notified laboratory SGS Netherlands BV, No. 0608 performed the determination of the product type on the basis of type testing under system 3 and issued test report EZKA/13/0129-7

8. Declared performance

Harmonized technical specification	**EN13229:2001/A2:2004/AC:2007**
Essential characteristics	**Performance**
Fire safety	
Reaction to fire	A1
Distance to combustible materials	Minimum distances, in mm Insulation thickness rear = 100 Insulation thickness sides = 120 Insulation thickness ceiling = 100 Front = 800 Insulation thickness floor = 100
Risk of burning fuel falling out	Pass
Emission of combustion products	CO = 0.08 %
Surface temperature	Pass
Electrical safety	Pass
Cleanability	Pass
Maximum operating pressure	Not applicable
Flue gas temperature at nominal heat output	T = 272 °C
Mechanical resistance (to carry a chimney/flue)	NPD
Thermal output	
Nominal heat output	11 kW
Room heating output	11 kW
Water heating output	-- kW
Energy efficiency	79 %

9. The performance of the product identified in point 1 and 2 is in conformity with the declared performance in point 8.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Robert de Louwere, CEO
(Name and function)

Bladel; January 7, 2014
(place and date of issue)

.....
(Signature)

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1 INTRODUCTION

Congratulations on your purchase of this modern Barbas appliance.
This quality product will provide you with many years of enjoyment due to the flame effect and warmth that it provides.
This appliance is exempted or recommended for exemption under section 21 of the Clean Air Act 1993 and can be used in accordance with the intended use as described in this manual in smoke control areas in the UK. The appliance, when sold into the UK market, include a factory-installed modified air slider to ensure compliance with smoke emission requirements within smoke control areas.

Study this manual carefully before using the fireplace. We recommend you keep this manual in a safe place for reference purposes.

"The Clean Air Act 1993 and Smoke Control Areas"

Under the Clean Air Act local authorities may declare the whole or part of the district of the authority to be a smoke control area.
It is an offence to emit smoke from a chimney of a building, from a furnace or from any fixed boiler, if located in a designated smoke control area.
It is also an offence to acquire an "unauthorised fuel" for use within a smoke control area it is used in an "exempt" appliance ("exempted" from the controls which generally apply in the smoke control area).
The Secretary of State for Environment, Food and Rural Affairs has powers under the Act to authorise smokeless fuels or exempt appliances for use in smoke control areas in England.
In Scotland and Wales this power rests with Ministers in the devolved administrations for those countries. Separate legislation, the Clean Air (Northern Ireland) Order 1981, applies in Northern Ireland.
Therefore it is a requirement that fuels burnt or obtained for use in smoke control areas have been "authorised" in Regulations and that appliances used to burn solid fuel in those areas (other than "authorised" fuels) have been exempted by an Order made and signed by the Secretary of State or Minister in the devolved administrations.
Further information on the requirements of the Clean Air Act can be found here: http://smokecontrol.defra.gov.uk/.
Your local authority is responsible for implementing the Clean Air Act 1993 including designation and supervision of smoke control areas and you can contact them for details of Clean Air Act requirements.

1.2 SAFETY AND INSTALLATION INSTRUCTIONS

Safety

- Do not place flammable objects within 150 cm of the appliance. Pay special attention to furnishings and ornaments around the appliance.

- When you use your appliance, the exterior will become hot. Always wear the glove or use the accessories supplied when filling etc.
  Protect yourself and others (especially children!) from burns. Do not leave children unattended when the appliance is burning.

- Watch your clothing. Synthetic clothing in particular can easily catch fire and burn intensely.

- Do not approach the appliance with flammable materials or liquids. Any work with solvents, adhesives etc. in the space heated by the appliance can be very dangerous.

- It is not allowed to connect the appliance to a flue which is already connected to another appliance.

- Cheak the chimney. Cracks in the chimney may not only lead to damp, staining of walls and leaking of smoke, they can also impair the carrying off of smoke.

- Prevent your chimney being soiled from above (birds' nests etc.) by fitting a suitable cap to the chimney pot.

- Avoid chimney fires! Have your chimney swept at least once per year - more often if you use your fire a lot. Prevent excessive deposits of soot inside the chimney by not burning freshly-cut wood. Instead, burn clean, dry chopped wood.

- Follow the instructions issued by your local fire brigade.
  The appliance can be taken in operation if national and local regulations are satisfied. The required constructive adaptations should be satisfied as well.

- It is essential that the appliance, the flue and combustion air supply are cleaned and inspected annually by a Barbas dealer/specialist.
  The safe operation of the appliance will thus remain guaranteed.

- The appliance is suitable and approved for periodical use.

Installation instructions

- The appliance may only be set up if the appliance and location meets the
  - national and local installation regulations;
  - local fire brigade regulations and required architectural provisions.

- Ensure that the room in which the appliance is situated has adequate ventilation.

- Wood and wood briquettes may be stoked in the appliance.
  Do not use any coal and liquid fuels or fuel gel in the appliance. The appliance is not intended for use of this fuels and can be dangerous and lead to damage to your health and may seriously damage the appliance.

- **Never** use the appliance to burn rubbish.

- Please read all instructions / stickers on and around the appliance.

- Read the “Directions for use” before using the appliance for the first time. When you first fire up your appliance, there are a number of extra points you should take into account.

- In transit, some parts of the appliance may have moved from their original place. Check that the door opens and closes, the brake plate is fitted correctly to the brackets at the top of the appliance, the heat-resistant panels are fixed to the walls and the panels on the bottom have not moved. Check if there are no foreign objects in the appliance.

- Avoid over-loading (white burning glow), caused, for example, by lengthy burning with primary air (combustion air supply slider all the way to “ **+** ”) or by burning too much wood in one go. The appliance can then become over-heated.
  This may damage the metal flue gas flap.

- Ask for the local building regulations, before commensing the installation of the appliance.

2 LOCATION

2.1 INCLUDED

Set documentation	Installation instructions Directions for use
Attributes	Glove (Heat resistant up to max. 95°C) Operating hook / Poker

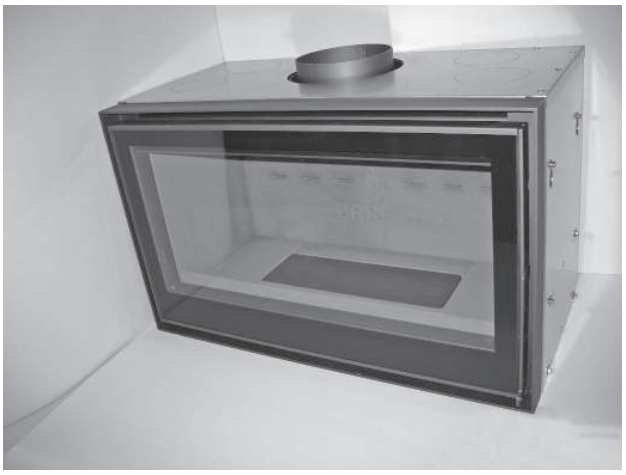
N.B. If any part is missing, please contact your dealer.

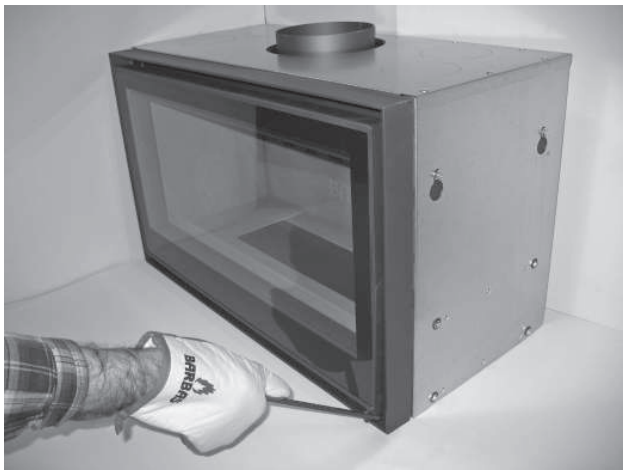
2.2 PREPARATION FOR POSITIONING

Check all functions of the appliance before fitting.

- Check the opening and closing operation of the door.

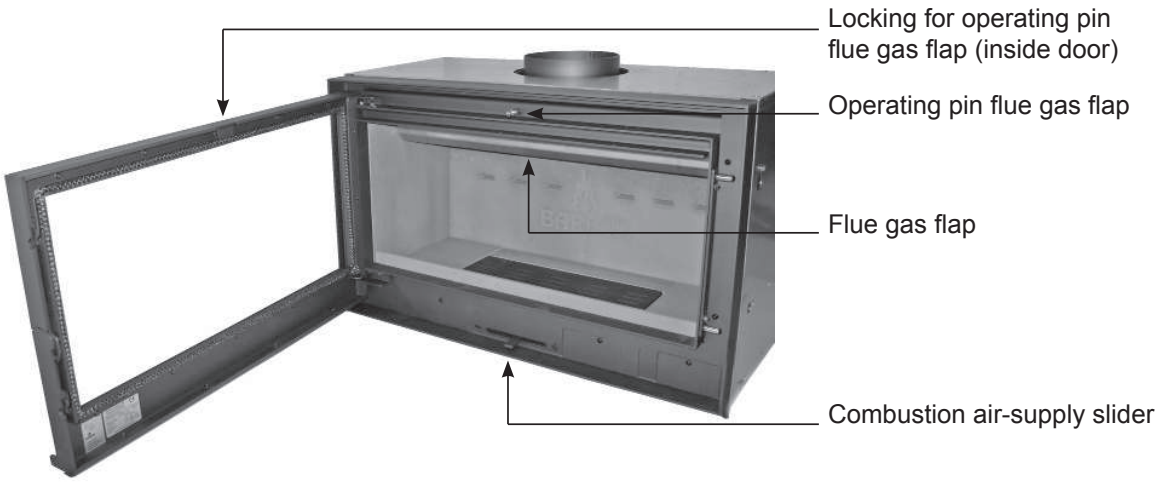
Turn the handle all the way down:
Door is locked.



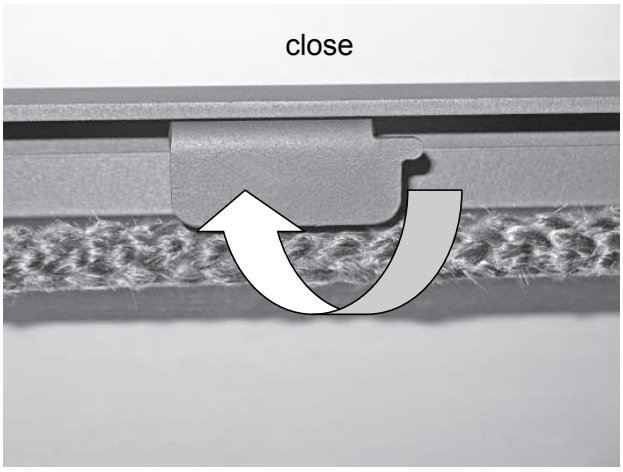


Handle forwards:
The door releases from its lock and can be opened forwards.
For this, use the operating hook supplied.

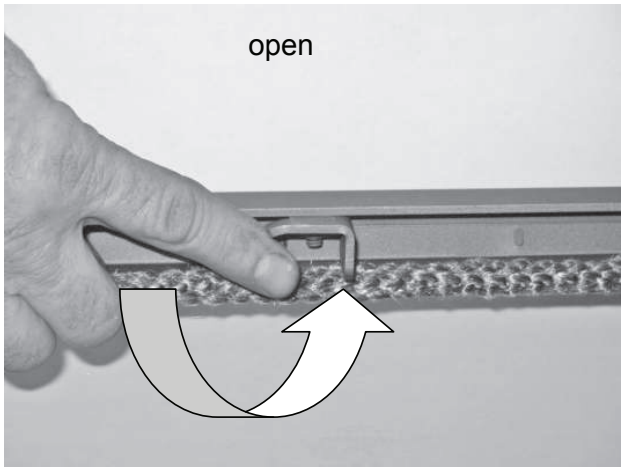
- Check the operation and setting of the flue gas flap.



Locking for operating pin of flue gas flap (inside of door).



Locking closed (turned to the left)



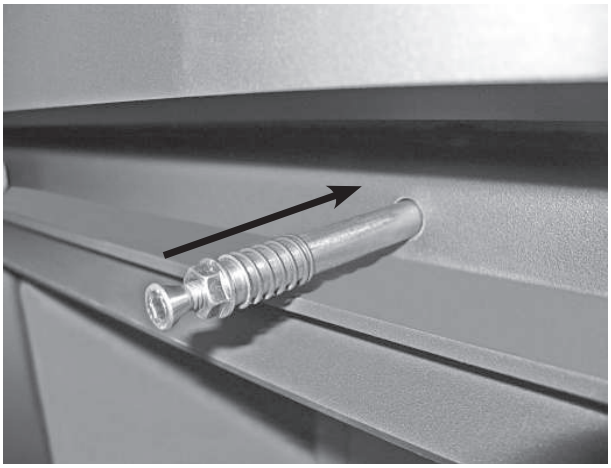
Locking open (turned to the right)

Locking slider all the way to the left (closed):
Flue gas flap operation works normally:
Door open ⟶ Pin comes forwards ⟶ Flue gas flap open
Door closed ⟶ Pin is pressed in by the door ⟶ Flue gas flap closed

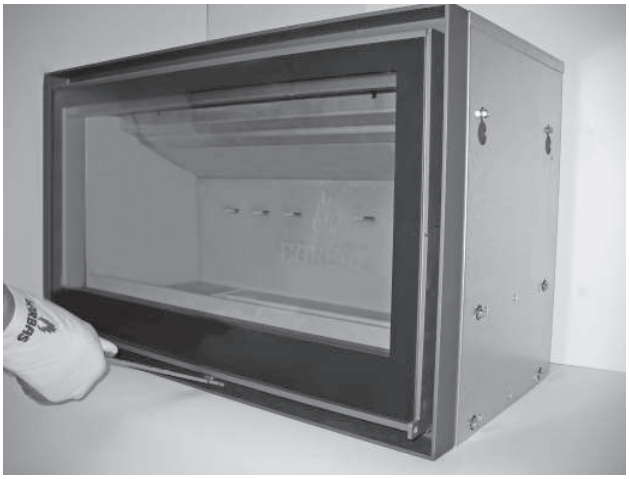
Locking slider all the way to the right (open):
Flue gas flap always remains open !!

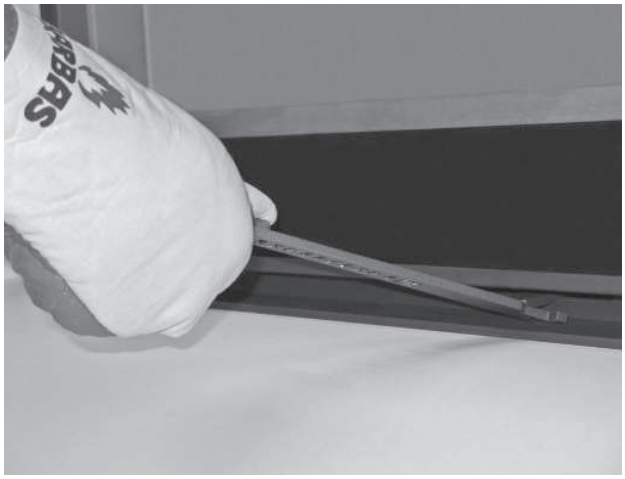
- Flue gas flap in “open” position.

- Operating pin flue gas flap.

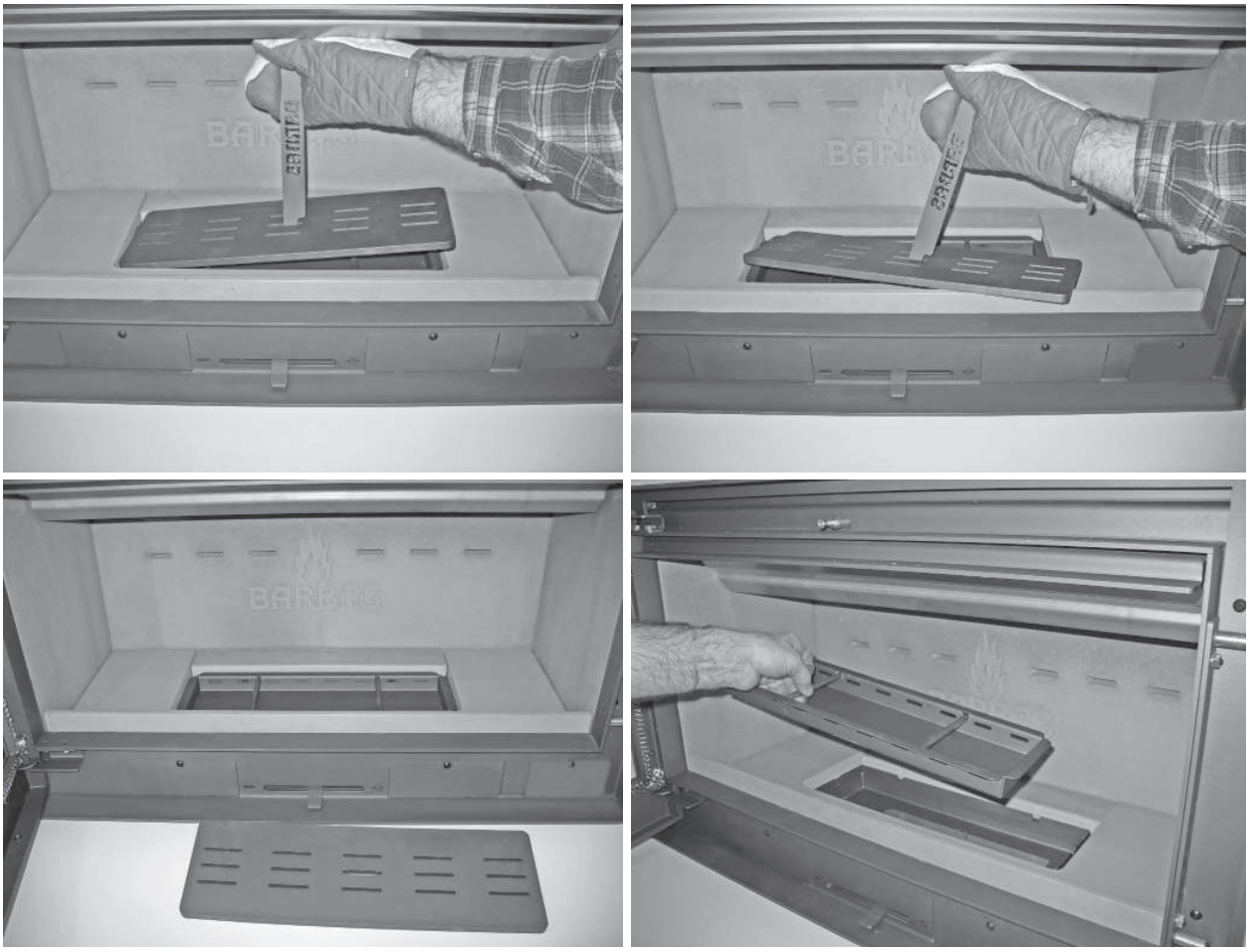


- Check whether the retardant plate (brake plate) is located correctly in the supports.
- Check the operation of the slider for the regulation of the combustion air intake (middle below the window).





- Check whether the ashtray is completely empty.



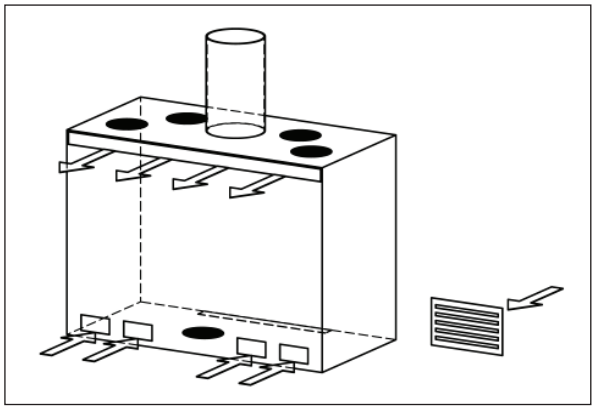
- Report any defects immediately to your dealer.
- Remove enclosed documents and components from the appliance.

- **Important:** Decide how to install the appliance.
  There are many possibilities !
  See also chapter 3.3 Fitting.
  Dependent on the type of fireplace where the appliance is located /installed.

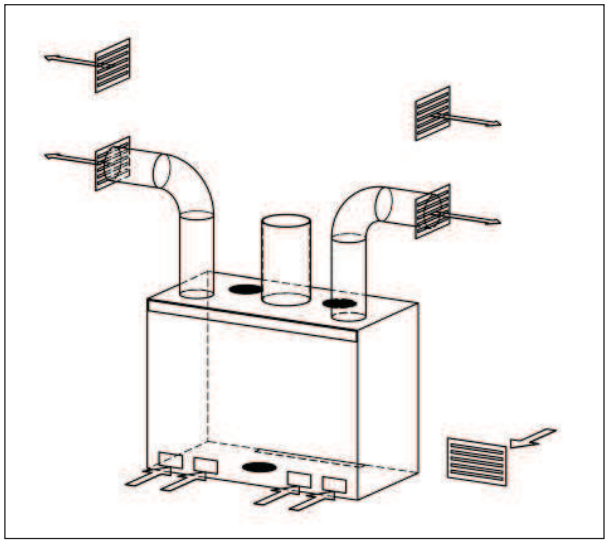
Connection Possibilities:

Ⓘ Mounting as inset in an existing fireplace.
(Combustion air supply opening at the bottom of the appliance is closed, by placing the appliance on a flat floor.)

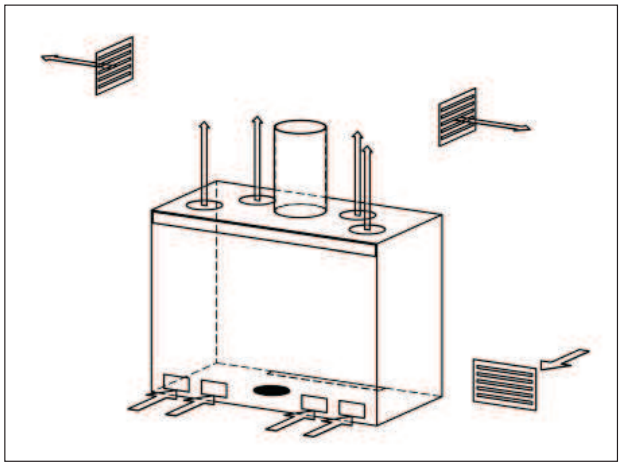
A Insert, no open space in top of the fireplace



B Insert, with convection set, with open space in top of the fireplace.

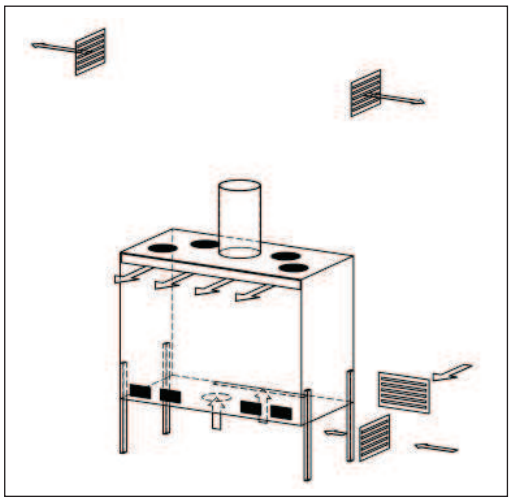


C Insert, with open space in top of fireplace.
Convection air through the chimney breast.

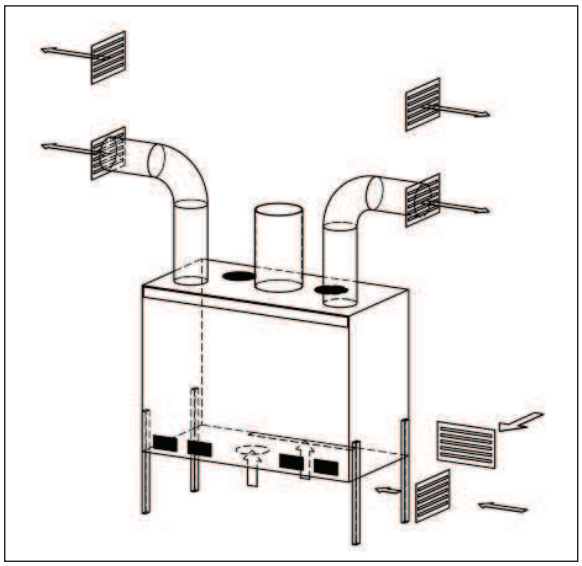


(II) Installing as a build-in appliance in an existing or new fireplace.
The chimney breast is totally empty.

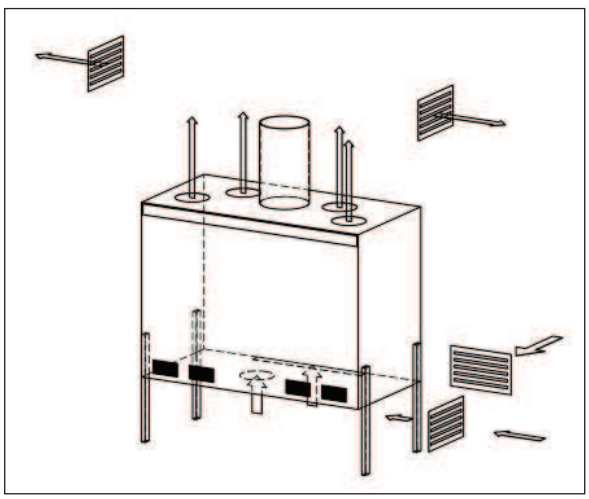
A Build-in appliance.



B Build-in appliance, with convection set.

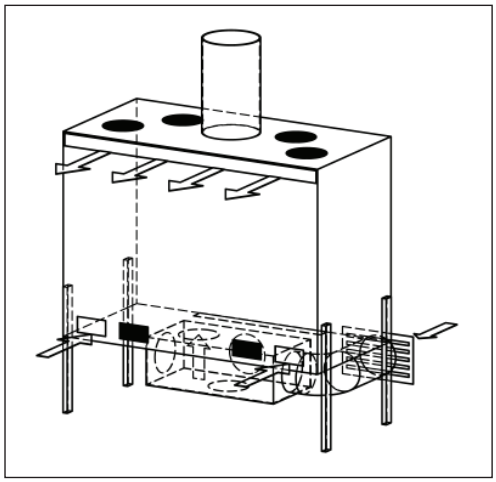


C Build-in appliance, convection air through the chimney breast.



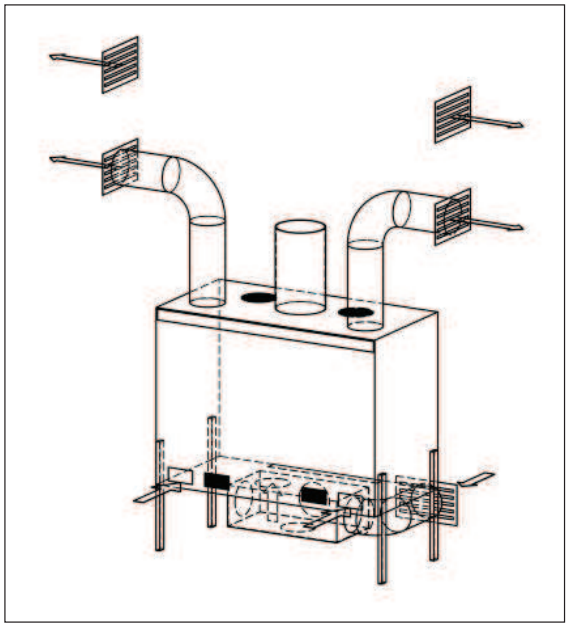
(III) Installing as build-in appliance with a air-box / fan box for direct external supply of combustion air.

A Build-in appliance with air-box / fan box.
Convection air supply through the front of the appliance.
No empty space in the chimney breast above the appliance.

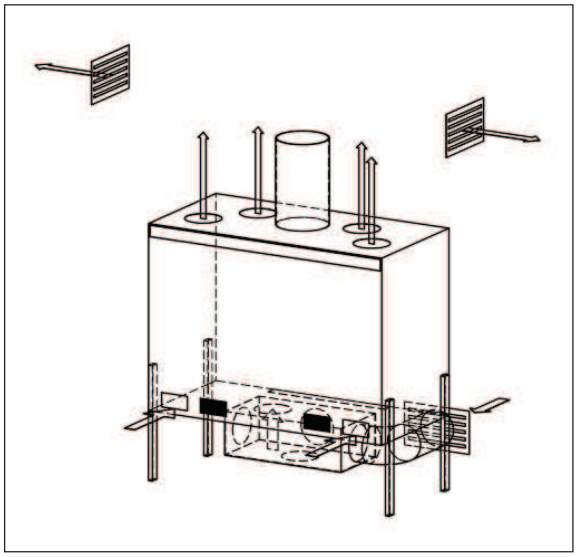


Ventilate the chimney breast, when it is totally empty, by placing vents in the top and bottom of the chimney breast.

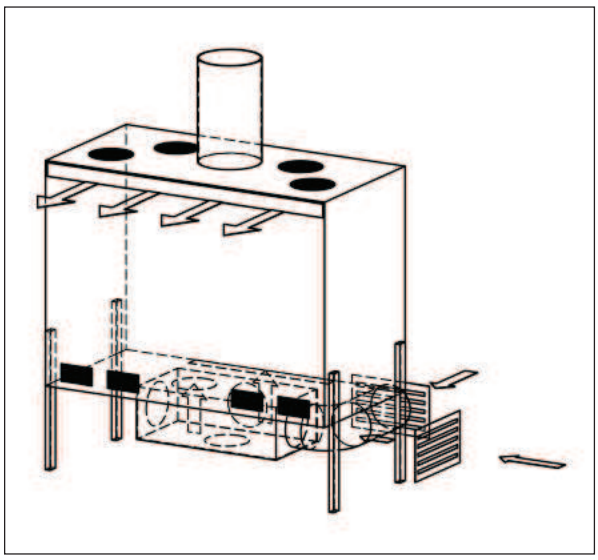
B Build-in appliance with air-box / fan box.
Convection air supply through inlets at front of the appliance.
With convection set.
The chimney breast is totally empty.



C Build-in appliance with air-box / fan box.
Convection air supply through inlets at front of the appliance.
Convection air through the chimney breast.
The chimney breast is totally empty.

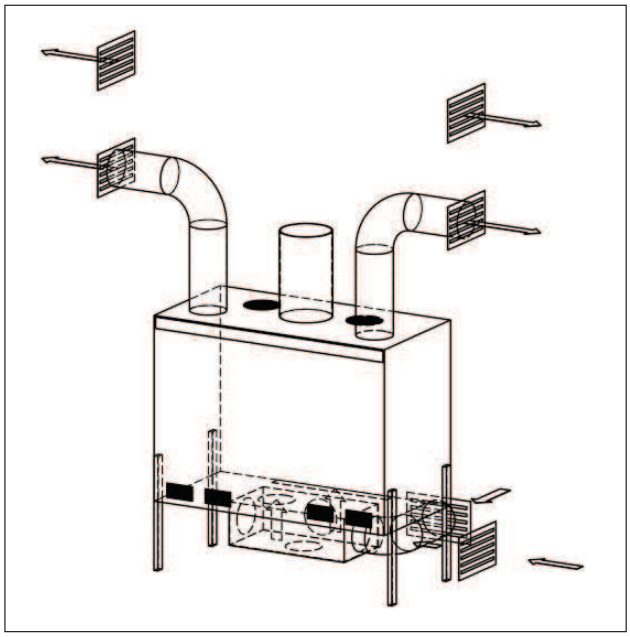


D Build-in appliance with air-box / fan box.
Convection air supply through a grate in the bottom side of the fireplace.
No empty chimney breast above the appliance.

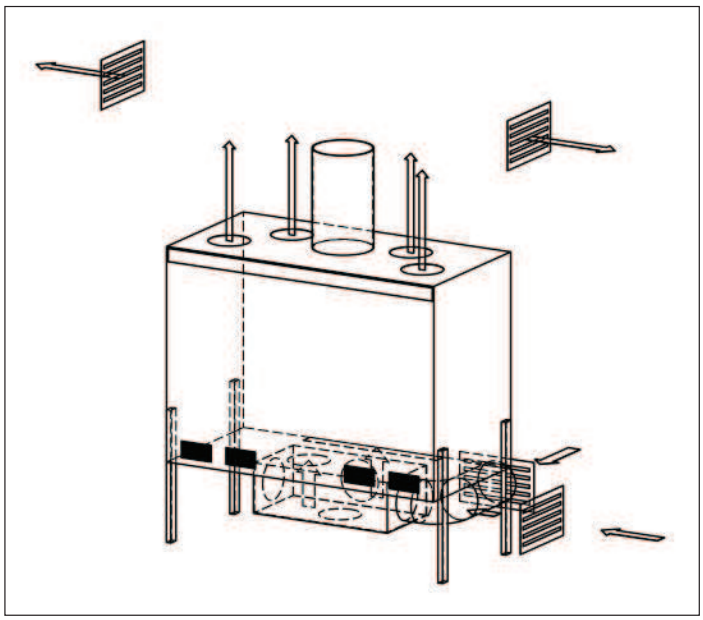


Ventilate the chimney breast, when it is totally empty, by placing grates in the top and bottom of the chimney breast.

E Build-in appliance with air-box / fan box.
Convection air supply through a grate in the bottom side of the fireplace.
With convection set.
The chimney breast is totally empty.

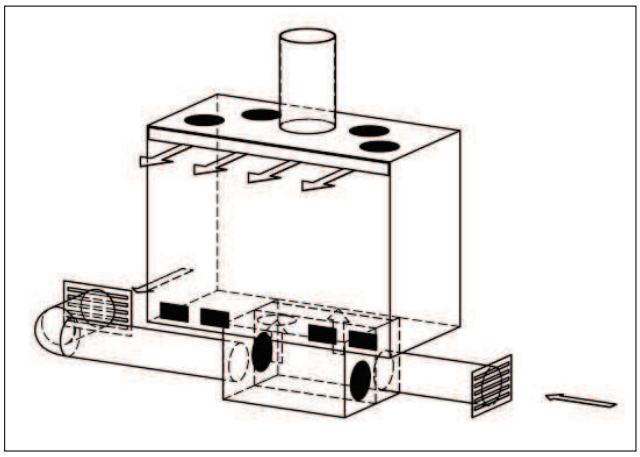


F Build-in appliance with air-box / fan box.
Convection air supply through a vent in the bottom side of the fireplace.
Convection air through the chimney breast.
The chimney breast is totally empty.



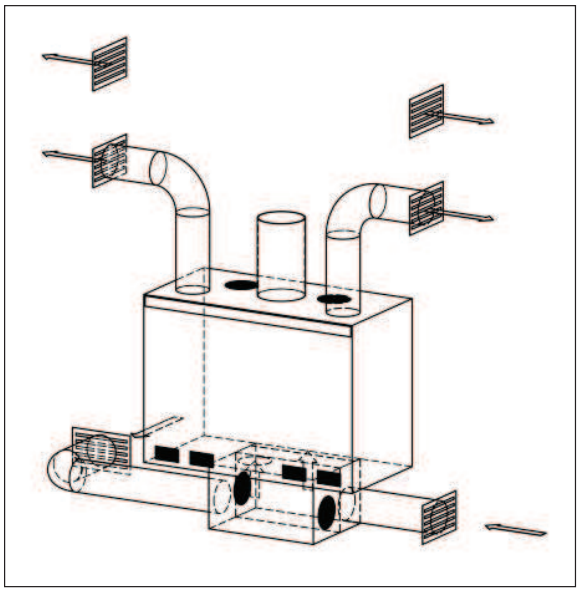
Ⓘⓥ Installing as build-in appliance, with air-box / fan box.
- Directly external combustion air supply
- Convection fan with built-in dimmer switch
- Convection air supply through a grate/opening from the living room

A Build-in appliance with fan box.
No empty space above the appliance.

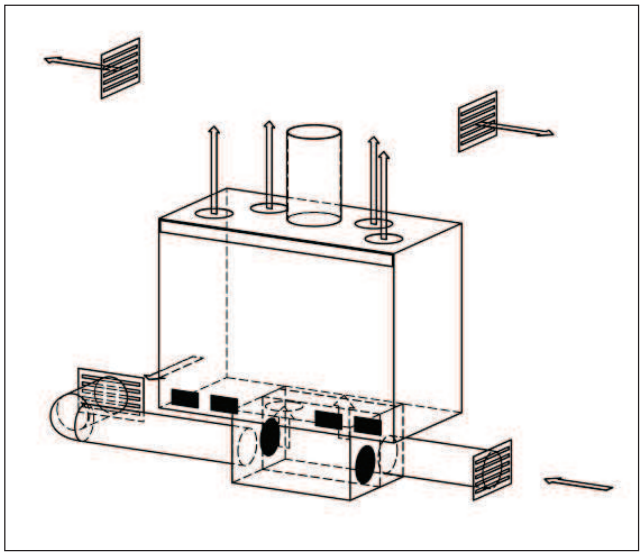


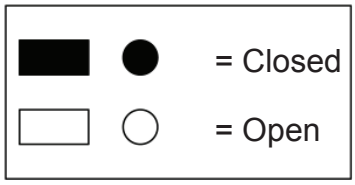
Ventilate the chimney breast, when it is totally empty, by placing vents in the top and bottom of the chimney breast.

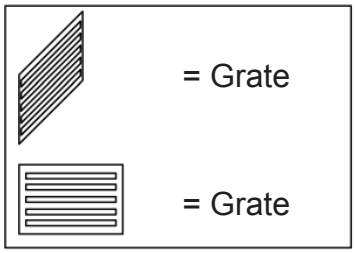
B Build-in appliance with air-box / fan box.
With convection set.
The chimney breast is totally empty.

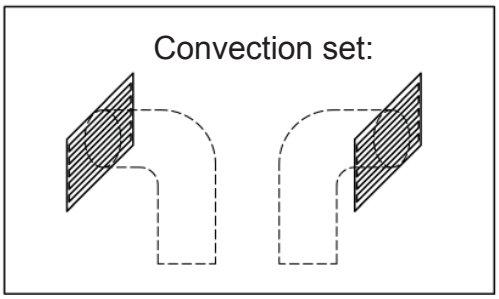


C <u>Build-in appliance with air-box / fan box</u>.
Convection air supply through the chimney breast
The chimney breast is totally empty.







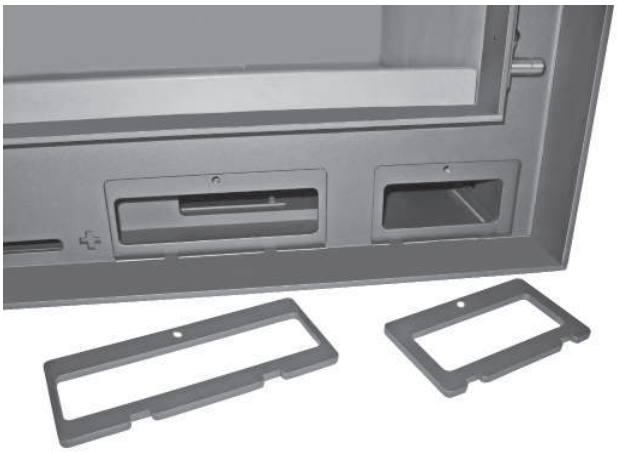


- Only when the appliance is installed as an insert appliance (installation option I A, I B and I C) should the openings for combustion and convection air at the front of the appliance be opened.
  The “closed” discs should be exchanged for “open” discs (delivered with the appliance).

- Remove the “closed” discs located on the far left and right openings with an allen key.

- Remove the inner “closed” discs (left and right) with an allen key.

- “Open” discs.

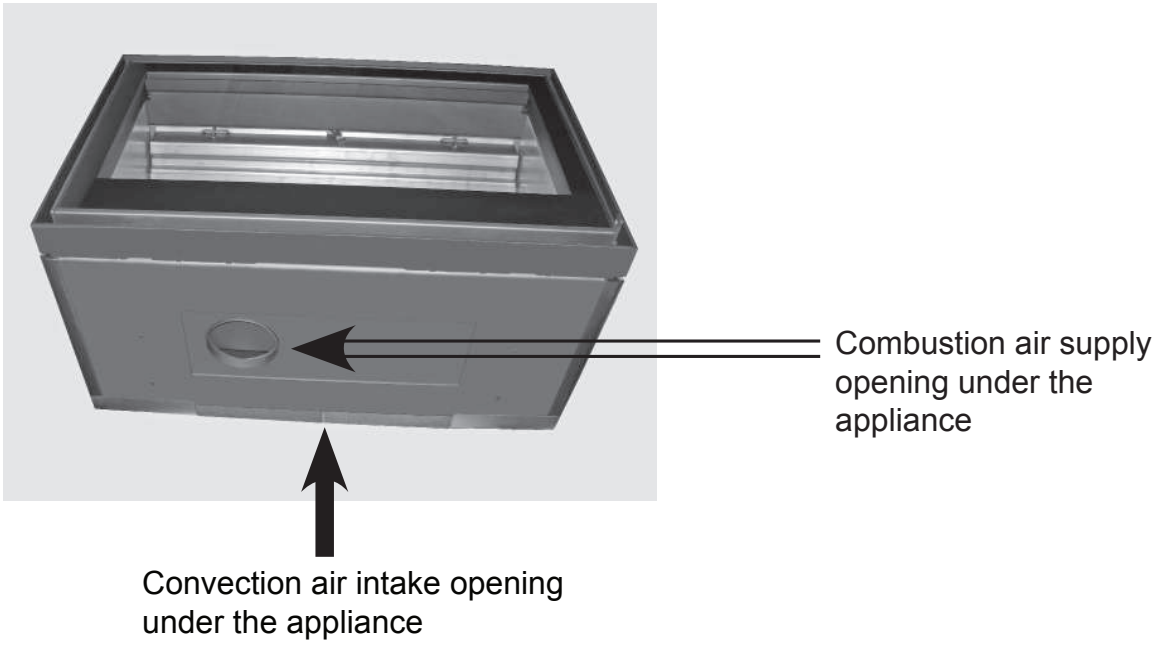


- Mount the “open” discs on the far left and right openings with an allen key.

- Mount the inner “open” discs (left and right) with an allen key.

- Appliance, equipped with “open” discs.
  The openings on the far left and right are the convection air inlets.
  The inner left and right openings are the combustion air inlets.

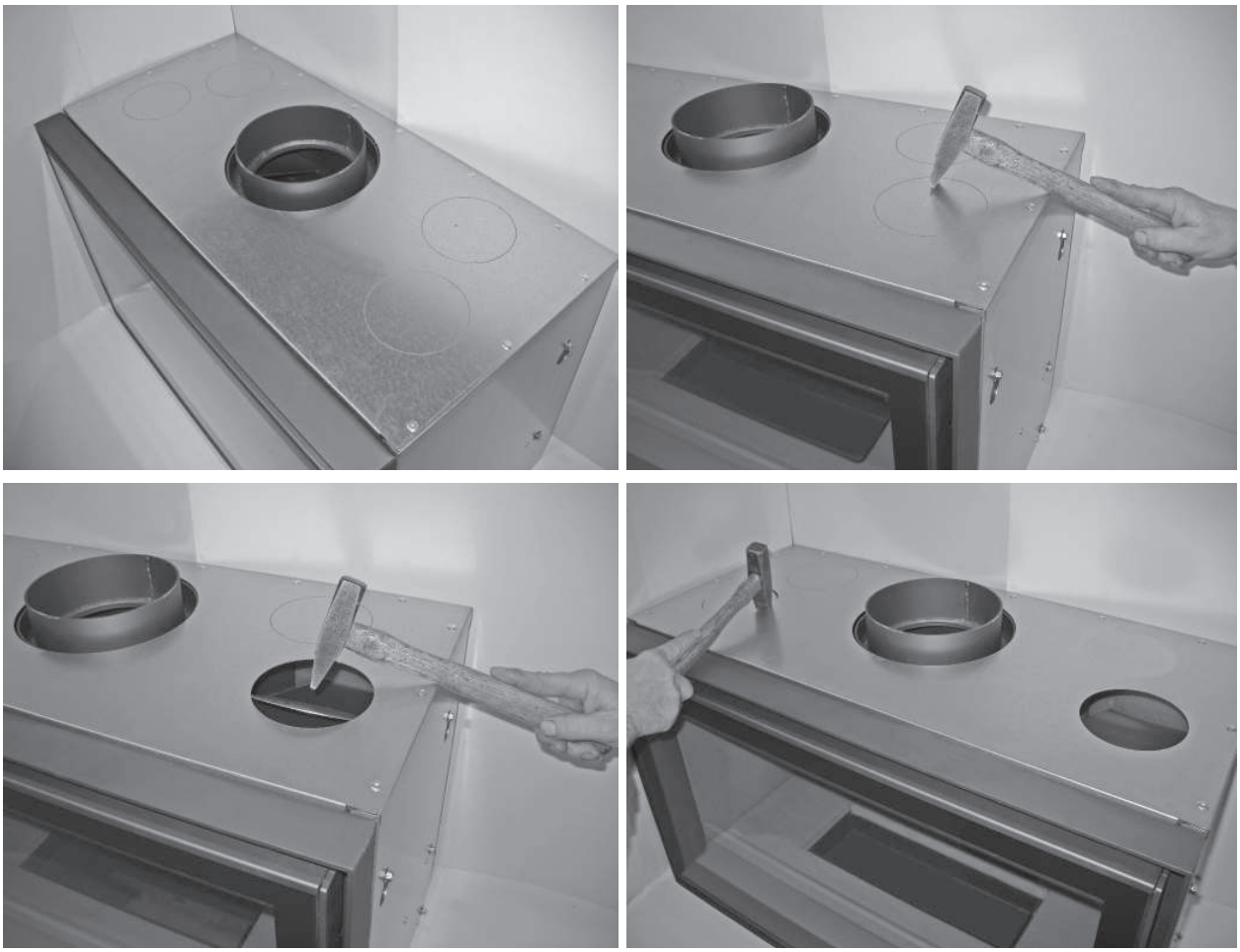
- Permanent inlet opening at the bottom of the appliance.

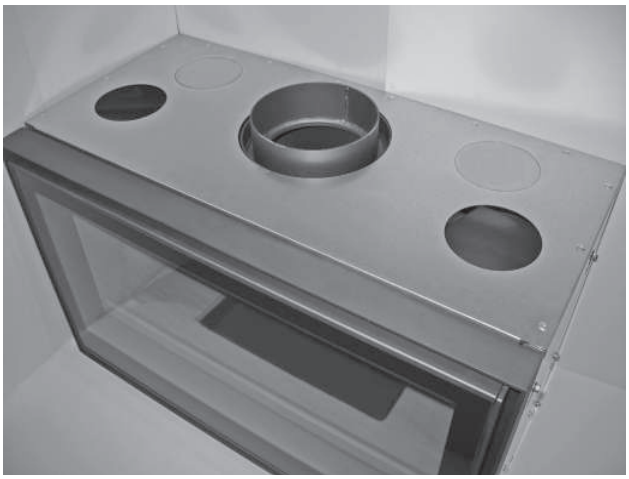


- Ventilation casing / chimney.
  Ensure that the casing/chimney has sufficient ventilation openings (See Chapter 3 and 4).

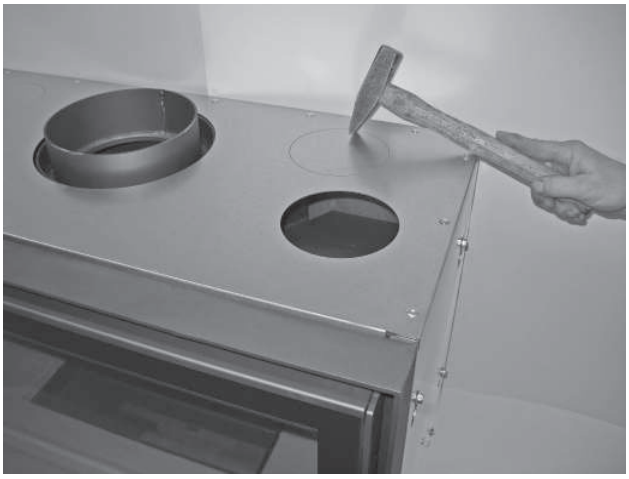
Important: Only open those convection air outlets, as defined by the chosen installation option.

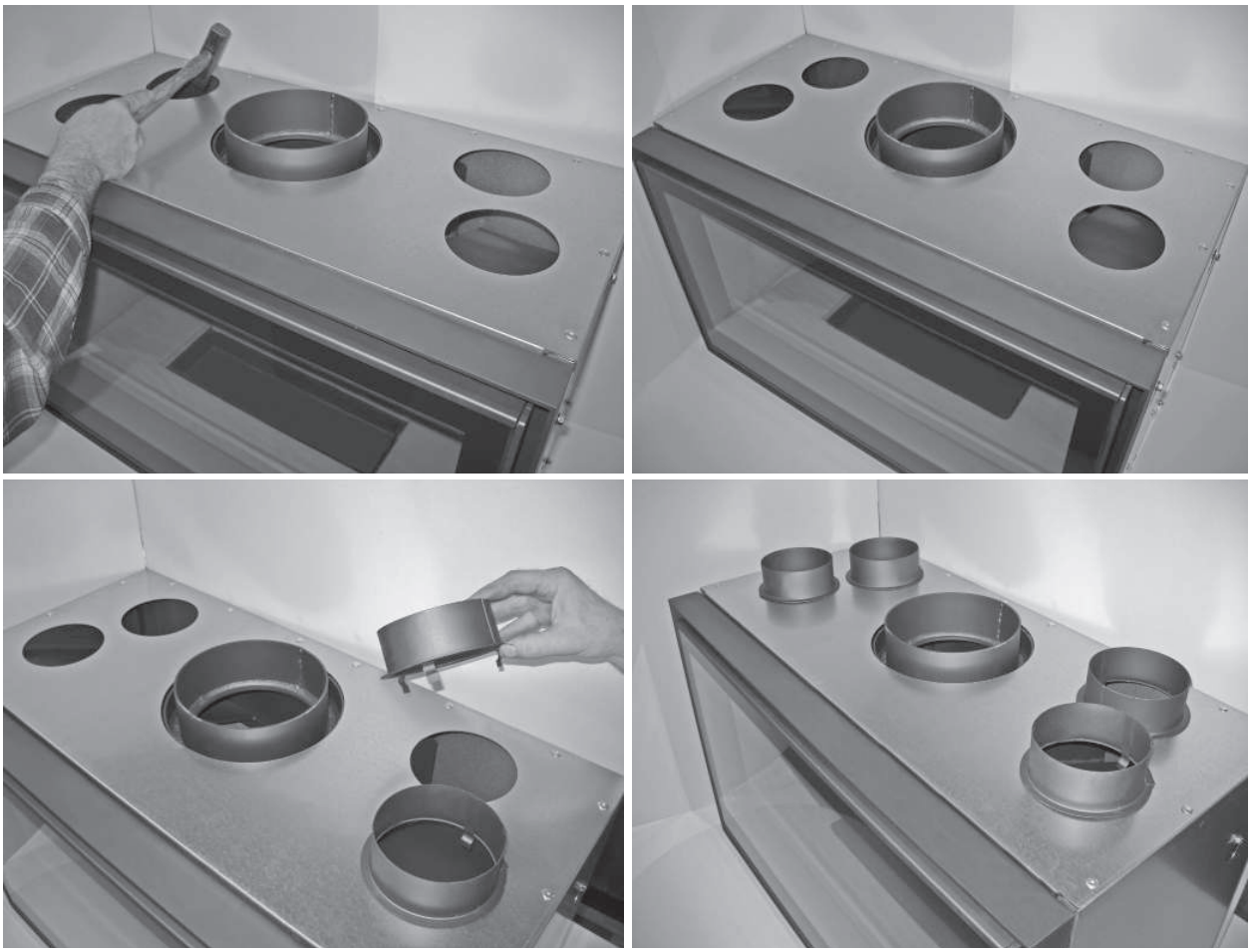
- Opening of 2 convection air outlets.





- Opening of 4 convection air outlets.

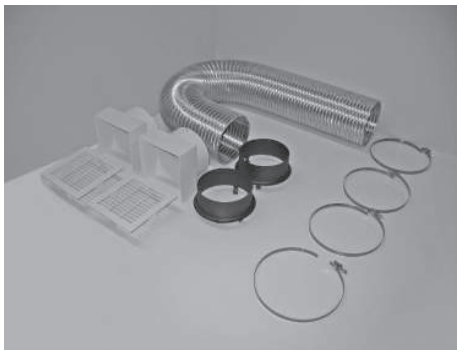




Have the suitability of the area in which the fire is to be fitted (and the chimney) approved by a specialist.
The space into which the appliance is to be fitted must in no way be damaged.
The appliance must have its own chimney, constructed in compliance with current legislation.

2.3 ACCESSORIES

The following accessories can be supplied by your dealer:

Part. no		Accessorie
.....	Ⓐ	Air-box / Fan box: 
312829 302188 310178 309872 309730 304040	Ⓑ	Convection set General: (for convection air extraction) Advice: • Appliance without air-box / fan box: The use of a convection set is strongly recommended. • Appliance with air-box / fan box: The use of a convection set is possible, but not mandatory. • 1x Flexible aluminium pipe Ø125 mm, L= 3 m (max.) • 2x Fitting box 135x135 mm • 2x Convection exit grid, white, 145 x 145 mm • 2x Collar adaptor Ø125 mm • 4x Hose clamp Ø125 mm 
.....	Ⓒ	3-Sided 35 mm frame
.....	Ⓓ	4-Sided 35 mm frame
309872 310178	Ⓔ	Grate ventilation chimney Fitting box for grate ventilation chimney

Part no		Accessorie
330361	Ⓕ	Set of high adjustable feet 

3 INSTALLATION

3.1 INSTRUCTIONS

When fitting one of these appliances local and/or national regulations relating to fire safety must be followed. In case of doubt, consult the fire safety department of the local fire brigade, particularly if the fire is to be fitted in a home with walls and/or floors containing flammable material.

The connection of several appliances to a single flue/chimney is not allowed.

3.2 CHIMNEY

If no chimney is immediately available, have one fitted by a recognised specialist only. The chimney must be compliant with local regulations and is particularly important because it has a significant bearing on the function of the appliance.

Basic rules:

- A chimney for an open appliance is not, by definition, suitable for a closable model (i.e. an appliance with doors). As a closed appliance draws in much less (cold) air, the smoke is hotter. Please have your chimney inspected to see whether it is suitable for a closable appliance.

- The chimney opening must be at least 5 metres above the top of the door opening of your appliance.

- The chimney must protrude at least 40 cm above the apex of a sloping roof and at least 1 metre above a flat roof. In short, the chimney must always end in an area with a negative air pressure. Contact your local chimney sweep for the exact dimensions of the chimney opening.

- The internal diameter must not be less than that of the appliance at any point (even at the end of the pipe).

- Avoid bends at all costs. The maximum deviation from the perpendicular is 45°.

- Both the dimensions and the construction must meet stringent construction standards. Your recognised specialist will be pleased to assist.

- Contact your fire insurer to make sure that your policy is in order.

3.3 FITTING

An appliance can be fitted in the newly-built or existing chimney breast of an open fire. When fitting, both fire safety and operational safety must be safeguarded. The fitter is responsible for this.

General guidelines:

- If there is a wooden beam above the fitting location, heat must not radiate directly onto it. An insulation plate must be hung below the beam, leaving an air gap between it and the beam of at least 1 cm.

- Always use (white) unbound ceramic insulation wool. Bound material (yellow), such as glass and rock wool, spreads an irritating smell on heating, causes excess smoke and is unsuitable for high temperatures.

Insulation requirements:	• **temperature resistance ≥ 700°C.** • **density ≥ 80 kg/m^3**

- Have any electrical connection for the convection fan box carried out by a professional electrician.
  Note ! : The fan set should be connected to an earthed wall socket.
  This socket must remain accessible at all times.

- Before fitting, remove the door to protect the glass.

3.3.1 Positioning of the appliance

The appliance must be positioned on a concrete surface. If such a surface is not immediately available, a sufficiently solid pedestal of noninflammable material should be built from the creeping space.

The appliance can be placed in position using the carrying brackets (dealer-accessorie) supplied.

Ventilate the empty space in the chimney, by placing ventilation openings at the top and bottom of the chimney breast.

The total ventilation openings should be at least 450 cm^2 at the bottom of the chimney breast and also at least 450 cm^2 at the top of the chimney breast.
(Total ventilation openings: 900 cm^2.)

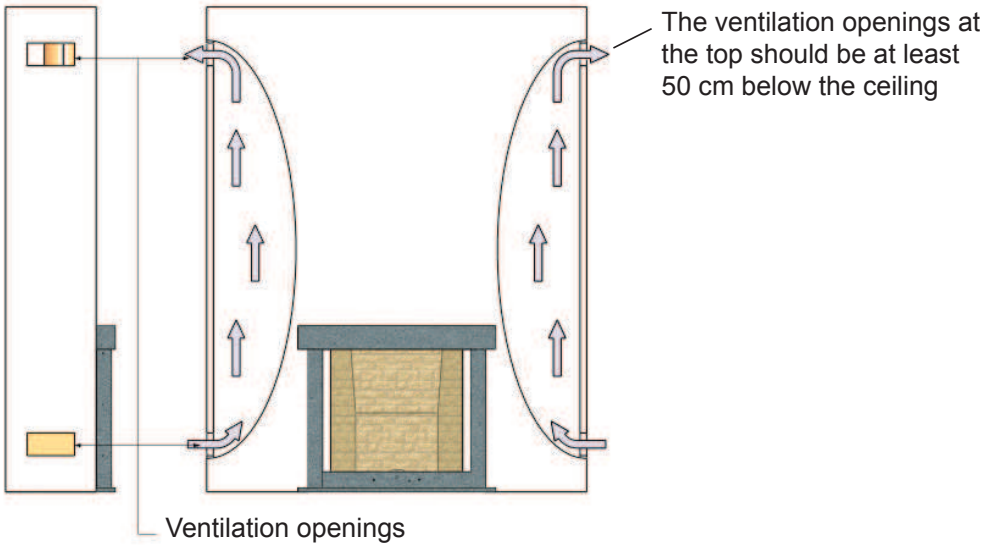
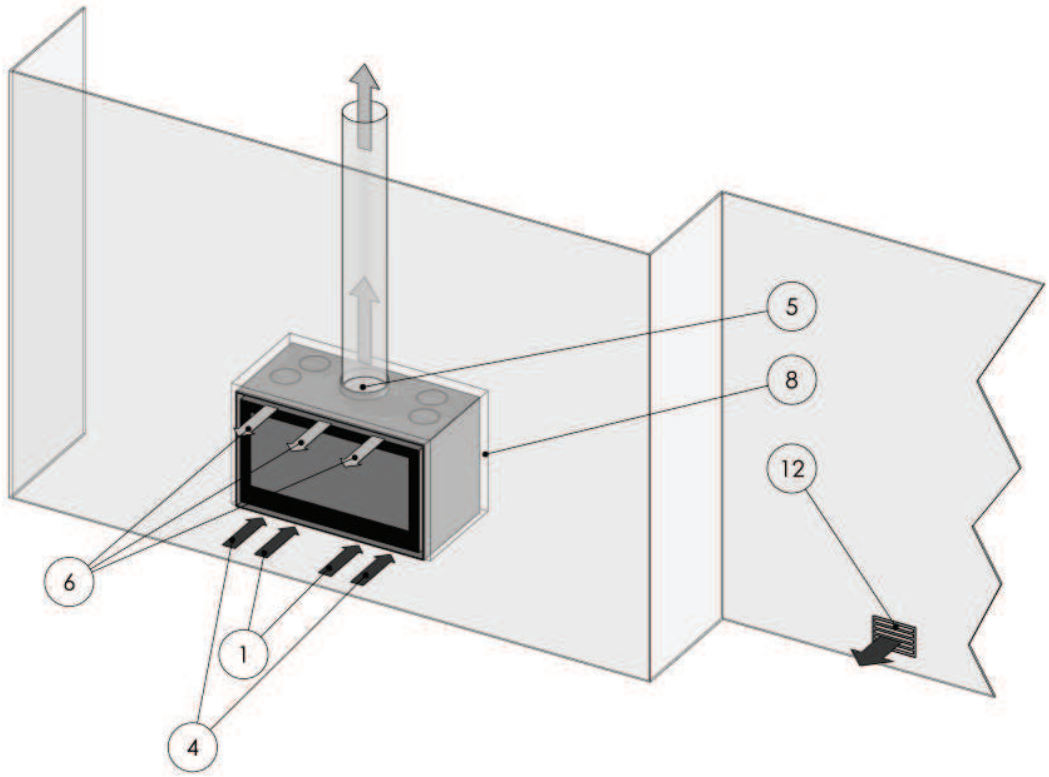


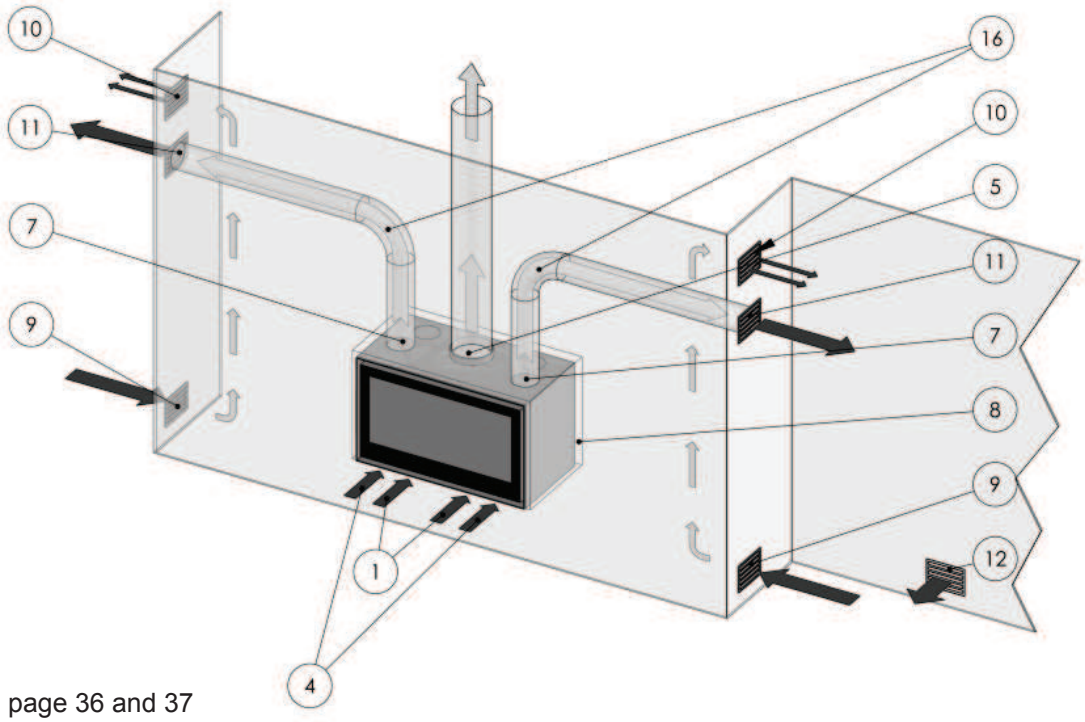
Figure 1: Use of ventilation of chimney

Examples installation possibilities.

Ⓘ A Appliance as an insert-appliance in an existing chimney.

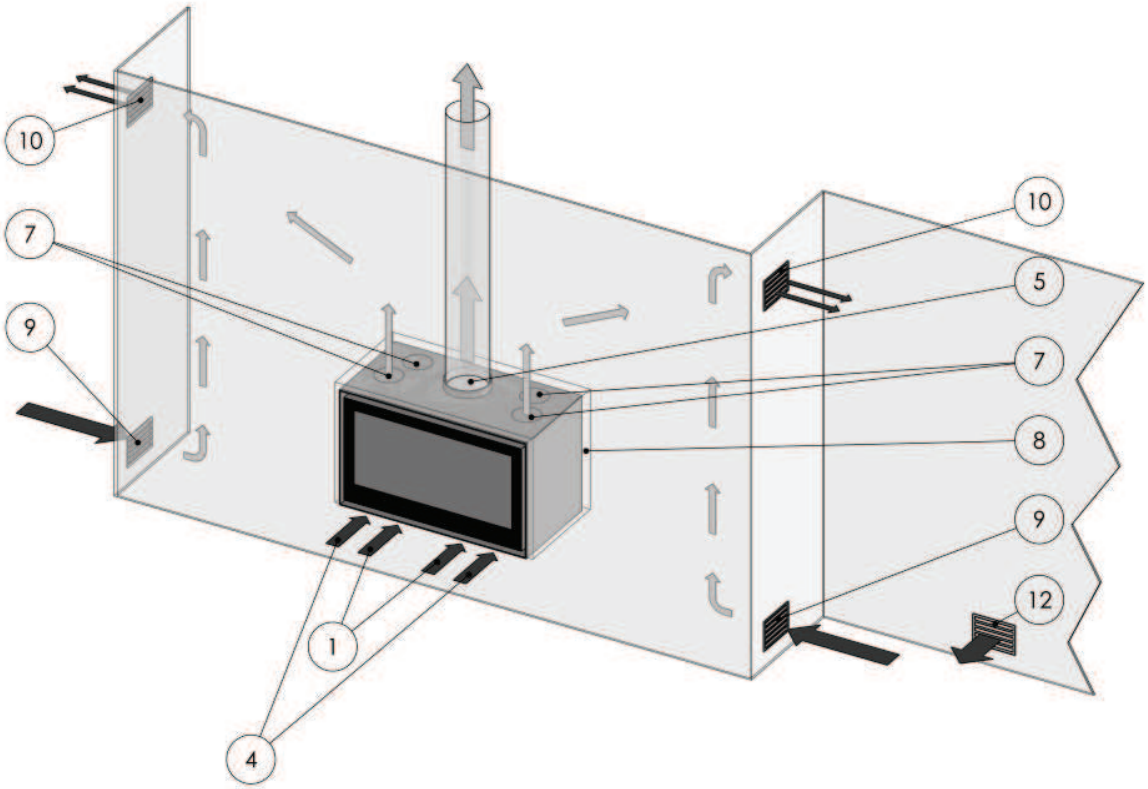


Ⓘ B Appliance as an insert-appliance in an existing chimney.
Fitted with a convection set and ventilation of the chimney.

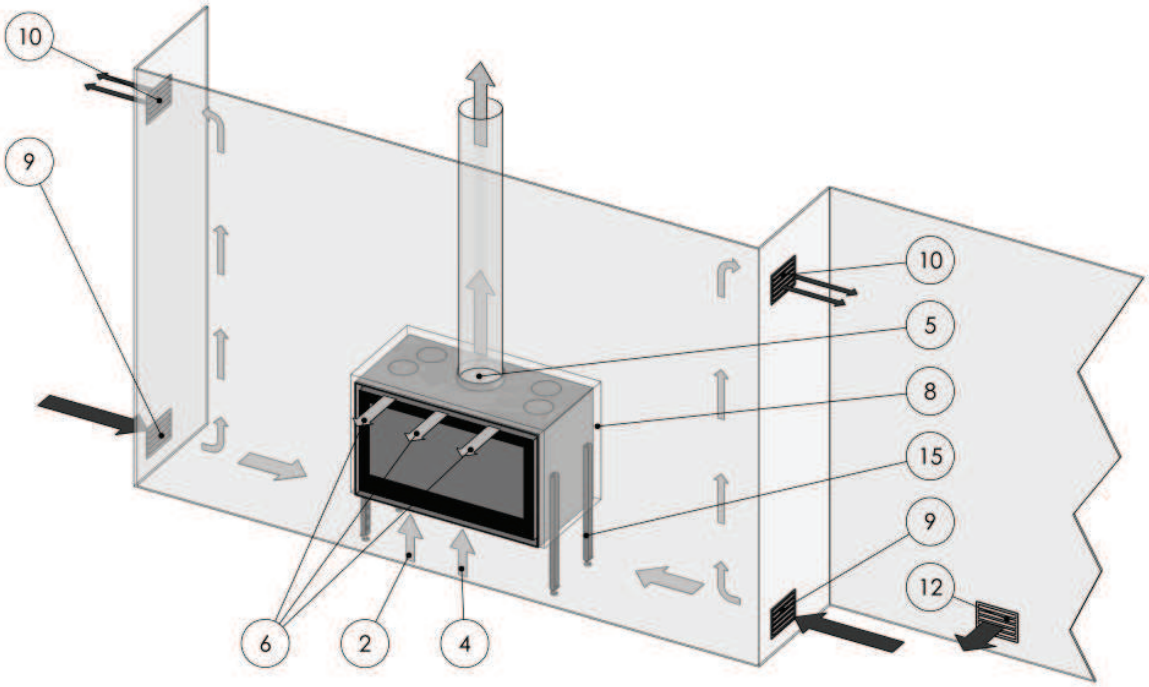


Legend page 36 and 37

(I) C Appliance as an insert-appliance in an existing chimney.
Convection air through the chimney breast.
Fitted with ventilation of the chimney.

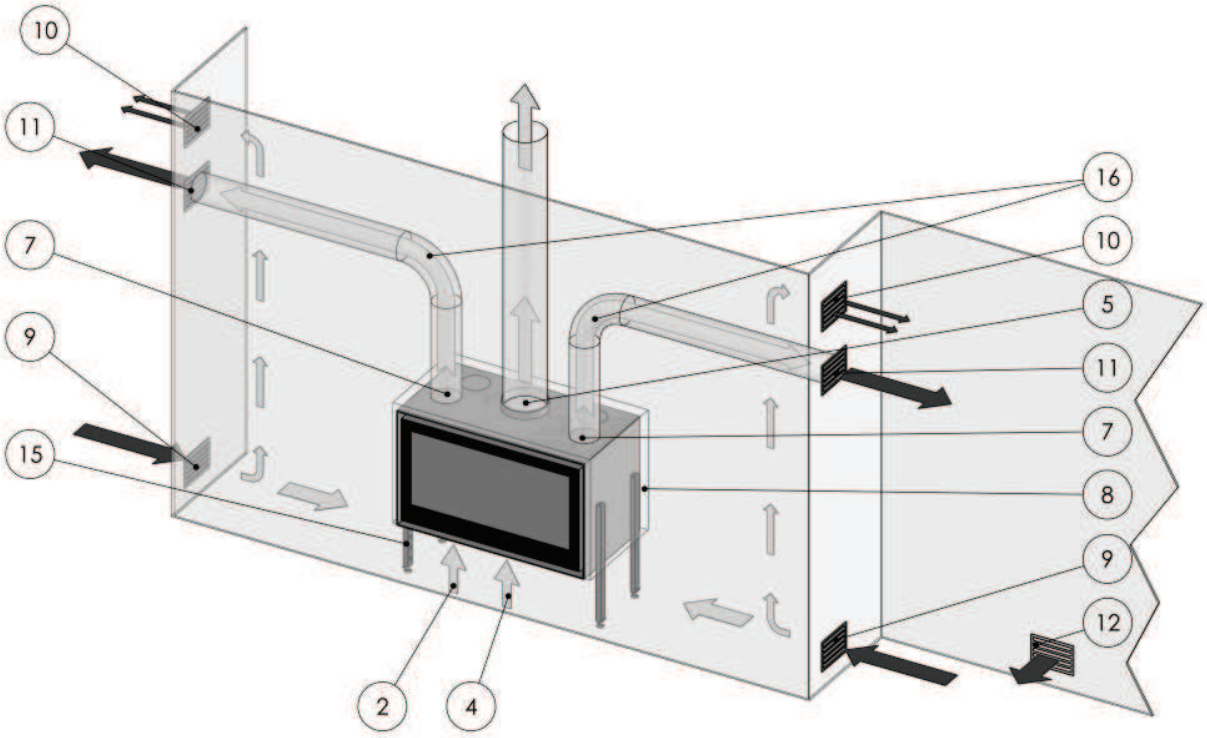


(II) A Appliance as a build-in appliance in an existing or a new chimney.
Fitted with ventilation of the chimney.

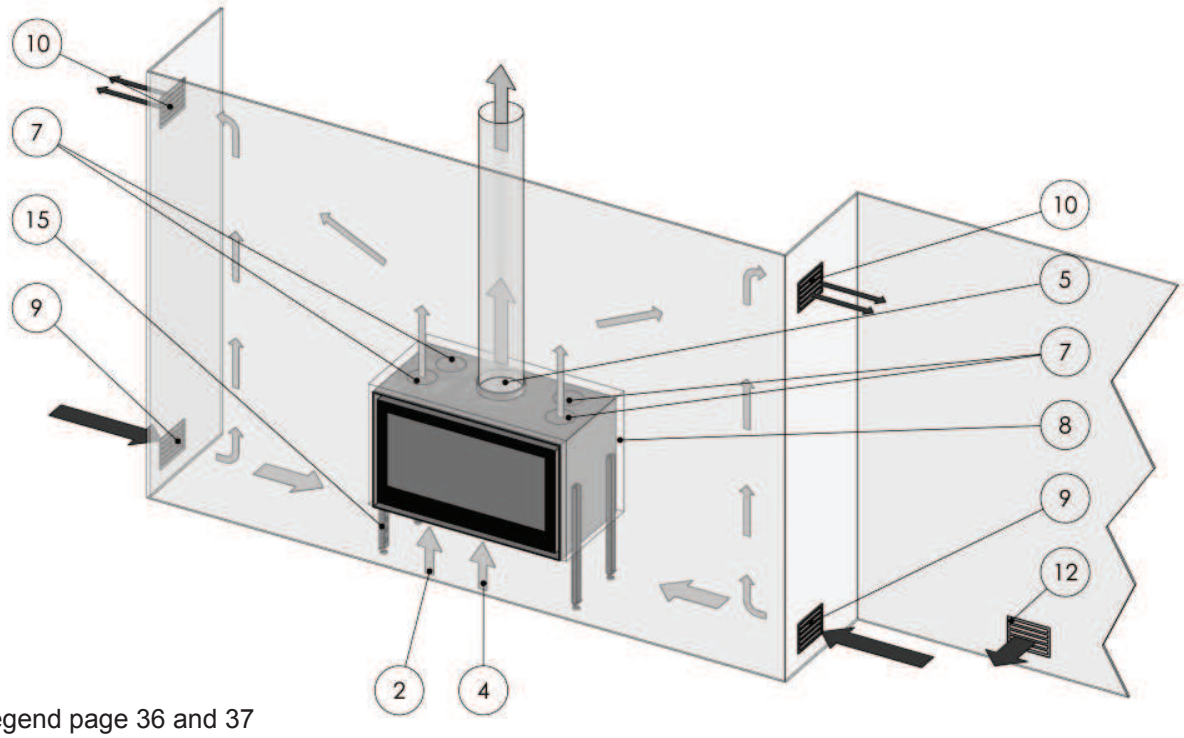


Legend page 36 and 37

(II) B Appliance as a build-in appliance in an existing or a new chimney.
Fitted with a convection set and ventilation of the chimney.

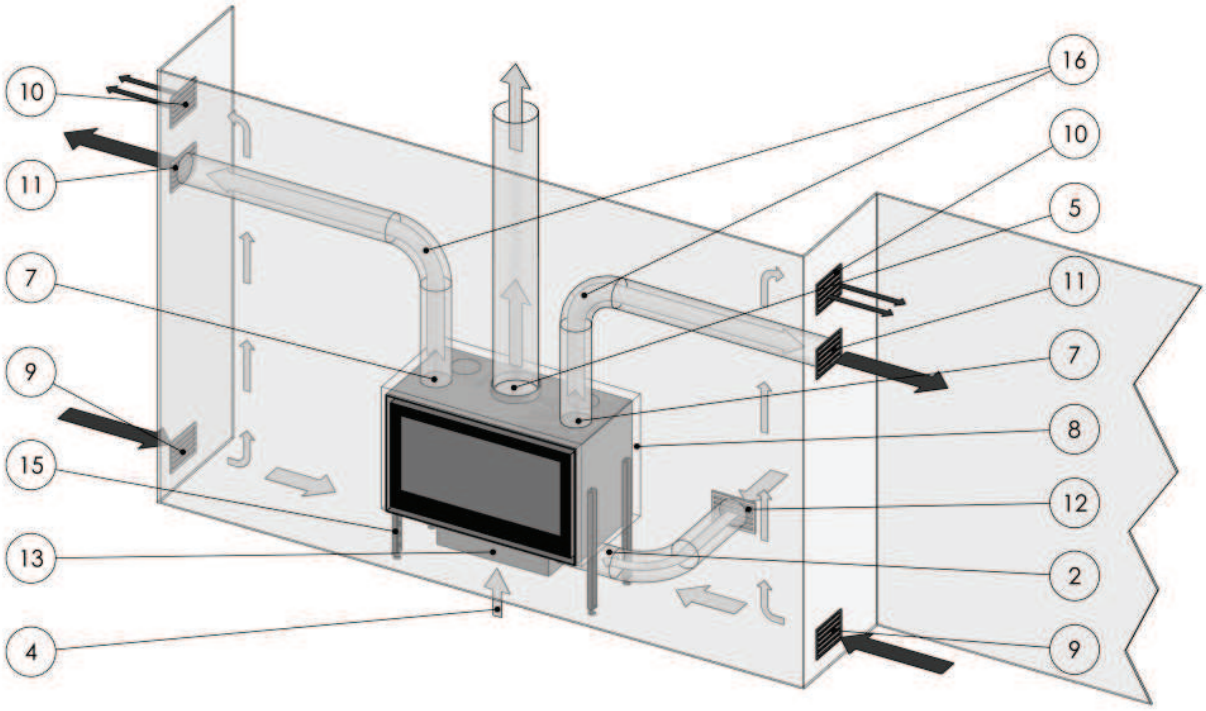


(II) C Appliance as a build-in appliance in an existing or a new chimney.
Convection air through the chimney breast.
Fitted with ventilation of the chimney.

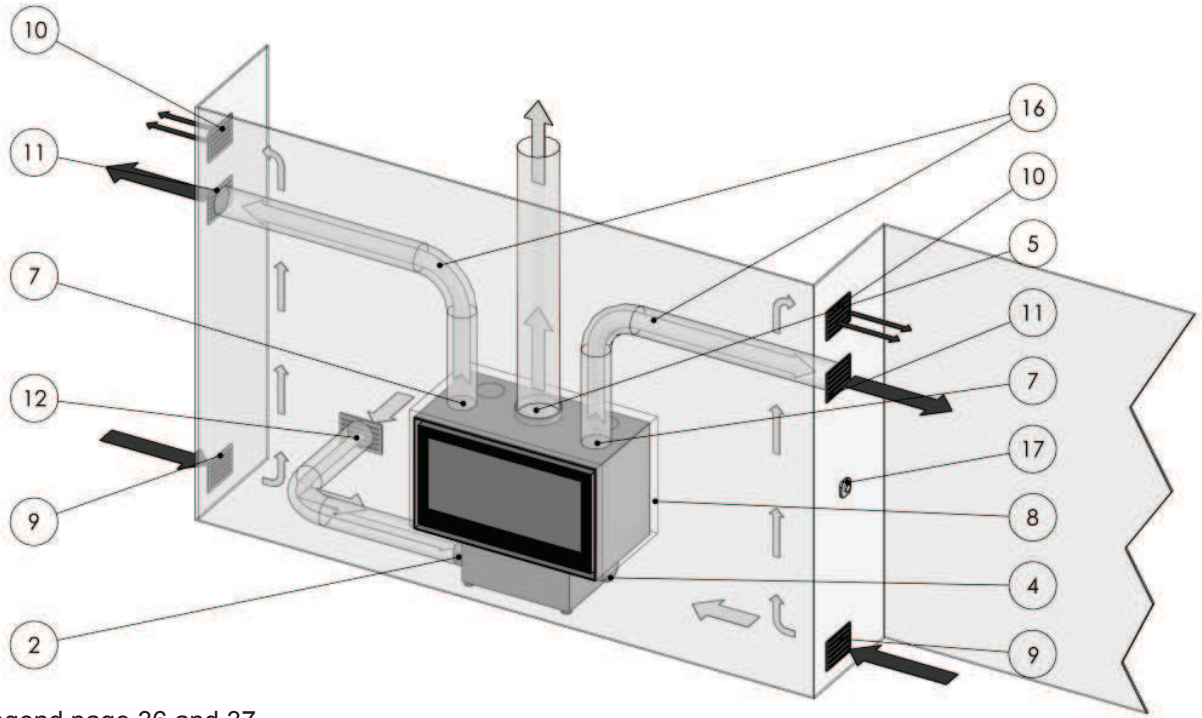


Legend page 36 and 37

(III) E Appliance as a build-in appliance with an air-box / fan box.
For a direct combustion air supply from outside.
Fitted with an convection set and ventilation of the chimney.



(IV) B Appliance as a build-in appliance with a air-box / fan box.
For a direct combustion air supply from outside and fitted with a convection fan with a build-in fanspeed controller.
Appliance is fitted with a convection set and ventilation of the chimney.



Legend page 36 and 37

Appliance:

① Inlet opening combustion air (front of appliance, bottom, 2x ⍁37 x 150 mm).
Important: dismount 2x “closed” discs (left and right of the combustion air-supply slider) and mount 2x “open” discs with opening; ⍁37x150 mm. (Only valid when ① is stated on the drawing.)

② Inlet opening combustion air (bottom of appliance, Ø125 mm) / (air-box / (fan box, Ø125 mm).

③ Inlet opening convection air (front of appliance, bottom, 2x ⍁37 x 97 mm.)
Important: dismount 2x “closed” discs (left and right of the combustion air-supply slider) and mount 2x “open” discs with opening; ⍁37 x 97 mm. (Only valid when ③ is stated on the drawing.)

④ Inlet opening convection air (bottom of appliance, ⍁ 20 x 480 mm) / (fan box, Ø125 mm)

⑤ Flue connection (topside of appliance, Ø180 mm)

⑥ Outlet opening convection air (front of appliance, above)

⑦ Outlet opening convection air (top of appliance) / (Connection convection set) (2x or 4x Ø125 mm)
Important: Remove “break-away” discs (2x or 4x Ø125 mm)! (Only valid when ⑦ is stated on the drawing.)

⑧ Insulation material, noninflammable !!! (for example ceramic fibre) (sides and top of appliance)

Chimney / Chimney breast:

⑨ Inlet opening combustion air/convection air/chimney-ventilation air (grate, bottom of chimney)

⑩ Outlet opening convection air/chimney-ventilation air (grate, top of chimney)

⑪ Outlet opening convection air via convection set (grate, top of chimney)

Exterior wall:

⑫ Inlet opening combustion air (grate, exterior wall).

Options:

⑬ Air-box / Fan box: Box with several connection possibilitys for a directly combustion air supply from outside and/or a build-in convection fan including a fanspeed controller for RPM control.

⑮ High adjustable feet (set of 4 pieces)

⑯ Convection set

⑰ Fanspeed controller (build-in) for RPM control of the convection fan.

3.3.2 Aeration / ventilation

The appliance generates:
- heating air
- combustion air

Heating air (convection air) is devoted to the convection of heat from the appliance to the room. The source of heat is in the room and stays there.

Combustion air is needed to keep the combustion going by drawing in air from the room, of directly from outside, due to the natural draught of the chimney.

- Combustion air from the living-room:
  The air inlet openings are located behind the operating flap. When using the appliance, please ensure there is a sufficient supply of fresh air: use a grate with a minimum net opening in the outer wall of 150 cm^2.

  When necessary, the combustion air inlet Ø125 mm at the underside of the appliance may be used. Through the hollow space, underneath the appliance, and a grate in the chimney breast, combustion air can be supplied from the living room.

  Make sure that the ventilation supply is open; this is particularly important with today's airtight dwellings

  If the dwelling has mechanical ventilation that creates under pressure in the room where the appliance is located, it is necessary to fit a flue gas fan.
  The type of flue gas fan is dependent on the capacity of the mechanical ventilation system. Always consult your fitter about this.

  In dwellings with an operating extractor hood, this should be turned to the lowest setting or turned off altogether. If the extractor hood remains in use, additional ventilation must be provided in compensation. This will not only avoid poor combustion, but will also prevent flue gases being sucked from the appliance into the room.
  Should creating an extra ventilation opening prove insufficient, it is then necessary to fit a flue gas fan.

- Combustion air directly from outside:
  The appliance now has a completely closed combustion system, which allows it to operate independently of the surrounding air in the room where the appliance is located.

  - Appliance with substructure air-box:
    Use one of the three combustion air supply connections Ø125 mm (external) of the air-box / fan box.
    Fit a rigid or flexible pipe measuring Ø125 mm between this air supply connection and the “outside air supply opening in the wall/floor”.
    We recommend that this pipe is fitted with a sealing valve in order to prevent condensation in the appliance when it is not in use.

  - Appliance with substructure fan box (convection fan):
    Use the Ø125 mm (external) combustion air supply connection at the left of right front side or the bottom side of the air-box / fan box.
    Fit a rigid or flexible pipe measuring Ø125 mm between this air supply connection and the “outside air supply opening in the wall/floor”.
    We recommend that this pipe is fitted with a sealing valve in order to prevent condensation in the appliance when it is not in use.

3.3.3 Fitting in an existing chimney

- Remove the existing fire basket or stoking stones and remove the shut-off flap. The chimney must be intact and must not be damaged during fitting.
  The chimney breast opening must be big enough for a gap of 1 - 3 cm to be left all round the appliance. Clad the chimney breast opening from the inside with a ceramic wool fireblanket or similar (see section 3.3).

- Extend the existing chimney so that it ends at the appliance’s smoke outlet. To do this, use a flexible, double-walled stainless steel chimney, for example.

- Slide the appliance into the chimney breast opening. Seal the smoke outlet where it joins the chimney so that no soot can accumulate above the appliance **under any circumstances**. See 3.3.4.

- Level off the appliance so that the cover does not catch on the base.

- Fill any gaps around the appliance with a ceramic insulation wool fireblanket and position the frame (where supplied)

3.3.4 Fitting in a newly-built chimney

- If required, a convection set can be added when installing the appliance.
  * Appliance without air-box/fan box: The use of a convectionset is strongly recommended.
  * Appliance with air-box/fan box: (with build-in fan) The use of a convectionset is possible, but not mandatory.

- In the case of utilisation of a convection set:
  Carefully break out the “break-away openings” at the topside (2x) or (4x) of the appliance.

- Use convection set:
  The function of the convection set (option) is to improve the convection through the appliance, resulting in efficiency improvement and preventing high temperatures in the chimney.
  The set consists of:
  - 3 m aluflex
  - 2 exit grids (white)
  - 2 collar adaptors Ø125 mm
  - 4 hose clamps

- Assembly convection set:
  - Secure the 2 collar adaptors to the appliance.
  - Now connect the flexible hoses to the 2 collar adaptors (Ø125 mm) on the top of the fire and to the metal fitting box on the air exit grids that are being used (do not forget to fit hose clamps).
  - Ensure that the flexible hose connections are gastight.
  - The air exit grids cannot be fitted until a few days later, once the masonry has been pointed and allowed to dry. If one or more channels are connected leading to other rooms, these rooms must be fitted with closable grids. These are available from your dealer, as well as the flexible hoses and clamps required.
  - Within a range of 30 cm either side and 50 cm above the escape opening (exit grids), there must be no flammable materials (e.g. wooden ceiling, fitted furniture).

- Clad the appliance on the top, sides and rear up to the front edge with an approx. 10 cm thick ceramic isolation wool fireblanket. Leave a few centimetres clearance between the front of the chimney and the appliance.

- Level off the appliance.

- Make a good seal between the smoke outlet from the appliance to the chimney. See also 3.3.5.
  Ensure that the entire flue is gas-tight.

- Ventilate the chimney, by placing ventilation openings at the top and bottom of the chimney.

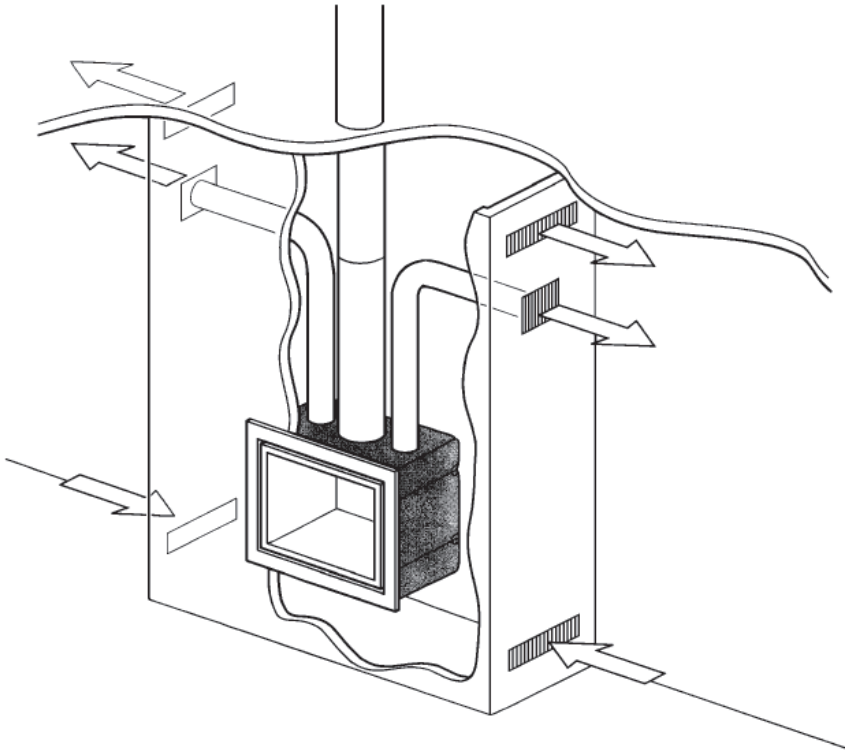


Figure 2: Use of convection set and ventilation of the chimney

- Close up the front.

Available BARBAS grids (option) for ventilating the chimney:

COLOUR	DIMENSION (cm)	CLEAR OPENING (cm^2)
Brass or white (incl. fitting)	13.5 x 13.5	75
Brass or white (incl. fitting)	27.0 x 13.5	150
Convection air fan (white)	43.0 x 22.0	550

- If the appliance is to be placed against a bearing wall or against a wall containing flammable material, an air gap of at least 20 mm should first be created.
  Before it a false wall, 100 mm thick, must be built of masonry or aerated concrete.

- If the appliance is not placed against a bearing wall or a wall containing flammable material, no false wall is necessary. Layers of insulation of at least 100-mm thickness will then be sufficient (class A1, DIN 4102-compliant). See also section 3.3.

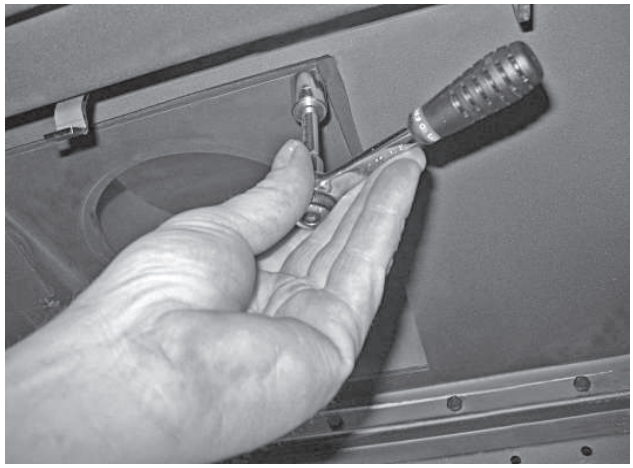
- After four weeks, your appliance will be ready for use.

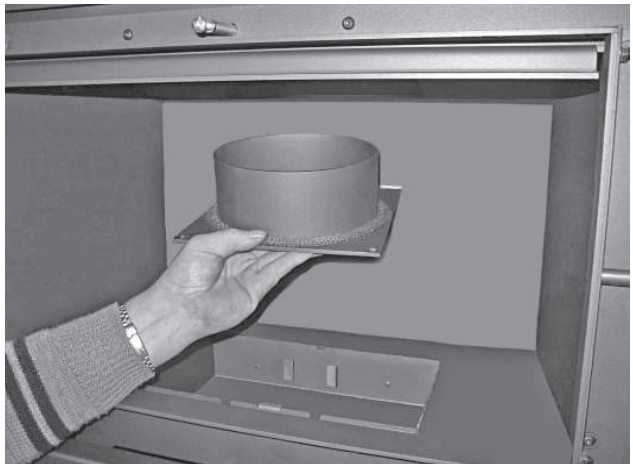
3.3.5 Connecting the smoke outlet

The appliance comes with a detachable smoke outlet connection; Cuatro-3 70:
Ø180 mm (Ø178 mm external). This connection is intended for steel pipes, double/single-skinned stainless steel (insulated) flues or double/single-skinned flexible stainless steel flues.
After the appliance has been installed, it can be connected to the flue.

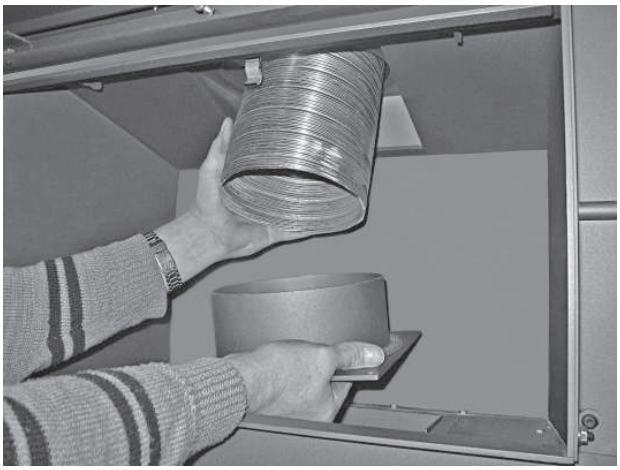
In order to be able to disassemble the smoke outlet connection, remove the flue gas flap and the brake plate first. See Chapter 6 for the disassembly sequence: “Sequence for replacing the interior of the appliance”.

- Disassembling the smoke outlet connection.

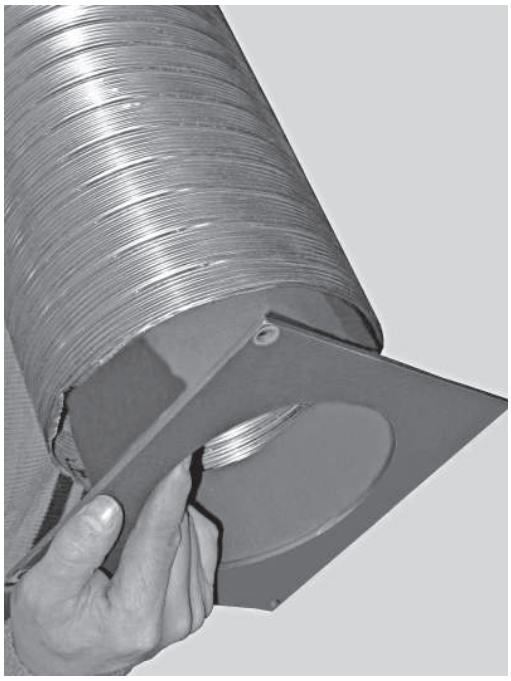



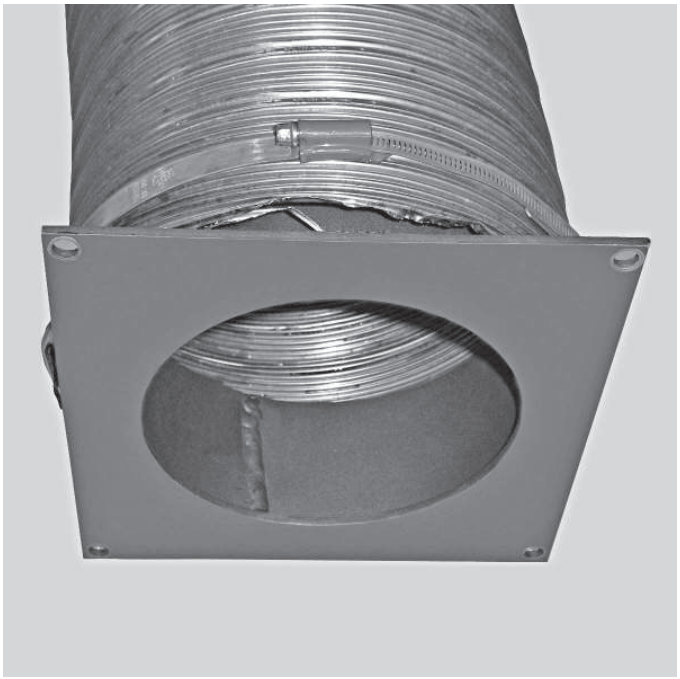


- Pull the pipe of the appliance or the stainless steel (flexible) pipe downwards through the appliance and secure it to the smoke outlet connection.

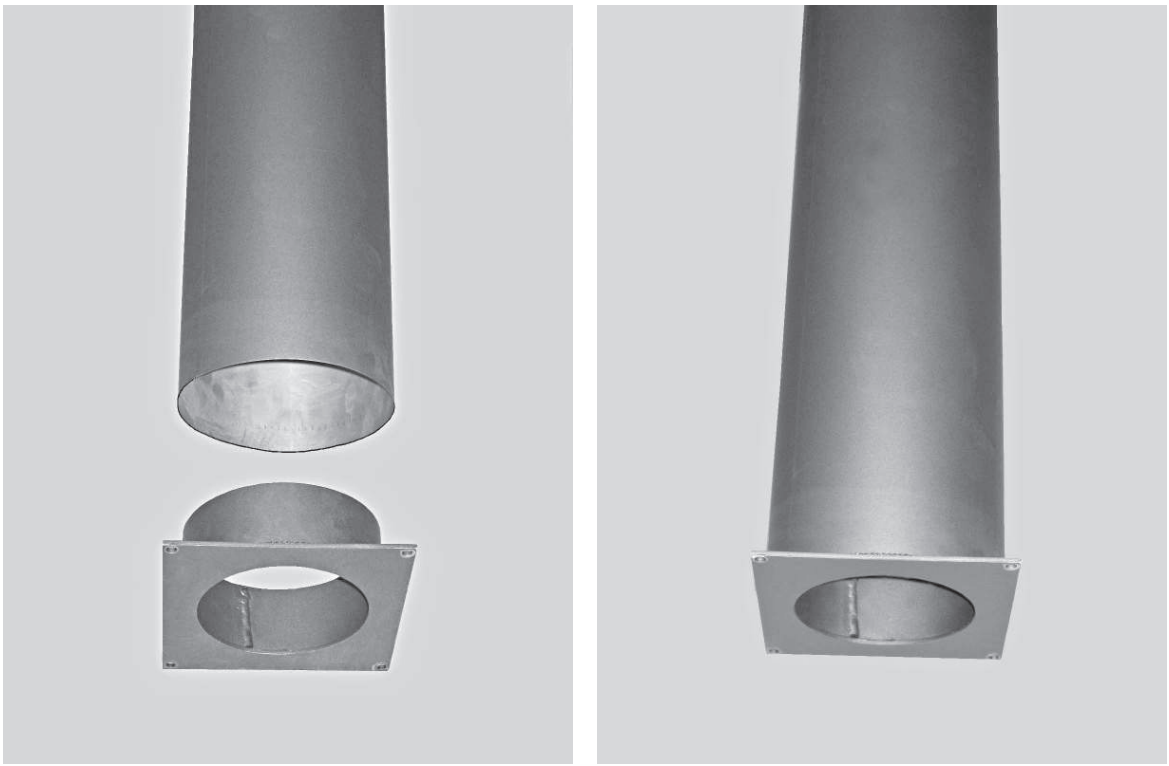


Stainless steel flexible





Fix with hose clamp
(Minimum 2 pieces
per connection.)



Pipe of steel for the appliance

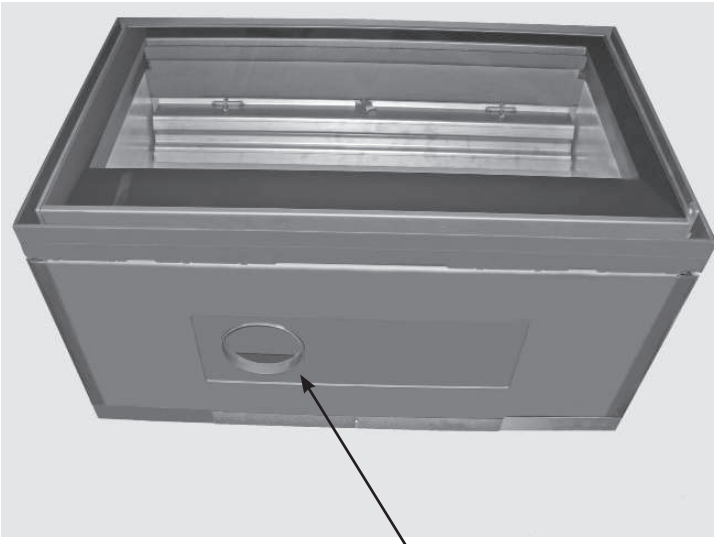
- Push the smoke outlet connection back upwards and secure it in place.
- Replace the brake plate and flue gas flap.

3.4 AIR-BOX / FAN BOX

3.4.1 INSTALLING AIR-BOX / FAN BOX

It is advisable to remove the complete door before installing the air-box / fan box; this can be done by tilting the door upwards when in the open position and removing it.

The appliance is equipped with a dedicated ring (underneath the appliance) to separate combustion and convection air, when the appliance is originally ordered with an air-box / fan box.
(Supply of combustion air through the front appliance is, by conseqence, no longer possible.)
In case the ring is not fitted, it is still possible to mount it through the bottom of the appliance.

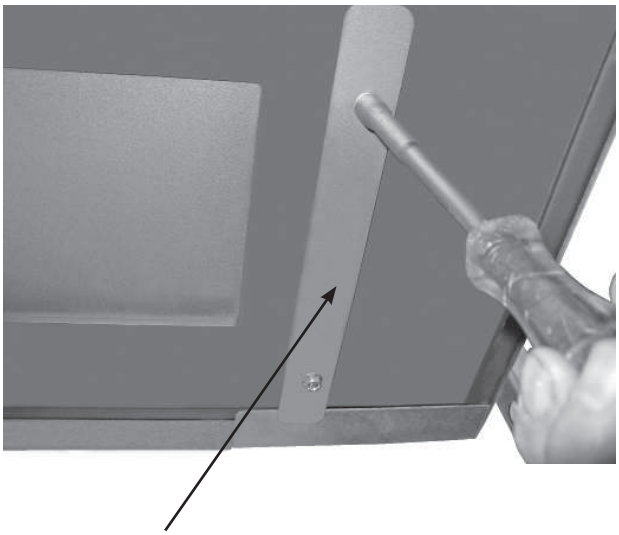


The appliance can not be supported by the air-box / fan box !

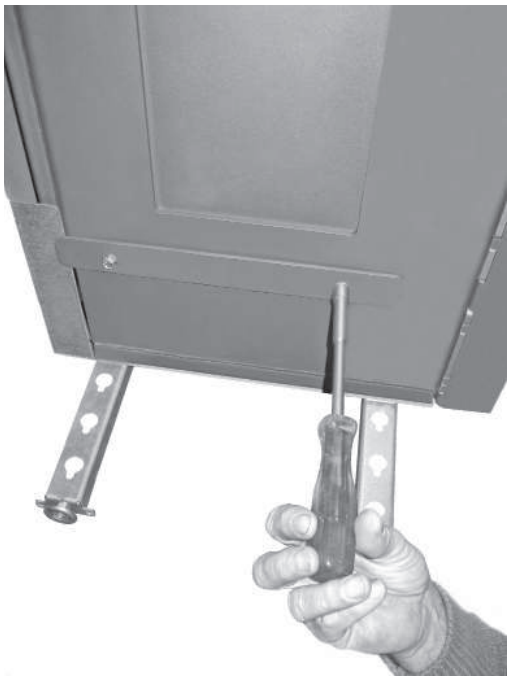
Mount the 4 high adjustable feets on the apliance.

Mount the fastening strips (L and R) at the underside of the appliance. Take care that the strips are loosely fixed. Allow for a few millimeters space inbetween the strips and the appliance

Attention ! The holes in the strips are not centered. Take care that the short end is directed towards the outside of the appliance.



Short end directly towards the outside !

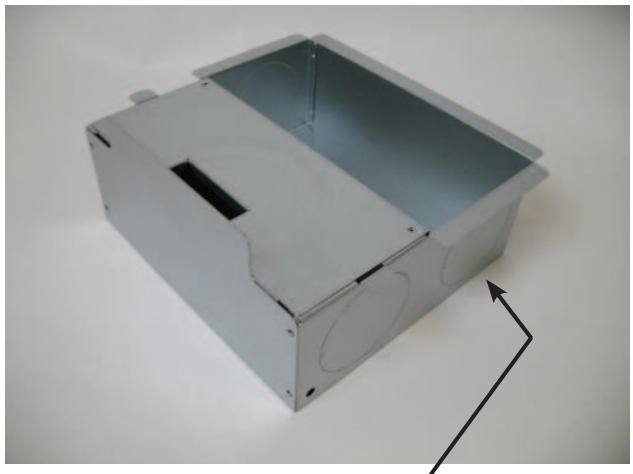


Knock out one round disc of the air-box using a broad, flat screwdriver. This is the combustion air intake opening.

With fan

Fan box

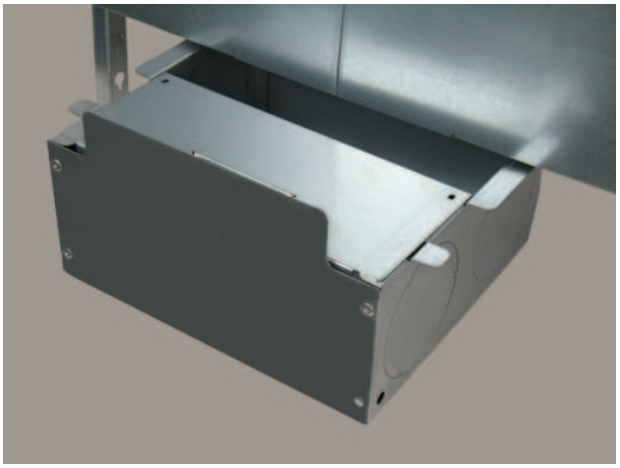
Without fan

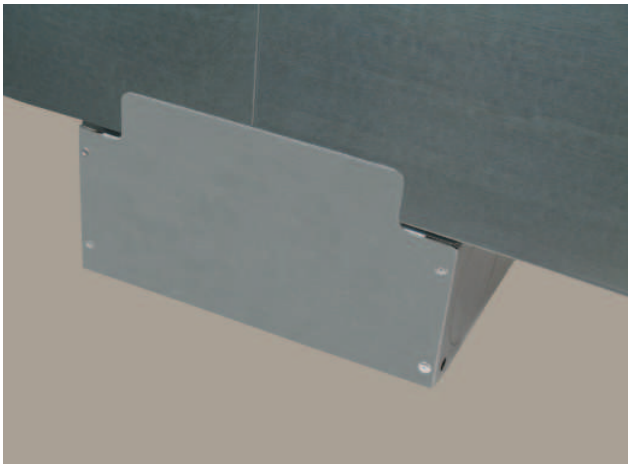


Combustion air-box

In the combustion air section of the air-box / fan box there are 3 possible inlets for combsution air available, i.e. under the box or at left or right side of the box.
In the convection air-section of the air box / fan box, the convention air intake is possible at left or right side of the box.

From the back of the appliance, slide the air-box / fan box underneath the appliance.





Securely fix both fastening strips (L and R).

Place the included collar adapter in the combustion air and/or convection air intake openings.

Convection air inlet:

Knock out one circular-“break-away” discs of the airbox / fan box with a hammer;

1x circular disc left or right - back.
This will be the fan-convection air inlet.
Place the collar adapter (125 mm) on the convection air intake opening.

Combustion air inlet:

1x circular disc left, right or at the bottom of the air-box.
This will be the combustion air inlet.
Place the collar adapter (125 mm) on the combustion air intake opening.

Make the direct combustion air supply to the outside with a metal (flexible) tube (Ø125 mm) and a grid on the outside wall.

Only replace the door in the appliance after fitting the complete appliance.

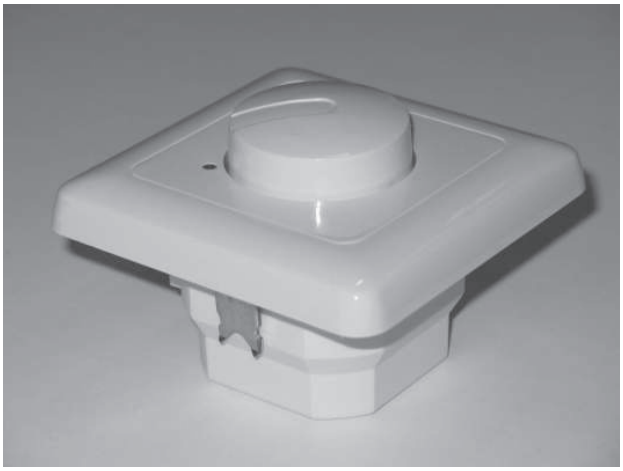
It is recommended to install a valve in the combustion air tube, to enable the closure of this tube when the appliance is not used. Take care that the valve position must be clearly visible at the outside of the tube.

If so desired, the appliance can be equipped with high adjustable feet (article no 330361 - set of high adjustable feet).

Heat transfer when using convection fan

The heat transfer can be increased by transporting the heat with a convection fan.
With this system, hot air is blown into the room.
The convector fan built into the box is regulated by a built-in dimmer, with an integrated on/off switch.
The fan doesn't have any automatic regulation based on the appliance temperature.

Dimmer with integrated ON - OFF switch.
For installation in built-in box.



Electrical connections dimmer.

Built-in box for dimmer.

Refer to the electrical wiring diagram supplied separately with the fan box, connect the dimmer to the fan.

For maintenance, the convection fan can be reached after removal of the complete floor of the combustion.

Only replace the door in the appliance after fitting the complete appliance.

3.5 PREPARATION / FUNCTION CHECK

- Check the operation of the combustion air supply slider
- Check the operation of the flue gas flap
- Check if the combustion air supply opening(s) is (are) open
- Check if the convection air supply opening(s) is (are) open
- Check if the convection air escape openings are open
- Check that the fan, once fitted, is in working order (if present)

4 OPERATION

Cuatro-3 with fan set (option) and convection set (option) built into chimney

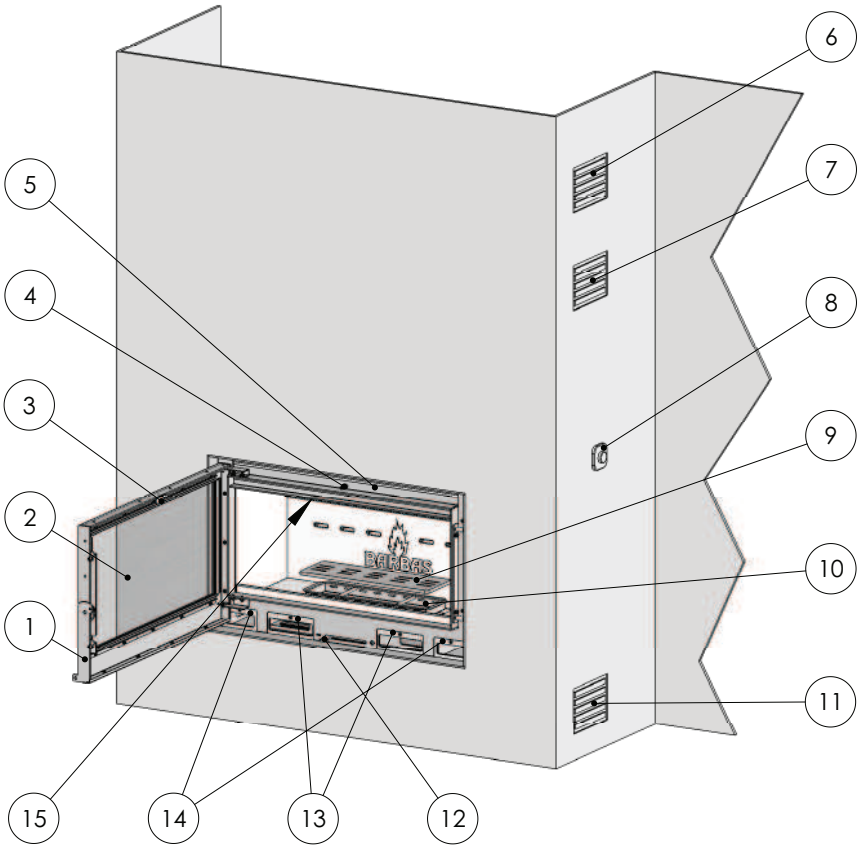


Figure 3: Operation

1 Handle
2 Ceramic heat-proof glass
3 Locking slider for operating pin of flue gas flap
4 Operating pin of flue gas flap
5 Convection air outlet opening (appliance) (permanent)
6 Natural convection air outlet opening (2x grate) (chimney)
7 Convection air outlet opening (2x grate convection set) (chimney)
8 Wall dimmer (option) with integrated ON-OFF RPM control switch of the Perma Air ® convection fan (option)
9 Combustion grate
10 Ashtray
11 Inlet opening (2x grate) (chimney) Ventilation air chimney / Convection air / Combustion air
12 Combustion air-supply slider (Combined operation for the primary, secondary and tertiary combustion air-supply.)
13 Inlet opening (2x) combustion air from living-room. The two openings are only open when no combustion air intake from underneath the appliance, nor from the outside is possible. This is already decided during the installation of the appliance. NEVER close off open air intakes.
14 Convection air intake opening (2x). These two openings are only open when no convection air intake from underneath the appliance, nor from the outside is possible. This is already decided during the installation of the appliance. NEVER close off open air intakes.
15 Not visible on the drawing: Bend strips on brake plate holder for improving the flue draught in bad draught conditions. See Chapter 4 “Using the appliance for the first time” in the Instructions for use & maintenance manual.

5 ANNUAL MAINTENANCE

It is essential that the appliance, the chimney and the combustion air supply are cleaned and inspected annually, by a Barbas-dealer/expert.
The safe operation of the appliance will thus remain guaranteed.

Start with maintence 24 hours after the last burning period.

Recommended order for yearly maintenance:

① Inside the appliance:

- Check the door seals. If necessary, replace the seals.
- Temporarily remove the door, by opening it competely and lifting it upwards.
- Remove the complete interior of the appliance (see Chapter 6) and carefully clean all parts with a hand brush.
  Emptying the ashtray.
- Clean the glass on the inside of the door with glass spray or ceramic hob cleaner.
- If the glass is broken or cracked, it must be immediately replaced before operating the appliance again.

Broken *ceramic heat-resistant glass may not be thrown away in a glass container, but must be included in normal household waste.*

- Check the grate and all interior plates on cracks.
  If necessary, replace the parts.

② Chimney/flue channel:

- Sweep and inspect chimney. Check for cracks, loose parts, flue gas leakage and overall condition of the chimney.
  When in doubt use an inspection camera !

③ Combustion air supply appliance:

- Check the combustion air supply route from the outside up to the appliance.
- Clean the combustion air supply inlet openings.

④ Convection air (Ventilation air) appliance:

- Check the convection air route.
- Clean the convection air intake openings, flues and air escape openings.
- Clean the innerside of the fan box (option).
  The convection fan can be reached after removal of the complete floor of the combustion chamber / heating room.

⑤ Outside appliance:

- Clean the outside of the appliance with a dry lint free cloth.
- Wait for the appliance to cool down sufficiently before cleaning. Never use scouring powder, aggressive cleaners or fire polish on the appliance.
- Any lacquer damage can be repaired with a BARBAS heat resistant paint spray can. (Pay atention that the appliance is sufficiently cooled down !)

⑥ Ventilation house:

- Check whether the room where the appliance is installed is sufficiently ventilated according to national and local regulations and standards.
- Ensure that as little dust, and as few particles of cigarette smoke, candles and oil lamps as possible pollute the air in the room in which the appliance is used. Heating of these particles by the convection system of the appliance could lead to discoloration of the walls and ceiling. It is therefore very important to ensure that the room in which the appliance is located is sufficiently ventilated.

⑦ Last check appliance:

- In reversed order, place back all parts in the appliance.
- Place back the door on the appliance.
- Check the correct operation from the sliders and flaps. See Chapter 3.6: Preparation / Function check.

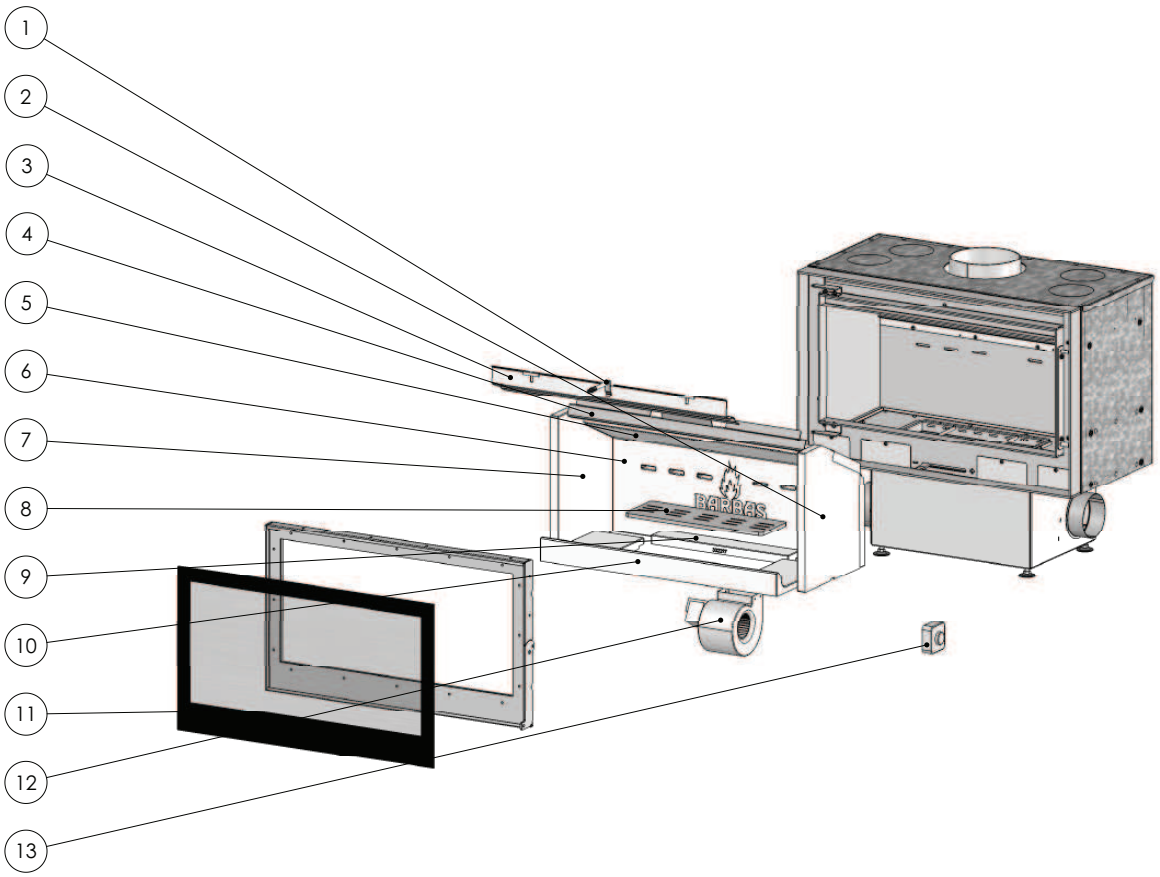
⑧ General:

- Parts:
  Individual parts for replacement/accessories are available from your BARBAS dealer. Use only original parts.

- Modifications:
  Introduced modifications to the appliance are not permitted.

6 REPLACEMENT PARTS

6.1 CUATRO-3 70 with 3 sided frame (option) with air-box / fan box (option)



Item no	Description	Number
1	Operating pin (for flue gas flap)	1
2	Side panel, right	1
3	Flue gas flap	1
4	Protective strip brake plate with bend strips	1
5	Brake plate / Retardant plate	1
6	Rear panel	1
7	Side panel, left	1
8	Grate	1
9	Bottom panel, rear	1
10	Bottom panel, front	1
11	Glass	1
12	Convection fan	1
13	Dimmer (built-in) convection fan	1

When ordering, please give the serial number. You can find the serial number on the front of this manual.

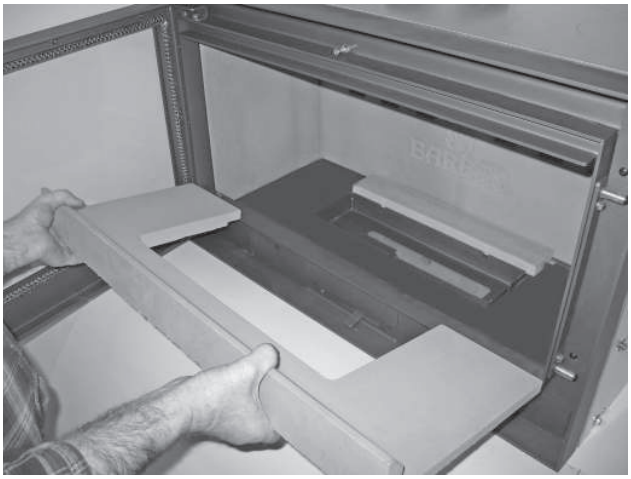
Sequence for replacing the interior of the appliance:

- Remove the grate and the ashtray.


Although the heat resistant panels have been manufactured with the greatest care, there is the possibility that some sharp parts may stick out, possibly causing injuries.
We therefore urgently recommend wearing safety gloves when handling the panels.

Disclaimer ! The person depicted on the photos showing the handling of the panels is a professional engineer who is aware of the risk of injury.

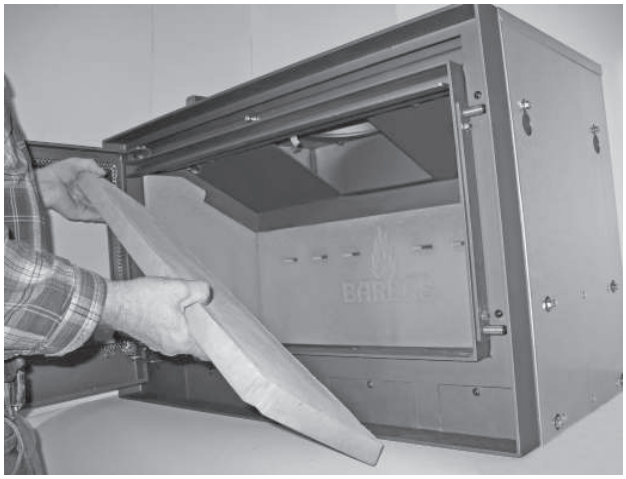
- Remove carefully the bottom panel (rear and front) by tilting it upwards and removing it.



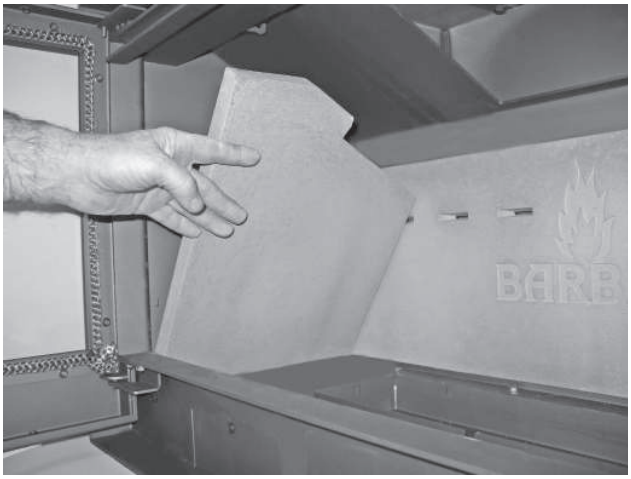
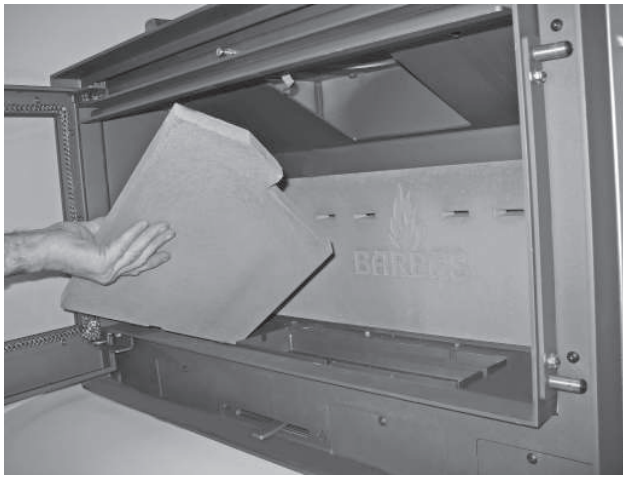

- Remove the flue gas flap by lifting it slightly, tipping it backwards and removing it.


- Remove the protective strip from the brake plate.

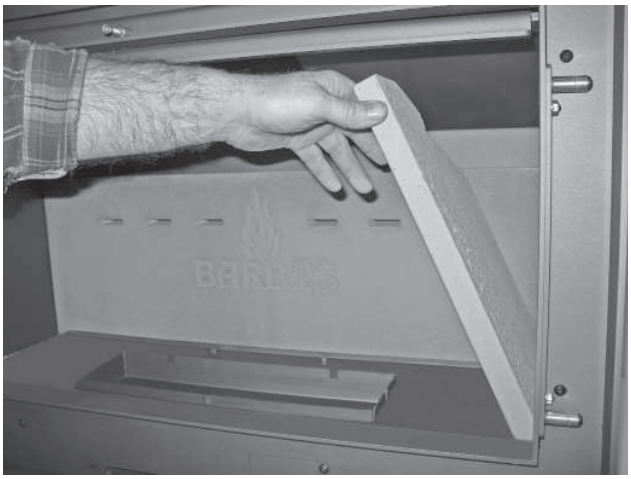
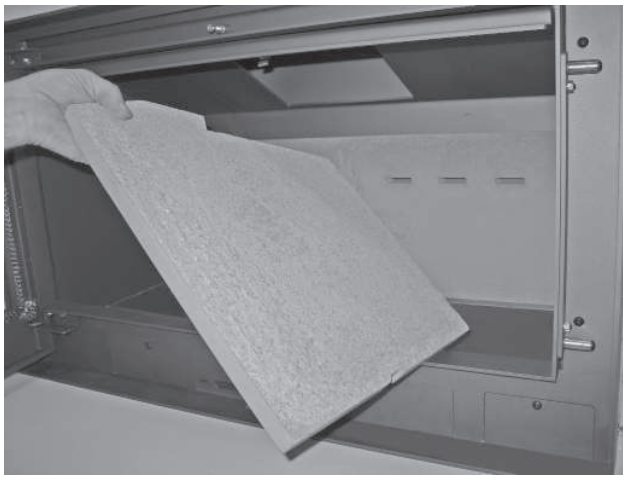

- Remove the brake plate by lifting it slightly and removing it sloping to one side.

- Remove carefully the left-hand side panel.

- Remove carefully the right-hand side panel using a broad, flat screwdriver.
  Make sure the rear panels do not fall forwards !

- Remove carefully the rear panel, by lifting it upwards and remove it diagonally forward.

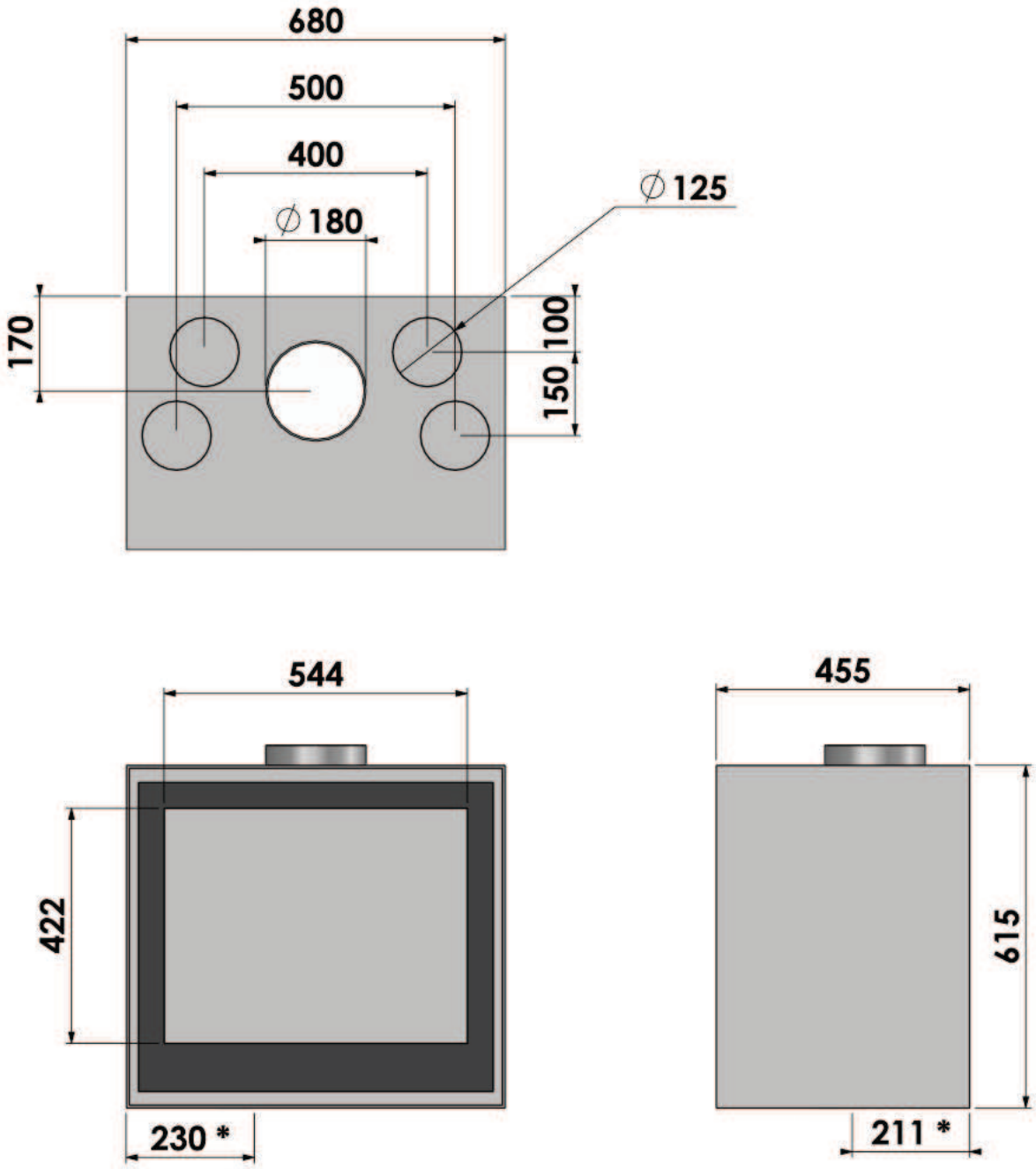

The entire interior is now disassembled.

The interior is reassembled in the reverse order.

7 DIMENSIONS

7.1 CUATRO-3 70

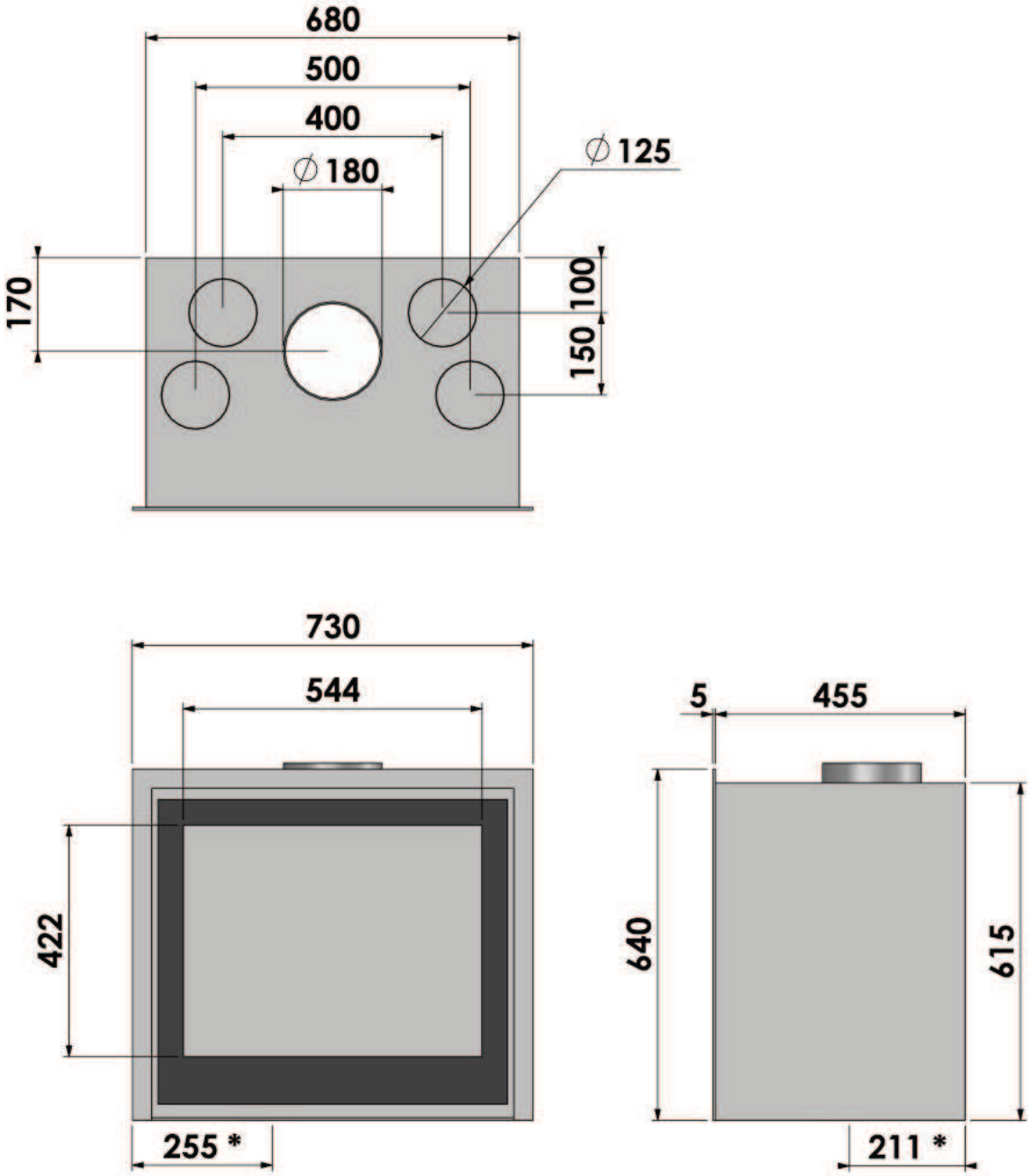
- without frame
- without air-box / fan box (option)



* = External combustion air supply Ø125 mm

7.2 CUATRO-3 70

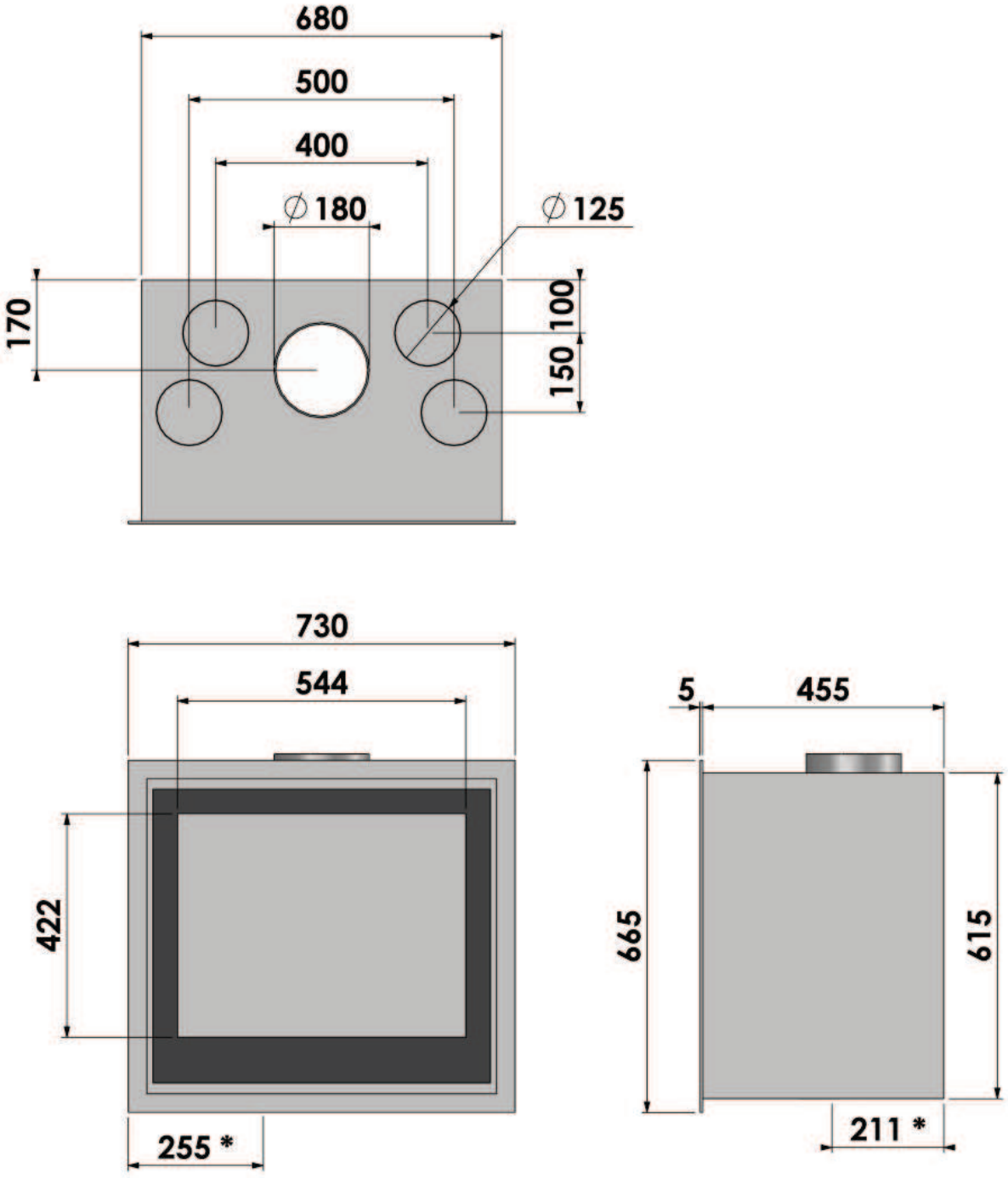
- with 3 sided 35 mm frame (option)
- without air-box / fan box (option)



* With the high adjustable feet, the appliance can be installed till 350 mm above the floor

7.3 CUATRO-3 70

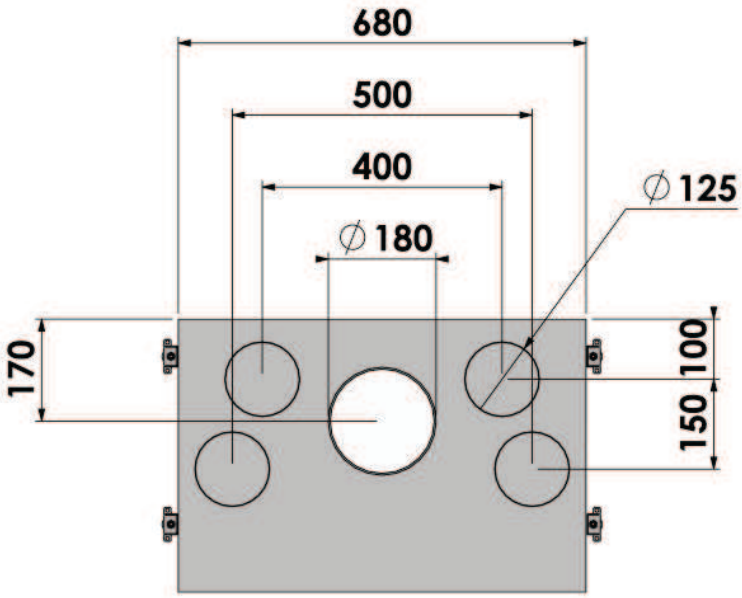
- with 4 sided 35 mm frame (option
- without air-box / fan box (option)

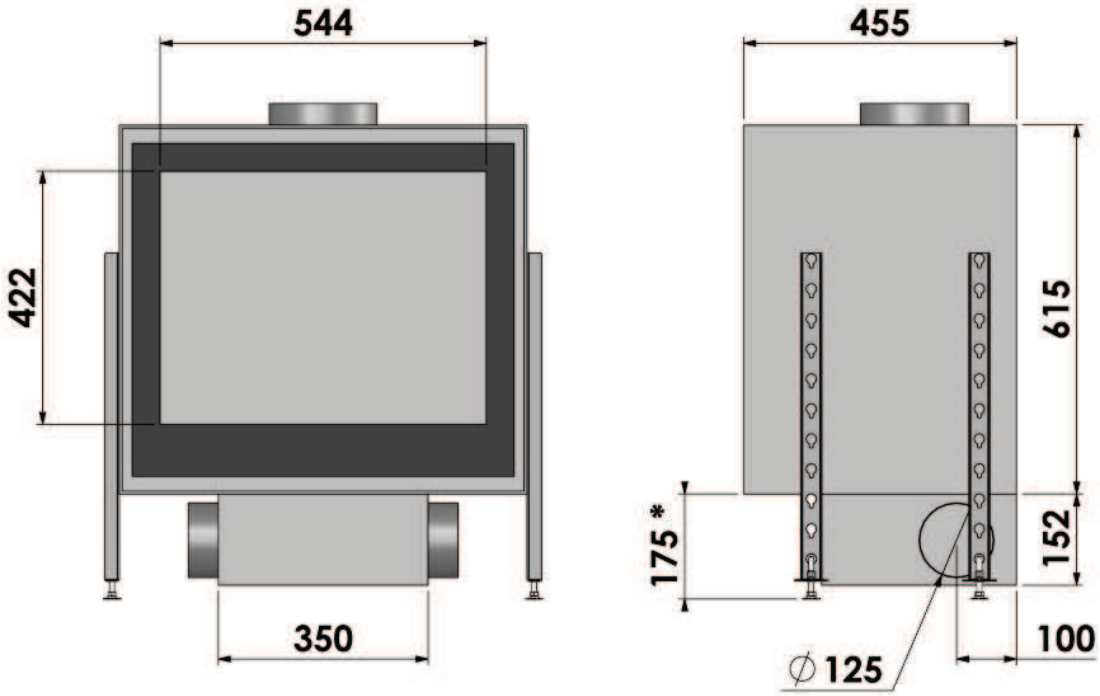


* = External combustion air supply Ø125 mm

7.4 CUATRO-3 70

- with 4 sided 35 mm frame (option
- with air-box / fan box (option)





* With the high adjustable feet, the appliance can be installed till 350 mm above the floor

8 TECHNICAL DATA

	CUATRO-3 70
Combustion:	
Measured in compliance with	EN 13229 : 2001 and EN 13229 - A2 : 2004
Fuel	Wood
Nominal output	11 kW
Efficiency	79%
Emissions (dry, at 13% O_2, 273K, 1013 hPa):	
Carbon monoxide (CO)	0.08%; 950 mg/m^3 (STP, at 13% O_2)
Dust	22 mg/Nm^3 (STP, at 13% O_2)
Total hydrocarbons (C_xH_y)	53 mg/m^3 (STP, at 13% O_2)
Nitrogen oxides (NO_x)	120 mg/m^3 (STP, at 13% O_2)
Flue gas mass flow	10.6 g/s
Flue temperature	272°C
Chimney draught	0.12 mbar
Smoke outlet connection	Ø180 mm (Ø178 mm external)
Weight - Cuatro-3 70	145 kg
- Fan box	19 kg
- Air-box	3 kg
Inside:	
Dimensions	
- surface area (w x d)	0.44 x 0.29 = 0.13 m^2
- clear fire opening (h x w)	422 x 544 mm
Side panels interior	Heat-resistant panels 1400 kg/m^3, 1300°C
Bottom interior	Heat-resistant panels 2000 kg/m^3, 1300°C
Inner lining	Steel (heat-resistant and rust-proof)
Retardant plate (brake plate)	Vermiculite insulation plates 700 kg/m^3, 1100°C
Flue gas flap	Steel
Outside:	
Construction	Sheet-steel casing
Doors	Flat door opening to left Shutter with fixed handle
Operation:	• Handle for opening the door • Combustion air supply slider Single combined slide for controlling the primary, secondary and tertiary air supply
Ash collection:	Ashtray with grate

Combustion air supply:	At least 150 cm^2 opening in the room where the fire is located or a outside air supply opening of Ø125 mm in wall/floor.
Options:	Air-box / fan box with 230 VAC / 69 W fan for transport of heating air. Rev control by built-in fanspeed controller. Convection set (1x or 2x)
Clean Air Act exemption:	The appliance has been factory-fitted with an air slide designed for use also in Smoke Control Areas.

9 WARRANTY TERMS

Interfocos
Warranty terms

Interfocos B.V. guarantees the quality of the supplied Barbas appliance and the quality of the materials used. All Barbas appliances are developed and manufactured according to the highest possible quality standards. If, despite all this, something should prove amiss with the Barbas appliance you have purchased, Interfocos B.V. offers the following manufacturer's warranty.

Article 1: Warranty

1.1. If Interfocos B.V. determines that the Barbas appliance you have purchased is defective as a result of a flaw in the construction or material, Interfocos B.V. guarantees to repair or replace the appliance free of charge, without charging any costs for labour or spare parts.
1.2. Repair or replacement of the Barbas appliance will be undertaken by Interfocos B.V. or by a Barbas dealer as designated by Interfocos B.V.
1.3. This warranty is supplementary to the existing legal national warranty of Barbas dealers and Interfocos B.V. in the country of purchase and is not intended to restrict your rights and claims based on the applicable legal provisions.

Article 2: Warranty conditions

2.1. Should you wish to claim under the warranty, please contact your Barbas dealer.
2.2. Complaints should be reported as quickly as possible after they have manifested themselves.
2.3. Complaints will only be accepted if they are reported to the Barbas dealer, together with the serial number of the Barbas appliance which is stated on the front of the instructions for use.
2.4. In addition, the original receipt (invoice, receipt, cash receipt) showing the date of purchase must also be submitted.
2.5. Repairs and replacements during the warranty period do not give any entitlement to an extension of the warranty period. After a repair or replacement of warranty parts, the warranty period shall be deemed to have started on the date of purchasing the Barbas appliance.
2.6. If a certain part is eligible for the warranty and the original part is no longer available, Interfocos B.V. shall ensure that an alternative part of at least the same quality shall be provided.

Article 3: Warranty exclusions

3.1. The warranty on the Barbas appliance ceases to be in effect if:
   a. it is not installed according to the supplied installation instructions, and to national and/or local regulations;
   b. it has been installed, connected or repaired by a non-Barbas dealer;

c. it has not be used or maintained according to the instructions for use;
d. it has been changed, neglected or roughly treated;
e. it has been damaged as a result of external causes (outside the appliance itself), for example, lightning strike, water damage or fire;

3.2. In addition, the warranty lapses if the original purchase receipt shows any change, deletion, removal or if it is illegible.

Article 4: Warranty area

4.1. The warranty is only valid in those countries where Barbas appliances are sold through an official dealer network.

Article 5: Warranty period

5.1. This warranty will only be granted during the warranty period.
5.2. The body of the Barbas appliance is guaranteed for a period of 10 years against construction and/or material faults, starting from the moment of purchase.
5.3. For other parts of the Barbas appliance, a similar warranty applies from the moment of purchase for a period of one year.
5.4. For user parts such as glass, glass (cord), thermocouple and the interior of the combustion chamber, a similar guarantee is given until after the first burning.

Article 6: Liability

6.1. A claim granted by Interfocos B.V. under this warranty does not automatically imply that Interfocos B.V. also accepts liability for any possible damage. The liability of Interfocos B.V. never extends further than that stated in these warranty conditions. Any liability of Interfocos B.V. for consequential damage is expressly excluded.
6.2. That stated in this provision is not valid if and to the extent that is derives from a mandatory provision.
6.3. All agreements entered into by Interfocos B.V. are, unless specifically stated otherwise in writing and to the extent that they are permitted based on applicable law, subject to the Conditions of the Dutch Metal and Engineering Association (METAALUNIEVOORWAARDEN), as filed with the registrar of the Court of Rotterdam on 1 January 2014.

Interfocos B.V.
Hallenstraat 17
5531 AB Bladel
The Netherlands
Tel: +31-497339200
Email: info@Barbas.com

Carefully retain the instructions for use; they show the serial number of the appliance. You will need this if you wish to claim under the warranty.

barbas wood fires

Your Barbas dealer

05 - 221117 - 336146