

# barbas. wood fires

## INSTALLATION INSTRUCTIONS & MANUAL FOR ANNUAL MAINTENANCE

# UNIVERSAL-6 80

Wood-burning insert 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!



Version number: 05 - 338396

Date: 03-07-2019

Serial number:

Production date:

This product is not suitable for primary heating purposes





**Declaration of Performance**  
 According to regulation (EU) 305/2011  
**No. 1.804.003-4 - CPR-2013/07/01**

|  |  |
|--|--|
| 1. Unique identification code of the product-type  | Universal-6 80   |
| 2. 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   |
| 3. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5)  | Barbas Bellfires BV; Hallenstraat 17; 5531 AB Bladel; The Netherlands  |
| 4. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2)   | Not applicable   |
| 5. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V  | System 3   |
| 6. In case of the declaration of performance concerning a construction product covered by a harmonised standard  | The notified laboratory SGS Nederland BV, No. 0608 performed the determination of the product type on the basis of type testing under system 3 and issued test report EZKA/14/0164-3     |
| 7. Declared performance  |  |
| <b>Harmonized technical specification</b>  | <b>EN13229:2001/A2:2004/AC:2007</b>  |
| <b>Essential characteristics</b>   | <b>Performance</b>   |
| <b>Fire safety</b>   | <b>Pass</b>  |
| Distance to combustible materials  | Minimum distances, in mm<br>Insulation thickness rear = 100<br>Insulation thickness sides = 100<br>Insulation thickness ceiling = 100<br>Front = 800<br>Insulation thickness floor = 100 |
| <b>Risk of burning fuel falling out</b>  | Pass   |
| <b>Emission of combustion products</b>   | CO = 0.12 vol%   |
| <b>Surface temperature</b>   | Pass   |
| <b>Electrical safety</b>   | Pass   |
| <b>Cleanability</b>  | Pass   |
| <b>Release of dangerous substances</b>   | NPD  |
| <b>Maximum operating pressure</b>  | Not applicable   |
| <b>Flue gas temperature at nominal heat output</b>   | T = 324 °C   |
| <b>Mechanical resistance (to carry a chimney/flue)</b>   | NPD  |
| <b>Thermal output</b>  | Pass   |
| Nominal heat output  | 12 kW  |
| Room heating output  | 12 kW  |
| Water heating output   | - kW   |
| <b>Energy efficiency</b>   | 75 %   |
| 8. The performance of the product identified in point 1 is in conformity with the declared performance in point 7.<br>This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 3. |  |

Signed for and on behalf of the manufacturer by:

Danny Baijens, CEO  
 (Name and function)

Bladel; September 18, 2018  
 (place and date of issue)

.....  
 (Signature)



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## 1 INTRODUCTION

### 1.1 GENERAL

The appliance must be positioned and connected by a Barbas dealer/specialist in accordance with the following installation instructions, nationally and locally applicable regulations.

This manual contains directions for both positioning the appliance and for its environmentally-friendly use. It also contains technical data for the appliance, parts information and directions in the event of problems.

This appliance is recommended as suitable for use in smoke control areas when burning wood logs. 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 pictures in this Installation Instructions are made from a variant of this appliance. Although the dimensions of the appliance on the pictures may differ from reality, the actions and instructions shown are fully valid for the appliance described here. Optionally the appliance can be equipped with a wood log storage module.

See the “Instructions for use” for the operation of the appliance  
The “Instructions for use” is provided separately by the appliance.

#### “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 unless it is used in an “exempt” appliance (“exempted” from the controls which generally apply in the smoke control area).

In England appliances are exempted by publication on a list by the Secretary of State in accordance with changes made to sections 20 and 21 of the Clean Air Act 1993 by section 15 of the Deregulation Act 2015.

In Scotland appliances are exempted by publication on a list by Scottish Ministers under section 50 of the Regulatory Reform (Scotland) Act 2014.

In Northern Ireland appliances are exempted by publication on a list by the Department of Agriculture, Environment and Rural Affairs under Section 16 of the Environmental Better regulation Act (Northern Ireland) 2016.

In Wales appliances are exempted by regulations made by Welsh Ministers.

Further information on the requirements of the Clean Air Act can be found here:  
<https://www.gov.uk/smoke-control-area-rules>.

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

- Do not place flammable objects within 100 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.
- Check 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.
- 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 plates are fitted correctly to the brackets at the top of the appliance and the heat-resistant panels are fixed to the walls. 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.
- Ask for the local building regulations, before commencing the installation of the appliance.
- Install a carbon monoxide alarm. The carbon monoxide alarm should be battery-powered and designed to operate for the life of the carbon monoxide alarm, following which it should be replaced. Alternatively a mains powered carbon monoxide alarm can be used, however this must be fitted with a sensor failure warning device.
- The carbon monoxide alarm must be fitted and fixed in place within the same room as the appliance and can be placed either on the ceiling or wall between 1 meter and 3 meter horizontally from the appliance. If fitting to the ceiling it must be at least 300mm from any wall. If fitting to a wall, it must be placed as high as possible above any doors or windows at 150mm below the ceiling.

## 2 LOCATION

### 2.1 INCLUDED

|                   |  |
|-------------------|--|
| Set documentation | <ul style="list-style-type: none"><li>• Directions for use</li><li>• Installation instructions</li></ul>   |
| Attributes        | <ul style="list-style-type: none"><li>• Glove (Heat resistant up to max. 95°C)</li><li>• Operating hook / Poker</li><li>• Cover plates</li></ul> |

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 whether the 2 retardant plates are 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.

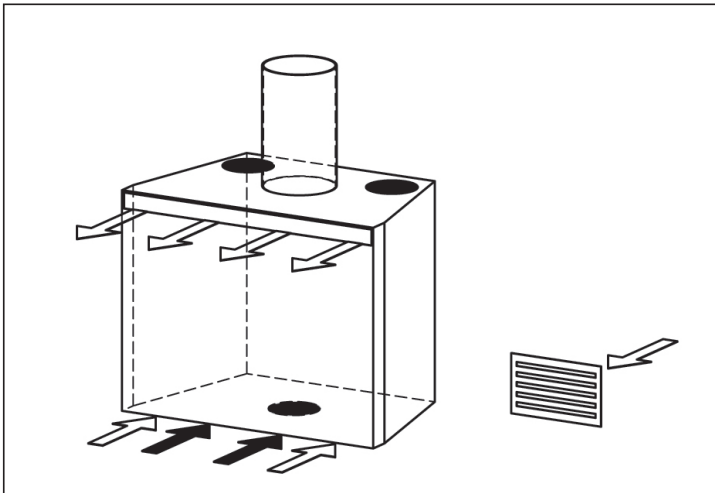
- **Important:** Decide how to install the appliance.  
There are many possibilities !  
See also chapter 3.3 Fitting.  
Dependent on the type of fireplace where  
the appliance is located /installed.



Connection Possibilities:

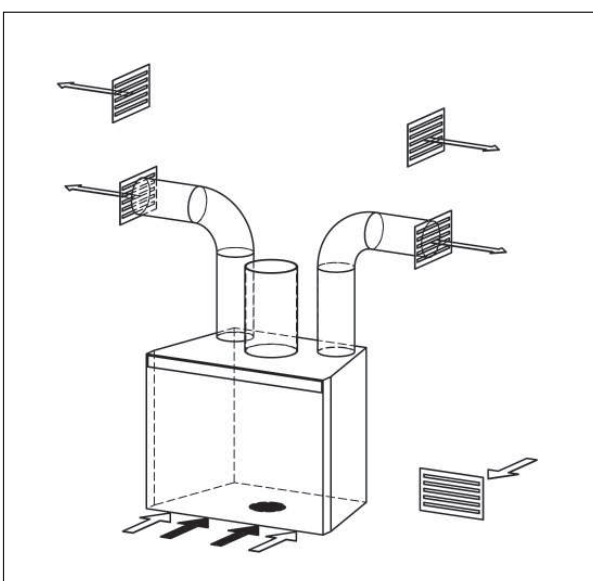
- ① Mounting as insert in an existing fireplace.  
In these situations the combustion air inlet is at the front of the appliance.

A Insert, no open space in top of the fireplace.

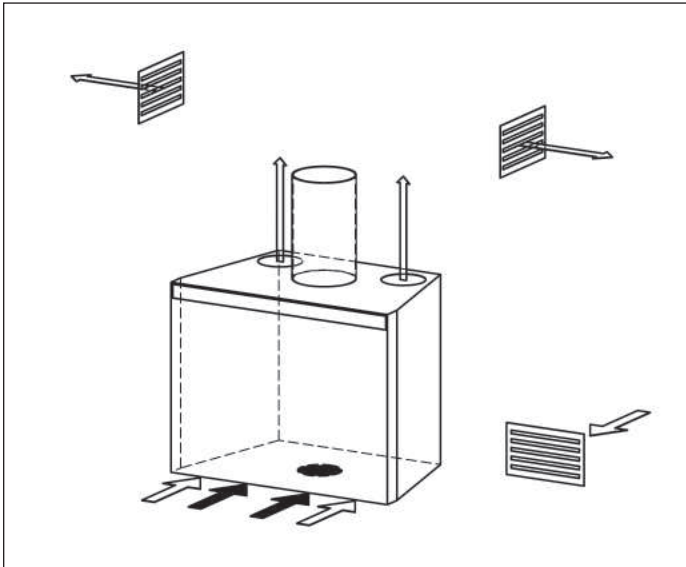


Ventilate the chimney breast, when it is totally empty, by placing vents in the top and bottom of the chimney breast.

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

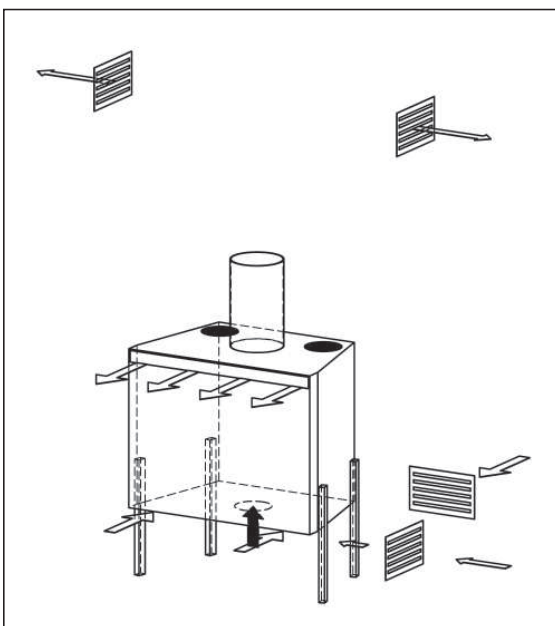


- C Insert, with open space in top of fireplace.  
 Convection air through the chimney breast.

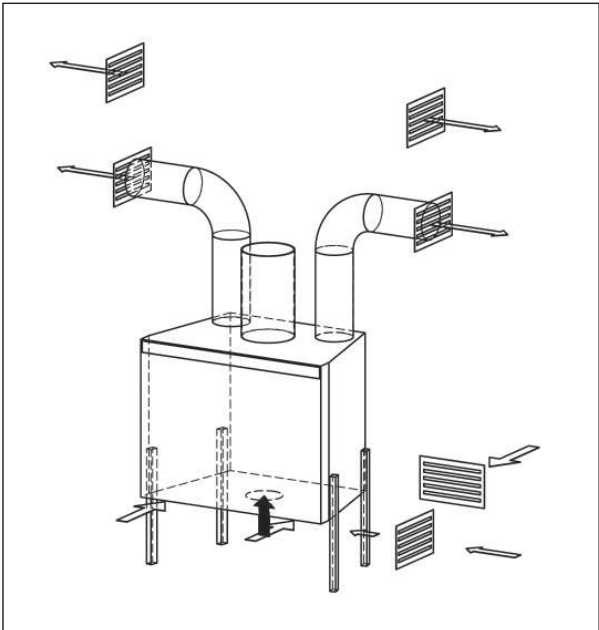


- II Installing as a build-in appliance in an existing or new fireplace.  
 In this situation it is possible to fit the appliance with a combustion air supply from the outside through the back or the underside of the appliance.

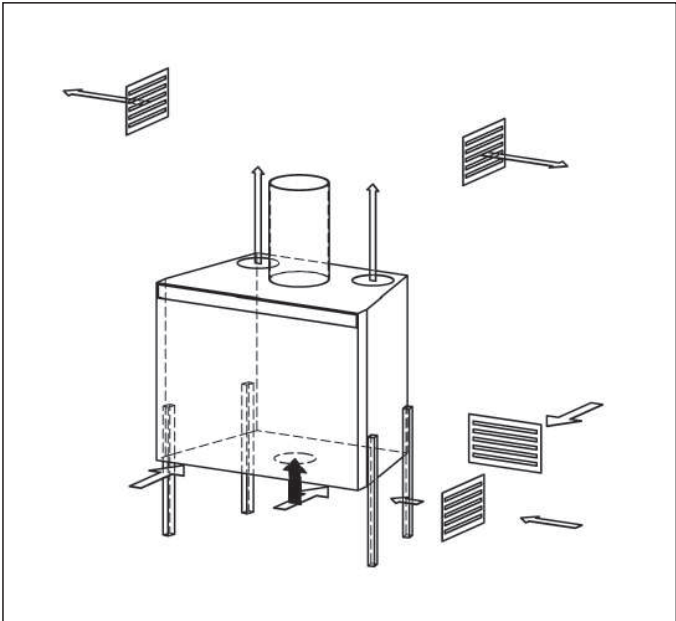
- A Build-in appliance.

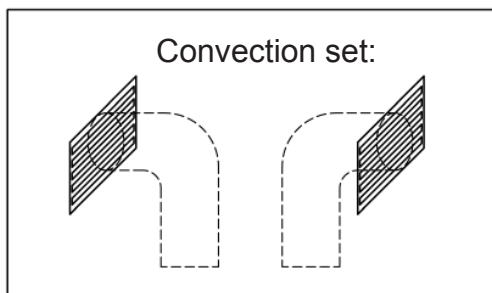
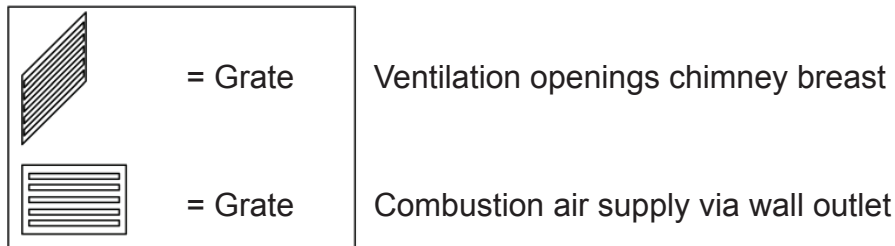
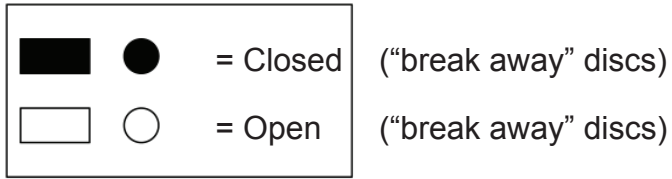


B Build-in appliance, with convection set and convection fan.



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





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



- Opening of 2 convection air outlets.

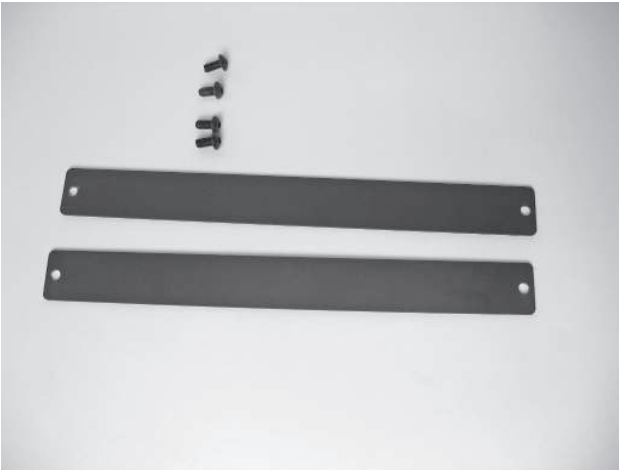


Have the suitability of the area in which the fire is to be fitted (and the chimney) approved by a specialist. The space into which the appliance is to be fitted must in no way be damaged. The appliance must have its own chimney, constructed in compliance with current legislation.

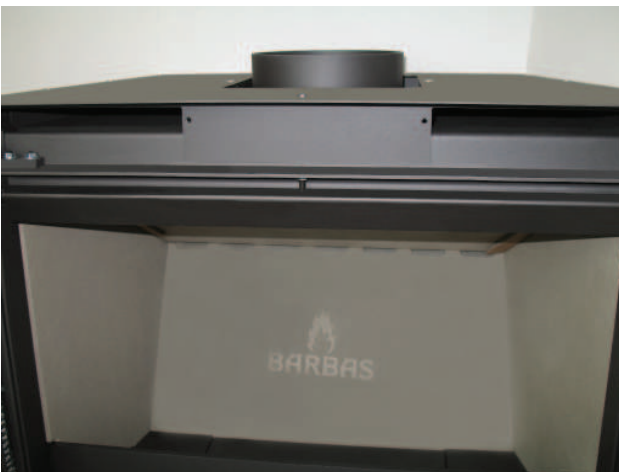
**IMPORTANT :** If the appliance is fitted with a convection set, the convection air outlet openings at the front side of the appliance must be closed by means of the included 2 cover plates and 4 Allen screws.



Cover plates convection air.



Convection air outlet openings open.



Convection air outlet openings closed.



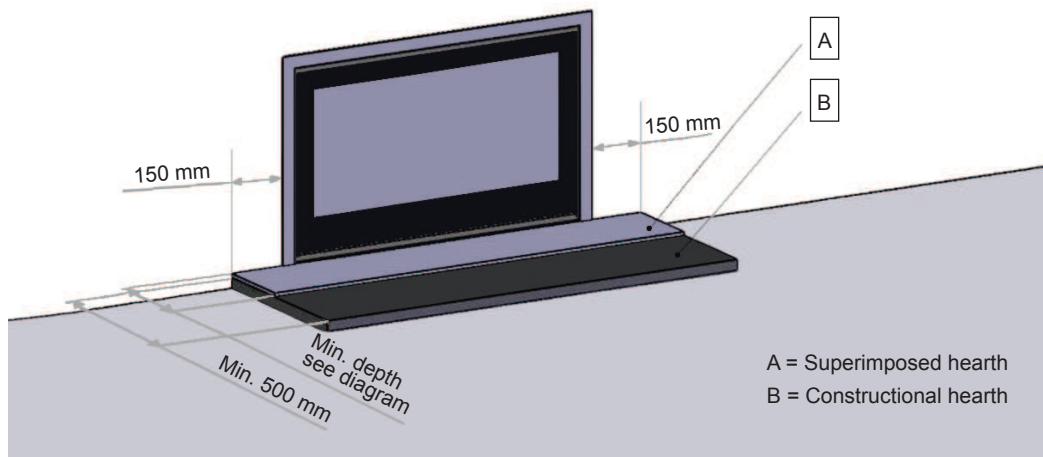
## 2.3 ACCESSORIES

The following accessories can be supplied by your dealer:

| <u>Part. no</u> | <u>Accessorie</u>  |
|-----------------|--|
| 338223          | <u>Convection set General</u> : (for convection air extraction)<br>Advice:                             |
| 302188          | • Appliance <u>without</u> convection fan:<br>The use of a convection set is strongly recommended.     |
| 310178          | • Appliance <u>with</u> convection fan:<br>The use of a convection set is possible, but not mandatory. |
| 309872          | • 1x Flexible aluminium pipe Ø125 mm, L= 3 m (max.)  |
| 309730          | • 2x Fitting box 135x135 mm  |
| 304040          | • 2x Convection exit grid, white, 145 x 145 mm   |
|                 | • 2x Collar adaptor Ø125 mm  |
|                 | • 4x Hose clamp Ø125 mm  |
| 338377          | Built-in frame   |
| 338376          | Deepened frame   |
| 338374          | Classic frame  |
| 309872          | Grate ventilation chimney  |
| 310178          | Fitting box for grate ventilation chimney  |
| 339377          | Set of high adjustable feet  |
| 339261          | 2x Cover plate   |

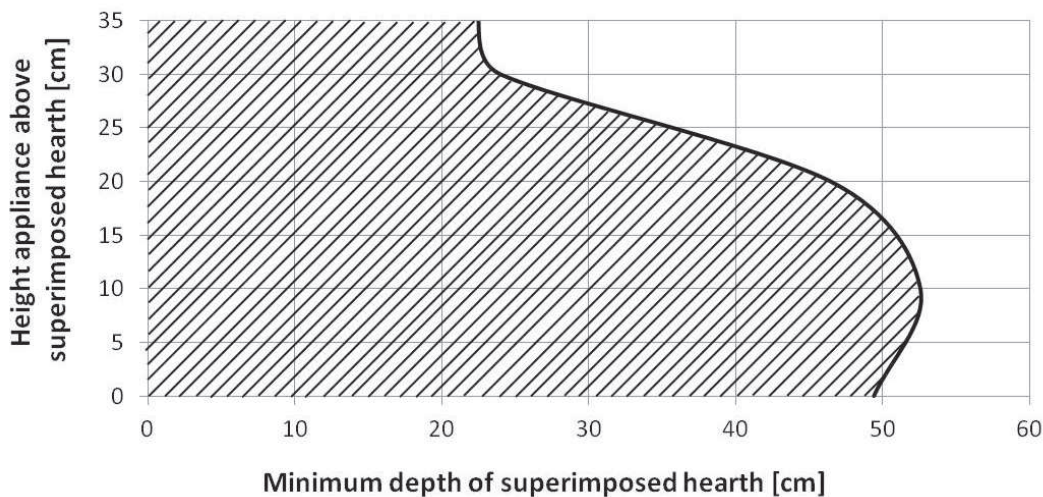
## 2.4 HEARTH REQUIREMENTS

The appliance must be placed on a constructional hearth made of solid non-combustible material, such as concrete or masonry, at least 125 mm thick, including the thickness of any non-combustible floor and/or decorative surface. Combustible material should not be placed beneath the constructional hearths unless there is an air-space of at least 50 mm between the underside of the hearth and the combustible material, or the combustible material is at least 250 mm below the top of the hearth.



**Figure 1: Minimum dimensions appliance**

The minimum depth of the constructional hearth is 500 mm. A superimposed hearth on top of the constructional hearth must have a minimum depth of 225 mm and must be free of any combustible material. The actual depth of a superimposed hearth is dependent on the installation height of the appliance. The higher the appliance is installed the deeper the superimposed hearth should be to avoid scorched floor coverings. On the diagram below the minimum depth of the superimposed hearth in relation to the height of the appliance can be determined.



**Figure 2: Minimum depth of the superimposed hearth in relation to the height of the appliance**

The constructional hearth and a superimposed hearth must have a width extending at least 150 mm from each side of the appliance.

### 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°. Never use more than 2 bends.
- 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

The 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.

|  |
|--|
| <p><b>Insulation requirements:</b></p> <ul style="list-style-type: none"><li>• <b>temperature resistance <math>\geq 700^{\circ}\text{C}</math>.</b></li><li>• <b>density <math>\geq 80 \text{ kg/m}^3</math></b></li></ul> |
|--|

- Have any electrical connection for the convection fan carried out by a professional electrician.  
**Note ! :** The fan 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.

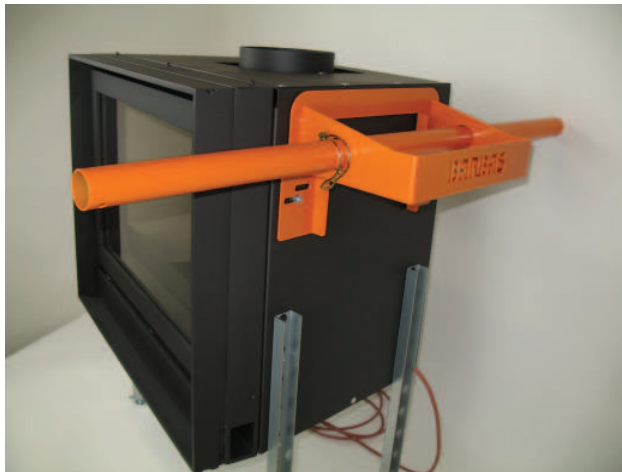


**Do not use masking tape on the appliance when installing and plastering.**  
**Tape can damage the finish of the appliance.**

### 3.3.1 Positioning of the appliance

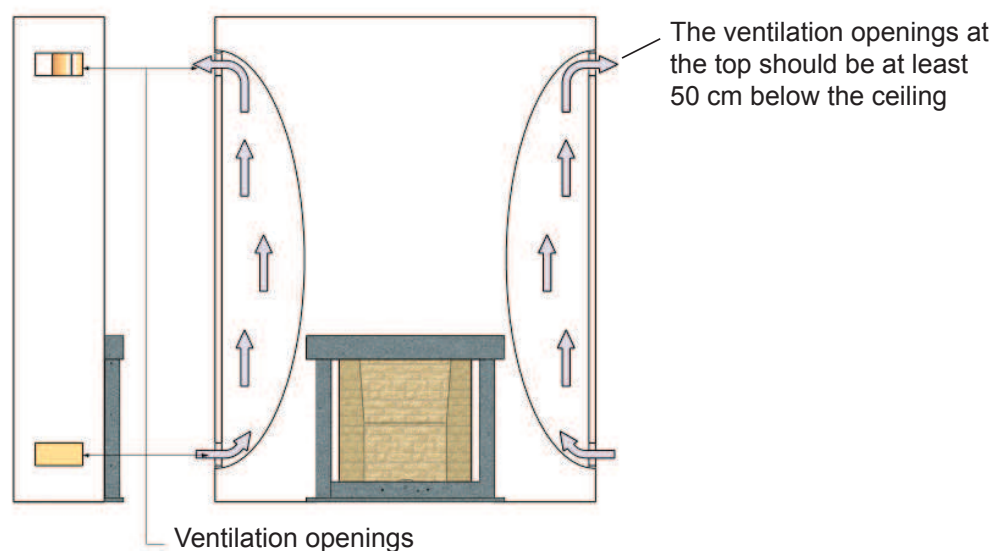
The appliance must be positioned on a concrete surface. If such a surface is not immediately available, a sufficiently solid pedestal of nonflammable material should be built from the creeping space.

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.

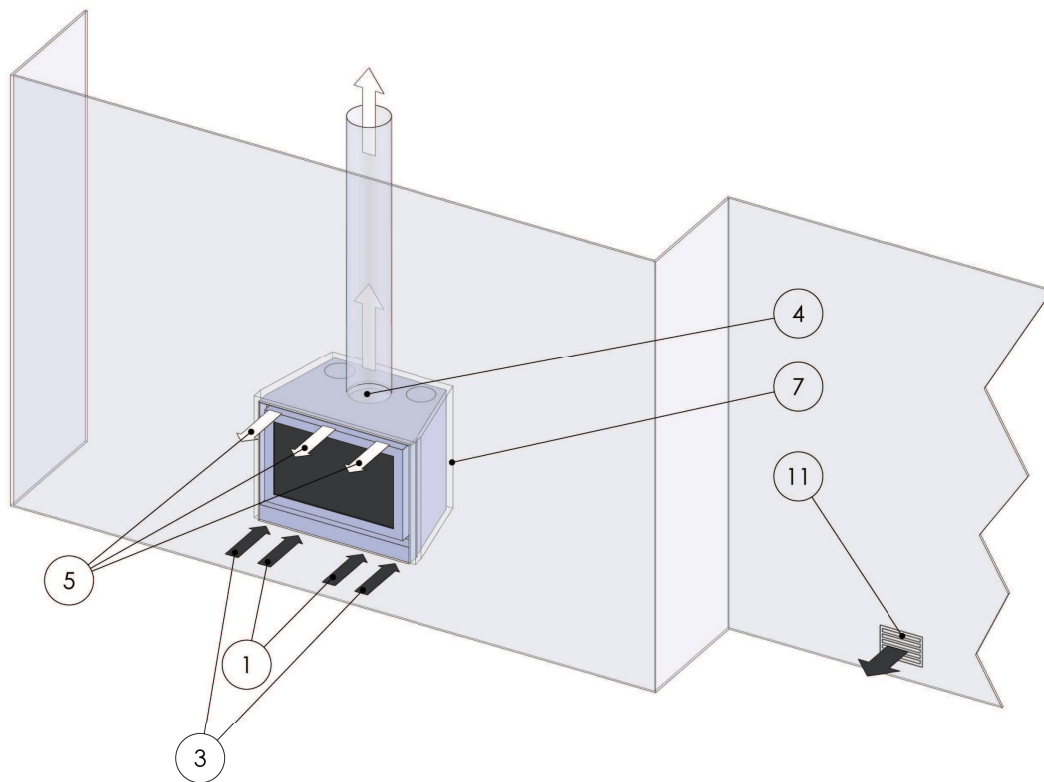
The total ventilation openings should be at least  $450 \text{ cm}^2$  at the bottom of the chimney breast and also at least  $450 \text{ cm}^2$  at the top of the chimney breast. (Total ventilation openings:  $900 \text{ cm}^2$ .)



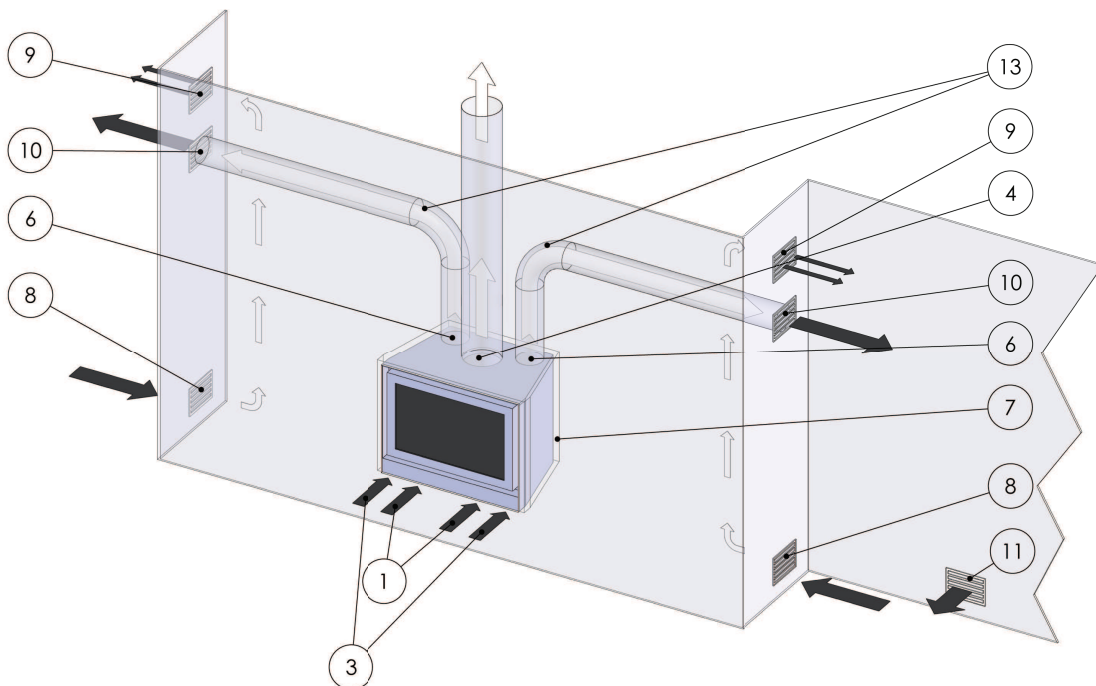
**Figure 3: Use of ventilation of chimney**

Examples installation possibilities.

① A Appliance as an insert-appliance in an existing chimney.



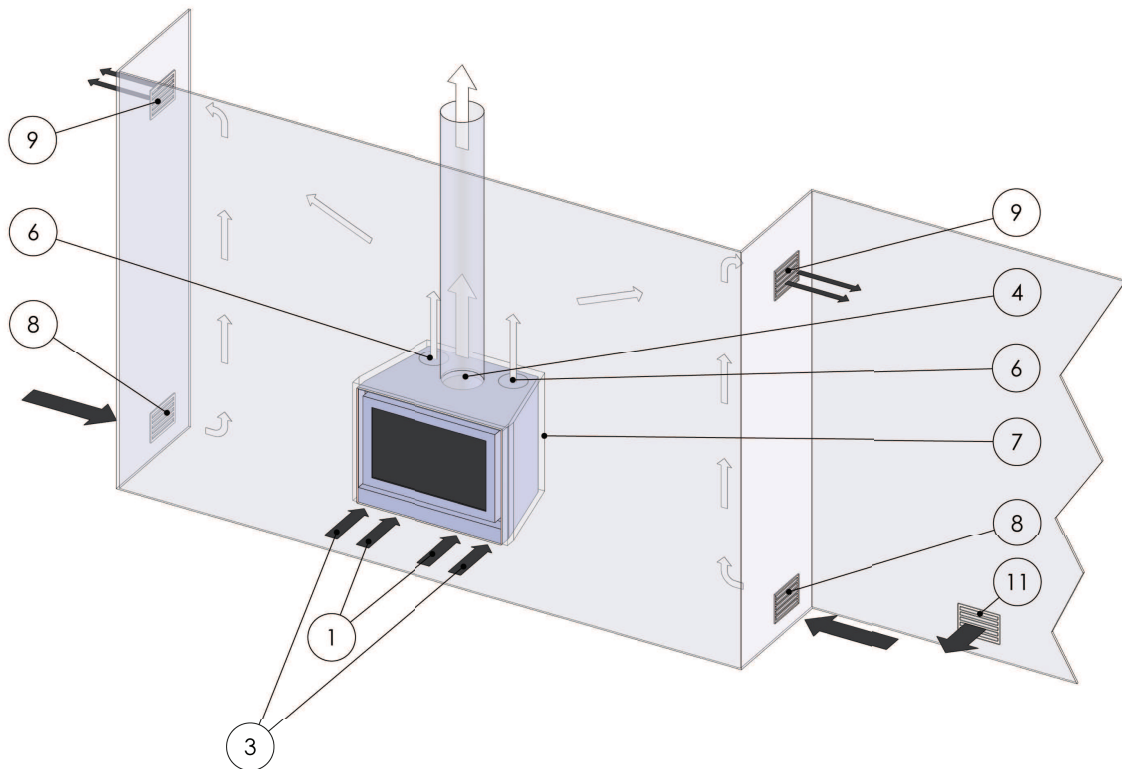
① B Appliance as an insert-appliance in an existing chimney.  
Fitted with a convection set and ventilation of the chimney.



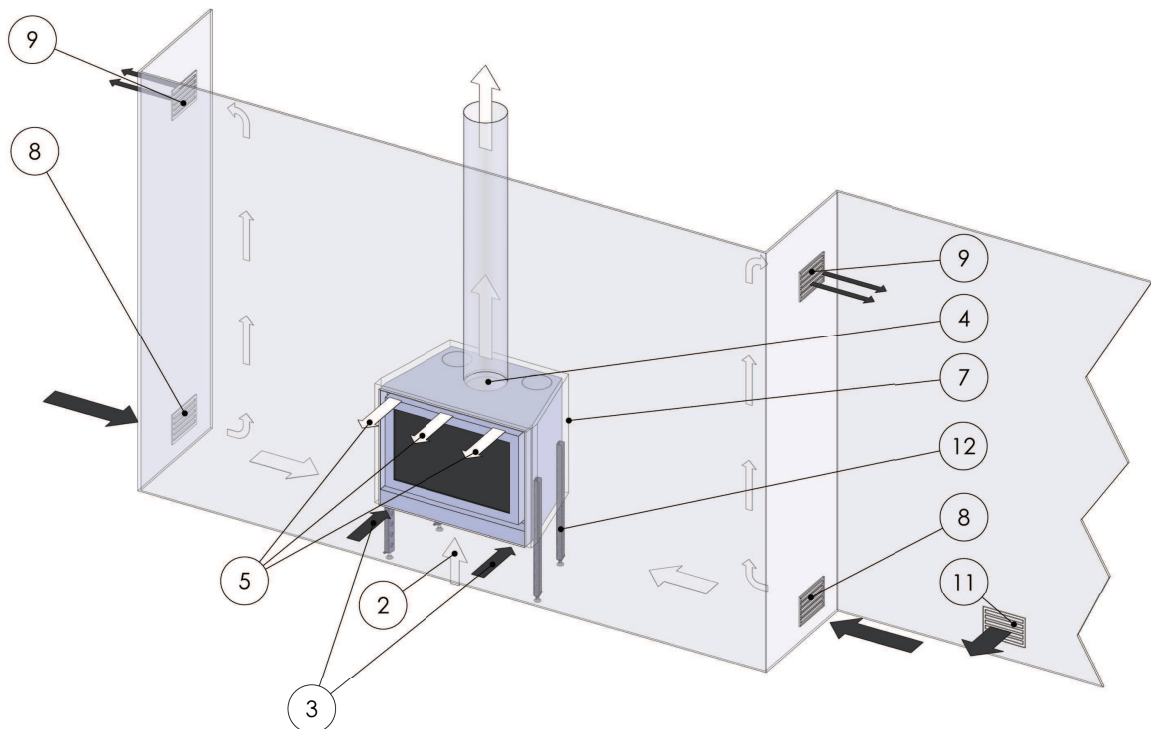
Legend page 27



- ① C Appliance as an insert-appliance in an existing chimney.  
 Convection air through the chimney breast.  
 Fitted with ventilation of the chimney.

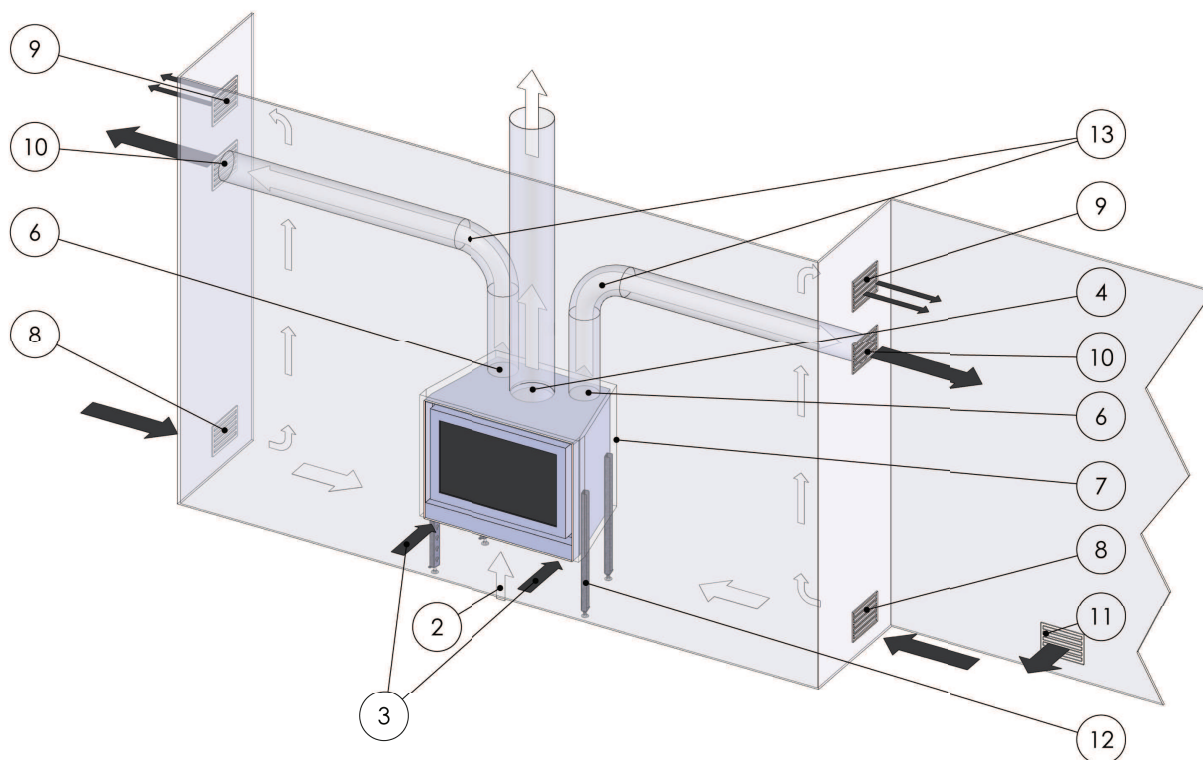


- ② A Appliance as a build-in appliance in an existing or a new chimney.  
 Fitted with ventilation of the chimney.

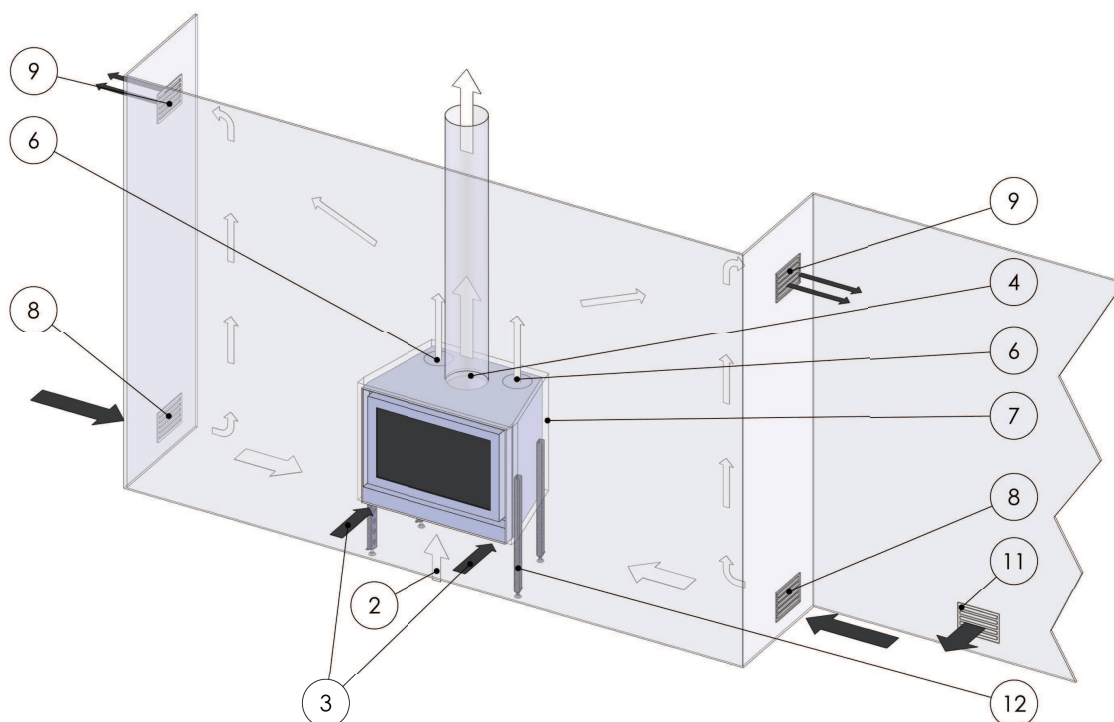


Legend page 27

- 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 27

**Appliance:**

- ① Inlet opening combustion air (front of appliance)
- ② Inlet opening combustion air (bottom / rear of appliance, Ø125 mm) with the aid of the air supply adapter (pre-mounted)
- ③ Inlet opening convection air (front of appliance)
- ④ Flue connection (topside of appliance, Ø180 mm)
- ⑤ Outlet opening convection air (front of appliance, above)
- ⑥ Outlet opening convection air (top of appliance) / (Connection convection set) (2x Ø125 mm)
- ⑦ Insulation material, noninflammable !!! (for example ceramic fibre) (sides and top of appliance)

**Chimney / Chimney breast:**

- ⑧ Inlet opening chimney-ventilation air (grate, bottom of chimney)
- ⑨ Outlet opening convection air/chimney-ventilation air (grate, top of chimney)
- ⑩ Outlet opening convection air via convection set (grate, top of chimney)

**Exterior wall:**

- ⑪ Inlet opening combustion air (grate, exterior wall)
- ⑫ High adjustable feet (set of 4 pieces)
- ⑬ Convection set

### 3.3.2 Aeration / ventilation

The appliance generates: - convection air  
- combustion 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.

If the appliance is fitted with a convection fan, this can be regulated using an built-in dimmer. Once the appliance is hot enough, the fan automatically starts.

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

On delivery, the appliance is prepared for a combustion air supply from the living room or a combustion air supply directly from the outside.

- Combustion air from the living-room:

The air inlet openings are located under 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<sup>2</sup>.

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 combustion air supply can be connected to the back or the underside of the appliance. To do this, use combustion air connection Ø125 mm (exterior) for the back or underside. Install a fixed or flexible pipe of Ø125 mm in the wall/floor between this air supply connection and outside air supply inlet. 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



**Do not use masking tape on the appliance when installing and plastering. Tape can damage the finish of the appliance.**

- 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



**Do not use masking tape on the appliance when installing and plastering. Tape can damage the finish of the appliance.**

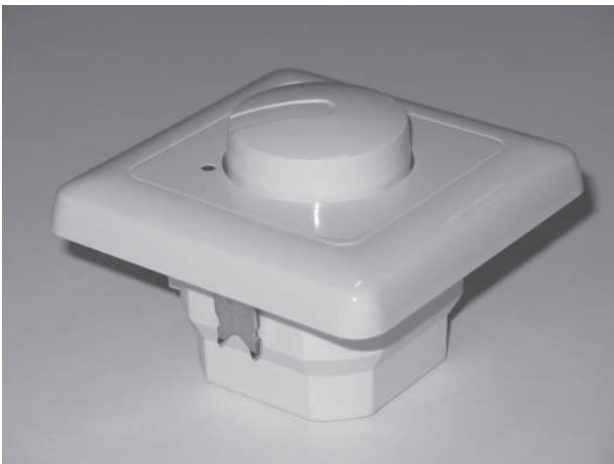
- If required, a convection set can be added when installing the appliance.
  - \* Appliance without convection fan : The use of a convectionset is strongly recommended.
  - \* Appliance with build-in fan : The use of a convectionset is possible, but not mandatory.
- In the case of utilisation of a convection set: Carefully break out the "break-away openings" at the topside (2x) 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.

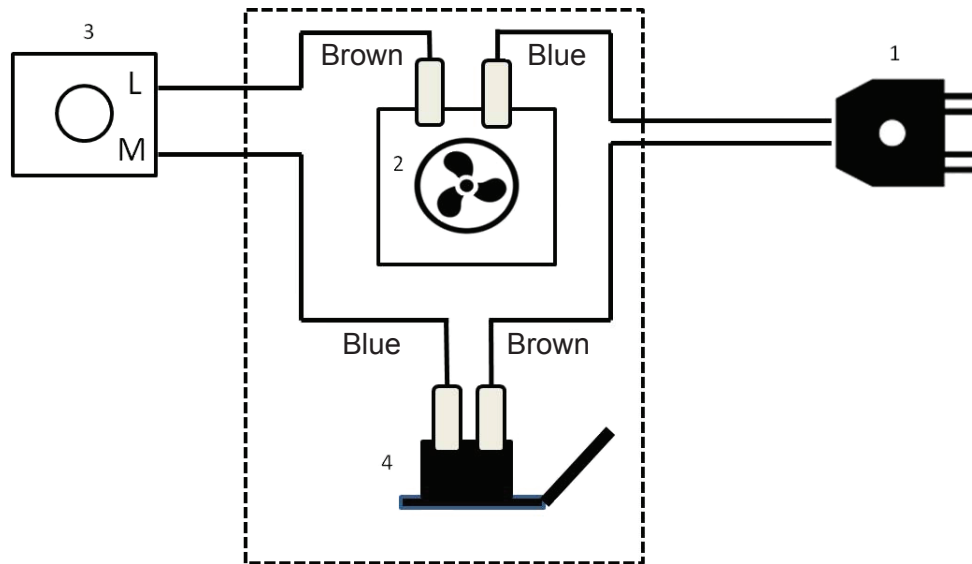


- Dimmer for installation in built-in box.



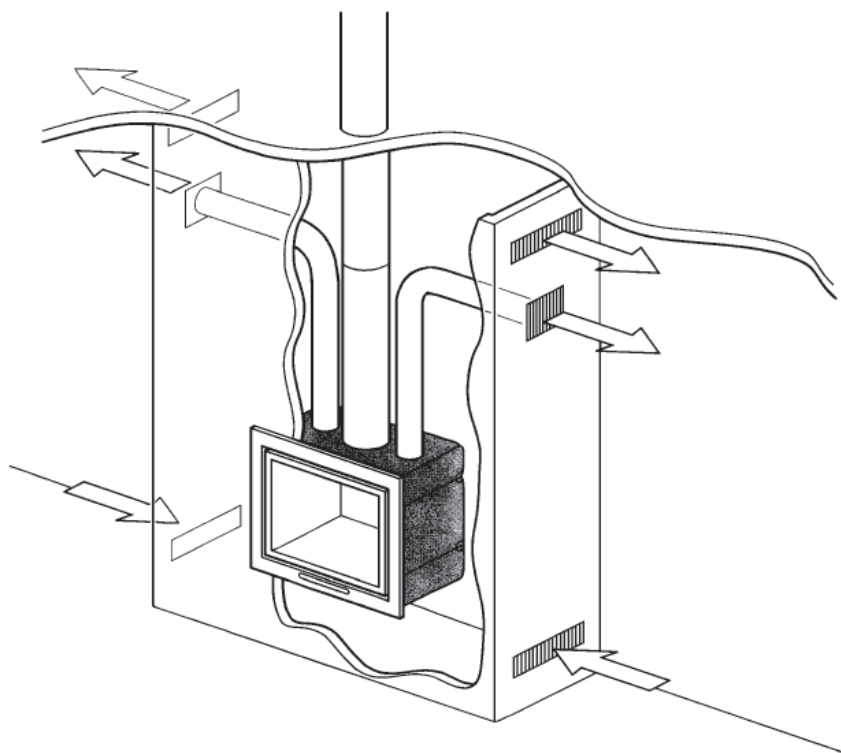
- Built-in box for dimmer.

Referring to the electrical wiring diagram in figure 4, connect the dimmer to the fan.



|   |   |
|---|---|
| 1 | Earthed plug (with earth sleeve) 230 VAC              |
| 2 | Convection fan 230 VAC/50 Hz                          |
| 3 | Adjustable dimmer                                     |
| 4 | Thermostat "Clickson" set at $\pm 40^{\circ}\text{C}$ |

**Figure 4: Electrical wiring diagram**



**Figure 5: Use of convection set and ventilation of the chimney (diagram)**

- Close up the front.

Available BARBAS grids (option) for ventilating the chimney:

| COLOUR                            | DIMENSION (cm) | CLEAR OPENING (cm <sup>2</sup> ) |
|-----------------------------------|----------------|----------------------------------|
| Brass or white<br>(incl. fitting) | 13.5 x 13.5    | 75                               |
| Brass or white<br>(incl. fitting) | 27.0 x 13.5    | 150                              |
| Convection air fan (white)        | 43.0 x 22.0    | 550                              |



- During installation of the appliance, a clearance of 3 mm should be maintained on all sides of the appliance to allow for expansion of the appliance during operation.
- 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

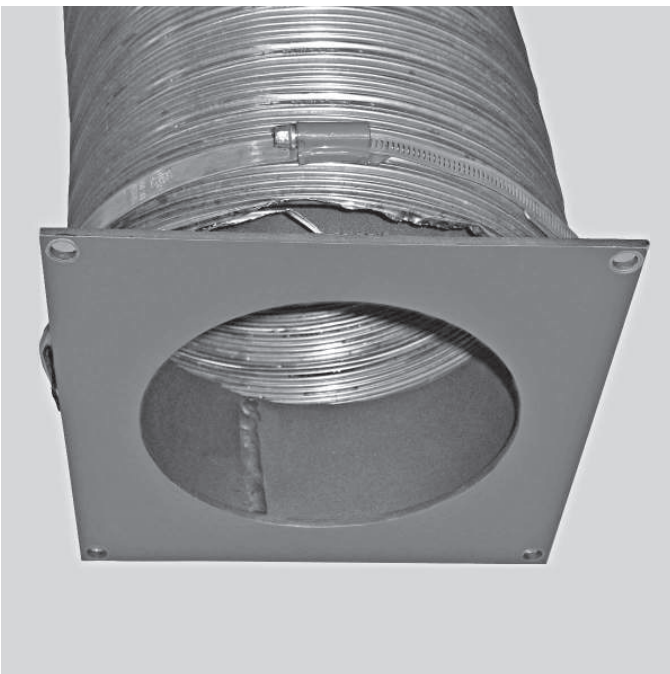
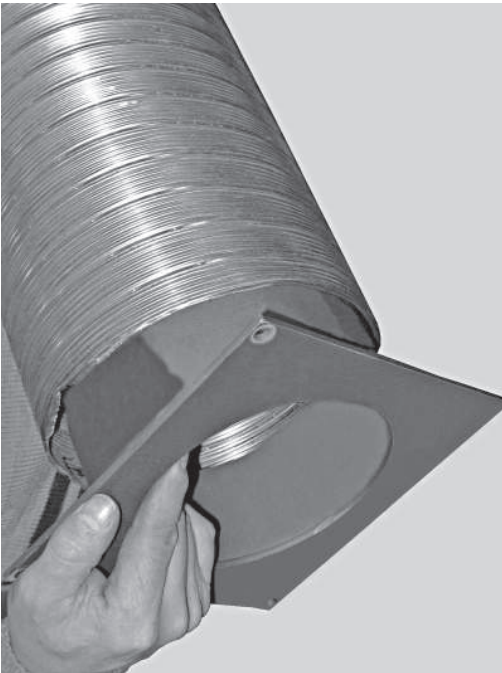
The appliance comes with a detachable smoke outlet connection, Ø180 mm (Ø178 mm external). This connection is intended for steel pipes, double/single-skinned stainless steel (insulated) flues or double/single-skinned flexible stainless steel flues. After the appliance has been installed, it can be connected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

In order to be able to disassemble the smoke outlet connection, remove the brake plates first.

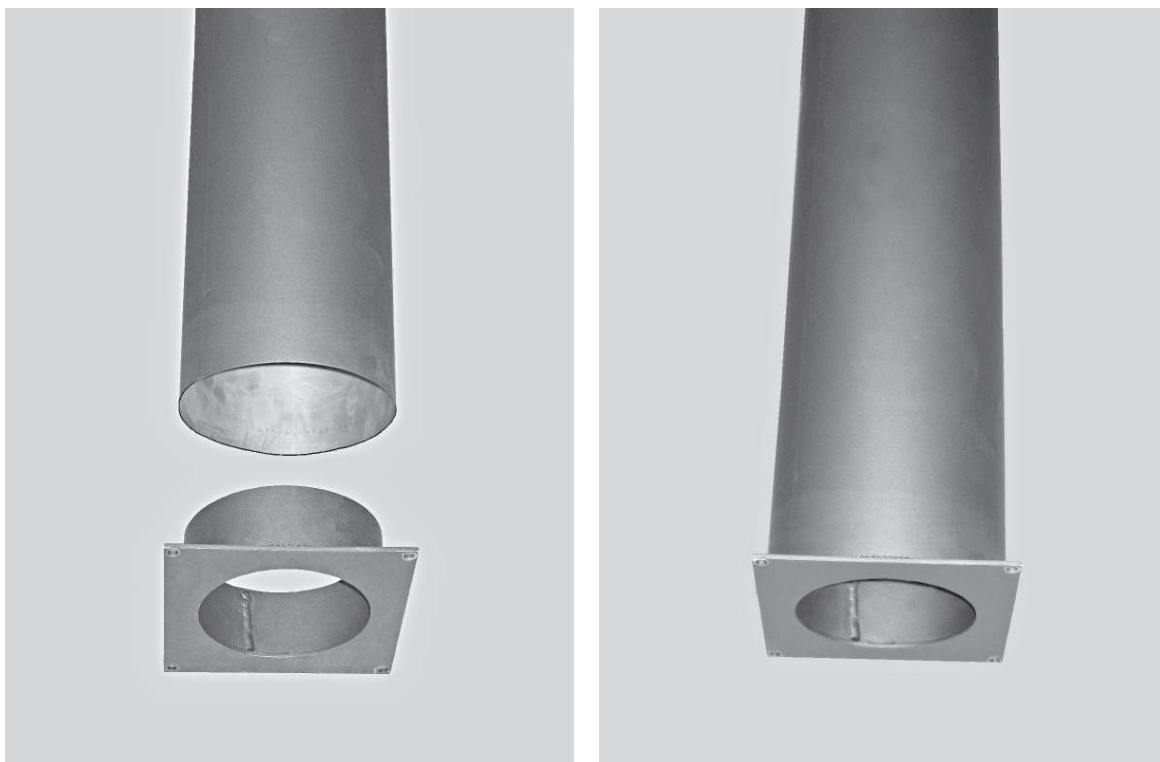
- Disassembling the smoke outlet connection.



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



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 COMBUSTION AIR SUPPLY SYSTEM SURROUND

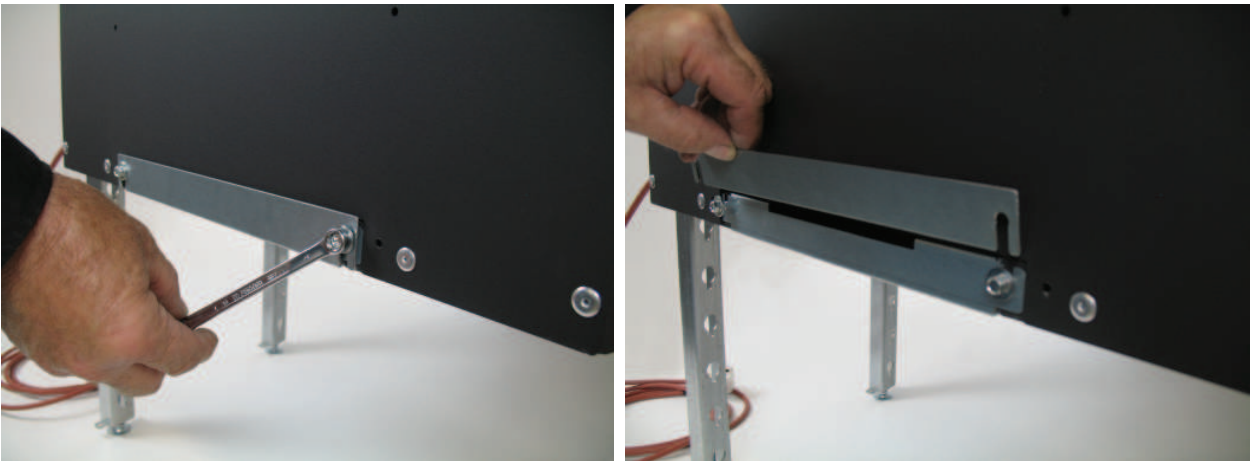
If the appliance is delivered by the dealer with the combustion air supply at the front of the appliance it is possible - before the appliance is built into to fireplace - to fit an outside air connection.

Unscrew the 2 screws on the front of the underside several turns.

**ATTENTION!** These screws may not be unscrewed completely.



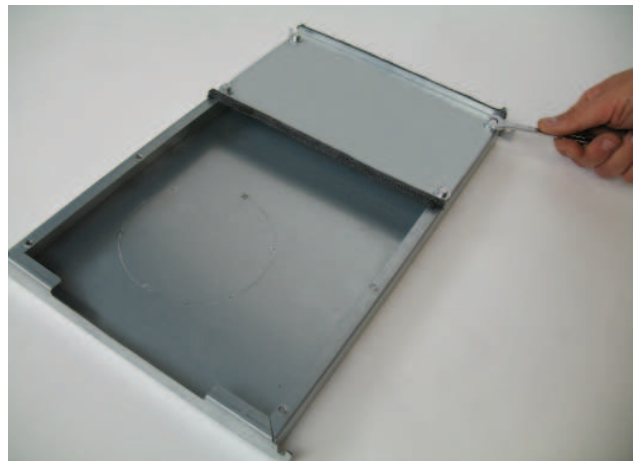
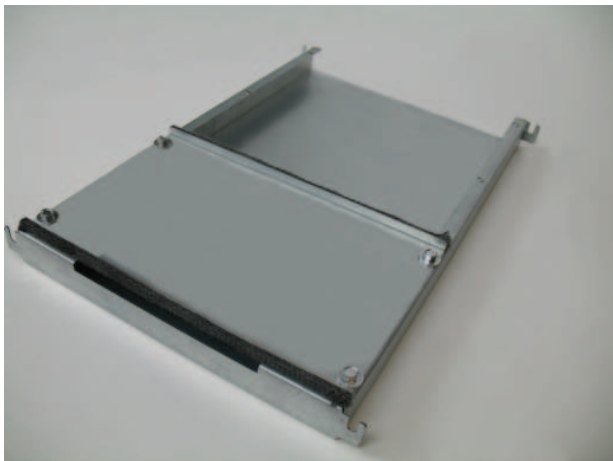
Remove the back of the cover plate by unscrewing the 2 screws several turns.



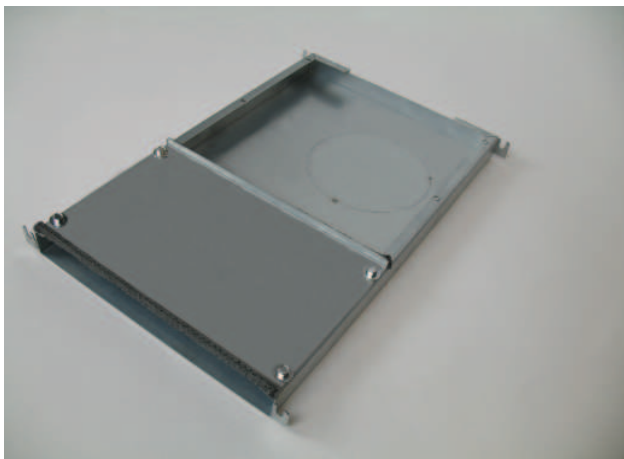
Remove the air supply adapter by carefully pressing it down at the back and then at the front. Unscrew the screws a little more if the adapter cannot be removed.



Move the top cover to the other side of the adapter with the aid of open-end wrench 8.

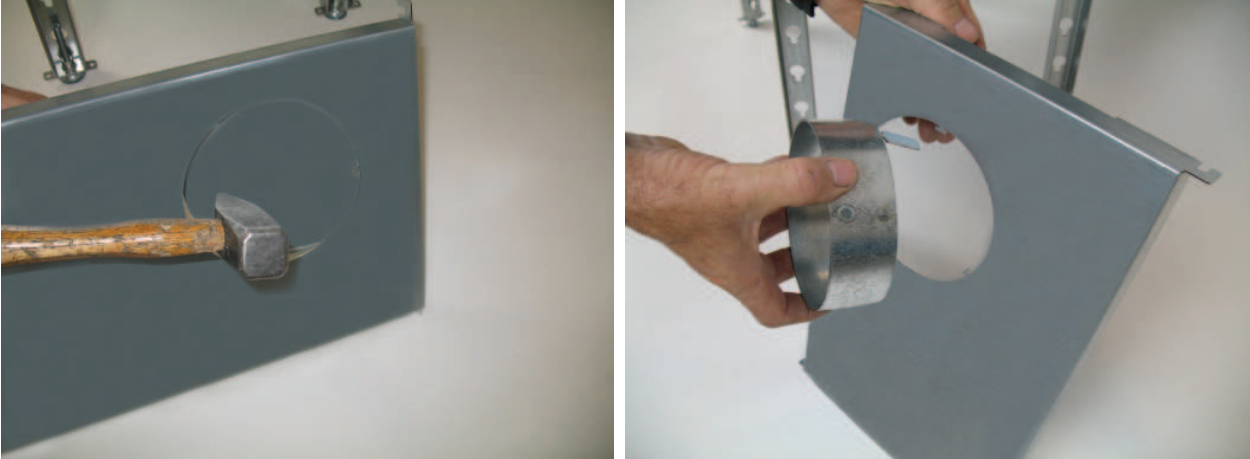


Turn the adapter around in such a way that the open side and the cover points to the back of the appliance.



### Air supply through the underside of the appliance

Use a hammer to hit the jaw plate out of the air supply adapter and place a collar in the hole that has been created.



Screw the collar tight and bend the 3 flanges outwards.

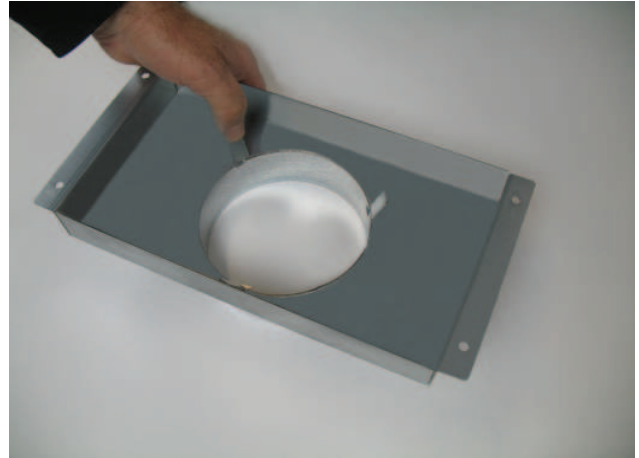
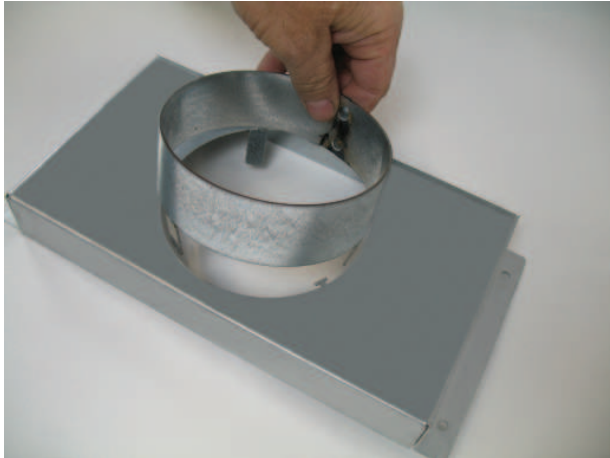


Reconnect the air supply to the appliance. Then place the cover plate. The appliance is now ready for an air supply through the underside.

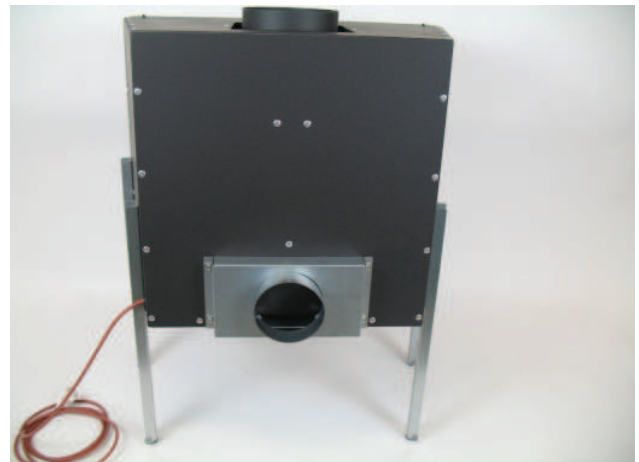
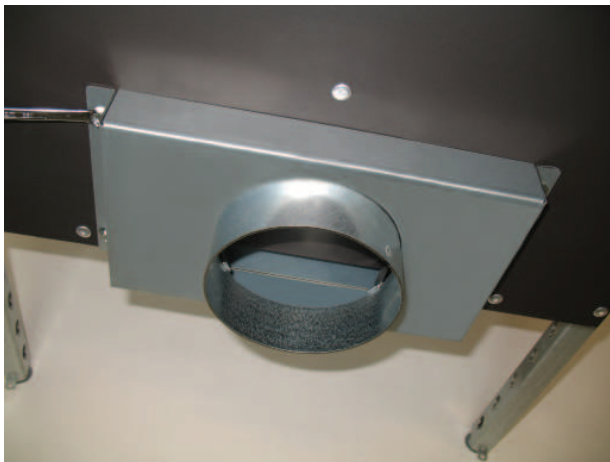
### Air supply through the rear

Reconnect the air supply to the appliance.

Take the connection module for the back connection and hit the jaw plate out with a hammer. Place a collar in the opening that has been created. Tighten the collar and bend the 3 flanges outwards.



Fit the connection module onto the back of the appliance. The appliance is now prepared for air supply from the outside.

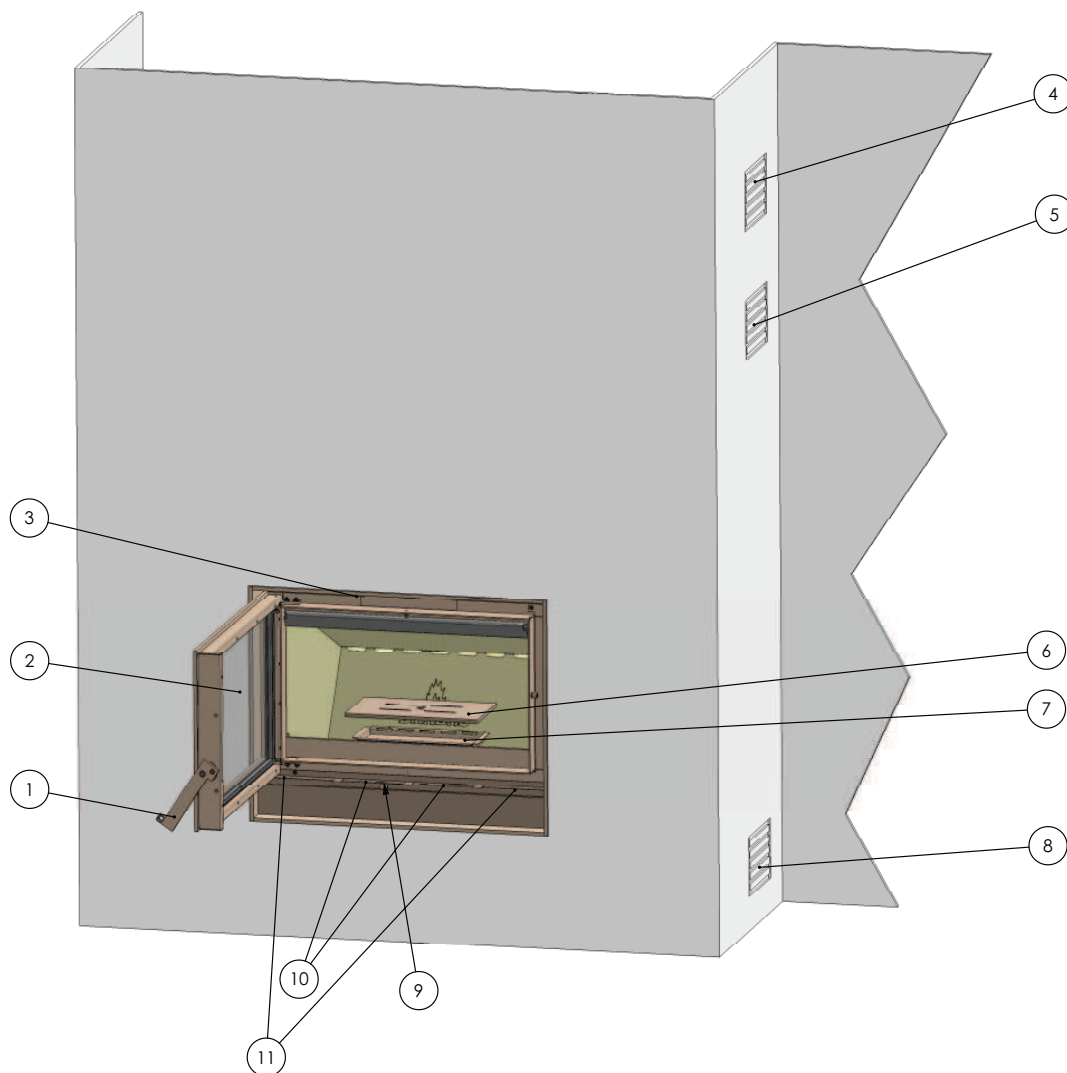


### 3.5 PREPARATION / FUNCTION CHECK

- Check the operation of the combustion air supply slider
- Check if the combustion air supply openings are open
- Check if the convection air supply openings 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

The appliance with fan set (option) and convection set (option) built into chimney



**Figure 6: Operation**

- 1 Handle
- 2 Ceramic heat-proof glass
- 3 Convection air outlet opening front (if there's no convection set available)
- 4 Natural convection air outlet opening (2x grate) (chimney)
- 5 Convection air outlet opening (2x grate convection set) (chimney)
- 6 Combustion grate
- 7 Ashtray
- 8 Inlet opening (2x grate) (chimney) Ventilation air chimney
- 9 Combustion air-supply slider (Combined operation for the primary, secondary and tertiary combustion air-supply.)
- 10 Inlet opening (2x) combustion air from living-room, if a direct outside air supply is not connected. This is already decided during the installation of the appliance.  
NEVER close off open air intakes.
- 11 Convection air intake opening (2x).



## 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 maintenance 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 completely and lifting it upwards.
- Remove the complete interior of the appliance 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:

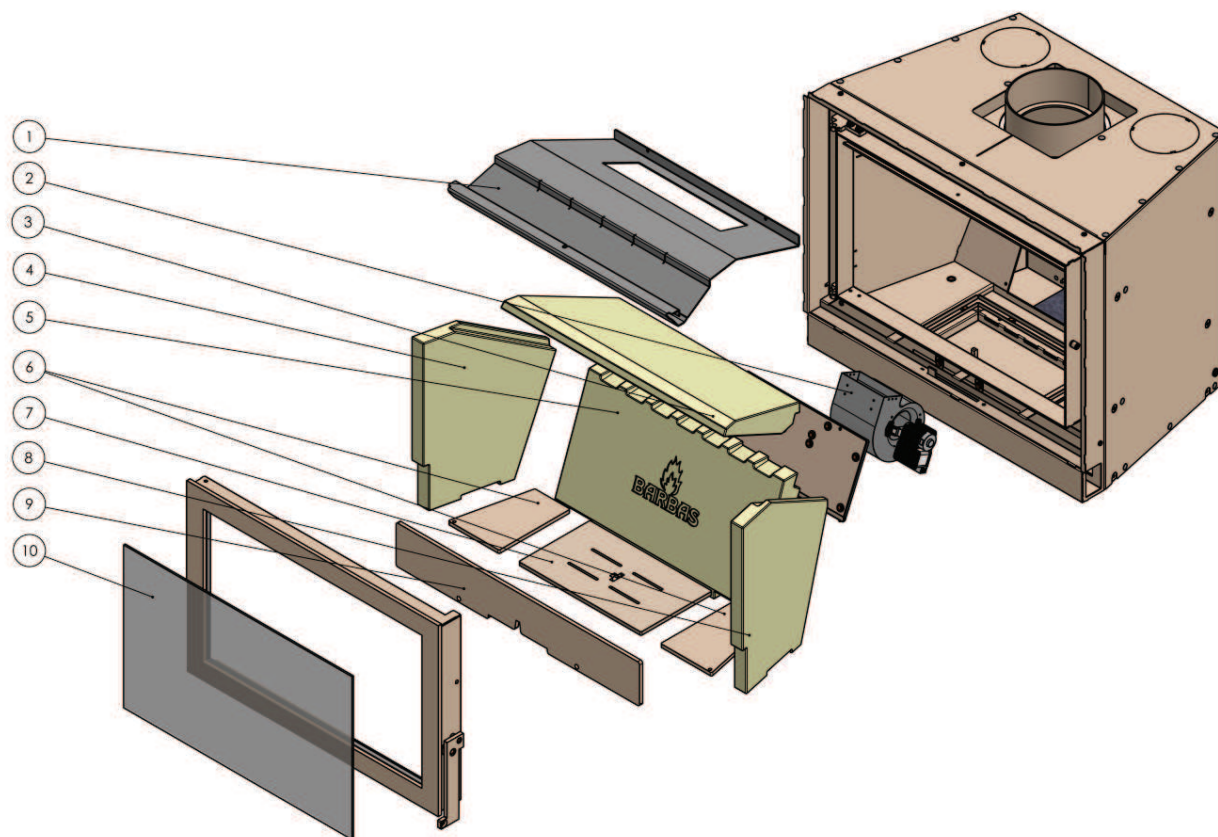
- Sweep and inspect chimney. Check for cracks, loose parts, flue gas leakage and overall condition of the chimney.  
When in doubt use an inspection camera !

### 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 space where the fan is placed.  
This space is accessible after the removal of the ceramic plates in the combustion chamber and the hatch on the back wall has been unscrewed.
- 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 attention 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



| Pos no | Article no | Description                 |
|--------|------------|-----------------------------|
| 1      | 338362     | Brake plate stainless steel |
| 2      | 337872     | Fan                         |
| 3      | 338049     | Stone brake plate           |
| 4      | 338047     | Stone side left             |
| 5      | 338046     | Stone rear                  |
| 6      | 338367     | Bottom                      |
| 7      | 338074     | Combustion grate            |
| 8      | 338048     | Stone side right            |
| 9      | 338368     | Wood rack                   |
| 10     | 338390     | Ceramic glass               |

When ordering, please give the serial number.

## 6.1 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.

- Remove the two steel bottom plates.



- Unscrew the locking pin with the aid of an Allen key and a wrench. You can now remove the top brake plate by pulling it forward slightly and then tipping it downwards. The brake plate can now be pulled forwards and out.



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



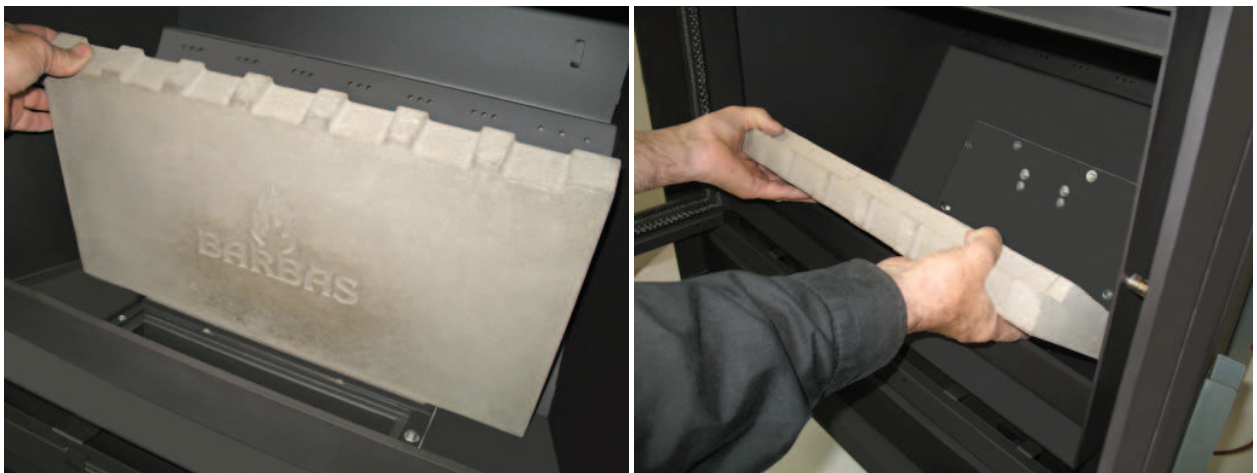
- Remove carefully the left-hand side panel.



- Remove carefully the right-hand side panel.  
Make sure the rear panels do not fall forwards !



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



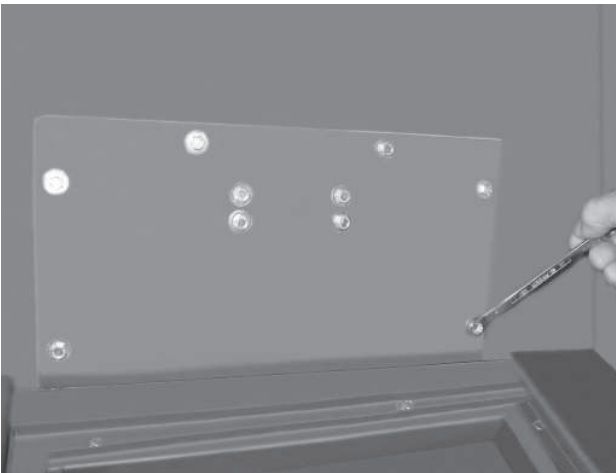
The entire interior is now disassembled.

The interior is reassembled in the reverse order.

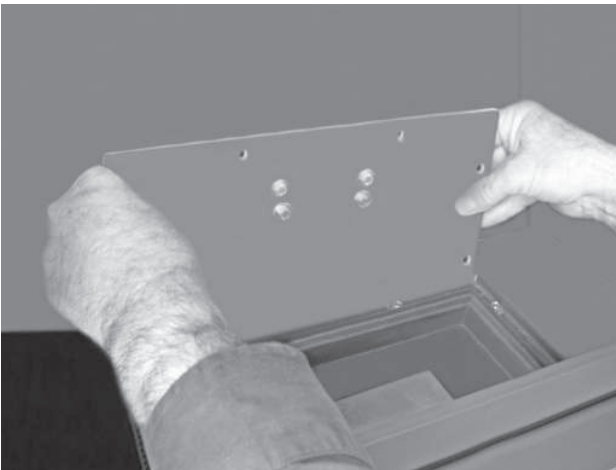
## 6.2 REMOVING THE FAN

**ATTENTION!** Ensure that there is no current on the fan before removal starts.  
Pull the plug out of the socket or switch the switch on the electricity meter to zero.

Unscrew the steel hatch that is visible on the back wall after the removal of the concrete panels. Do not unscrew the 4 central screws.

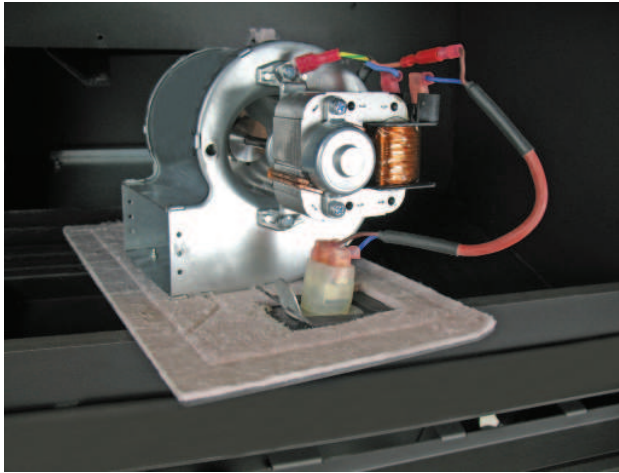


Carefully pull the hatch forwards.  
The fan is screwed onto the back of the hatch.





Carefully pull the small plugs off the fan. The fan can now be removed from the appliance together with the hatch

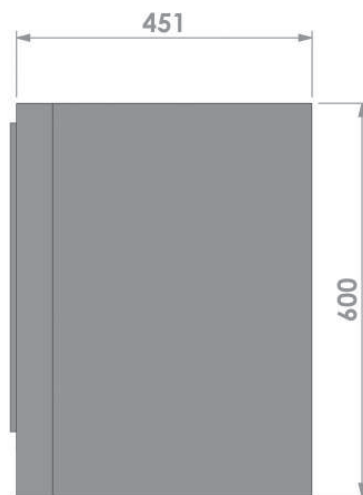
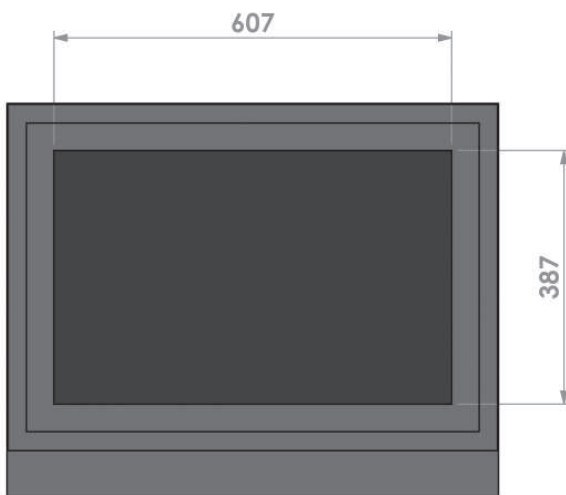
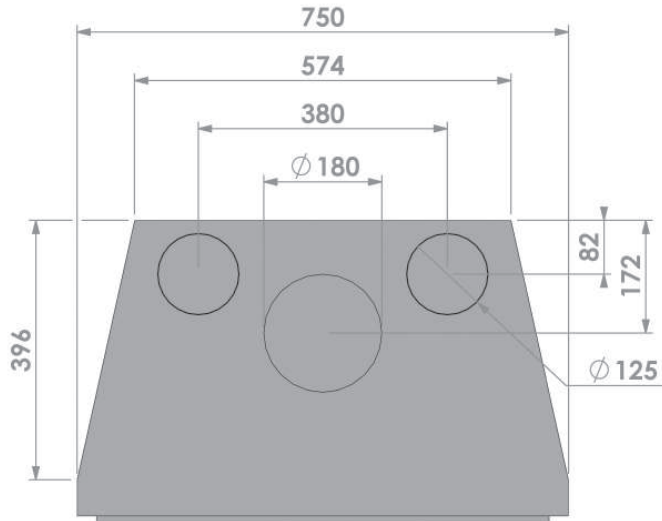


Unscrewing the 4 screws on the hatch removes the fan from the hatch.

Fitting the fan takes place in reverse order.  
Ensure that cables are not trapped.

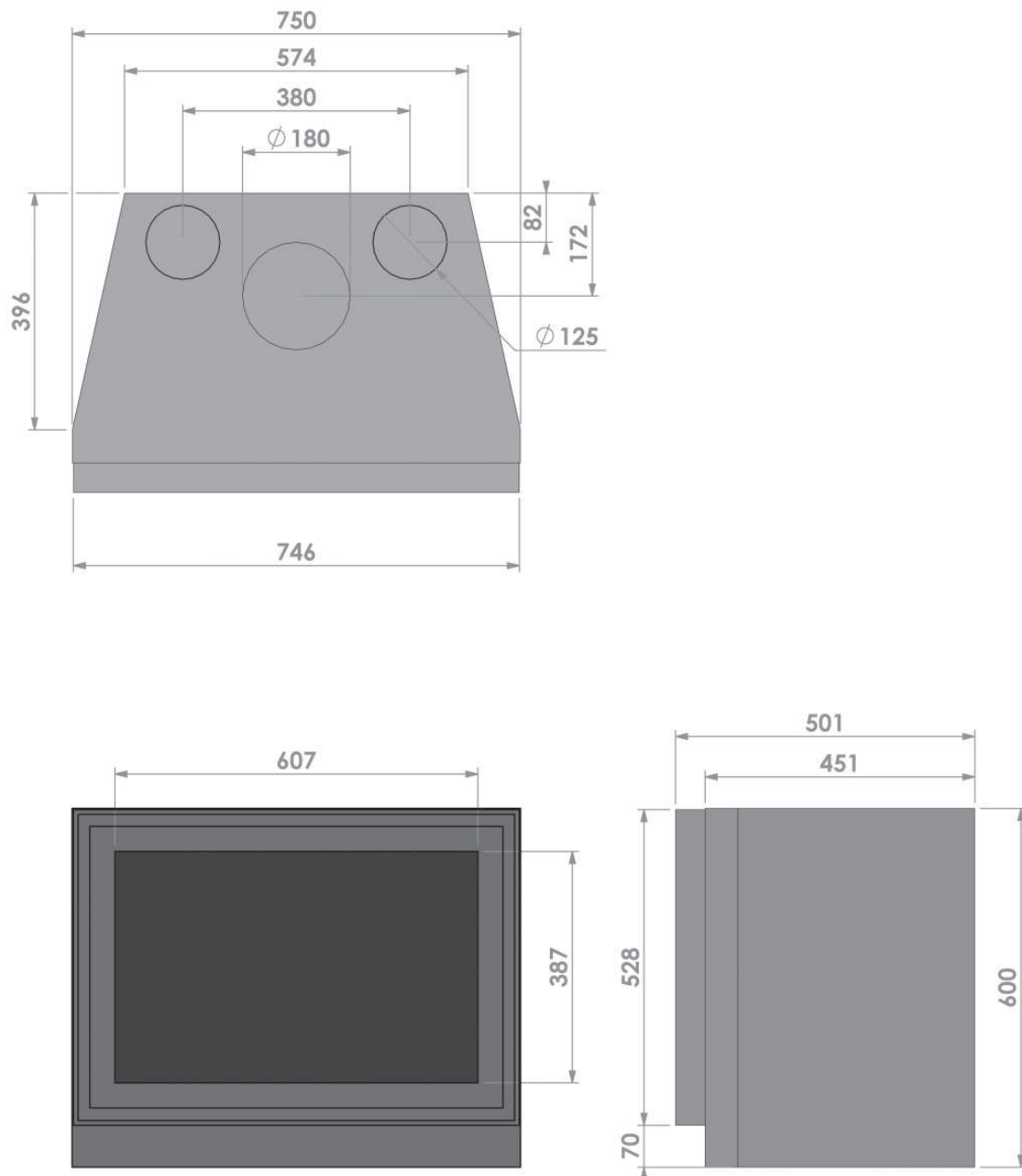
7 DIMENSIONS

7.1 • without frame



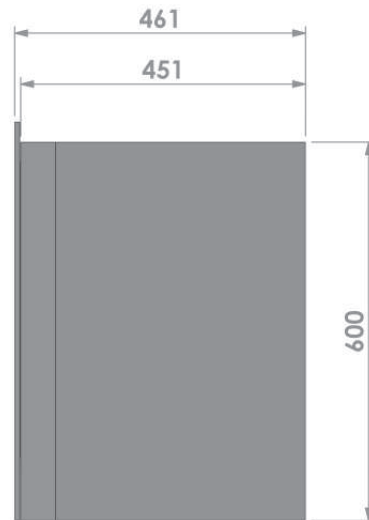
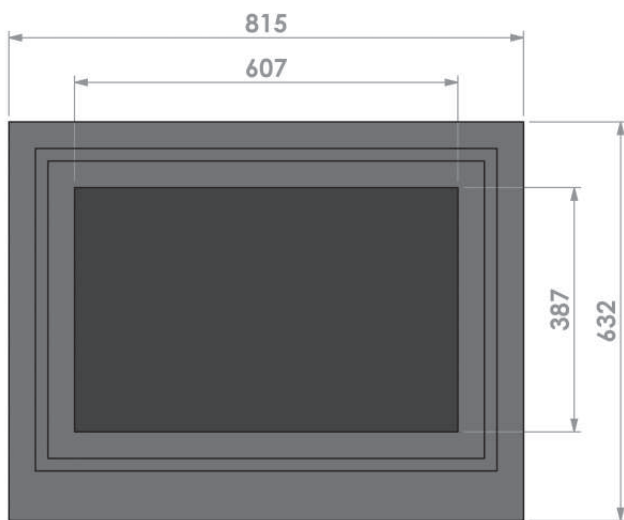
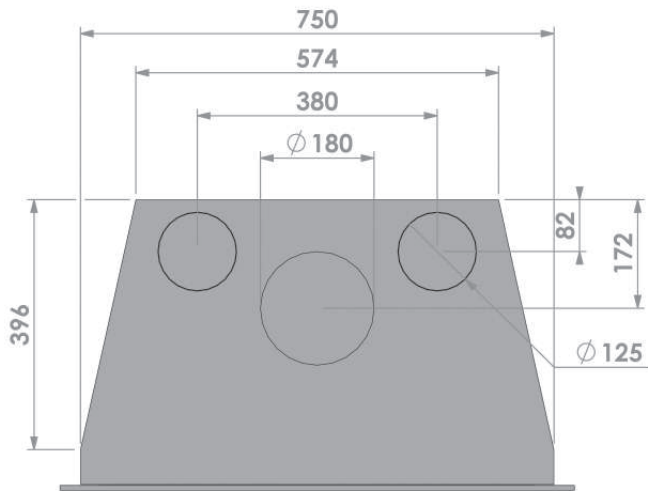
With the high adjustable feet, the appliance can be installed till 350 mm above the floor

## 7.2 • with built-in frame



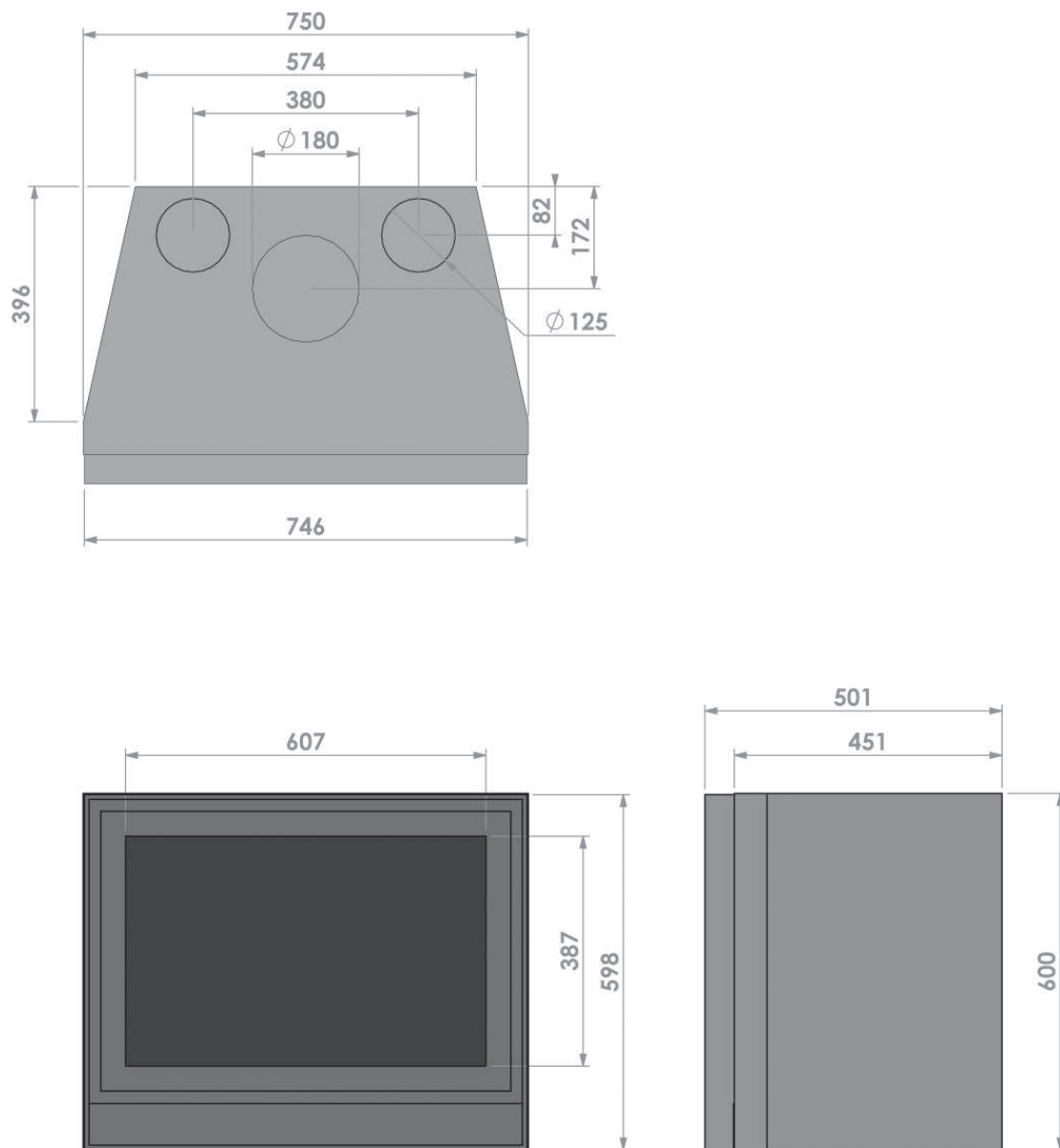
With the high adjustable feet, the appliance can be installed till 350 mm above the floor

7.3 • with classic frame



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

## 7.4 • with deepened frame



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

## 8 TECHNICAL DATA

### Combustion:

Measured in compliance with EN 13229 : 2001 and EN 13229 - A2 : 2004

|                |       |
|----------------|-------|
| Fuel           | Wood  |
| Nominal output | 12 kW |
| Efficiency     | 75%   |

Emissions (dry, at 13% O<sub>2</sub>, 273 K, 1013 hPa):

|   |  |
|---|--|
| Carbon monoxide (CO)                                | 0.12%; 1500 mg/m <sup>3</sup> (STP, bij 13% O <sub>2</sub> ) |
| Dust  | 40 mg/Nm <sup>3</sup> (STP, at 13% O <sub>2</sub> )          |
| Total hydrocarbons (C <sub>x</sub> H <sub>y</sub> ) | 120 mg/m <sup>3</sup> (STP, at 13% O <sub>2</sub> )          |
| Nitrogen oxides (NO <sub>x</sub> )                  | 109 mg/m <sup>3</sup> (STP, at 13% O <sub>2</sub> )          |

|                     |                        |
|---------------------|------------------------|
| Flue gas mass flow  | 12.2 g/s               |
| Flue temperature    | 324°C                  |
| Chimney draught     | 0.12 mbar              |
| Flue gas connection | Ø180 mm (Ø178 mm ext.) |
| Weight              | 128 kg                 |

### Inside:

|                              |                      |
|------------------------------|----------------------|
| Dimensions                   |                      |
| - surface area (b x d)       | 0.108 m <sup>2</sup> |
| - clear fire opening (h x b) | 316 x 629 mm         |

|                                      |   |
|--------------------------------------|---|
| Interior side panels                 | Heat-resistant panels 1400 kg/m <sup>3</sup> , 1300°C |
| Interior bottom                      | Steel (heat-resistant and rust-proof)                 |
| Inner lining                         | Steel (heat-resistant and rust-proof)                 |
| Bottom retardant plate (brake plate) | Heat-resistant panel 2000 kg/m <sup>3</sup> , 1300°C  |
| Top retardant plate                  | Stainless steel                                       |

### Outside:

|              |  |
|--------------|--|
| Construction | Sheet-steel casing.                                      |
| Doors        | Flat door opening to left.<br>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<sup>2</sup> opening in the room where the fire is located or a outside air supply opening of Ø125 mm in wall/floor.
- Options:**
- Convection fan 230 VAC / 39 W  
Rev control by built-in fanspeed controller.
  - Convection set
- 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****Barbas Bellfires B.V.  
Warranty terms**

Barbas Bellfires 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, Barbas Bellfires B.V. offers the following manufacturer's warranty.

**Article 1: Warranty**

- 1.1. If Barbas Bellfires B.V. determines that the Barbas appliance you have purchased is defective as a result of a flaw in the construction or material, Barbas Bellfires 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 Barbas Bellfires B.V. or by a Barbas dealer as designated by Barbas Bellfires B.V.
- 1.3. This warranty is supplementary to the existing legal national warranty of Barbas dealers and Barbas Bellfires 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, Barbas Bellfires 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 Barbas Bellfires B.V. under this warranty does not automatically imply that Barbas Bellfires B.V. also accepts liability for any possible damage. The liability of Barbas Bellfires B.V. never extends further than that stated in these warranty conditions. Any liability of Barbas Bellfires 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 Barbas Bellfires B.V. are, unless specifically stated otherwise in writing and to the extent that they are permitted based on applicable law, subject to the FME-CWM general sales and delivery conditions for the technology industry.

Barbas Bellfires B.V.  
Hallenstraat 17  
5531 AB Bladel  
The Netherlands  
Tel: +31-497339200  
Email: [info@barbasbellfires.com](mailto:info@barbasbellfires.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 .**

**Your Barbas dealer**

05 - 030719 - 338396