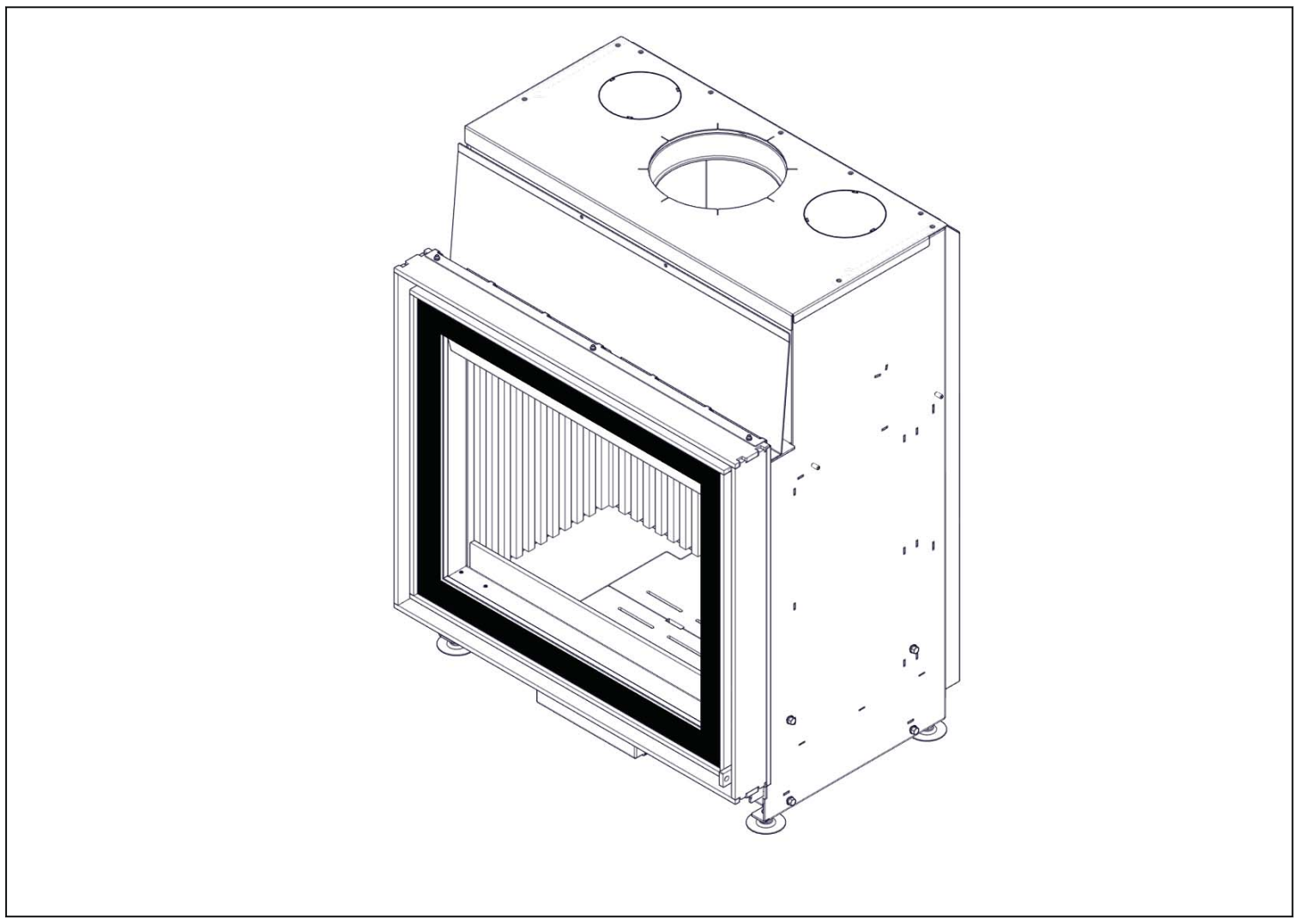
barbas wood fires

Installation and maintenance manual

Falcon 73/63



CE

Version number: 02- 346032

Date: 30-03-2018

Serial number:

Production date:

Contact information

Barbas Bellfires BV

Hallenstraat 17, 5531 AB Bladel, The Netherlands

Phone: +31 49 733 9200

E-mail: info@barbas.com

Contents

1 Declaration of performance

barbas bellfires fireplaces

fire for life

Declaration of Performance

According to regulation (EU) 305/2011

No. 3.125.001-1 - CPR-2013/07/01

1.	Unique identification code of the product-type	Falcon 73/63
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/2018-01/00004-1

7. Declared performance

Harmonized technical specification	**EN13229:2001/A2:2004/AC:2007**
Essential characteristics	**Performance**
Fire safety	**Pass**
Distance to combustible materials	Minimum distances, in mm Insulation thickness rear = 100 Insulation thickness sides = 100 Insulation thickness ceiling = 40 Front = 1000 Insulation thickness floor = 100
Risk of burning fuel falling out	Pass
Emission of combustion products	CO = 0.07 vol%
Surface temperature	Pass
Electrical safety	Pass
Cleanability	Pass
Release of dangerous substances	NPD
Maximum operating pressure	Not applicable
Flue gas temperature at nominal heat output	T = 350 °C
Mechanical resistance (to carry a chimney/flue)	NPD
Thermal output	Pass
Nominal heat output	12.3 kW
Room heating output	12.3 kW
Water heating output	- kW
Energy efficiency	75.2 %

8. The performance of the product identified in point 1 is in conformity with the declared performance in point 7.

   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)

2 The Clean Air Act 1993 and Smoke Control Areas

The Barbas Falcon 73/63 inset appliance has been 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.

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. Similarly, 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.

3 About this document

This document shows the necessary information to do these tasks on the Falcon 73/63:

- Installation
- Maintenance

This document refers to the Falcon 73/63 as 'the appliance'. This document is an essential part of your appliance. Read it carefully before you do work on the appliance. Keep it in a safe place.

The original instructions of the document are in English. All other language versions of the document are translations of the original instructions. It is not always possible to provide a detailed illustration of every single item of the equipment. The illustrations in this document show a typical setup. The illustrations are for instructional use only.

3.1 How to work with this document

1. Make yourself familiar with the structure and content of the document.
2. Read the safety chapter in detail.
3. Make sure that you understand all the instructions.
4. Do the procedures completely and in the given sequence.

3.2 Warnings and cautions used in this document

Warning

If you do not obey these instructions, there is a risk that can cause personal injury or death.

Caution

If you do not obey these instructions, there is a risk of damage to the equipment or to property.

Note

A note shows more information.

Symbol	Description
	Visual sign that there is a hazard
	Visual sign that there is a notice

3.3 Related documentation

- Installation and maintenance manual
- User manual

4 Description

4.1 Overview of the appliance

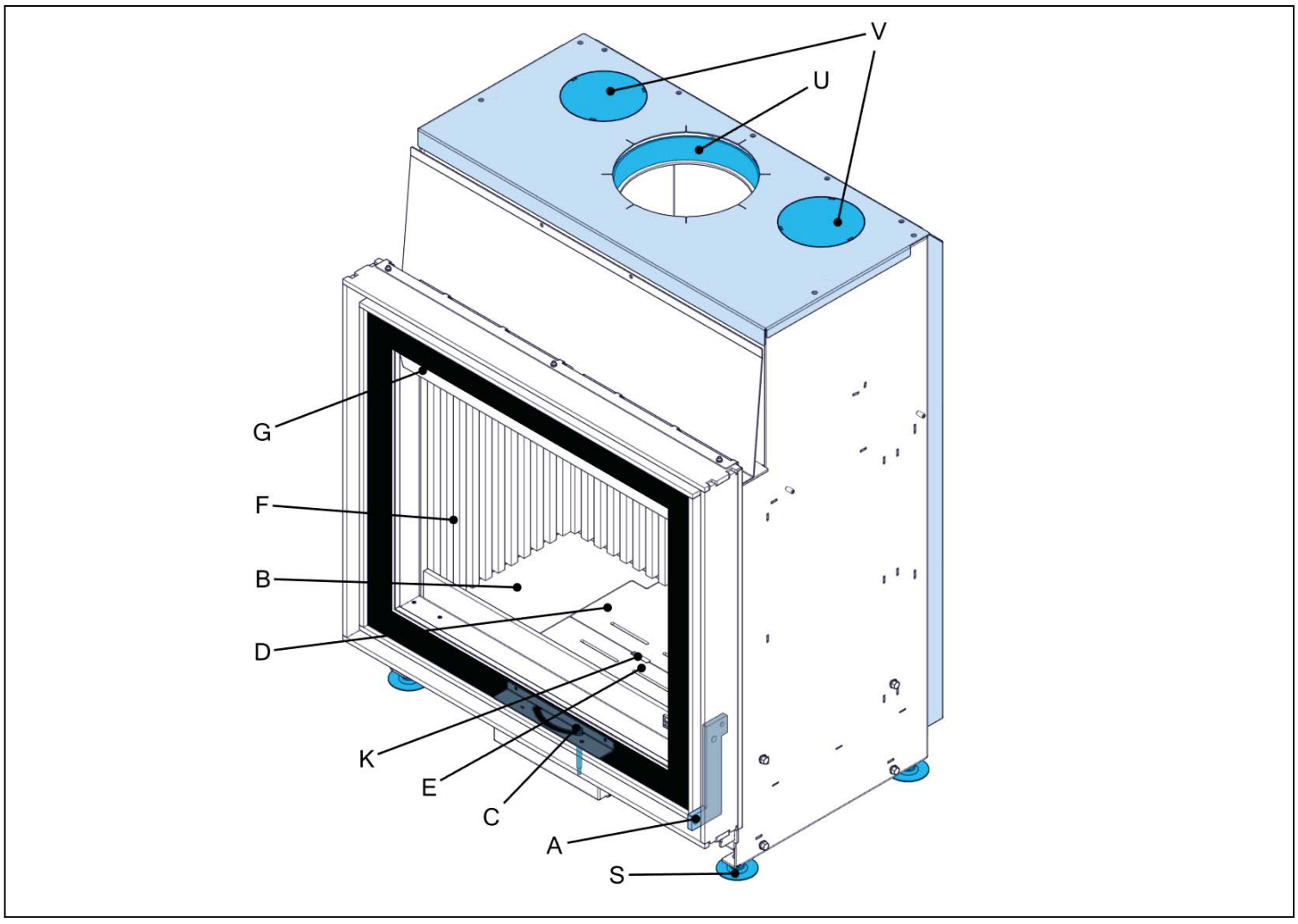


Table 1: Top view

	Item	Description
A	Handle	Use the handle to open and to close the door.
B	Glass	The glass keeps the flue gases inside the appliance and closes the combustion chamber off.
C	Control lever	Use the control lever to control the amount of combustion air.
D	Grate	Cover of the ash tray. Inlet of the primary air into the combustion chamber.
E	Ash tray	Tray to collect the ashes that fall through the grate.
F	Cast iron panels	Cover of the rear and sides of the combustion chamber.
G	Heat shield	Protects the steel in the top of the appliance against excessive heat radiation.
K	Primary air inlet	Combustion air supply through the grate into the combustion chamber. Primary air is used to start the fire.
S	Adjustable feet	4 adjustable feet to level the appliance.
U	Flue connection	The connection to the flue system that extracts the flue gases.
V	Convection air outlet	The heated air is extracted by the outlet openings into the (optional) aluminum flexible pipes.

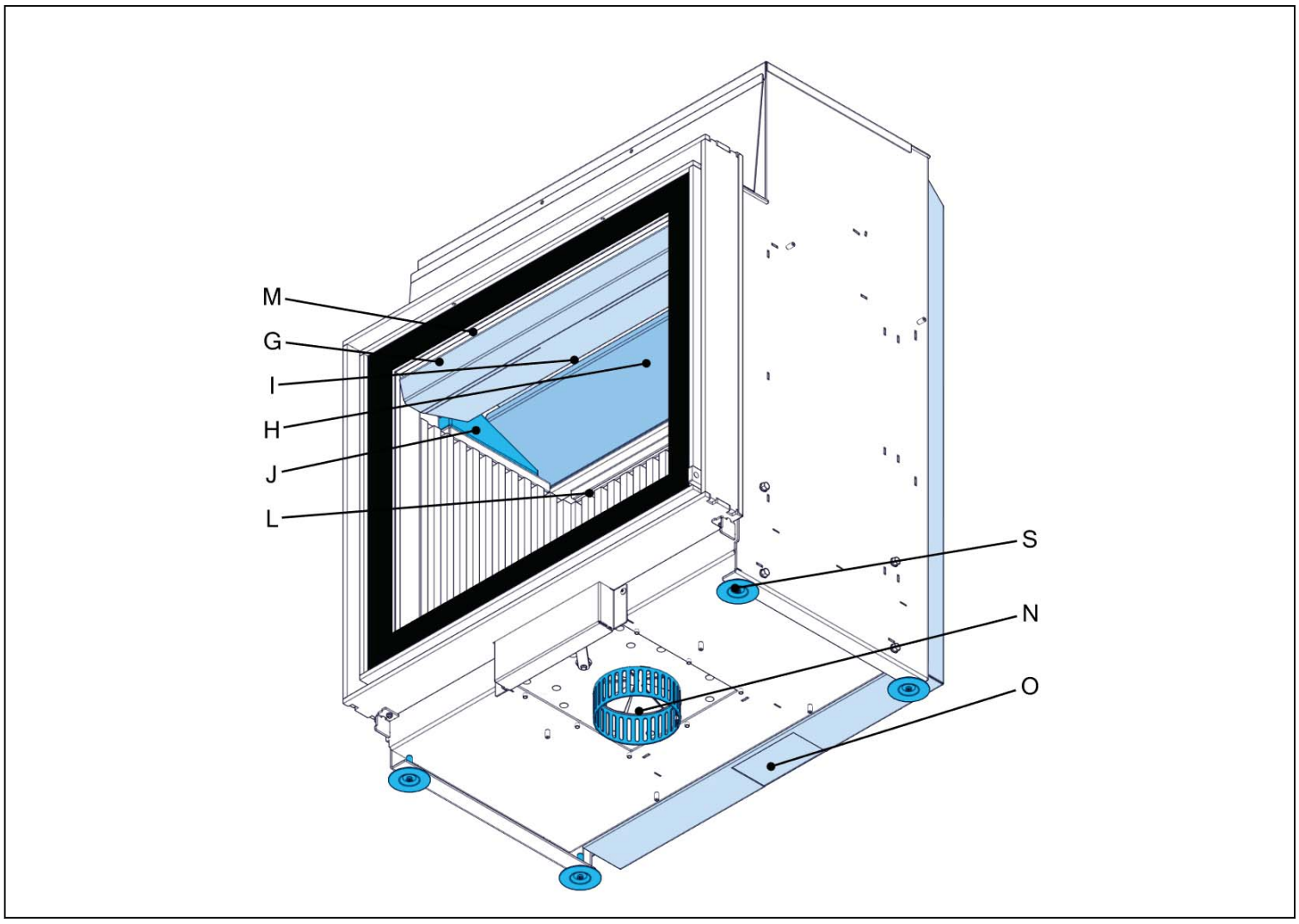


Table 2: Bottom view

	Item	Description
G	Heat shield	Protects the steel in the top of the appliance against excessive heat radiation.
H	Lower baffle	Ceramic plate in the top of the combustion chamber.
I	Upper baffle	Not visible in picture. Vermiculate plate in the top of the combustion chamber above the lower baffle.
J	Ceramic supports	Supports the lower baffle.
L	Secondary air inlet	Combustion air supply through the back wall into the combustion chamber. Secondary air is used for clean burning.
M	Air wash inlet	Combustion air supply through the top of the appliance into the combustion chamber. Air wash is used to prevent deposition of soot on the glass.
N	Combustion air inlet	Provides the appliance with combustion air.
O	Convection air inlet	Provides the appliance with convection air.
S	Adjustable feet	4 adjustable feet to level the appliance.

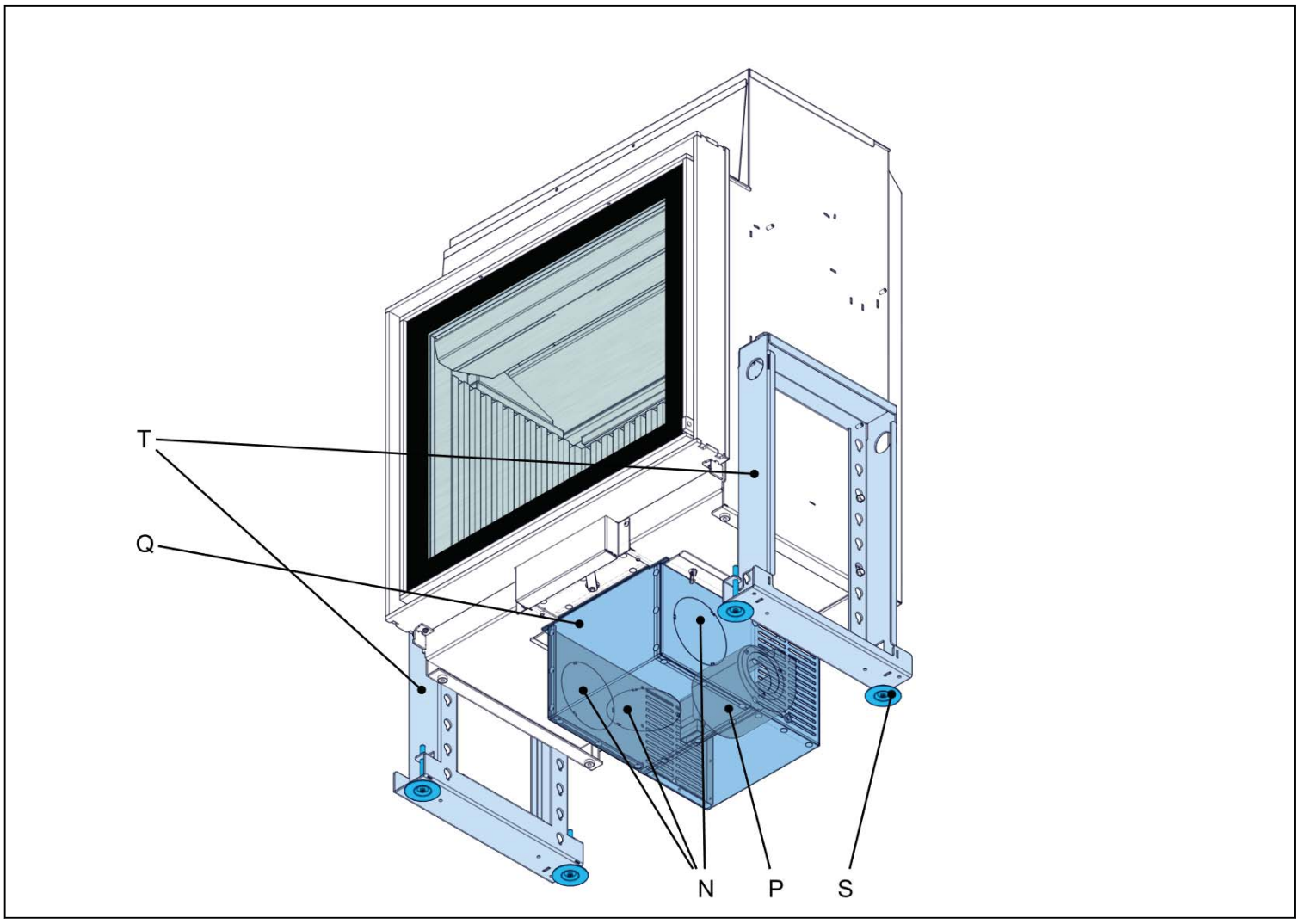


Table 3: Bottom view with convection ventilator / combustion air inlet box

	Item	Description
N	Combustion air inlet	Provides the appliance with combustion air.
P	Convection ventilator (option)	Forces the convection air through the convection system.
Q	Convection ventilator / Combustion air inlet box (option)	Cover for the convection ventilator, with inlet openings for the combustion air.
S	Adjustable feet	4 adjustable feet to level the appliance.
T	Adjustable height frame (option)	Set of 2 adjustable frames with 2 adjustable feet each to put the appliance on a higher position.

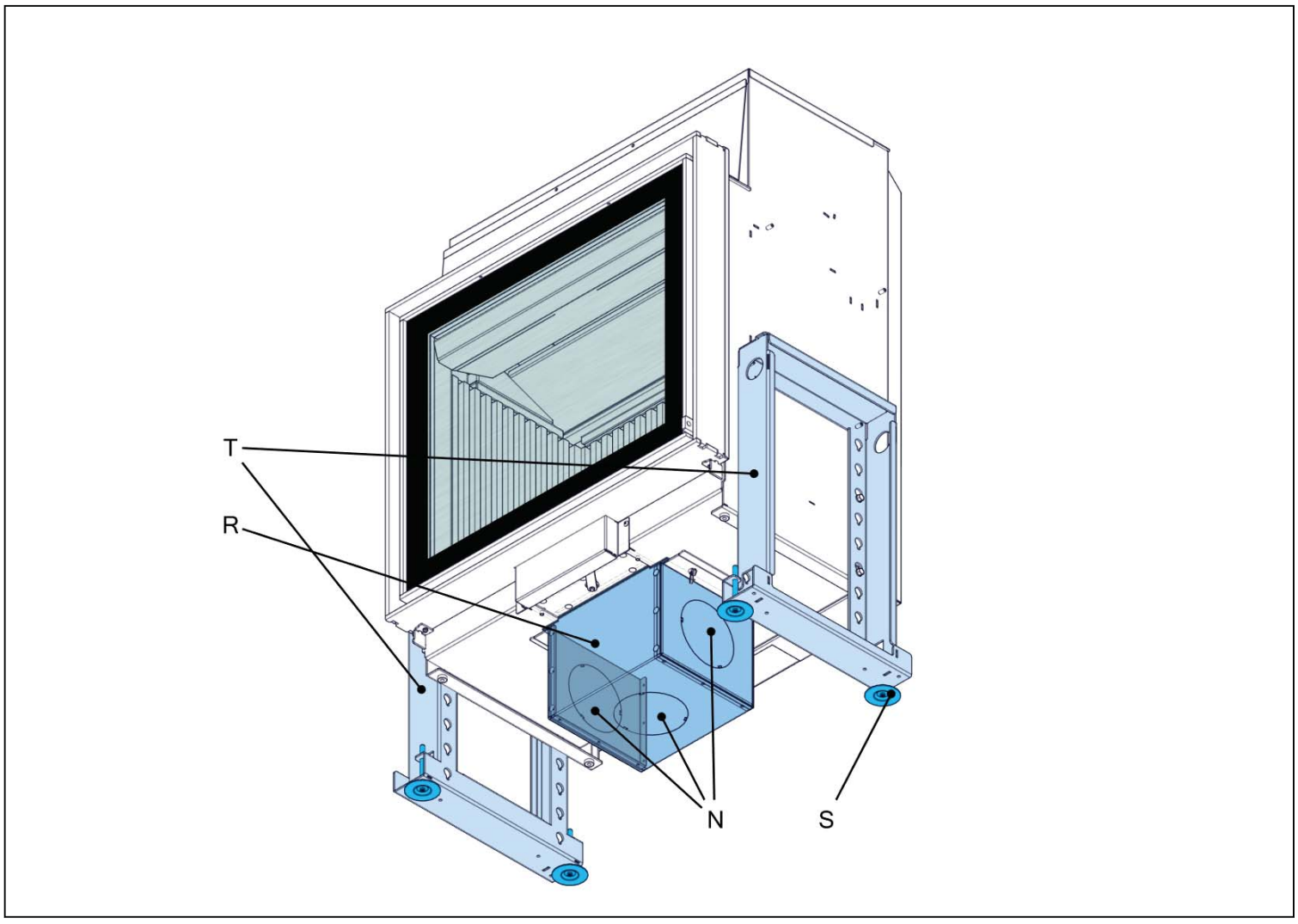


Table 4: Bottom view with combustion air inlet box

	Item	Description
N	Combustion air inlet	Provides the appliance with combustion air.
R	Combustion air inlet box	Box with inlet openings for the combustion air.
S	Adjustable feet	4 adjustable feet to level the appliance.
T	Adjustable height frame (option)	Set of 2 adjustable frames with 2 adjustable feet each to put the appliance on a higher position.

4.2 Intended use

The appliance is intended for indoor use to heat the room wherein it is installed. Do not use it for other purposes.

The appliance is intended for use with wood logs or wood briquettes as fuel. Do not use other fuels.

The appliance is intended for use with the door closed.

The appliance may only be used at the location that meets the requirements for the installation of the appliance.

The appliance is intended for intermittent use and is not intended for continuous use.

The appliance is intended to heat the room by direct heating. It is not allowed to connect the appliance to a central-heating installation.

4.3 Installation options

- The appliance can be installed with a combustion air inlet box to connect a flexible aluminum pipe for the external combustion air supply.
- The appliance can be installed with a combined convection ventilator / combustio air inlet box to connect a flexible aluminum pipe for the external combustion air supply and to connect a flexible aluminum pipe for the supply of convection air.
- The appliance can be installed with a convection set. The convection set collects the heated convection air from the appliance and releases this air into the room. A convection ventilator / combustion air inlet box is needed for the convection system.
- The combustion air can be provided from the installation room or from external.

Note:

The appliance is a room-sealed appliance when combustion air comes from the outer side of the building through a flexible pipe that is connected to the combustion air inlet of the appliance. In all other cases the appliance is not a room-sealed appliance and the data for leak tightness as given in *8* are not valid.

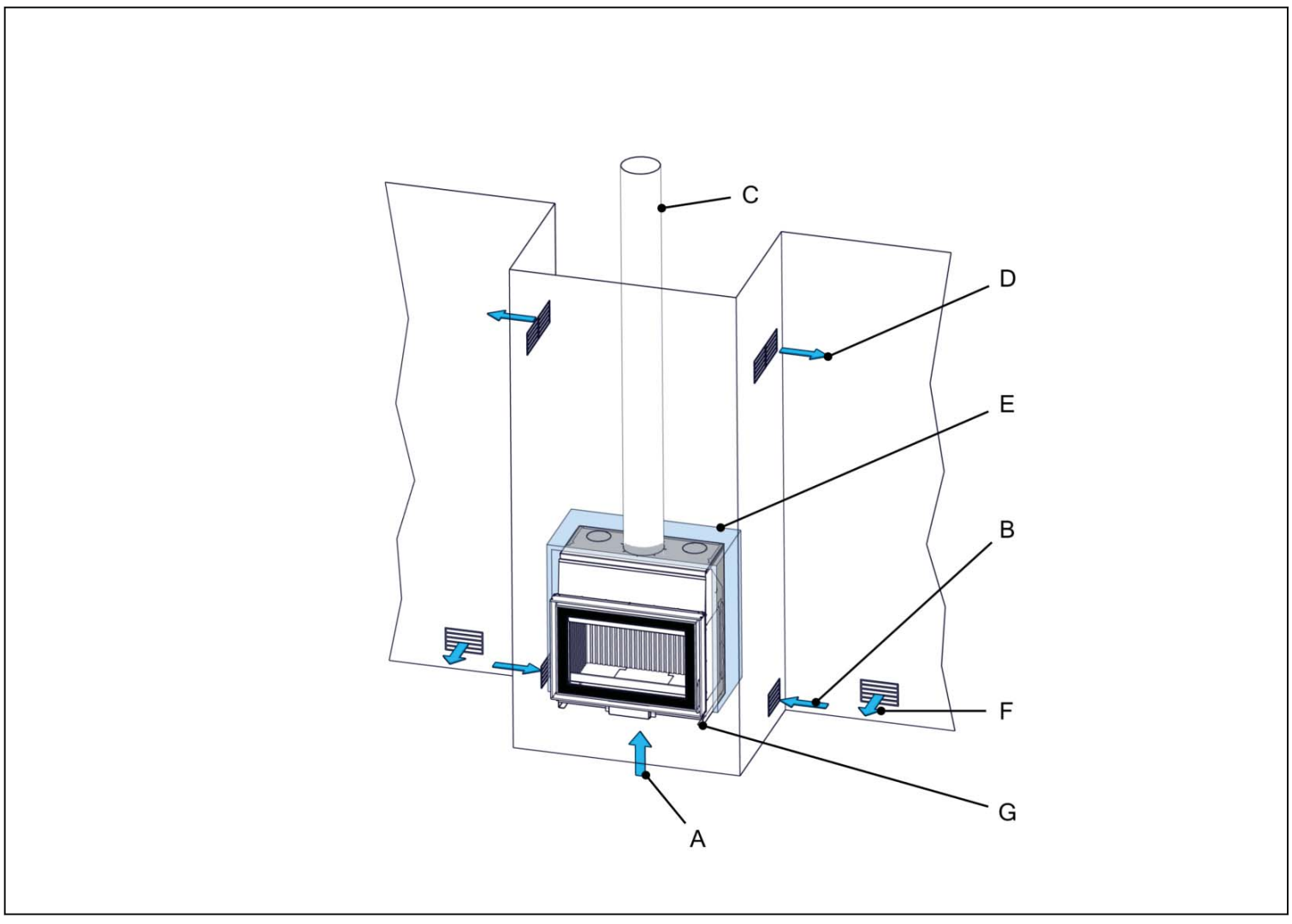
- The appliance can be installed with 2 height adjustable frames. With these frames the appliance can be installed higher from the ground level.

4.4 Installation examples

Note:

The illustrations shown in this paragraph are typical installation examples.

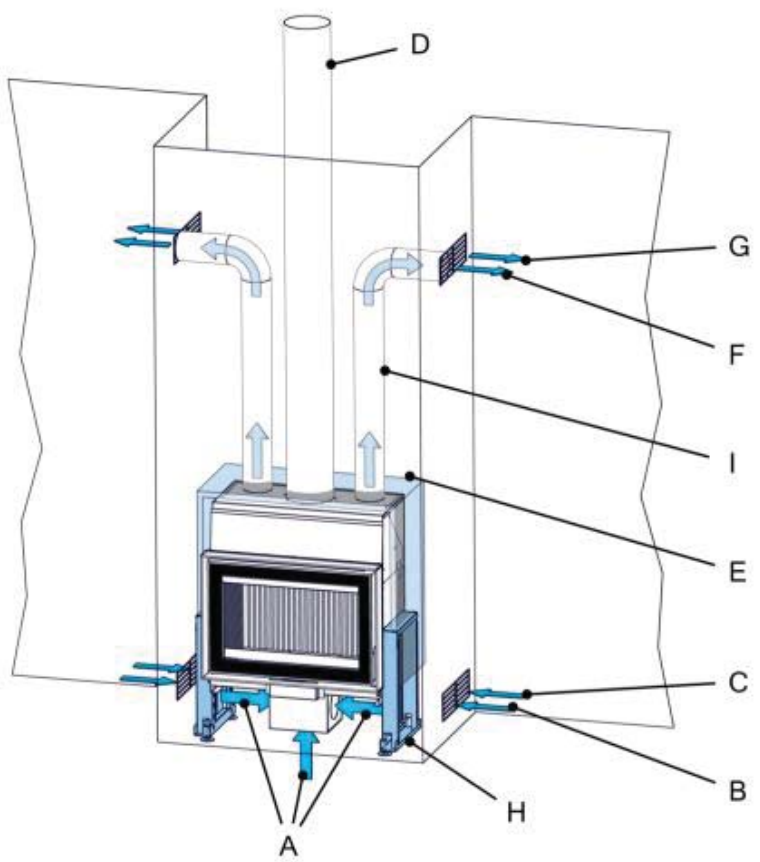
Installation with combustion air supply from the installation room, without convection package



	Item	Description
A	Combustion air inlet	Provides the appliance with combustion air.
B	Ventilation air inlet	Provides the chimney breast with air.

	Item	Description
C	Chimney	The chimney extracts the flue gases from the appliance.
D	Ventilation air outlet	The heated air in the chimney breast is extracted by the outlet openings into the room. This prevents overheating of the chimney breast.
E	Insulating material	The appliance insulation to keep the heat inside the appliance
F	Air supply	Provides the room with air for the appliance.
G	Adjustable feet	4 adjustable feet to level the appliance.

Installation with external combustion air supply, with convection package and convection ventilator



	Item	Description
A	Combustion air inlet	Provides the appliance with external combustion air. A flexible aluminum pipe is connected between the combustion air inlet box and the outer side of the house.
B	Convection air inlet opening	Provides air for the convection ventilator. A flexible aluminum pipe is connected between the convection air inlet opening and the convection air box.
C	Ventilation air inlet opening	Inlet opening for air for ventilation of the chimney breast.
D	Chimney	The chimney extracts the flue gases from the appliance.
E	Insulating material	The appliance insulation to keep the heat inside the appliance.
F	Convection air outlet	The heated air is extracted through flexible aluminum pipes by the outlet grate into the room.
G	Ventilation air outlet	The heated air in the chimney breast is extracted by the outlet grate into the room. This prevents overheating of the chimney breast.
H	High adjustable feet (option)	Set of 2 adjustable frames with 2 adjustable feet each to put the appliance on a higher position.

	Item	Description
I	Flexible aluminum pipe (convection set option)	Extracts the heated convection air from the appliance.

5 Safety

5.1 Safety instructions for installation

Warning:

- Installation must be done by a qualified installer.
- Install the appliance in accordance with the following installation instructions and the national and local applicable regulations.
- Make sure that the area around the fireplace is free of combustible material at all times. The minimal safe distance is 100 cm.

Caution:

- Install the appliance on a floor with adequate load-bearing capacity. Refer to chapter *8* for the weight of the appliance.
- It is not allowed to connect the appliance to a flue that is also connected to another appliance.
- Make sure that the chimney has no creaks and is in general good order.
- Install a suitable cap on the chimney outlet to avoid birds' nests build in the chimney.
- Parts in the appliance can be moved during transportation. Make sure these parts are in the correct position. See the User Manual.
- Do not use masking tape on the appliance. Masking tape can damage the finish of the appliance.
- Do not use fiberglass, rockwool or any other sort of insulation material. These materials produce a pungent odor and can produce discoloration of the appliance.
- Make sure that the brickwork is build with a clearing of at least 3 mm between the sides and the top of the appliance and the brickwork. The appliance can expand during operation due to heating.
- Make sure that the chimney temperature class is at least T400 sootfire resistant.
- Do not install the appliance in a room with a ventilation system that makes pressures below -15 Pa.

5.2 Safety instructions with regard to the environment

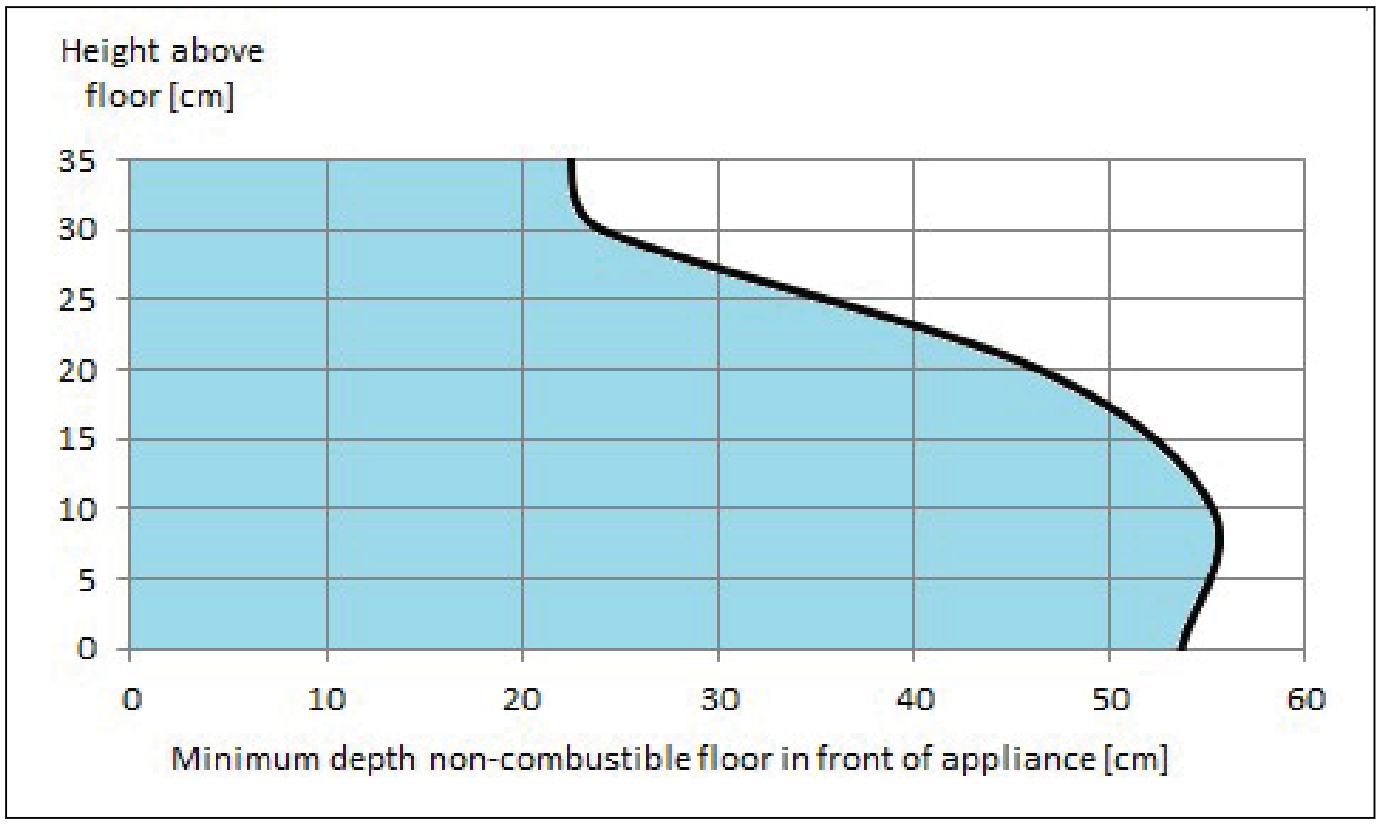
- Dispose of the packing materials in an environmentally friendly way.
- Dispose of batteries as chemical waste.
- Dispose of ceramic heat-resistant glass as household waste. Do not dispose of ceramic heat-resistant glass in a glass recycling container.
- Dispose of an obsolete appliance according to instructions of the authorities or the fitter.
- Obey the local regulations.

6 Installation

6.1 Installation requirements

6.1.1 General requirements

- Make sure the floor is made of concrete or a solid pedestal of non-combustible material.
- Make sure the floor can support the weight of the appliance. Refer to chapter *8* for the weight of the appliance.
- Make sure that the floor temperatures below and in front of the appliance cannot be higher than 85 °C, during use of the appliance.

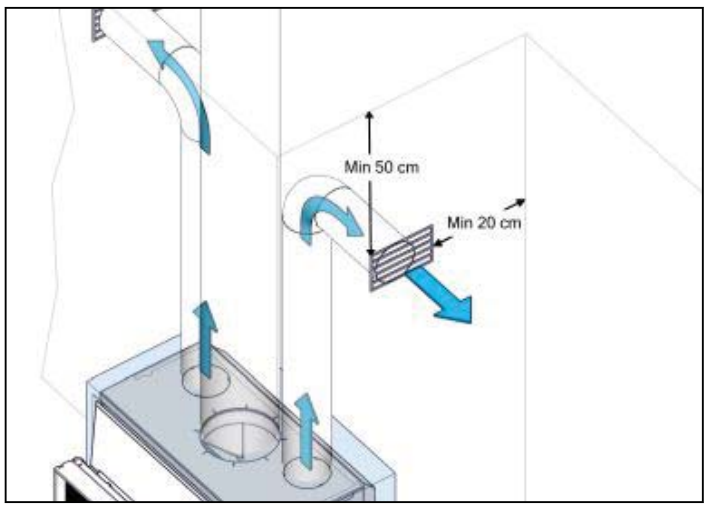


The graph shows the minimum depth of a non-combustible floor in front of the appliance in relation to the installation height of the appliance. If the underside of the door is 30 cm above the floor, the minimum depth of the non-combustible floor is approx. 24 cm.

- The non-combustible floor must have a width that extends at least 150 mm from each side of the appliance.
- Make sure the room where the appliance is installed is properly ventilated.

6.1.2 Requirements on the installation of the appliance

- Do not install the appliance against a combustible rear wall or combustible side wall.
- The appliance must be installed minimum 10 cm from a non-combustible wall.
- If a wooden beam is present above the appliance, make sure it is protected against direct heat radiation. Make sure to put an insulation plate with a thickness of minimum 30 mm between the wooden beam and the appliance, with an air gap of minimum 1 cm between the insulation plate and the wooden beam.
- Make sure that combustion air can flow into the appliance without obstruction.
- If the appliance is equipped with the optional convection ventilator, the combustion air must be supplied from outside through a flexible aluminum pipe to the appliance.
- Make sure the distance between the convection air outlet openings and the ceiling above is at least 50 cm.
- Make sure the distance between the convection air outlet openings and a neighboring wall is at least 20 cm.



- The fireplace must have ventilation openings near the bottom and near the top of the fireplace.
- The total ventilation air inlet openings must have an area of at least 450 cm^2. (For example 2 inlet openings with an area of at least 225 cm^2 each.)
- The total ventilation air outlet openings must have an area of at least 450 cm^2. (For example 2 outlet openings with an area of at least 225 cm^2 each.)

6.1.3 Requirements on the chimney

- Make sure that in case of use of an existing (masonry) chimney, it is in good order and applicable for the appliance. Ask your dealer or chimney sweeper for advice.
- Make sure the flue system obeys the national and local applicable regulations.
- Do not connect more than one appliance to the same chimney.
- The flue system must have a temperature class designation of at least T400.
- The inner diameter of the existing chimney must be at least 200 mm.
- Do not use more than 2 bends of 45°.
- The chimney outlet must be at least 5 meter above the top of the appliance.
- The chimney outlet must be at least 40 cm above the top of a sloped roof.
- The chimney outlet must be at least 1 meter above a flat roof.
- The chimney outlet must be free from any objects (buildings, trees, etc.) within a horizontal range of at least 5 meter.
- Make sure your fire insurance policy covers any damage caused by a chimney fire.

6.2 Preparation for installation

- If applicable, make sure a 230 VAC grounded electrical connection is located near the installation location.

Warning:

- The electrical connection must be grounded.
- The electrical connection must be made by a certified electrician.
- Make sure the electrical connection can always be accessed.

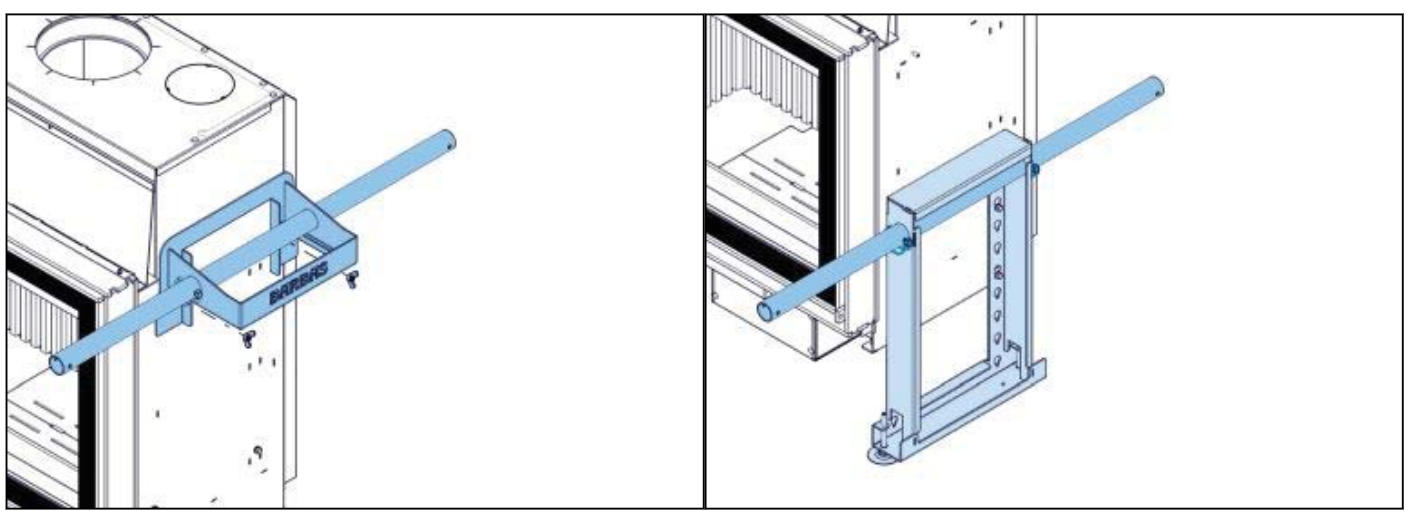
- Make sure the door of the appliance opens and closes correctly.
- Make sure the baffle is in the correct position
- Make sure the control lever can move freely to left and to right.
- Make sure the ashtray is empty.

6.3 Installation procedure

Do all the procedures in this section. Optional procedures are indicated with (optional).

6.3.1 Install the appliance

Caution: If the appliance is installed against a flammable rear and/or side wall, precautions must be taken to prevent accidental fire. Refer to *6.3.7* for a description of suitable precautions.

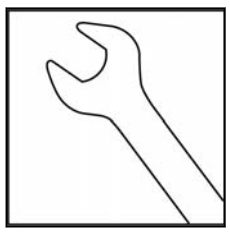


1. Install the carrying tubes together with the bracket on the appliance or put the carrying tubes in the optional adjustable height frames. You can use the carrying tubes to move the appliance.
2. Install the appliance. Make sure the distance between the appliance and rear wall is approximately 10 cm minimum.
3. Remove the carrying tubes and - if applicable - the bracket.
4. Refer to *6.3.7* for measures to be taken when installed against a flammable rear and/or side wall.

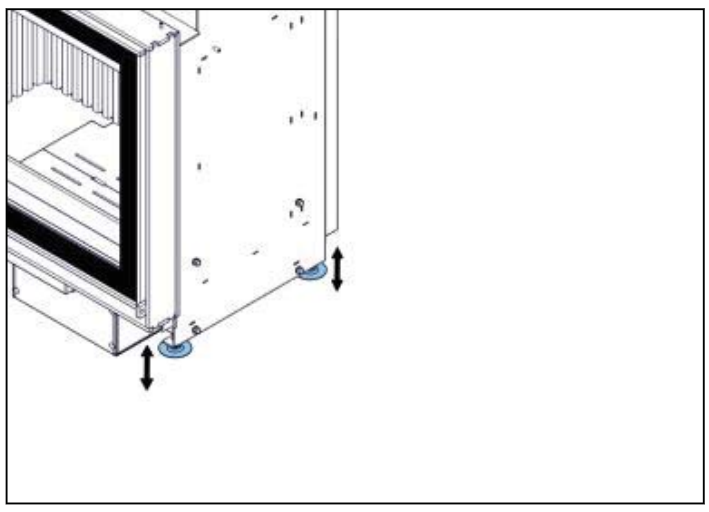
6.3.2 Horizontally align the appliance

Aligning with adjustable feet

1. Adjust the adjustable feet. Use a 13 mm fork spanner.

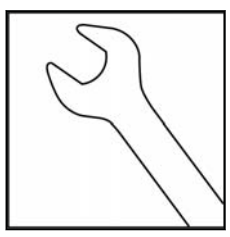


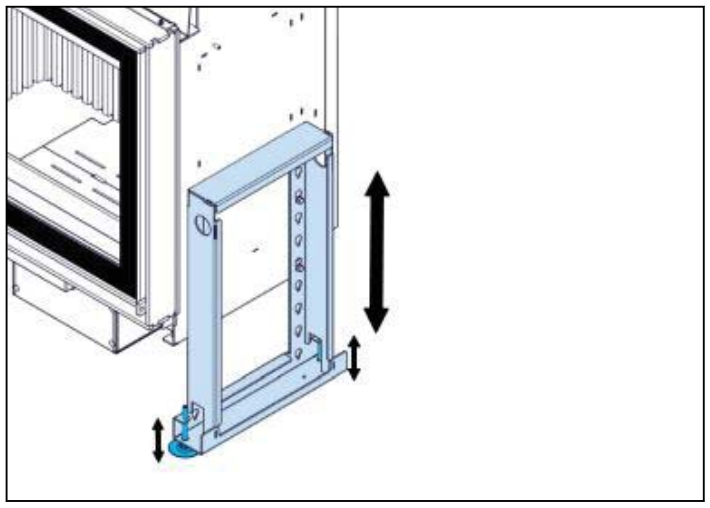
2. Make sure that the appliance is installed horizontally. Use a spirit level.



Aligning with adjustable height frame

1. Set the frames to the required height. Use a 10 mm socket spanner for the 4 screws.





Caution:

Make sure each frame is attached with all 4 screws.

2. Adjust the adjustable feet. Use a 13 mm fork spanner.
3. Make sure that the appliance is installed horizontally. Use a spirit level.

6.3.3 Connect the flue gas pipe

The appliance can be connected to steel pipes, double-walled insulated stainless steel flues and flexible stainless steel flues with an outside diameter of 200 mm.

Caution:

- During operation of the appliance the outer side of the flue system becomes hot. Refer to the installation instructions of the flue system for safe installation. Follow these instructions with regard to safe distances to combustible material.

If the appliance is installed on an unlined, masonry flue with a large diameter, consider using a flue lining system to improve the performance of the appliance.

1. Connect the flue to the flue gas connection on the appliance. If necessary use a steel flue adaptor.
2. If a flexible stainless steel flue is used, secure the flue connection with 2 clamps.
3. If the flue is connected to an existing (masonry) chimney, make sure that the gap between the flue and the existing chimney is sealed, with ceramic wool or any other applicable component (ask your flue system supplier for advice)
4. Make sure that all mechanical connections of the flue system are correctly used.
5. Make sure that all of the flue system is gas-tight,
6. Insulate any non-insulated pipes with ceramic insulation wool. Refer to *6.3.6* for the material requirements.

6.3.4 Connect the external combustion air supply pipe

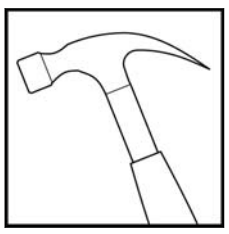
Warning:

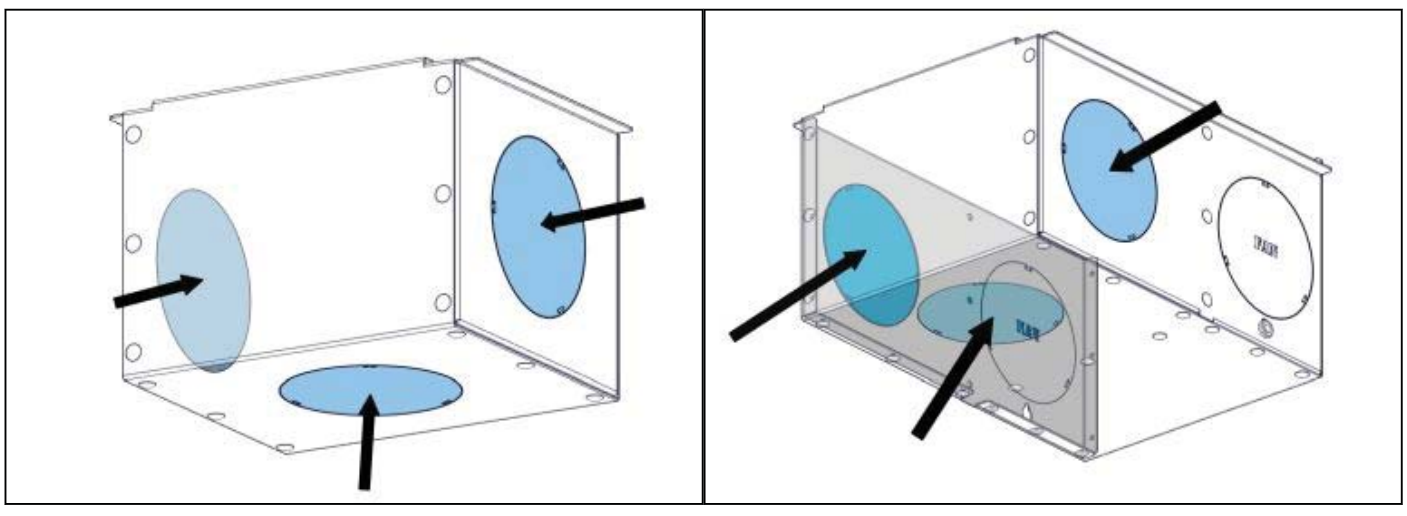
Only when the optional convection ventilator / combustion air box or the combustion air inlet box is used: make sure to remove one of the break out plates in the combustion air inlet of the box . If you do not obey to do this, there is a risk of a dangerous situation when firing the appliance.

Note:

- It is possible to install the appliance without external air supply and take combustion air from the installation room. If so, make sure the combustion air inlet on the appliance is not blocked and the ventilation air inlets are according the requirements. Refer to *6.1.2* for dimensions of the ventilation air openings.
- The appliance is a room-sealed appliance when combustion air comes from the outer side of the building through a flexible pipe that is connected to one of these:
  - the combustion air inlet of the appliance.
  - the combustion air inlet on the combustion air box.
  - the combustion air inlet on the convection ventilator / combustion air box.
- If not connected to one of these three possibilities, the appliance is not a room-sealed appliance and the data for leak tightness as given in chapter *8* are not valid.
- It is strongly recommended to install a valve in the external combustion air supply pipe, to avoid debris in the pipe and to avoid water vapor condensation in the appliance when not in use.

1. Identify the location in the outer wall or in the floor (to a ventilated crawl space) for the external combustion air supply inlet.
2. Make a hole in the outer wall or floor with at least a diameter of 125 mm.
3. Install a grate in the hole in the outer wall. A grate is not needed when the combustion air supply comes from the crawl space under the floor.
4. If applicable, select one of the 3 inlet openings on the left, right or bottom of the optional combustion air inlet box or the convection ventilator / combustion air inlet box .



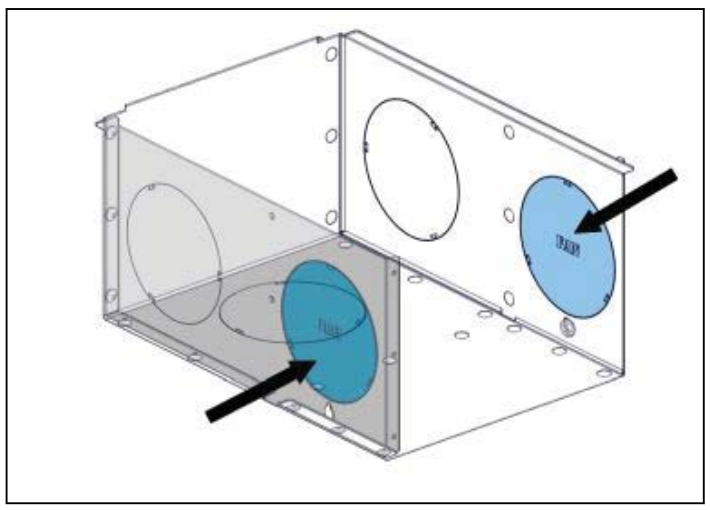


   a) Remove the break out plate in the selected inlet opening of the optional convection air/ combustion air inlet box with a hammer.
   b) Put the collar adaptor in the open inlet opening.
   c) Bend out the 3 lips on the collar adaptor, to attach the collar adaptor on the inlet opening.
5. Connect a flexible aluminum pipe with a diameter of 125 mm on the combustion air inlet on the appliance or on the collar adaptor. Secure the connection with a clamp.
6. Connect the other end with the hole in the floor or the grate in the wall. Use a suitable connector.

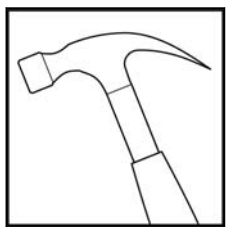
6.3.5 Connect the convection set (optional)

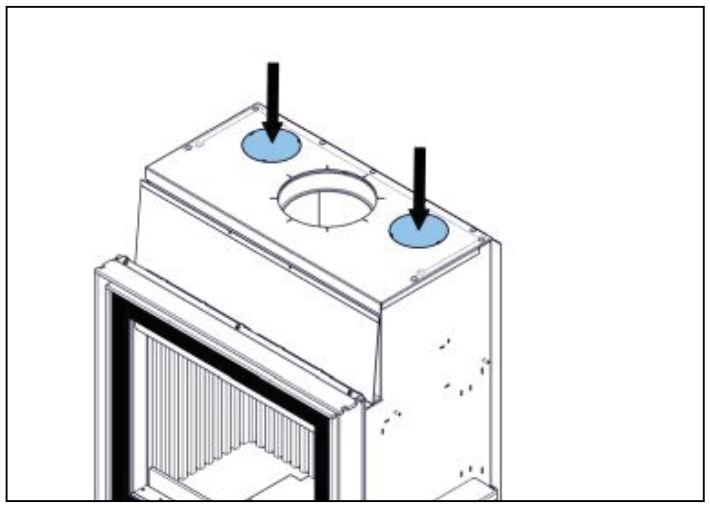
Connect the aluminum pipe to the appliance

1. On the convection air box select one of the 2 inlet openings, identified by "FAN", on the left or right side.

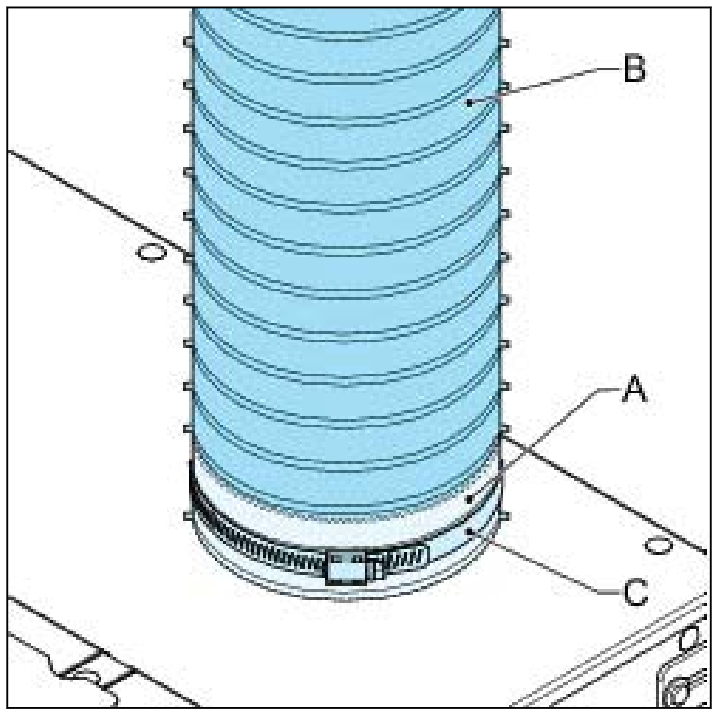


   a) Remove one (1) break out plate in the selected convection air inlet opening with a hammer.
   b) Put the collar adaptor in the open inlet opening.
   c) Bend out the 3 lips on the collar adaptor, to attach the collar adaptor on the inlet opening
   d) Connect a flexible aluminum pipe (B) on the collar adaptor (A). Use a hose clamp ©).
2. Connect the flexible aluminum pipe to a fitting box in the chimney breast
3. On the appliance, remove the two break out plates in the convection air outlet openings with a hammer.





4. Put the collar adaptors in the open outlet openings.
5. Bend out the 3 lips on each collar adaptor, to attach the collar adaptor on the outlet opening.
6. Connect the flexible aluminum pipes (B) on the collar adaptors (A) . Use the hose clamps ©).
7. Connect the flexible aluminum pipes to fitting boxes in the chimney breast.



6.3.6 Insulate the appliance

Caution:

- Use white unbound ceramic insulation wool. Do not use glass wool or rock wool, these materials can cause a bad smell, unwanted smoke and is not applicable for high temperatures.

Table 5: Ceramic insulation wool requirements

Temperature resistance	> 700 °C
Density	> 80 kg/m^3

- Put a ceramic wool blanket with a thickness of at least 5 cm on the top of the appliance and the sides and back of the appliance.
- Keep approximately 10 cm free between the front of the appliance and the front of the fireplace.

6.3.7 Build the fireplace

Caution:

- If the appliance is placed against a load-bearing wall or a combustible wall, put a non-combustible insulating wall with a thickness of at least 100 mm and a thermal conductivity of maximum 0.10 W/m.K before it on a distance of at least 20 mm from the combustible or load-bearing wall.

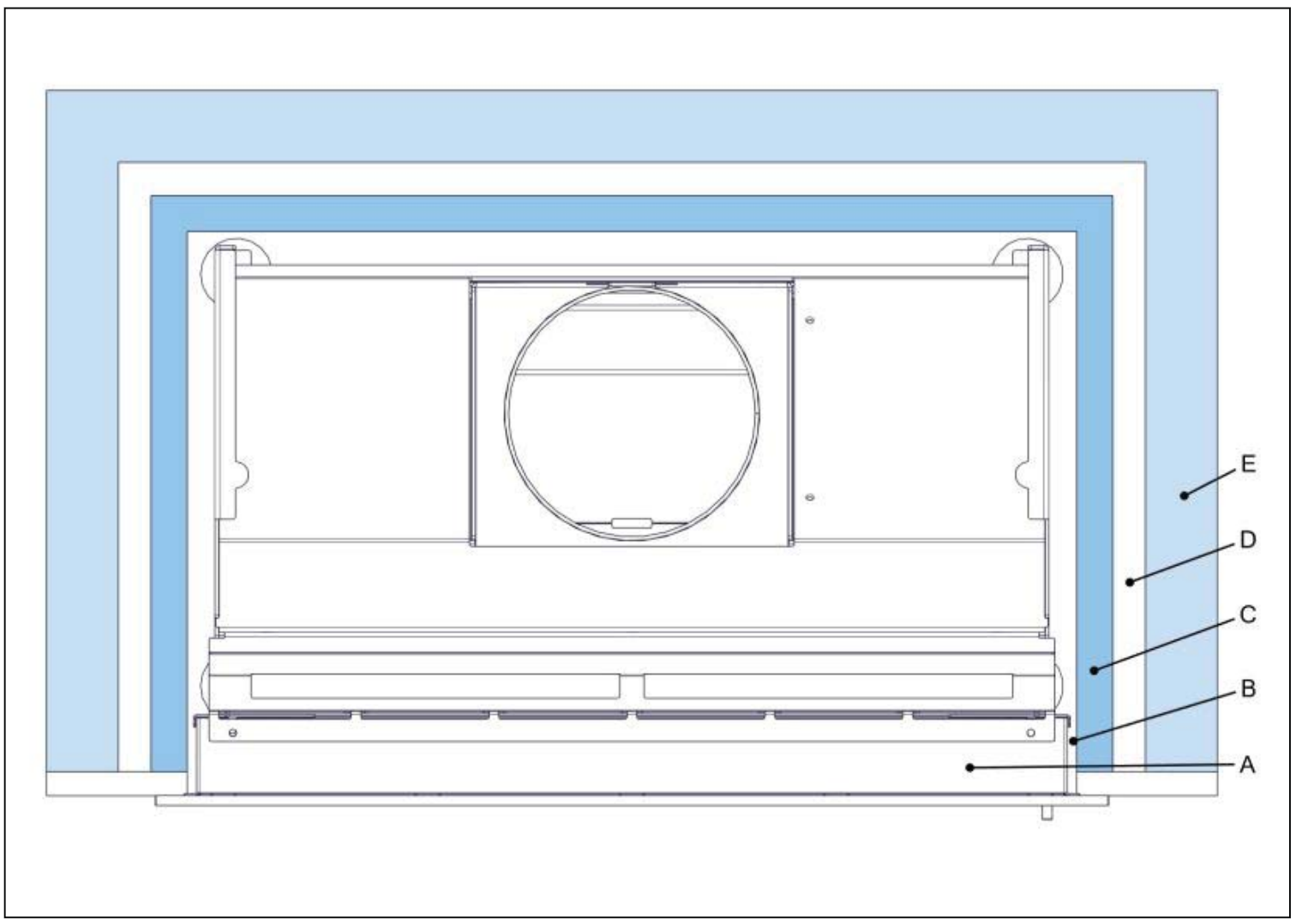


Table 6: Installation against combustible or load-bearing walls

	Item	Description
A	Appliance	
B	Air gap	Space between appliance and insulation plate. Width of air gap at least 3 mm

	Item	Description
C	Insulation plate	Plate of non-combustible material with a thickness of at least 100 mm and a thermal conductivity of at least 0.10 W/m.K
D	Air gap	Space between insulation plate and wall. Width of air gap at least 20 mm
E	Wall	Existing side and/or rear wall made of combustible material or load-bearing wall

Caution:

- Put a non-combustible insulating plate with a thickness of at least 40 mm and a thermal conductivity of not more than 0.10 W/m.K on a distance of at least 50 mm from a combustible ceiling.

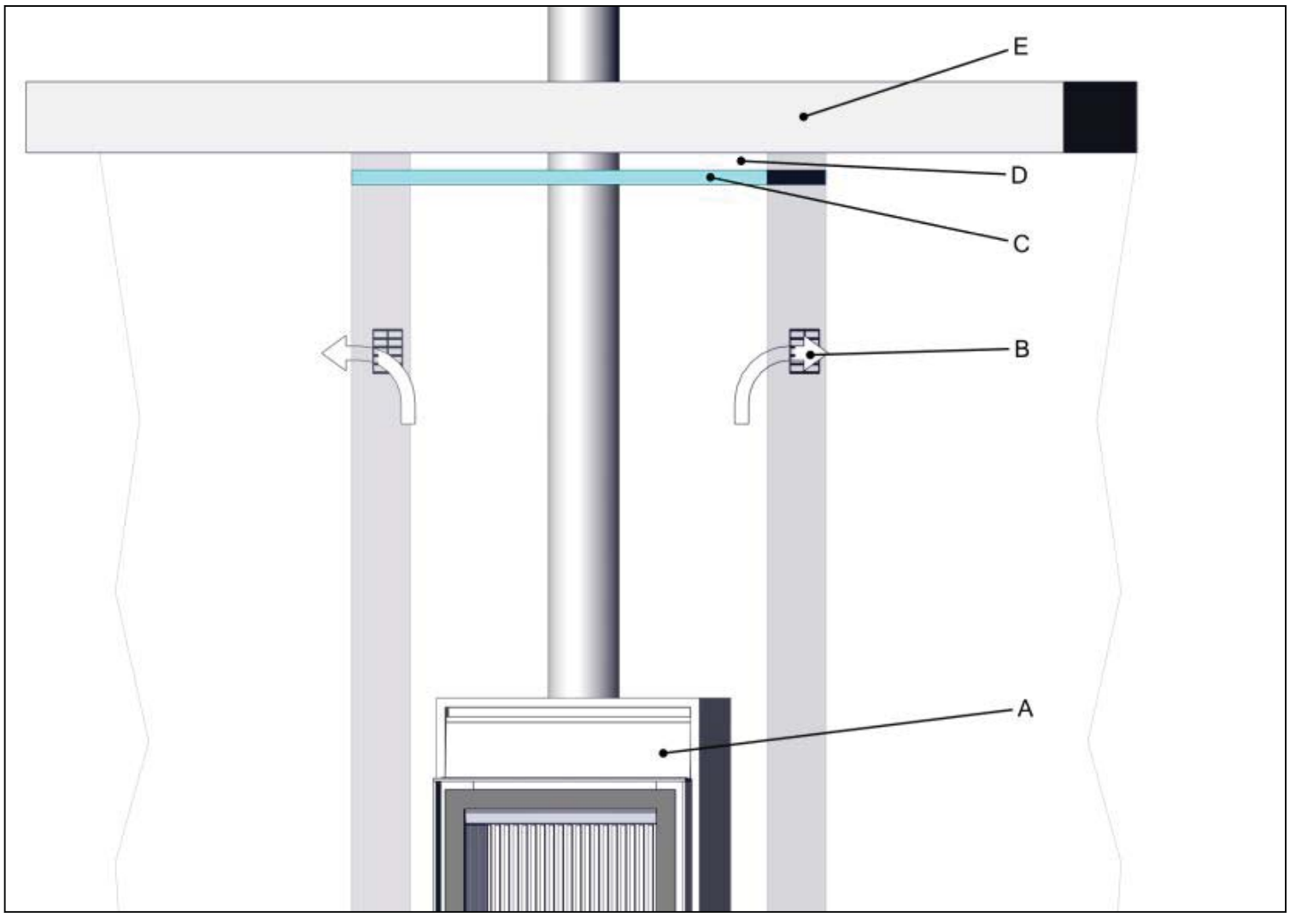


Table 7: Installation against a combustible ceiling

	Item	Description
A	Appliance	
B	Ventilation air outlet	Outlet of heated air from the chimney breast
C	Insulation plate	Plate of non-combustible material with a thickness of at least 40 mm and a thermal conductivity of at least 0.10 W/m.K
D	Air gap	Space between insulation plate and wall. Width of air gap at least 50 mm
E	Ceiling	Existing ceiling made of combustible material

Caution:

- Make sure that brickwork is build with a clearing of at least 3 mm between the sides and top of the appliance and the brickwork. The appliance can expand during operation due to heating.

Note:

- Make sure the thickness of any plastering is taken into account when the brickwork is being build.
- Do not use masking tape on the appliance. Masking tape damages the paint on the appliance.
- If you use other material than bricks, install the material in accordance with the instructions of the supplier of the material
- If you use other material than bricks, refer to the instructions of the supplier of the used material for information on the need to use a mantle iron.

1. Identify the positions where the ventilation air inlet grates and the ventilation air outlet grates must be put. Refer to *6.1.2* for requirements on the size of the ventilation air openings.
2. If applicable, identify the positions where the fitting boxes of the convection air inlets and convection air outlets must be put. Refer to *6.1.2* for requirements on minimum distances from ceiling and neighboring wall.
3. Identify the position where the dimmer for the convection ventilator must be put.
4. Build the brickwork around the appliance up to the upper frame around the glass.
   a) Install the fitting boxes of the ventilation air inlets.
   b) If applicable, install the fitting boxes of the convection air inlets.
   c) If applicable, install the dimmer of the convection ventilator.
5. If applicable, install a mantle iron to support the brickwork above the appliance. Put the mantle iron on both sides of the brickwork. Maintain a space of at least 3 mm between the appliance and the mantle iron.
6. If applicable, install the flexible aluminum pipes of the convection set. Refer to *6.3.5*.
7. Build the fireplace around the appliance.
   a) Install the fitting boxes of the ventilation air outlets.
   b) If applicable, install the fitting boxes of the convection air outlets
8. Install the frame around the appliance.

6.3.8 Final check on the appliance

Caution:

Wait 4 weeks after the installation before you use the appliance. The cement used for the fireplace needs to harden and to avoid damage to the plaster work.

1. Make sure the door closes and opens easy.
2. Make sure the control lever moves easy to left and right without undue noise.
3. Make sure all cast iron plates and the baffles are in the correct position.
4. When applicable: Start the convection ventilator and make sure the ventilator does not make an unusual noise (grinding sound). A soft hum is not an unusual sound.

Contact your dealer if the final check shows a defect.

7 Annual maintenance

Warning:

Make sure that the appliance has cooled down completely before doing the procedures in this section.

Do all procedures in this section every year.

7.1 Appliance

1. Remove ashes from the floor of the combustion chamber.
2. Examine the door seals. Replace damaged seals.
3. Remove the grate and empty the ash tray.
4. Examine the two baffles for damage. Replace when damaged. Refer to *7.5* for access to the baffles.
5. Clean both sides of the glass with glass spray or ceramic hob cleaner.
6. Clean the inside of the appliance with a soft brush.
7. Clean the metal parts on the outside of the appliance with a dry lint free cloth. Use Barbas heat resistant paint spray to repair lacquer damage.

7.2 Combustion air supply

1. Make sure that the inlet of the pipe of the external combustion air supply is not blocked by leaves or other debris.
2. Clean the inlet of the pipe of the external combustion air supply.

7.3 Convection air system

Note:

Do the procedure in this section only when a convection air system has been installed.

1. Clean the 2 inlet openings for the convection air.
2. Clean the 2 outlet openings for the convection air.

7.4 Chimney

Note:

It is recommended to contact a registered chimney sweep company to inspect and clean the chimney.

1. Sweep and inspect the chimney
2. Make sure there is no blockage in the chimney, for example by birds' nests.
3. Make sure the chimney is in good condition. Examine for cracks, loose parts and flue gas leakage. It is recommended to use an inspection camera.

Make sure to remove the heat shield and the upper and lower baffle before the chimney sweep work. Refer to *7.5*.

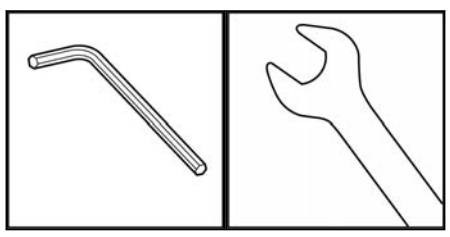
Make sure to replace the heat shield and the upper and lower baffle after the finish of the chimney sweep work and before firing the appliance. Refer to *7.6*.

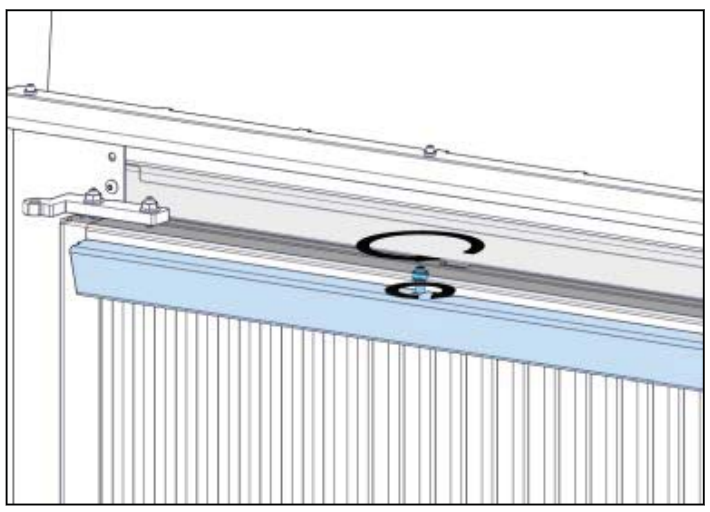
7.5 Removal of the baffles

To prepare for the chimney sweep, do all the procedures in this section.

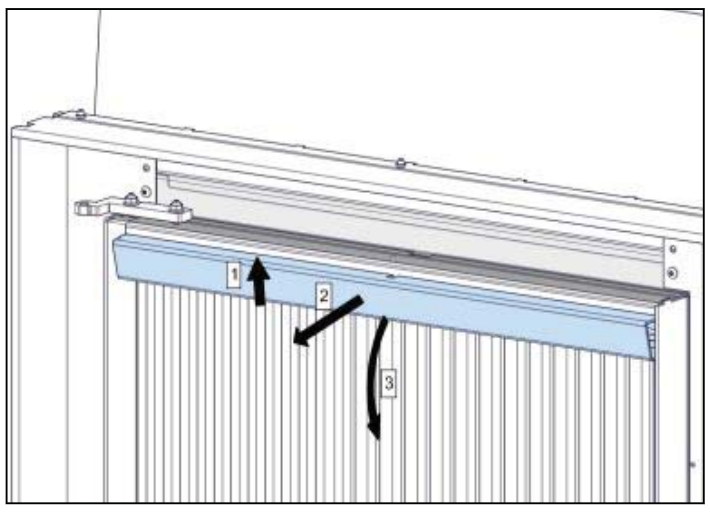
7.5.1 Remove the heat shield

1. Loosen the nut above the heat shield with a 3 mm hexagonal key and a 10 mm fork spanner. Unscrew the socket screw. Make sure the nut stays attached to the socket screw



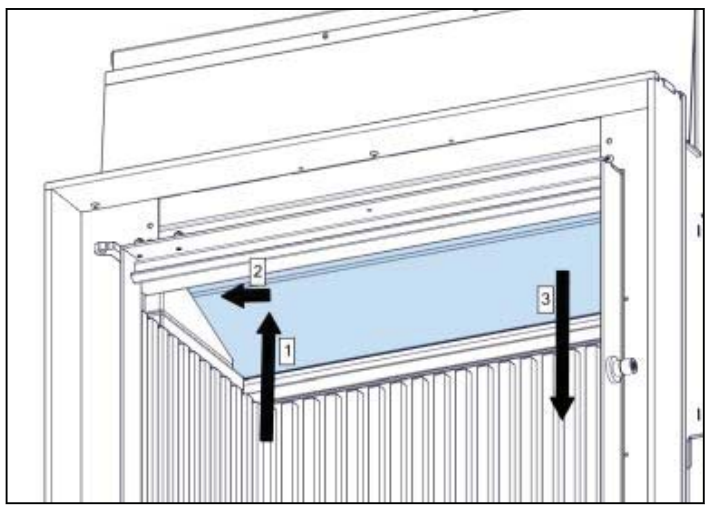


2. Push up (1) the front of the heat shield and pull it forward (2) and move downward to a vertical position (3).
3. Remove the heat shield from the appliance.

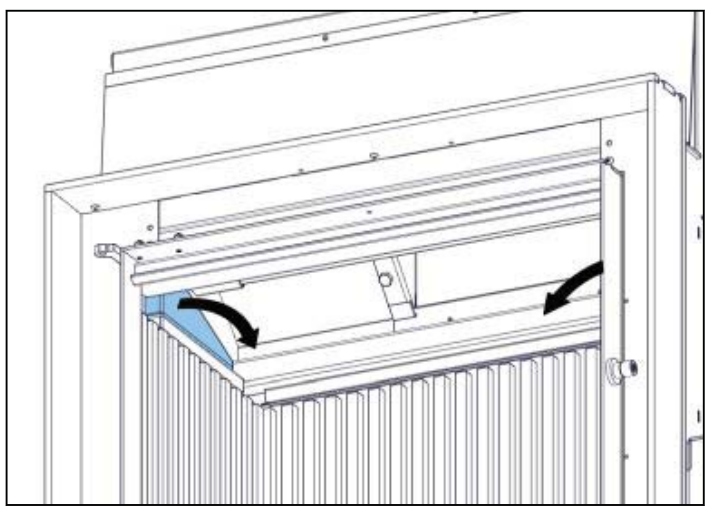


7.5.2 Remove the lower baffle

1. Push up the left side of the lower baffle (1) and move it to the left as far as possible (2).
2. Lower the right side of the lower baffle (3) and remove it from the appliance.

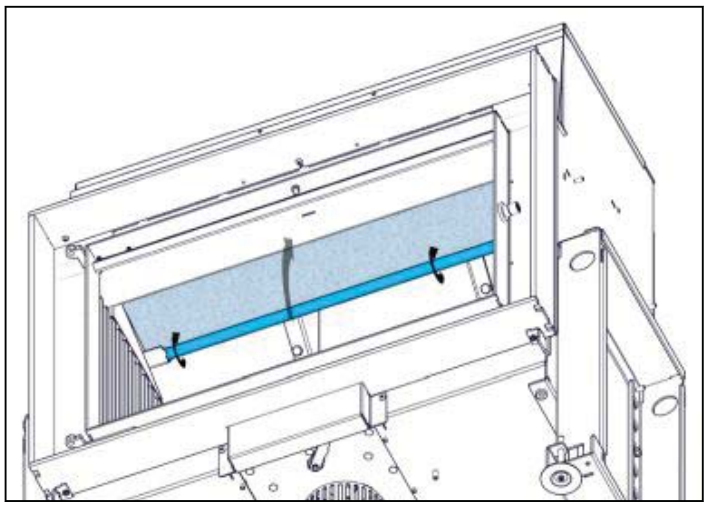


3. Remove the ceramic supports on the left and right side.

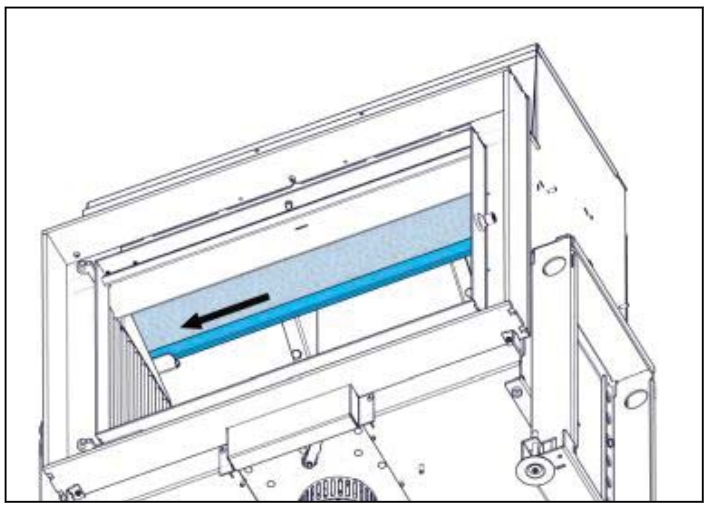


7.5.3 Remove the upper baffle

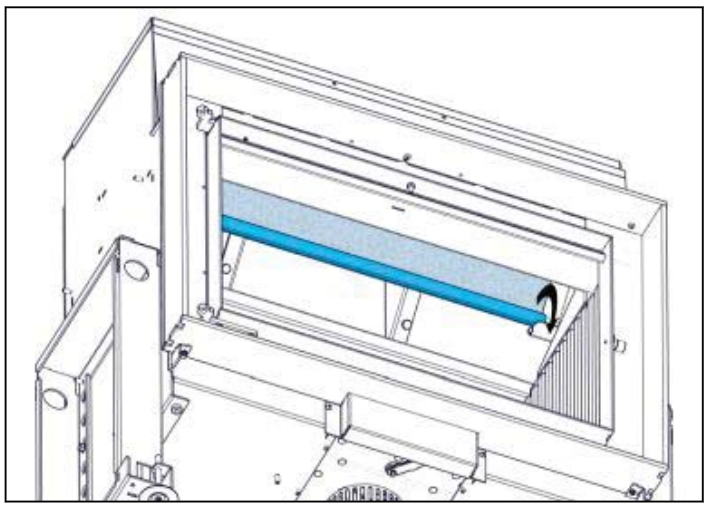
1. With 2 hands, hold the upper baffle at the back side.
2. Turn the front of the upper baffle up until it is in a vertical position.



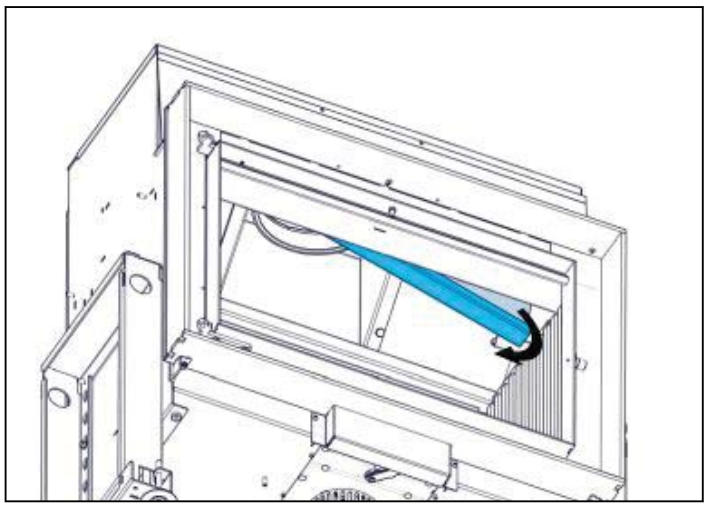
3. Move the left side of the upper baffle to the left.



4. Move the right side of the upper baffle over the support.



5. Lower the right side of the upper baffle and remove it from the appliance.



7.6 Place the baffles

Do all procedures of *7.5* in reverse order.

1. Place the upper baffle. Make sure the steel rim points backwards after placement.
2. Place the ceramic supports.
3. Place the lower baffle.
4. Place the heat shield and screw the socket screw against the heat shield and tighten with the nut.

8 Technical data

8.1 Technical data

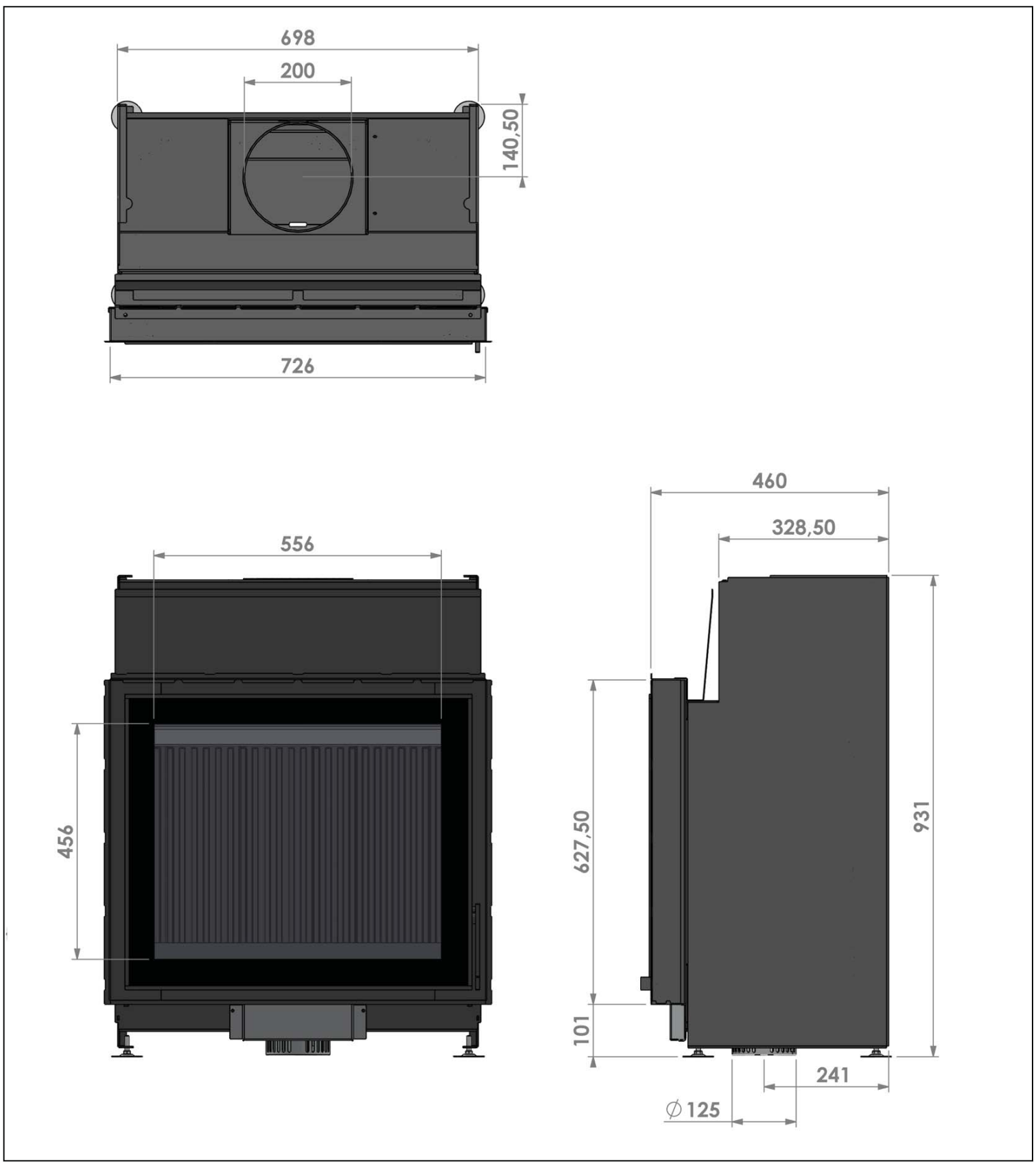
Table 8: Technical data Falcon 73/63

Name	Barbas
Model	Falcon 73/63
Tested in accordance with	EN 13229:2001-A2:2004 EN16510-1 annex D, E, F
Energy efficiency index	99.9
Energy efficiency class	A
Fuel	Wood logs, Wood briquettes
Nominal fuel load	2.8 kg
Nominal heat output (net)	12.3 kW
Minimum heat output (net)	8 kW
Useful efficiency at nominal heat output	75.2 %
Useful efficiency at minimum heat output (indicative)	79 %
Indirect heating function	No
Leak rate at 10 Pa	1.3 m^3/h (at 273 K, 1013 hPa)
Emissions (at 13 % O_2, 273 K, 1013 hPa)	
• carbon monoxide (CO)	0.07 vol% (932 mg/Nm^3)
• particles (PM)	24 mg/Nm^3
• organic gaseous compounds (OGC)	50 mg/Nm^3
• nitrogen oxides (NO_x)	85 mg/Nm^3
Flue gas mass flow	13.1 g/s
Flue gas temperature	350 °C
Chimney draught	12 Pa (0,12 mbar)
Flue gas connection	Ø 207 mm, suitable for a pipe with an outer diameter of 200 mm
Weight	
• Basic appliance • Áppliance with adjustable height frames and convection ventilator	• 218 kg • 236 kg
Minimum insulation thickness to combustible walls	
• side wall • back wall • floor • ceiling	• 100 mm • 100 mm • 100 mm • 40 mm
Used materials	
• Combustion chamber side panels	Cast iron

• Combustion chamber insulation	Vermiculite 750 kg/m^3
• Combustion floor and grate	Steel
• Lower baffle	Heat resistant ceramic 2000 kg/m^3
• Upper baffle	Vermiculite 750 kg/m^3
Combustion air supply	Pipe connection with diameter of 125 mm on the appliance or 3 holes with diameter of 125 mm on the optional convection ventilator / combustion air inlet box
Options	
• Convection ventilator / combustion air inlet box • Combustion air inlet box • Set of 2 adjustable height frames	
Electrical energy consumption: • Convection ventilator	69 W; 230 VAC
The specific precautions that shall be taken when the local space heater is assembled, installed or maintained, are listed in the attached documents:	• Installation and maintenance manual • User manual

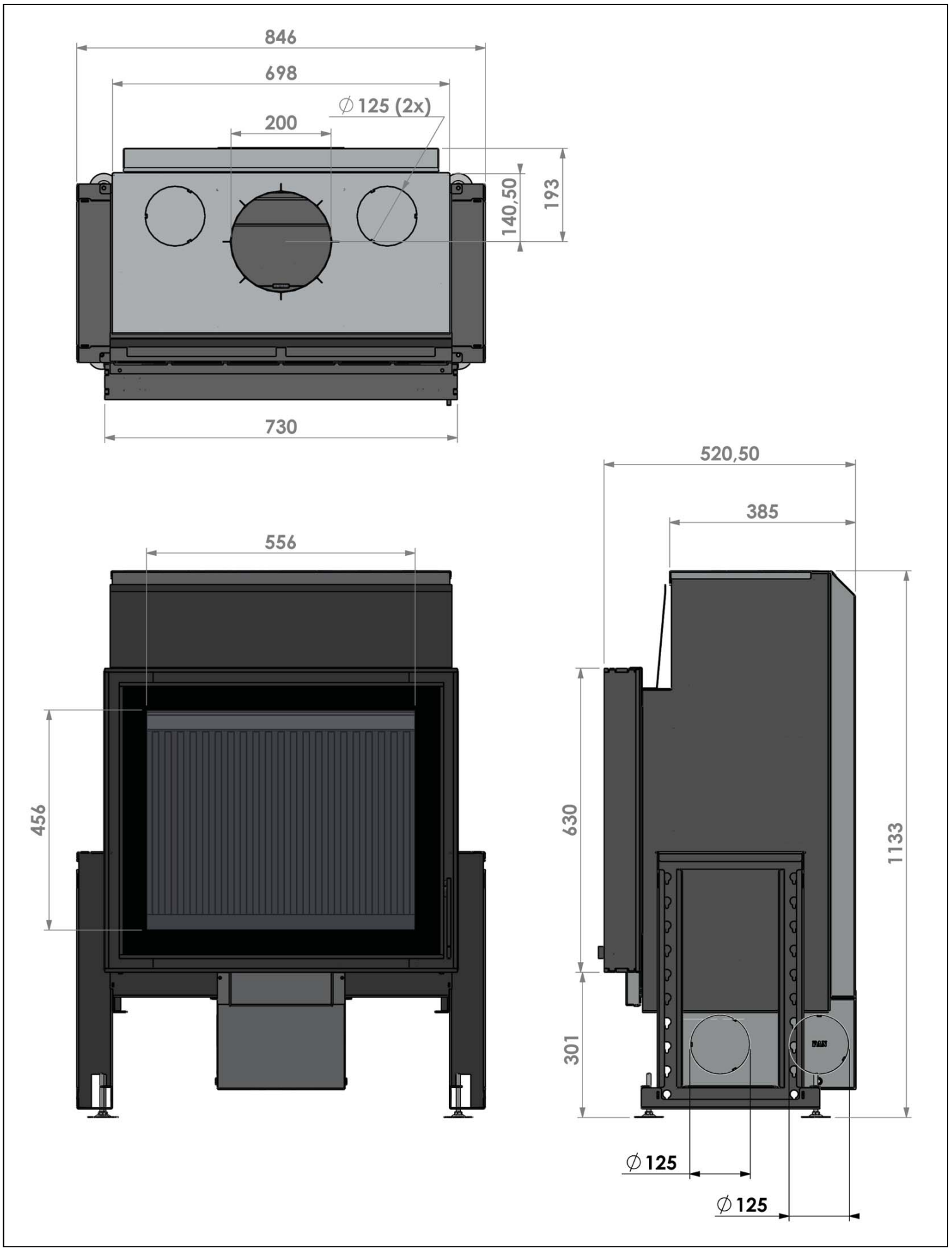
9 Dimensions

9.1 Frameless appliance

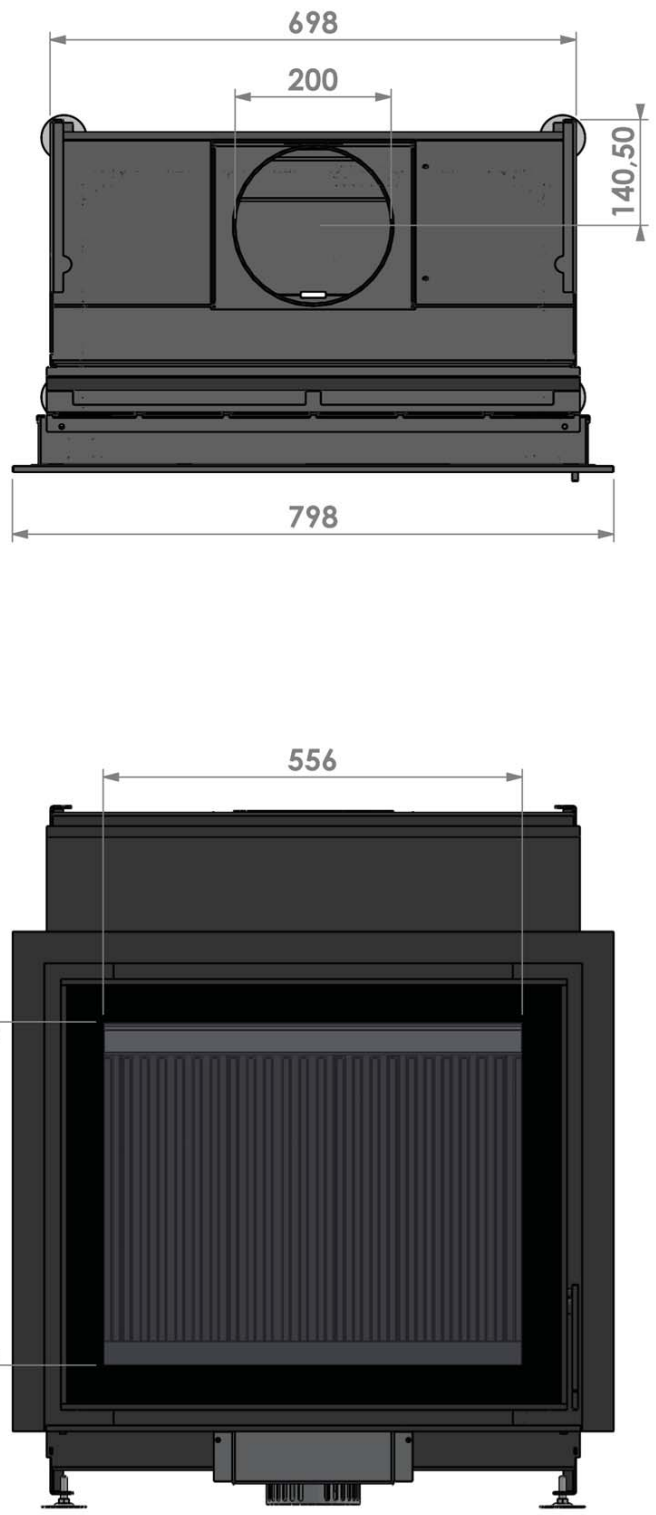


9.2 Appliance with built-in frame

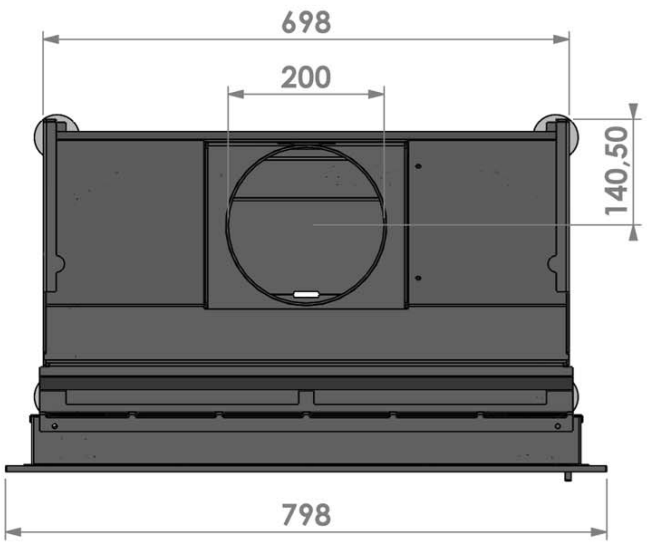
With optional convection ventilator / combustion air box

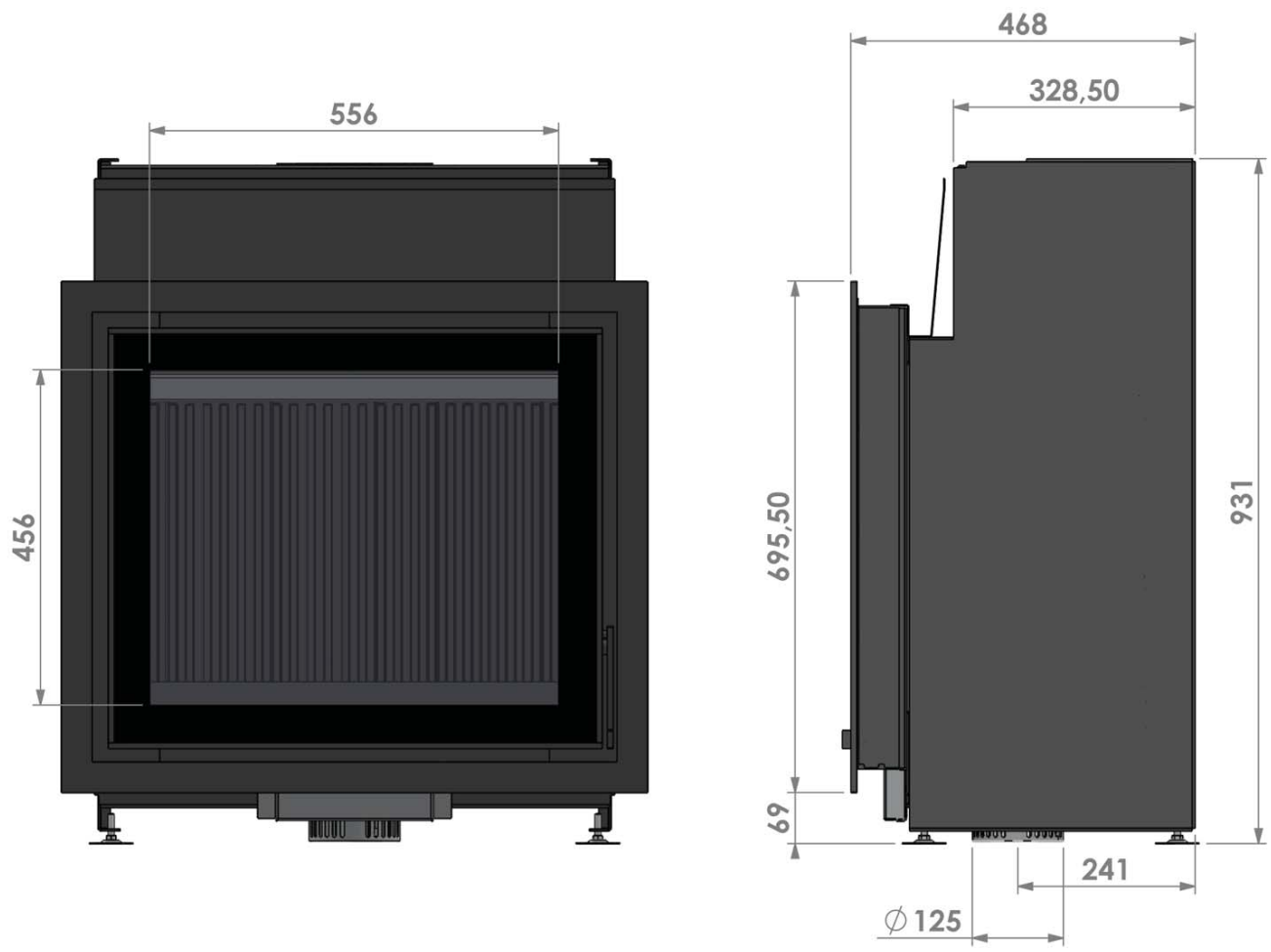


9.3 Appliance with 3-sided classic frame



9.4 Appliance with 4-sided classic frame





10 Warranty Terms

Barbas Bellfires 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. 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 labor or spare parts.
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.
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

1. Should you wish to claim under the warranty, please contact your Barbas dealer.
2. Complaints should be reported as quickly as possible after they have manifested themselves.
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.
4. In addition, the original receipt (invoice, receipt, cash receipt) showing the date of purchase must also be submitted.
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.
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

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;
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

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

Article 5: Warranty period

1. This warranty will only be granted during the warranty period.
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.
3. For other parts of the Barbas appliance, a similar warranty applies from the moment of purchase for a period of one year.
4. For user parts such as glass, glass (cord) and the interior of the combustion chamber, a similar guarantee is given until after the first burning.

Article 6: Liability

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.
2. That stated in this provision is not valid if and to the extent that is derives from a mandatory provision.
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@Barbas.com

Carefully retain the user manual; it shows the serial number of the appliance. You will need this if you wish to claim under the warranty.

barbas .

Your Barbas dealer

001 - 30.03.2018 - 346032