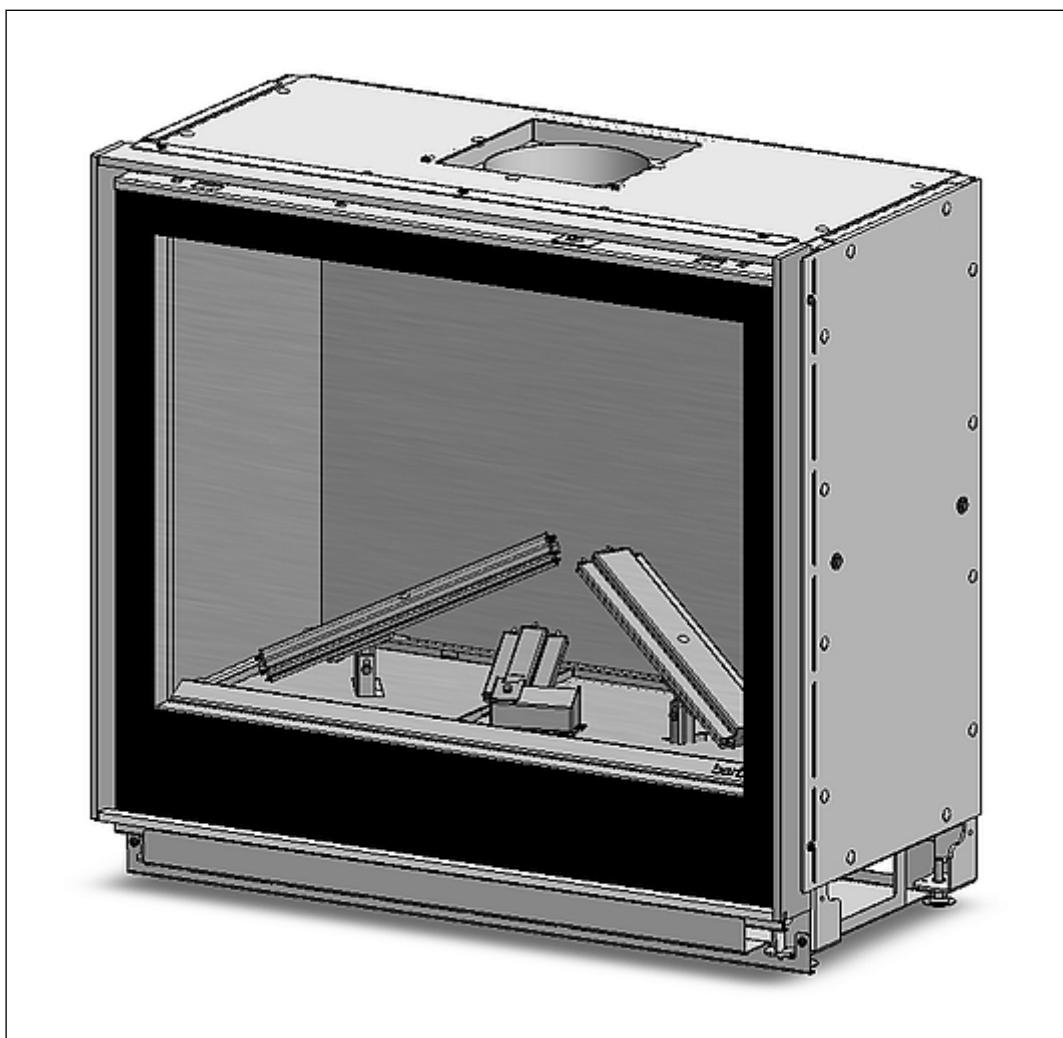


barbas .

Installation and maintenance manual

Gas Fire Smart 90-70 PF



Serial number:

Production date:

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1 About this document

This document shows the necessary information to do these tasks on the Gas Fire Smart 90-70 PF

- Installation
- Maintenance

This document refers to the Gas Fire Smart 90-70 PF 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.

1.1 How to work with this document

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

1.2 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

1.3 Related documentation

- Preparation manual
- Installation and maintenance manual
- User manual
- Assembly instructions for concentric flue system

2 Description

2.1 Intended use

The appliance is intended for use in a completely sealed or mechanically ventilated house without extra ventilation and/or fume extraction to heat the room wherein it is installed. Do not use it for other purposes.

The appliance may only be used at a location that meets the requirements for the installation of the appliance. Refer to the preparation manual.

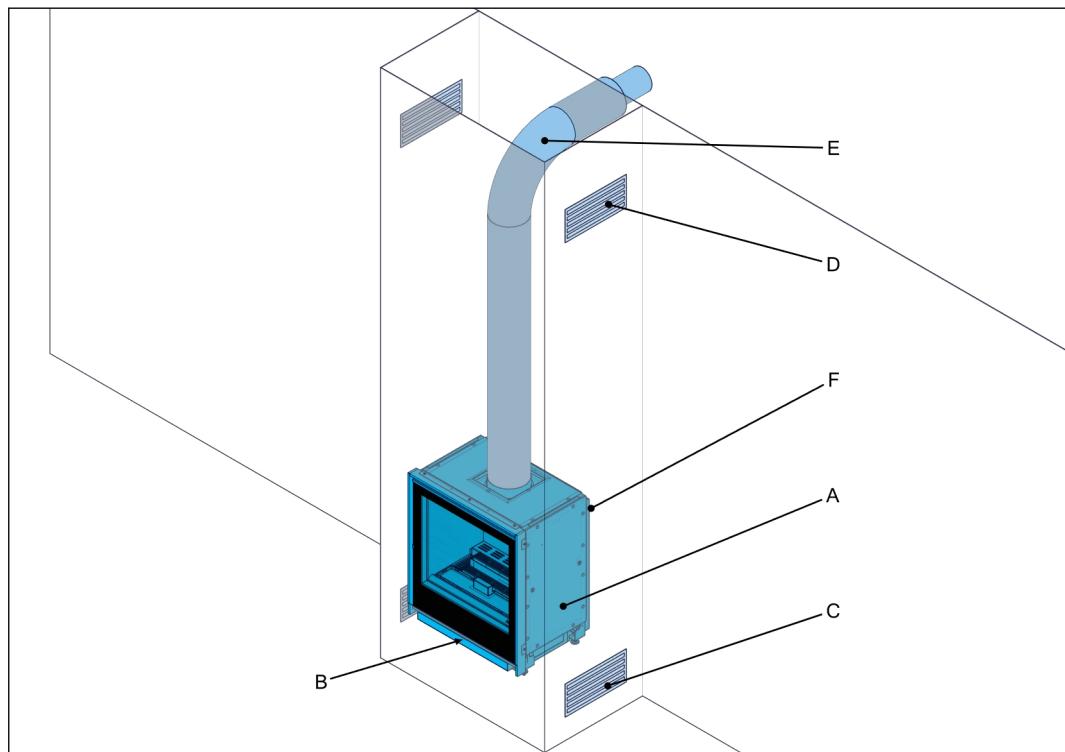
2.2 Installation options

The appliance is supplied with a PF (Premium Fire) double burner.

- The appliance can be installed as an insertion into an existing open fireplace or as a built-in appliance in a new fireplace.
- The appliance can be installed with a convection fan set. The convection fan collects the heated convection air from the appliance and releases this air into the room. The convection fan set consists of the convection fan, backcasing, cable and assembly material, which will be installed on the appliance from the factory.
- A mantel iron can be installed on the appliance. The mantel iron makes it possible to build the brickwork of the fireplace beyond the height of the appliance.

2.3

Overview of a typical installation

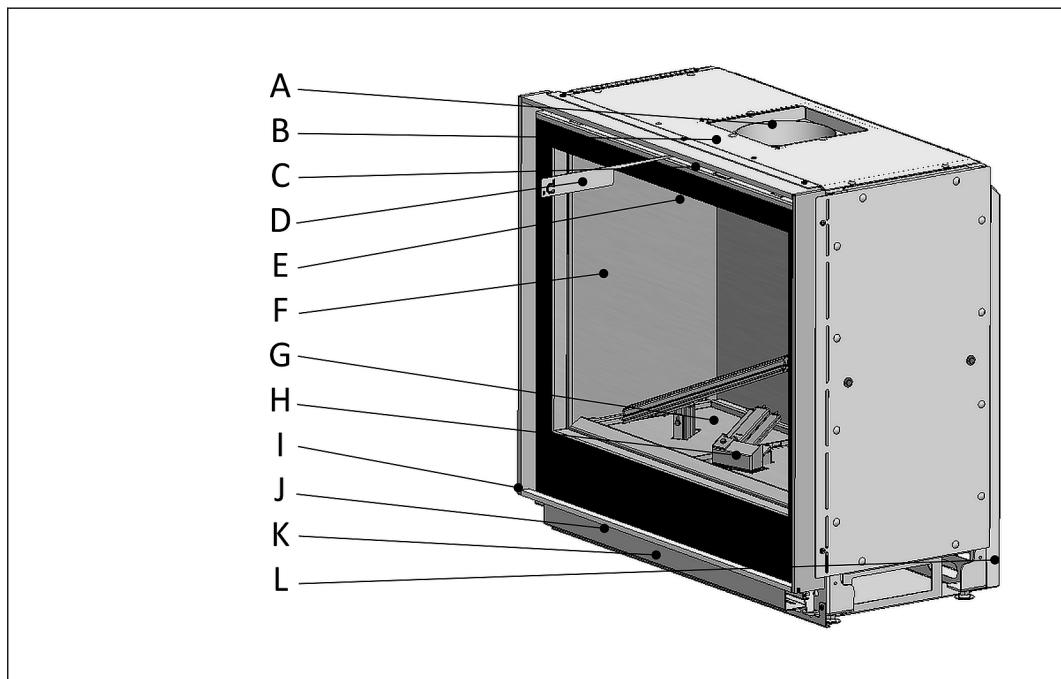


Note:

This is an example of a typical installation with the convection fan set option and a wall outlet for the concentric flue, your installation can be different.

Item	Description
A	Appliance
B	Control unit
C	Inlet grate
D	Outlet grate
E	Concentric flue system (wall outlet variant)
F	Convection fan set (option)

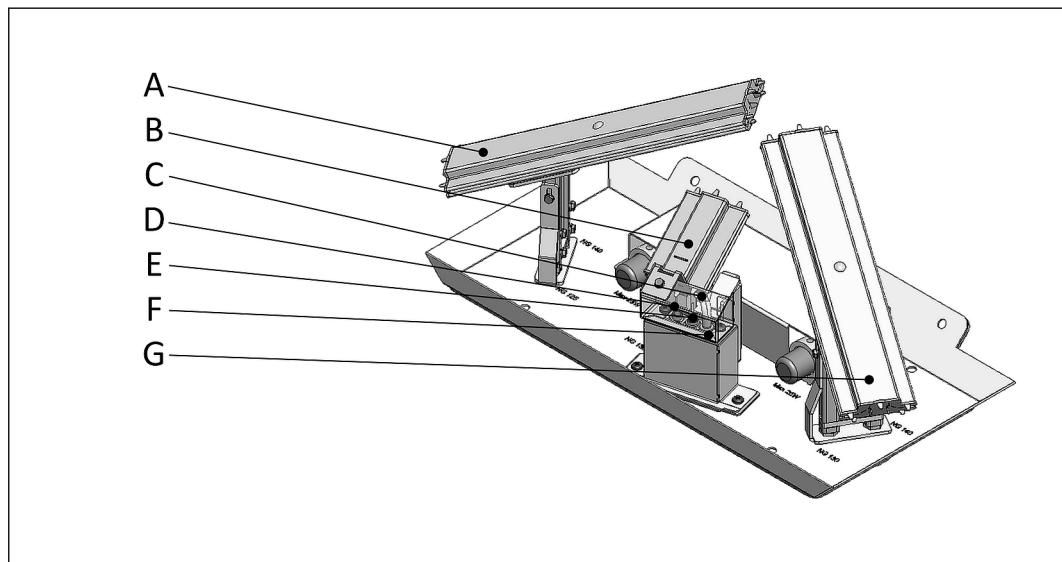
2.4 Overview of the appliance



Item	Description
A Concentric flue connection	The connection to the concentric flue system that provides combustion air and extracts the flue gases
B Convection casing	Collects the heated convection air. The convection air has a natural upward flow and is extracted by the upper front side openings of the appliance
C Outlet opening convection air	An outlet opening in the front of the appliance which is connected to the convection casing
D Hook	For opening the door (including glass)
E Overpressure door	Protects the appliance against an overpressure
F Glass	The heat resistant glass keeps the flue gases inside the appliance and closes the combustion chamber off
G Burner bed	Top side of the gas burners and grate
H Pilot light burner	Provides a pilot light
I Frame (there are different sizes available)	A decorative edge around the glass
J Inlet opening convection air	An inlet opening in the front of the appliance which is connected to the convection casing
K Control unit	Contains the gas regulator block, receiver and the fan/light module
L Convection fan set (option)	Pushes the heated air of the convection casing

2.5

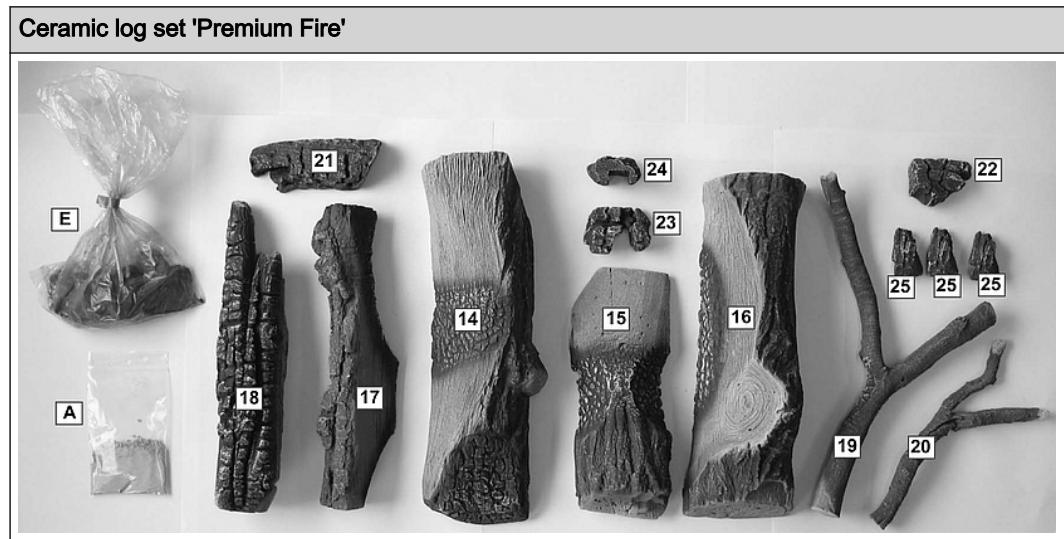
Overview of the burner bed and the pilot light



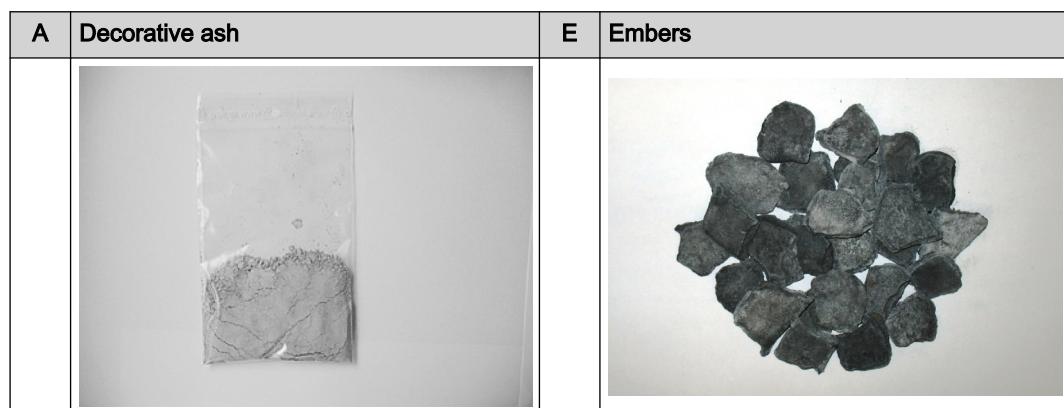
Item	Description
A Main burner Left	Supplies the gas for the main left fire
B Main burner Middle	Supplies the gas for the main middle fire
C Pilot light burner	Supplies the gas for the pilot light
D Thermocouple	Detects if the pilot light is on
E Ignition electrode	Supplies a spark to ignite the pilot light
F Pilot light outer casing	Protective cover for the pilot light
G Main burner Right	Supplies the gas for the main right fire

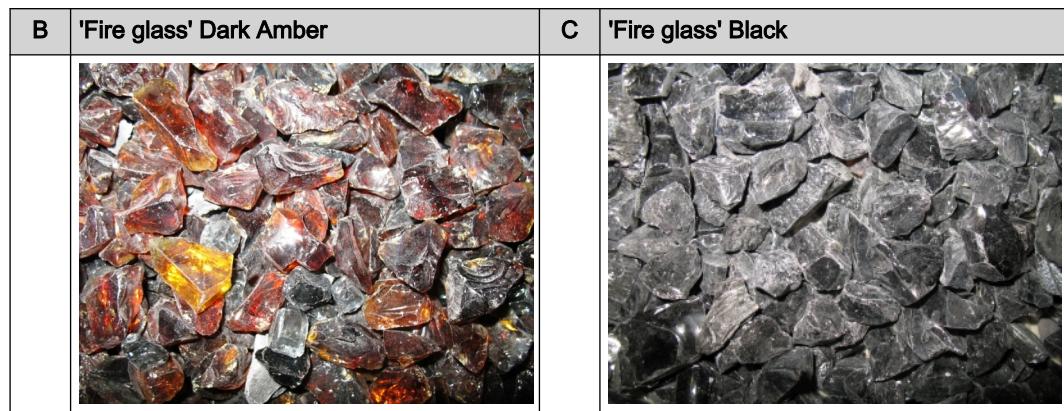
2.6

Overview of the ceramic log set 'Premium Fire'



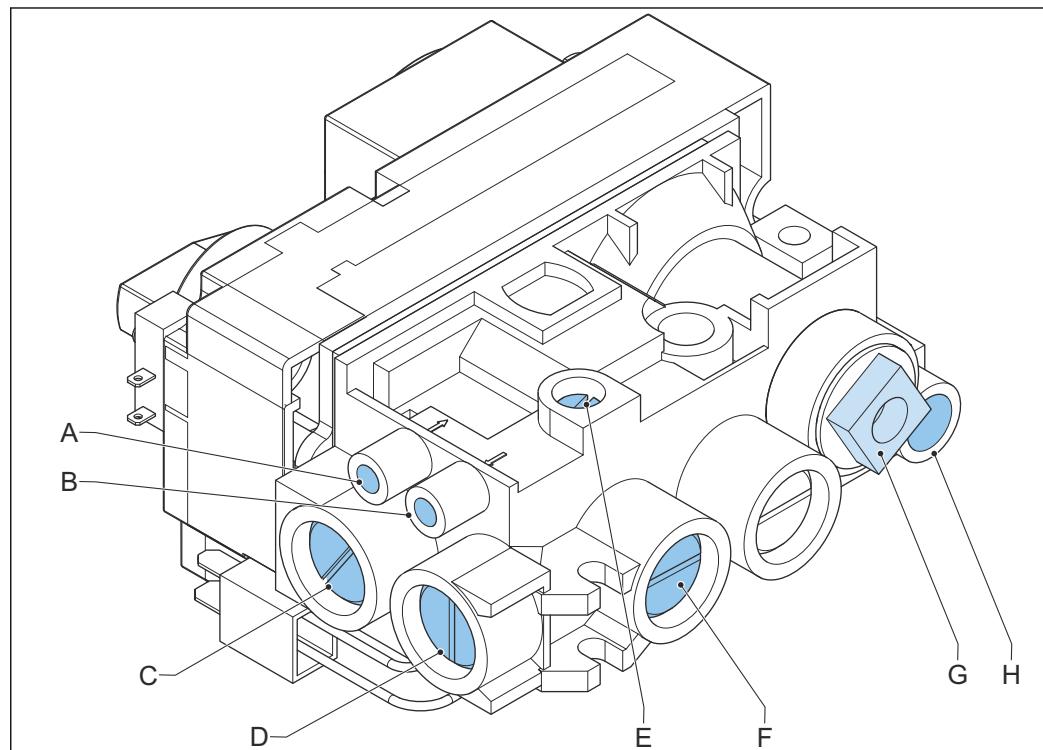
	Item	Position on burner bed - Refer to paragraph 4.3.2
14	Log	To put on the left burner
15	Log	To put on the middle burner
16	Log	To put on the rightt burner
17	Log	To put left against the log set
18	Log	To put partly under the right log
19	Branch	To put in front of the log set
20	Branch	To put in front of the log set
21	Charcoal	To put partly under the left log
22	Charcoal	To put to the left of the log set
23	Charcoal	To put under the right burner, around the venturi
24	Charcoal	To put under the left burner, around the venturi
25	Charcoal	To put around the log set
A	Decorative ash	To sprinkle on the log set
B	'Fire glass' Dark Amber	To divide evenly around the log set
C	'Fire glass' Black	To divide evenly on the left and right side of the mesh grate
E	Embers	To put shredded around the mesh grate





2.7 Overview of the control elements

2.7.1 Overview of the rear of the gas regulator block

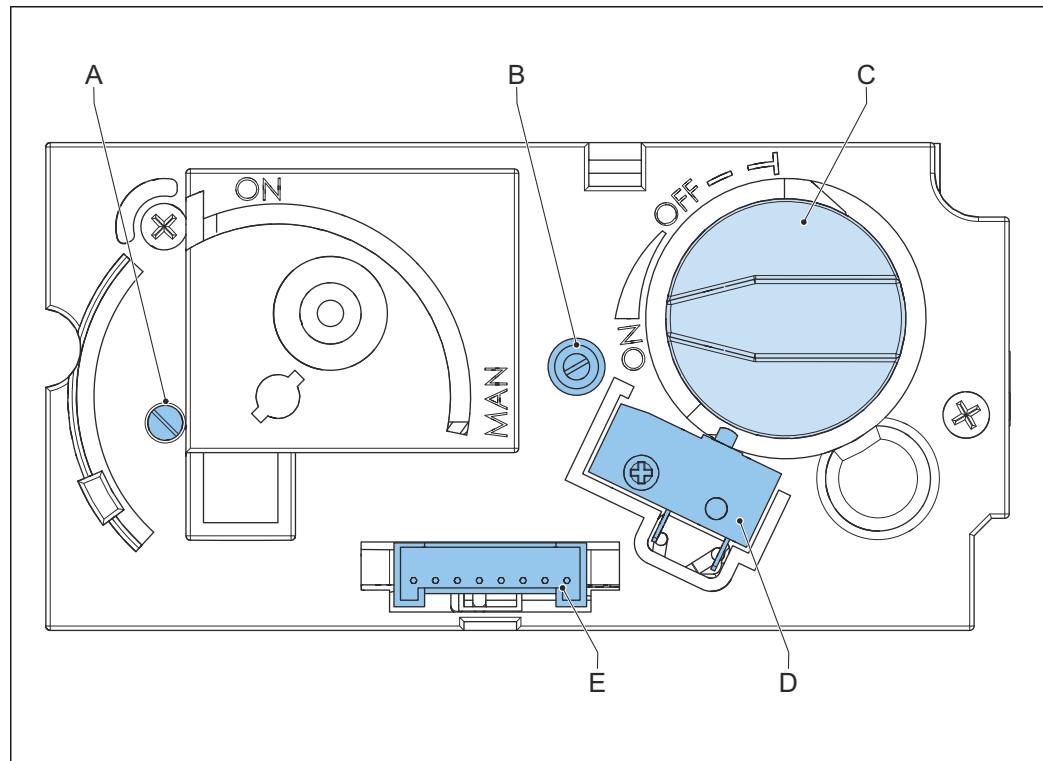


A	Inlet pressure tap	E	Adjustment screw for minimum burner pressure
B	Outlet pressure tap	F	Gs connection for the rear burner
C	Gas supply connection	G	Thermocouple interrupter connection
D	Gas connection front burner	H	Gas connection for the pilot light

Figure 1. Gas regulator block (rear)

2.7.2

Overview of the front of the gas regulator block

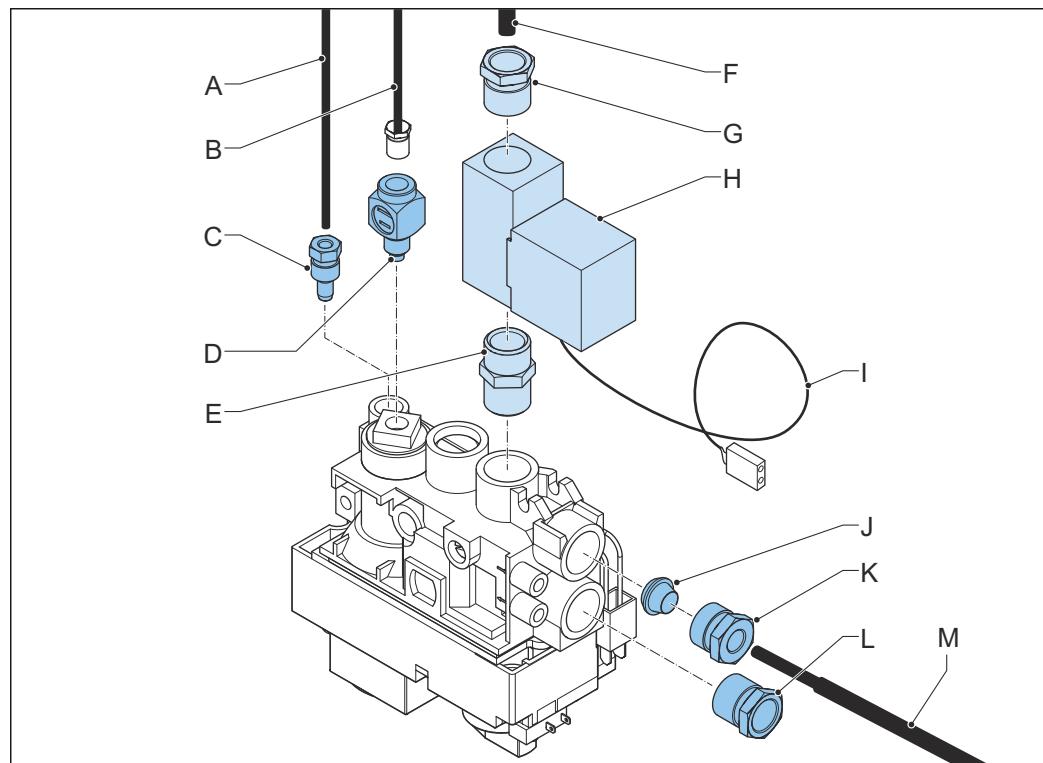


A	Adjustment screw for the pilot light gas pressure	D	Micro switch to detect the motor knob end position
B	Adjustment screw for maximum burner pressure	E	8-wire cable connection
C	Motor knob of the internal main gas valve		

Figure 2. Gas regulator block (front)

2.7.3

Overview of the connections on the gas regulator block



A	Pilot light pipe	H	Gas valve of the rear burner
B	Thermocouple	I	Control cable of the gas valve of the rear burner ²
C	Connector (nut-olive) Ø 4mm	J	Olive Ø 8mm
D	Thermocouple interrupter ¹	K	Nut Ø 8mm
E	Connector of gas valve of the rear burner	L	Gas supply connection
F	Gas pipe to rear burner	M	Gas pipe front burner
G	Connector (nut-olive) Ø 8 mm		

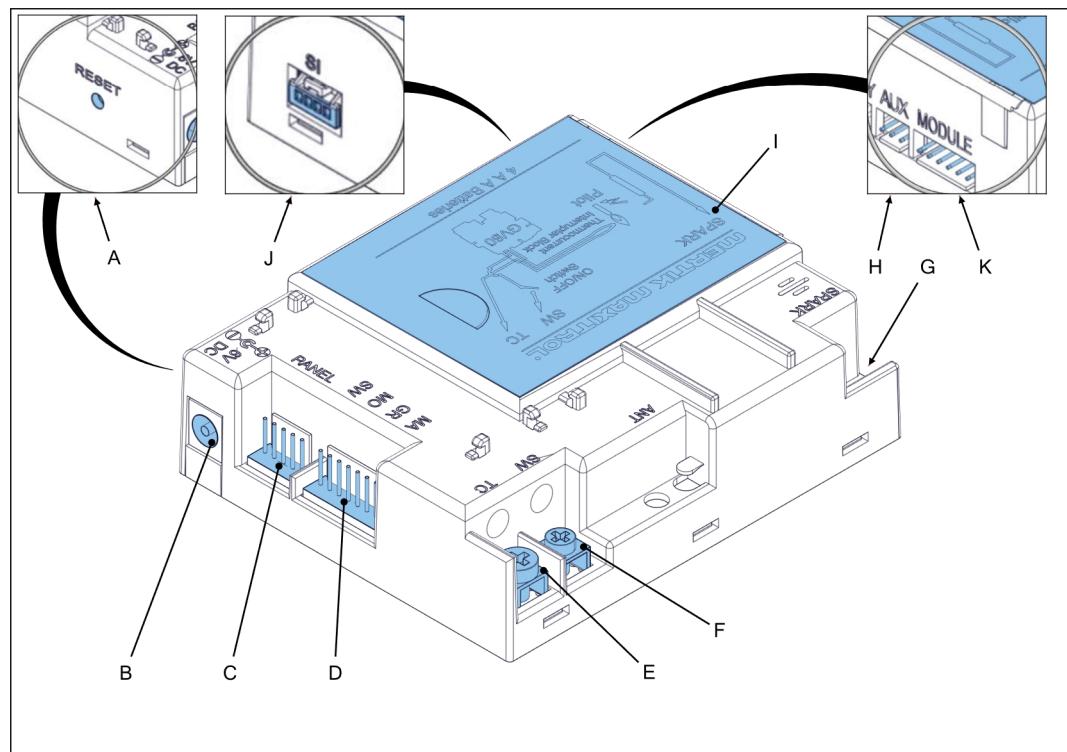
Figure 3. Connections on the gas regulator block

¹ Interrupts the signal of the thermocouple, and bypasses this signal through the receiver. When the thermocouple signal is cut off by the receiver (requested by the remote control) or when the thermocouple signal is weak or broken, the gas supply to the pilot light will stop

² Connects the valve to the receiver

2.7.4

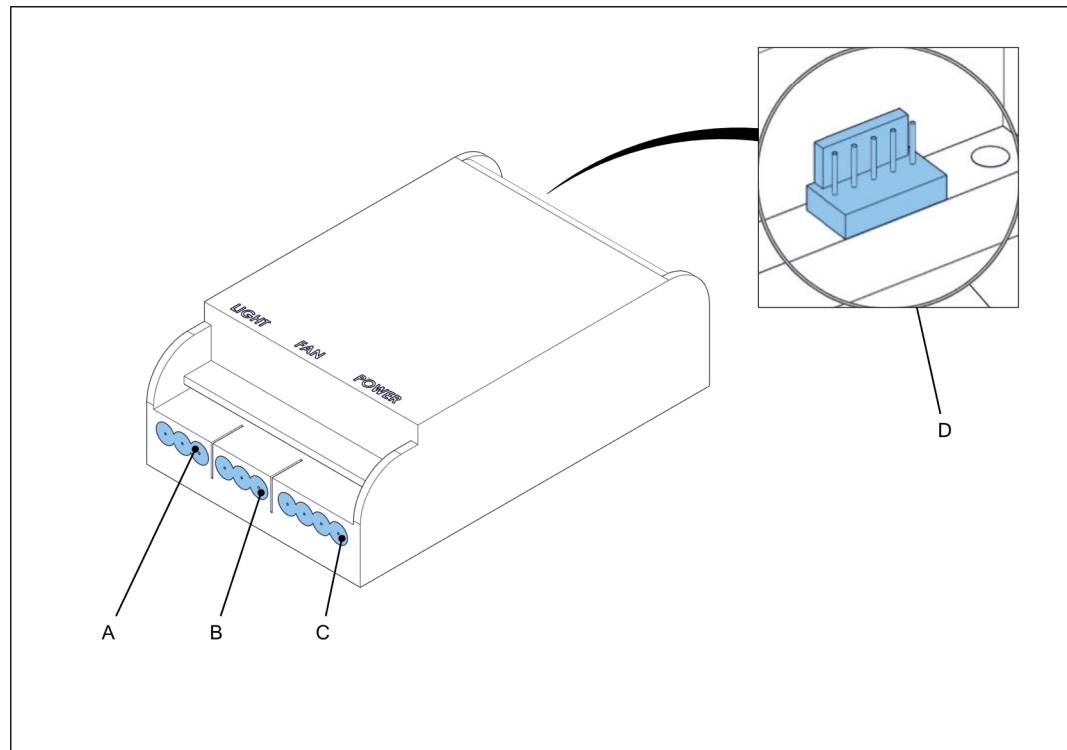
Overview of the receiver



Item	Description
A Reset button	Reset of the receiver
B Connection for an adapter	Optionally, a 6 VDC adapter can supply the receiver and an optional wifi-box with power
C connection for external operating	Optionally, a wall switch or domotica system can be connected
D 8 wire cable connection	Sends signals to the gas regulator block
E Thermocouple voltage / current IN (red connection)	Connection to the thermoelectric pilot light shut-off wire IN
F Thermocouple voltage / current OUT (yellow connection)	Connection to the thermoelectric pilot light shut-off wire OUT
G Piezo cable connection	Connection for the piezo cable which is connected to the ignition electrode of the pilot light
H Connection to the gas valve rear burner (AUX)	Sends a signal if the rear burner must burn
I Battery compartment cover	Batteries are not applicable in the receiver for this appliance. (Power is supplied by the fan/light module.)
J Connection for a wifi-box (SI)	Optionally, a wifi-box can be connected to the receiver to control the appliance with a smartphone or tablet with the Barbas app.
K Connection for the fan/light module (MODULE)	To control the light function and optionally to control the fan speed function

2.7.5

Overview of the fan/light module



	Item	Description
A	Connection for the ambient lights	Powers the ambient light bulbs
B	Connection for a convection fan	Powers the convection fan. Optional for this appliance
C	connection for the power supply	Connection for the 230 VAC power cable with an earthed plug. Connection is also used for earthing the appliance
D	Connection for the receiver	To control the light function and optional the convection fan function

3 Safety

3.1 Safety devices on the appliance

Name	Description
Thermo-electric pilot light shut off	Prevents unforseen discharge of gas from the main burner.
Overpressure door	If an overpressure occurs in the appliance, the door opens for a short duration. When the door opens, a loud noise can occur. If an overpressure occurs, the installer must do a thorough check on the appliance.

3.2 Safety instructions for installation

Warning:



- The appliance must be positioned and connected as a 'room sealed system' appliance by a certified and registered gas installation engineer
- Before beginning the installation, check that the details on the rating plate correspond to the gas type and supply pressure to which the appliance will be connected.
- Install the appliance in accordance with the following installation instructions, and the national and the local applicable regulations.
- Do not put flammable materials in the fireplace.
- Make sure that the area around the fireplace is free of flammable materials at all times. the minimal safe distance is 100 cm from the fireplace.
- Make sure that the burner openings stay clean during installation. Blockage of the burner openings can lead to a dangerous situation.
- Make sure that the gas regulator block and the piping remain free of cement or other building material. Otherwise, the gas regulator block or the piping can start to leak.
- Do not twist the flexible pipes to the gas regulator block. Make sure that there is no stress on the flexible pipes and the gas regulator block.
- Make sure that you do not damage the pipes.
- Make sure that the compression fittings do not come loose.
- Do not install the appliance against a flammable rear wall.
- After installation, Make sure that the pipes and compression fittings are gas tight.

Caution:



- Only use the items that are supplied or described in the preparation manual and other related documentation.
- Do not use masking tape on the appliance. Masking tape can damage the finish of the appliance.
- Do not insulate the appliance. If necessary, only install strips of white, loose insulation wool that is heat resistant up to at least 1000 °C. Install the insulation strips with a width of maximally 15 cm to protect the walls. Only install these strips on top and on the side of the appliance.
- Do not use fiberglass, rockwool, or any other sort of insulation material. These materials produce pungent odour and can produce discolouration of the fireplace.
- Make sure that 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.
- Do not build the brickwork higher than the casing without the use of a mantel iron.

3.3

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.

4 Installation

4.1 Installation prerequisites

1. Make sure that the location agrees with the requirements. Refer to the preparation manual.
2. Make sure that the details of the rating plate of the appliance agree with the gas type and gas pressure of the gas supply.

4.2 Installation procedure



Note:

The appliance is factory set to the correct nominal heat input. The pilot light is set to the correct level of gas consumption.

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

4.2.1 Install the appliance

Safety conditions

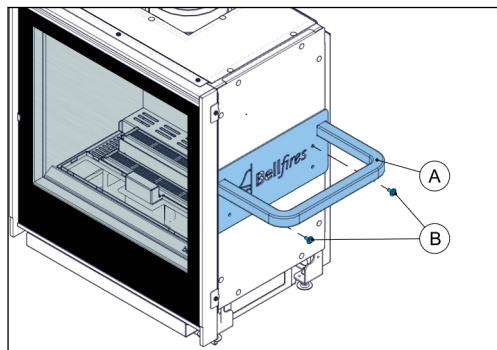


Caution:

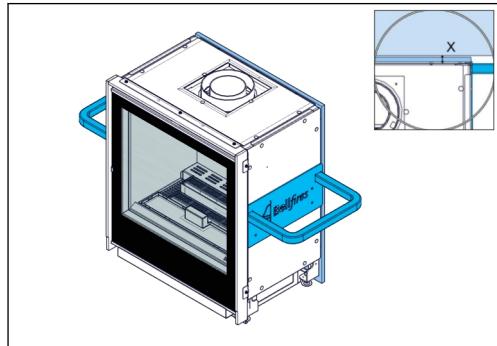
Do not install the appliance against a flammable rear wall.

Procedure

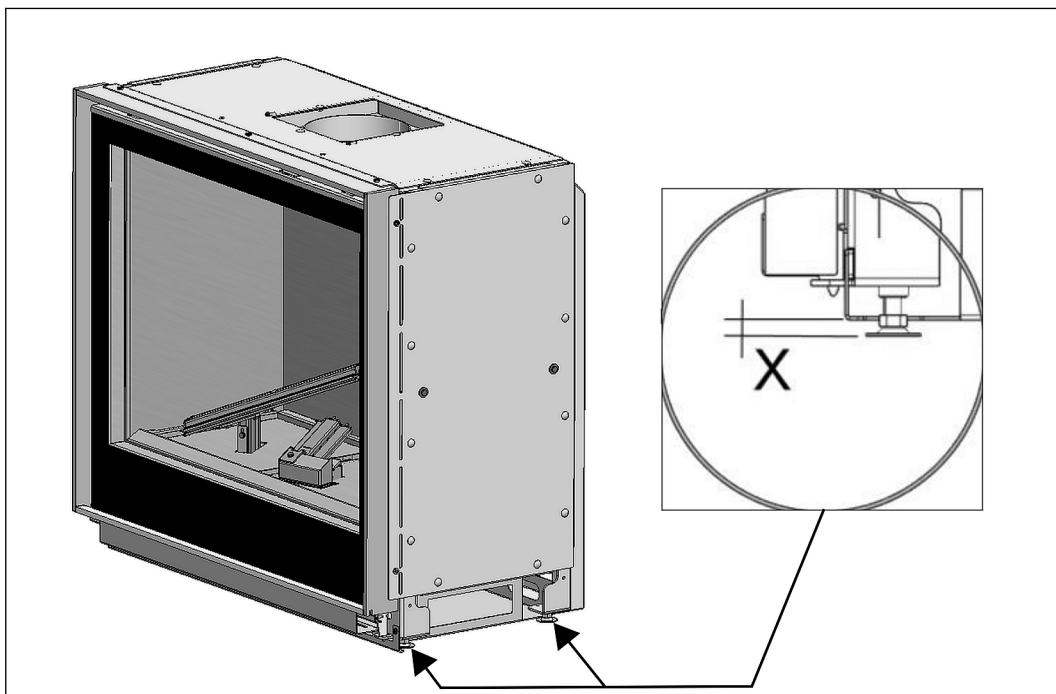
1. Install the carrying brackets (A). Use the fasteners (B). You can use the carrying brackets to move the appliance.



2. Install the appliance. Make sure that the distance x is approximately 2 cm.
3. Remove the carrying brackets.
4. Put a nonflammable insulation plate (B) of at least 12 mm thick between the appliance and the rear wall. Make sure that the insulation plate covers the entire area of the rear of the appliance.



4.2.2 Horizontally align the appliance



- Adjust the adjustable feet. Use an hexagonal key of size 4.
 - a) Make sure that distance x is at least 1 cm.
 - b) Make sure that the appliance is installed horizontally.

4.2.3 Make the gas connection

Caution:



- Do not twist the gas supply pipe to the gas regulator block. Make sure that there is no stress on the gas supply pipe and the gas regulator block.
- Make sure that you do not damage the gas supply pipe.

1. Connect the gas to the appliance. Use a compression fitting.
2. Make sure that the gas is correctly connected.

4.2.4 Do a check on the gas connections

- Make sure that the gas connections do not leak. Use soapy water or a leak tester.

4.2.5 Make the electrical connection

Caution:



- Use a wall socket with earth connection.
- The socket must be accessible at all times.

1. Connect the plug to the wall socket.
2. Make sure that the electrical cable does not touch the appliance, due to the high temperatures of the appliance.

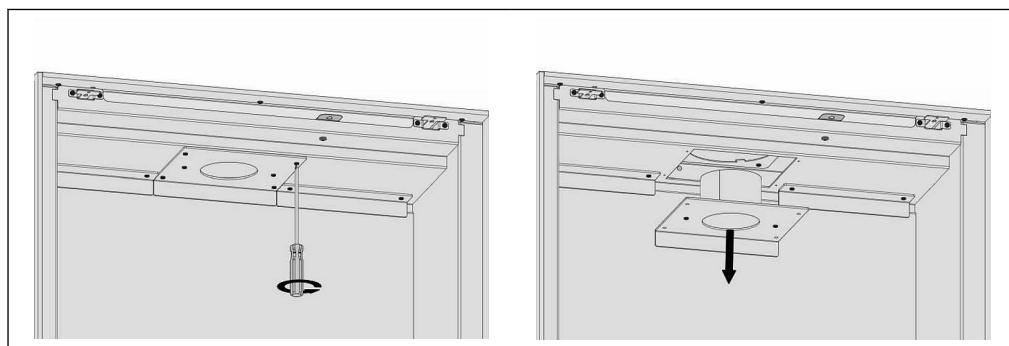
4.2.6**Connect the concentric flue system**

1. Connect the concentric flue system to the appliance. Use the materials that are specified in the preparation manual. Do not use any other materials.
2. Make sure that all mechanical connections of the concentric flue system are correctly connected.
3. Attach the concentric connection pipes to the wall or ceiling with metal brackets. Refer to the manual 'assembly instructions for concentric flue system'.

4.2.7**Disassembling and assembling the flue gas connection and air supply connection**

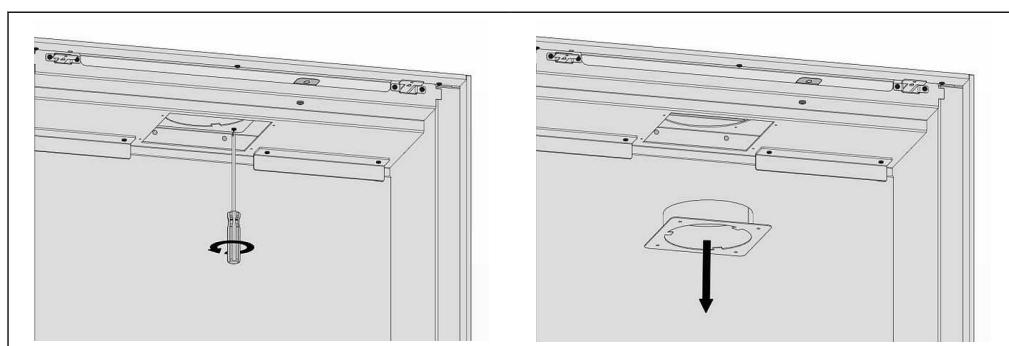
When the appliance is installed as an insert into an existing open fireplace, it is possible to connect the appliance with stainless steel flexible liners specified in the preparation manual.

1. Disassembling the flue gas connection.



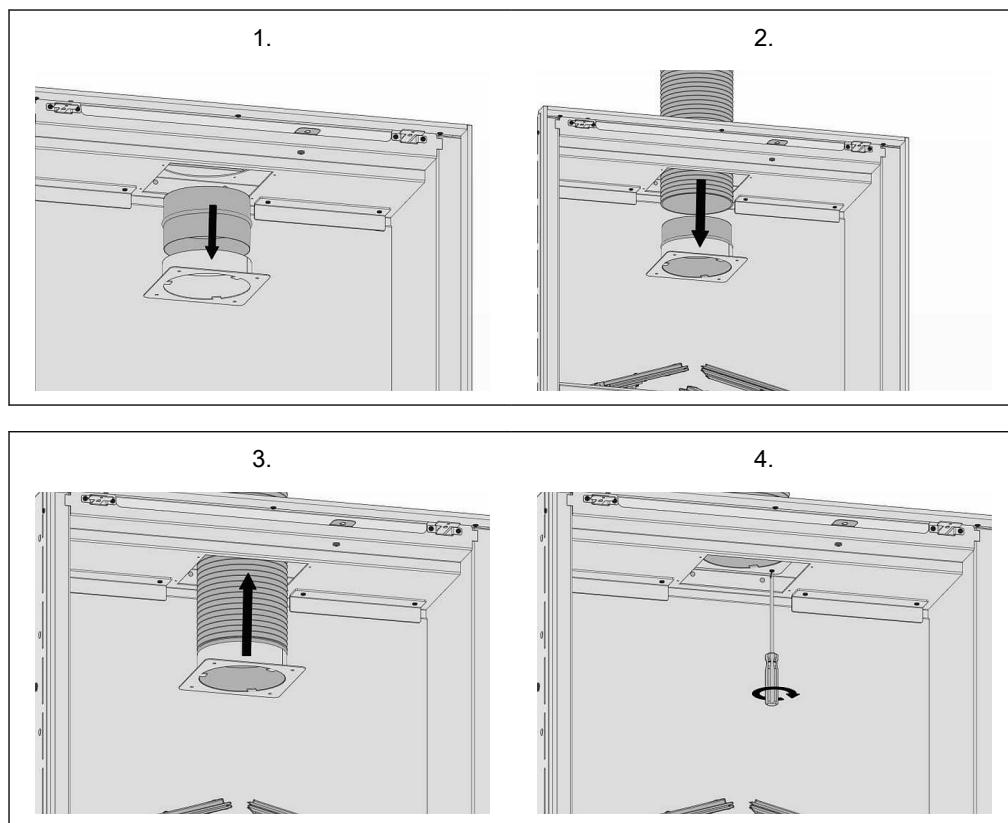
Disassemble the flue gas connection from inside the appliance by loosening the 4 mounting screws.

2. Disassembling the air supply connection.



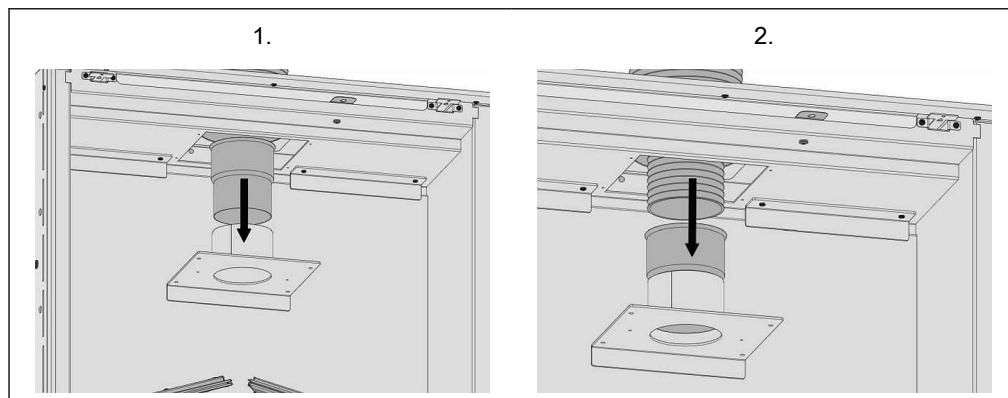
Disassemble the air supply connection from inside the appliance by loosening the 4 mounting screws.

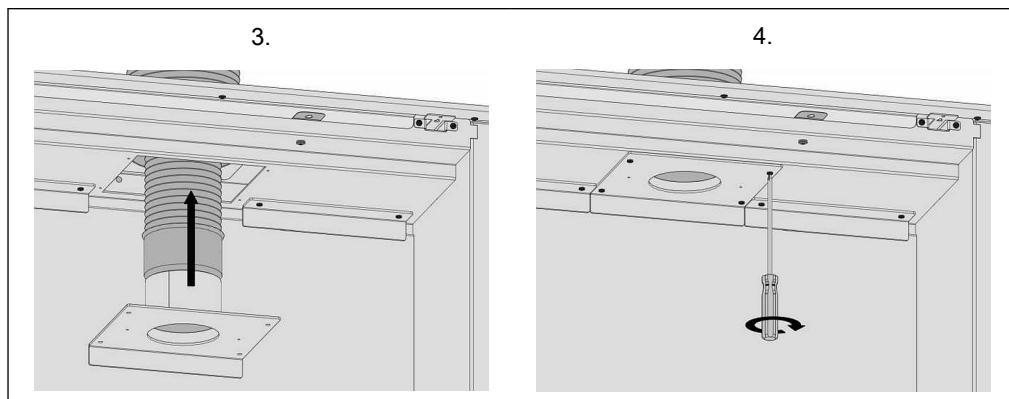
3. Assembling the air supply connection.



Put an Ø150 adapter (article no. 302279) on the air supply connection and insert the stainless steel flexible (Ø150 mm) air supply pipe. Reconnect the air supply connection to the appliance by tightening the 4 screws.

4. Assembling the flue gas connection.





Put an Ø100 adapter (article no. 302278) on the flue gas connection and insert the stainless steel flexible (Ø100 mm) flue pipe. Reconnect the flue gas connection to the appliance by tightening the 4 screws.

**Note:**

- Only use the stainless steel flexible liners specified in the preparation manual.
- Make sure that all connections are completely gastight.
- A stainless steel flexible (Ø 150mm) air supply pipe is not required over the entire length of the duct if the space between (the inside of) the existing (brick) chimney and the stainless steel flexible (Ø 100mm) flue gas pipe can be used for the air supply. Make sure that the air supply connections with the appliance, existing (brick) chimney and roof terminal are completely airtight.

4.2.8

Install the flue gas restriction plate

Safety conditions

Caution:

Install the correct restriction plate as specified in the preparation manual. An incorrect restriction plate can cause damage to the appliance.

Procedure

1. Remove the glass pane. See chapter [5.2.1](#) for instructions .
2. Install the restriction plate (A) with the fasteners (B) in the appliance. Use the restriction plate specified in the preparation manual.

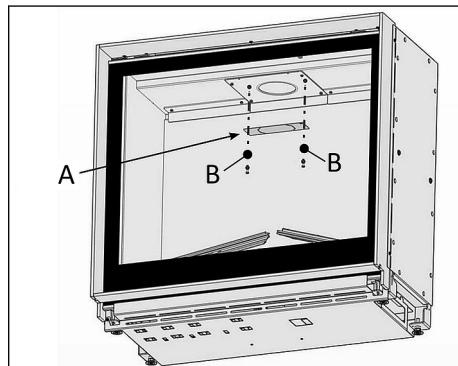


Figure 4. Restriction plate

4.2.9 Build the fireplace

Safety conditions

Caution:



- Remove the door (including glass). See [5.2.1](#).
- Remove the frame to prevent damage of the frame during work. See [5.2.3](#).
- Make sure that the gas piping remains free of cement or other building material. Otherwise, the gas piping can start to leak.
- 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.
- Do not use masking tape on the appliance. Masking tape can damage the finish of the appliance.
- Do not build the brickwork higher than the casing without the use of a mantel iron.

Note:



- Make sure that the thickness of any plastering is taken into account when the brickwork is being build.
- If you use other material than bricks, install the material in accordance with the instructions of the supplier of the material.

Procedure

1. Identify the positions where the inlet grates and the outlet grates must be put. See [2.3](#) and refer to the preparation manual.
2. Build the brickwork around the appliance up to the upper frame.
3. If applicable, install a mantel iron.
 - a) Put ceramic felt on the top of the mantel iron. Brickwork can be built on top of the ceramic felt.
4. Build the fireplace around the appliance.
5. Install the grates on the inlet openings and the outlet openings.
6. Install the frame on the appliance.

4.3 Prepare the appliance for use

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

4.3.1 Do a check on the operation of the lighting

- Make sure that the operation of the ambient lights function well. To operate the lights with the remote control, refer to the user manual.

4.3.2 Put the ceramic log set on the burner bed

Safety conditions

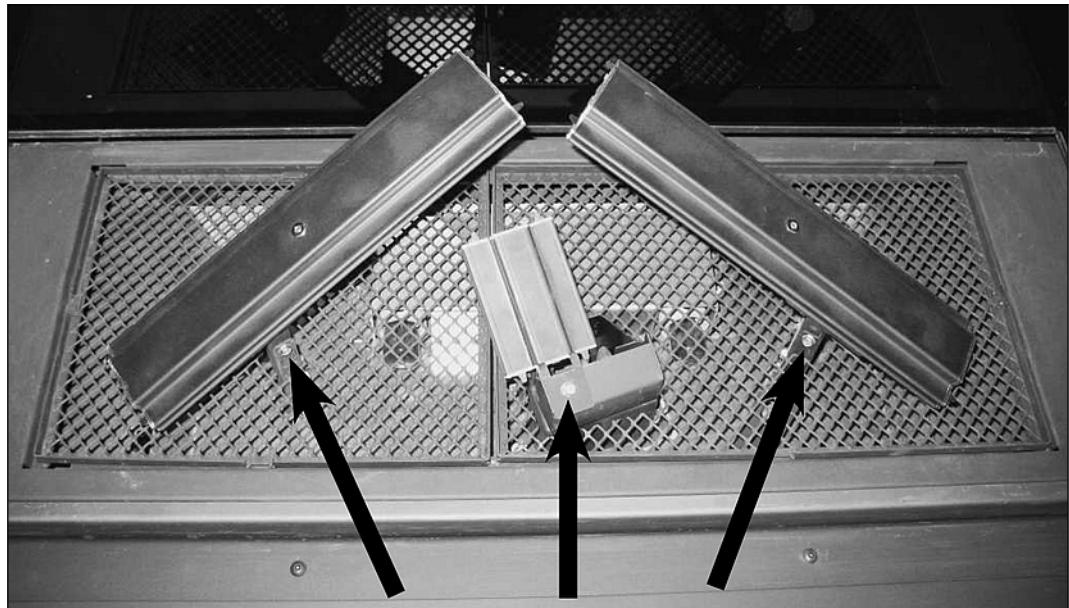
Warning:



- Put the items of the log set in the correct configuration according to this paragraph. If you put the items of the log set in another configuration, a dangerous situation can occur.
- Do not put anything against the pilot burner or in the protective pilot light cowl.
- Do not sprinkle decorative ash on the pilot light burner.
- Only use the items that are supplied.

Preparation

1. Make sure that all items of the log set are there. Refer to [2.6](#) for the numbers of the items.
2. Make sure that the operation of the ambient light is working properly with the remote control. Refer to [4.3.1](#).



3. Make sure that the three burner fixing bolts are present.

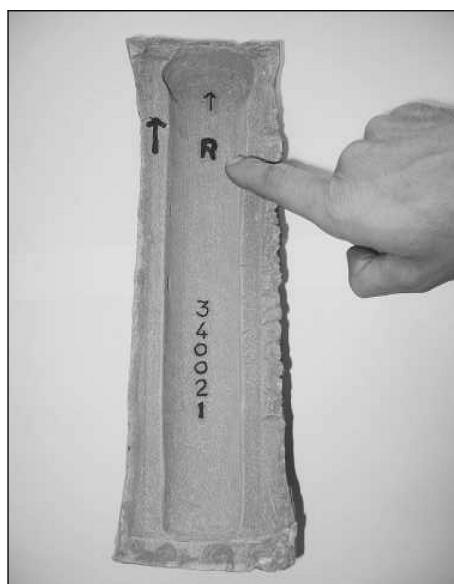
Setting up the burner bed

1. Put burner log No. 16 carefully on the burner - right.

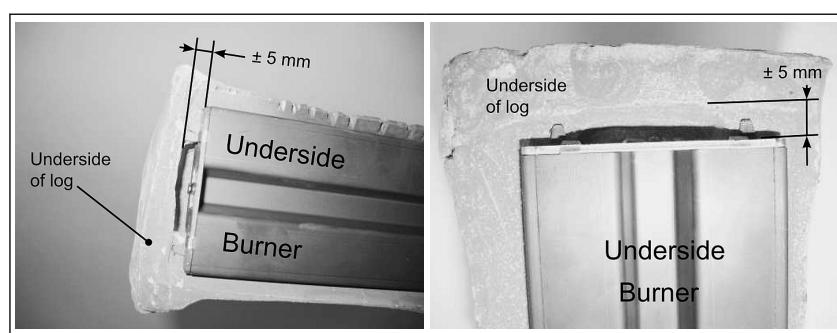


Note:

- Make sure that the "Arrow", on the underside of the log, is pointing up



- Make sure that the underside of the log has free space on both end faces of ± 5 mm with respect to the metal burner.

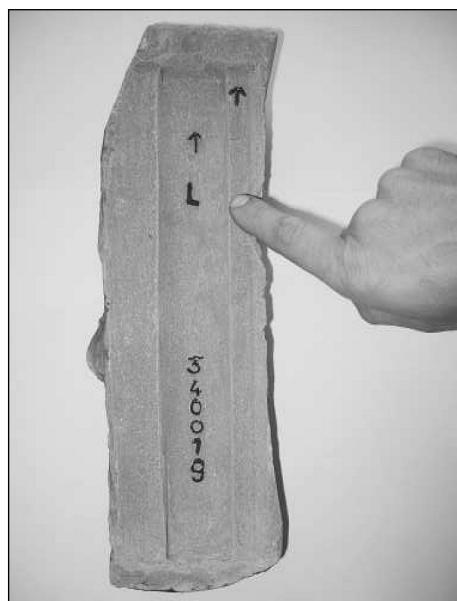


2. Put burner log No. 14 carefully on the burner - left.

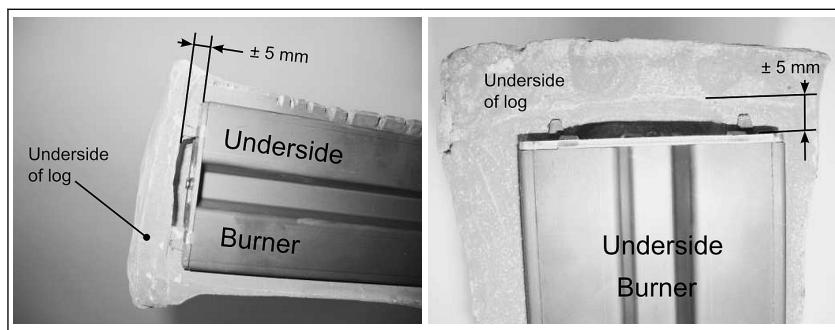


Note:

- Make sure that the "Arrow", on the underside of the log, is pointing up.



- Make sure that the underside of the log has free space on both end faces of ± 5 mm with respect to the metal burner.

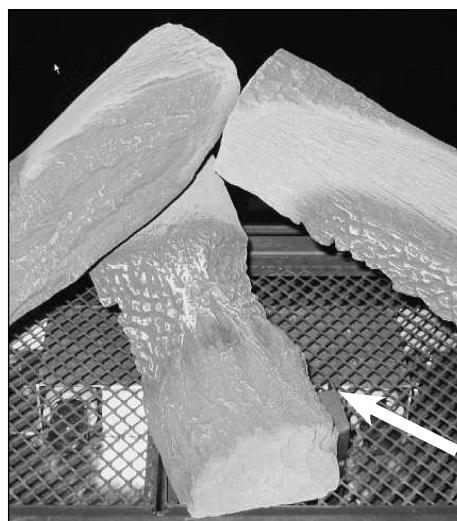


3. Put burner log No. 15 carefully on the burner - middle (with the pilot light).

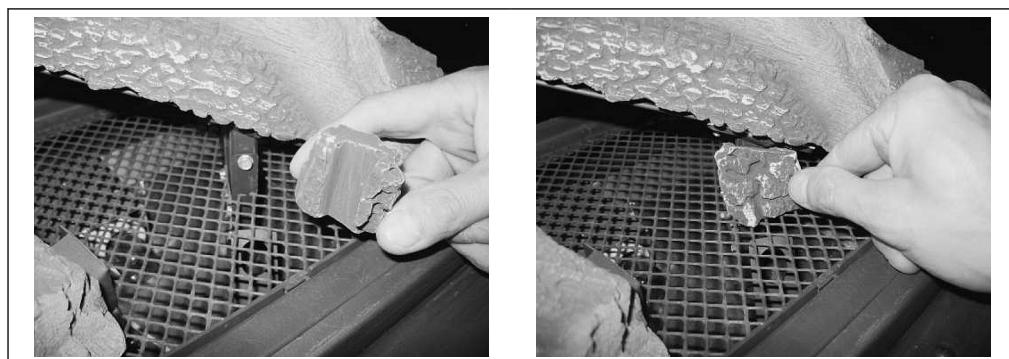


Note:

- Make sure that the pilot light remains visible.



4. Put the charcoal part No. 23 under the Right burner, around the venturi.



5. Put the charcoal part No. 24 under the Left burner, around the venturi.

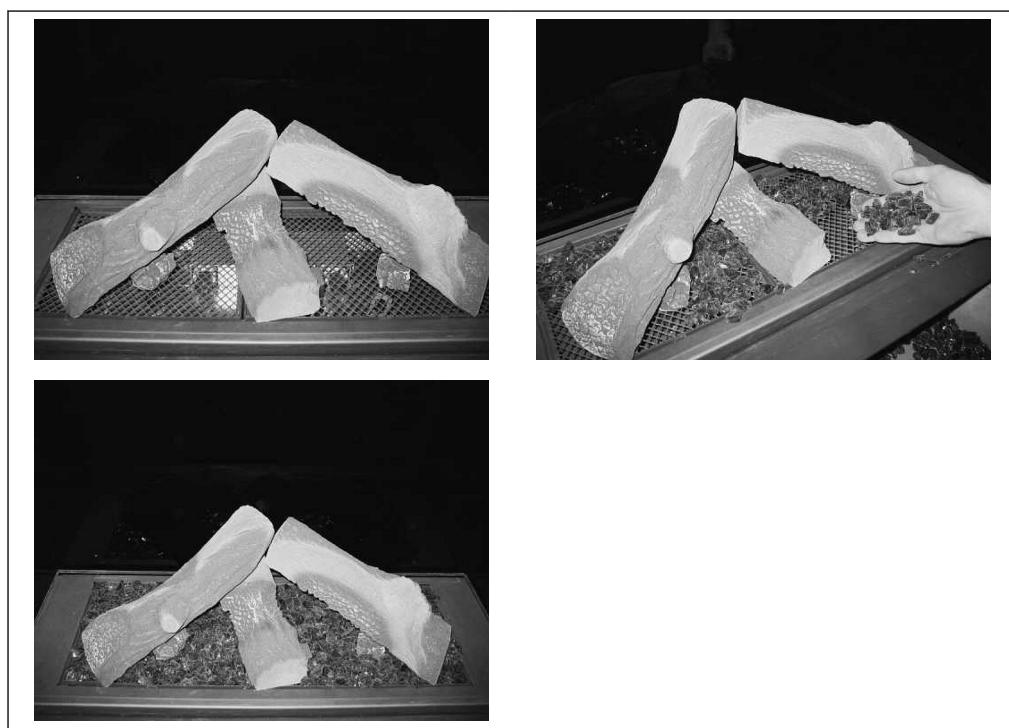


6. Sprinkle the 'Fire glass Dark Amber' evenly on the mesh grate, around the burners.



Note:

- Put no "fire glass" on or against the pilot light burner!
- Put no 'fire glass' under burner logs No. 14, 15 and 16, where these are supported by the mesh grate.



Note:

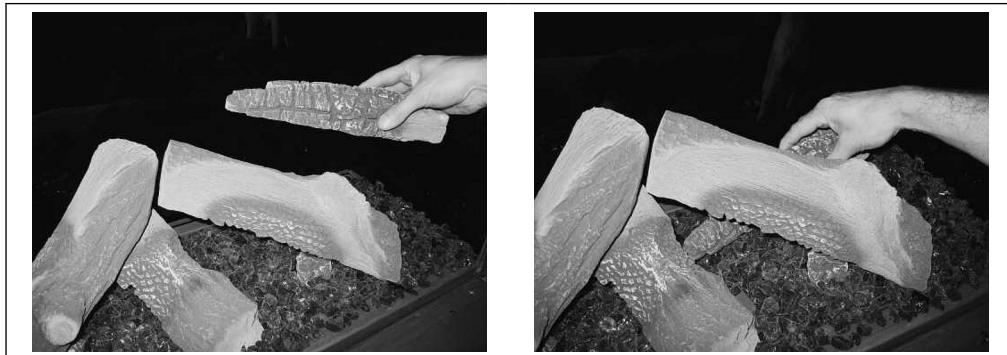
- Do not sprinkle "Fire glass Black" on the mesh grate, around the burners.

'Fire glass Black' blocks the light too much.

7. Sprinkle the 'Fire glass Black' evenly on the grate, left and right of the mesh grate.



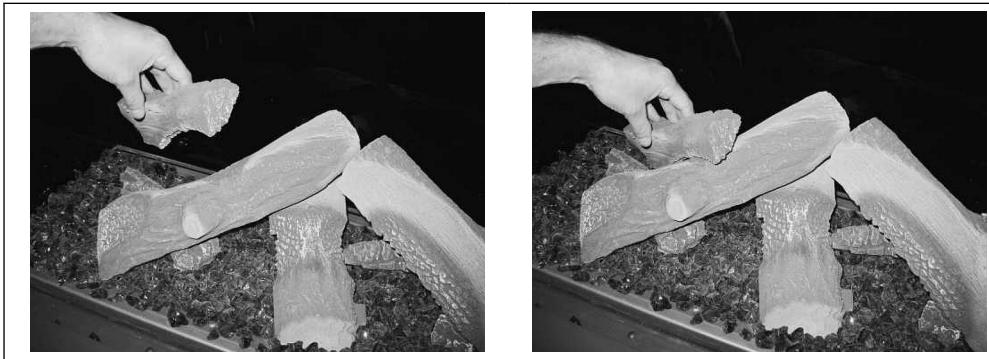
8. Set the light intensity of the ambient lighting/dimmer to maximum on the remote control. Refer to the User manual. Make sure that the "fire glass" is distributed evenly and that the light intensity is the same everywhere. Adjust the distribution of the "fire glass" if necessary.
9. Put log No. 18



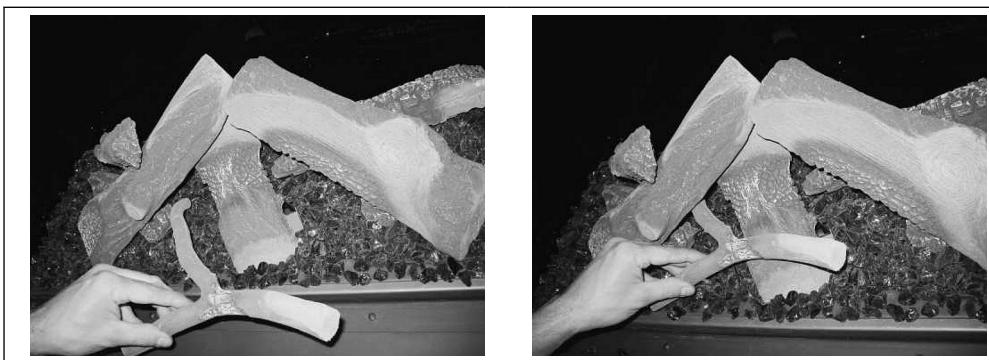
10. Put charcoal part No. 21



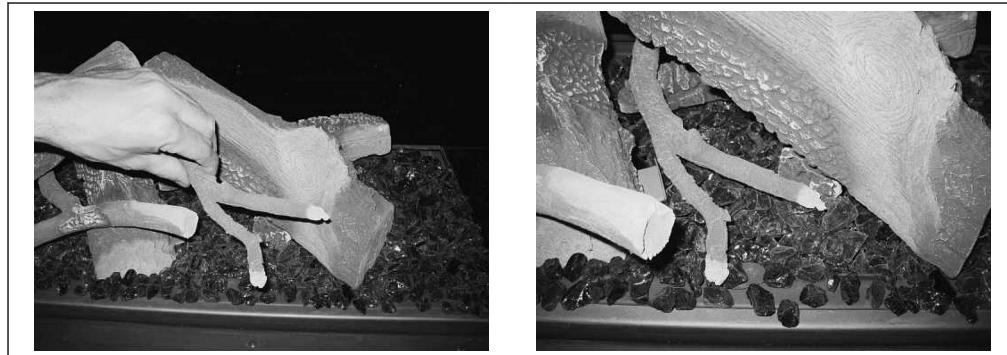
11. Put log No. 17



12. Put branch No. 19



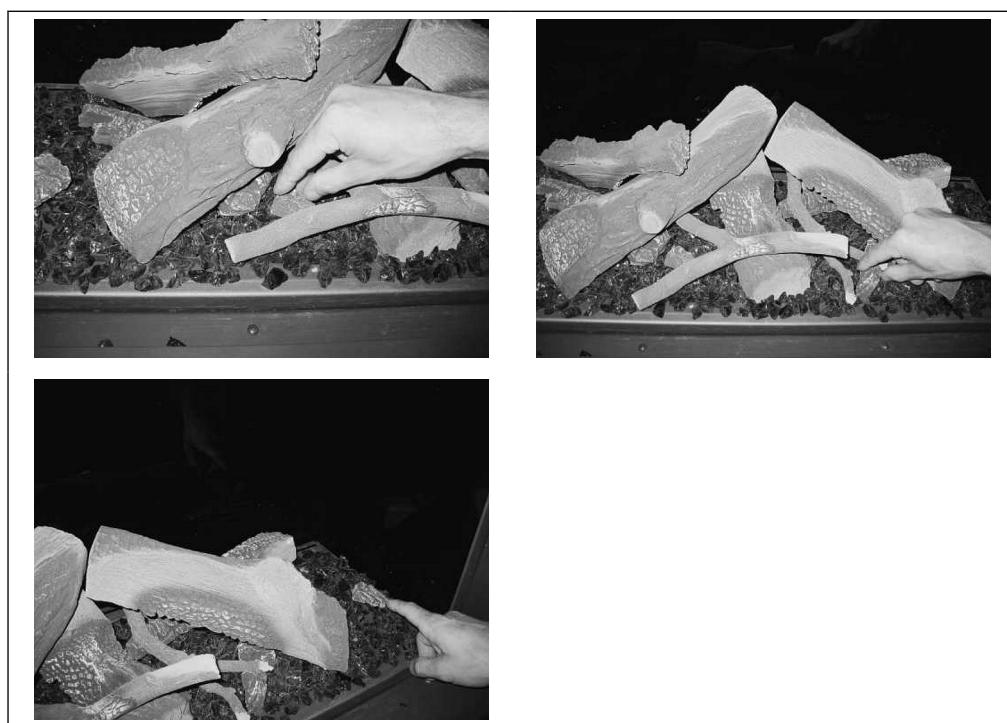
13. Put branch No. 20



14. Put charcoal part No. 22



15. Put 3x charcoal parts No. 25



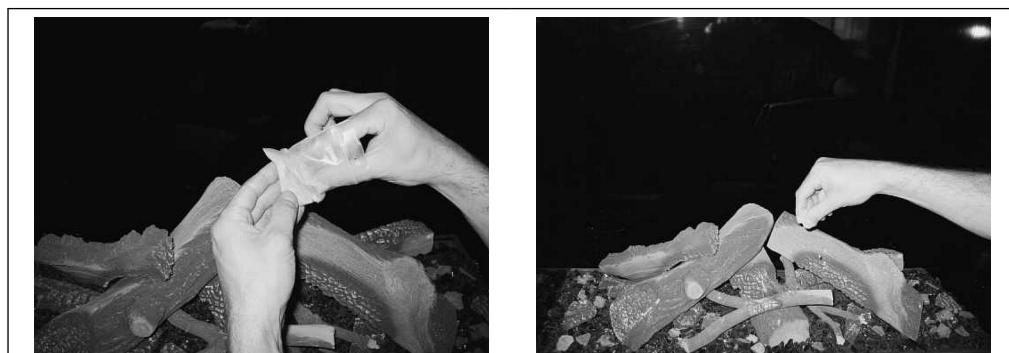
16. Break the embers supplied in half and distribute the parts along the Sprinkle the side on the grate (around the mesh grate).

**Note:**

- Do not put any embers on the mesh grate. Embers will block the light!
- Put no embers on or against the pilot light burner!



17. Decorative ash: Carefully distribute a small amount of decorative ash over the entire bottom.



18. Make sure that the pilot light burner is easily visible from the right hand side of the log set.



Pilot light position

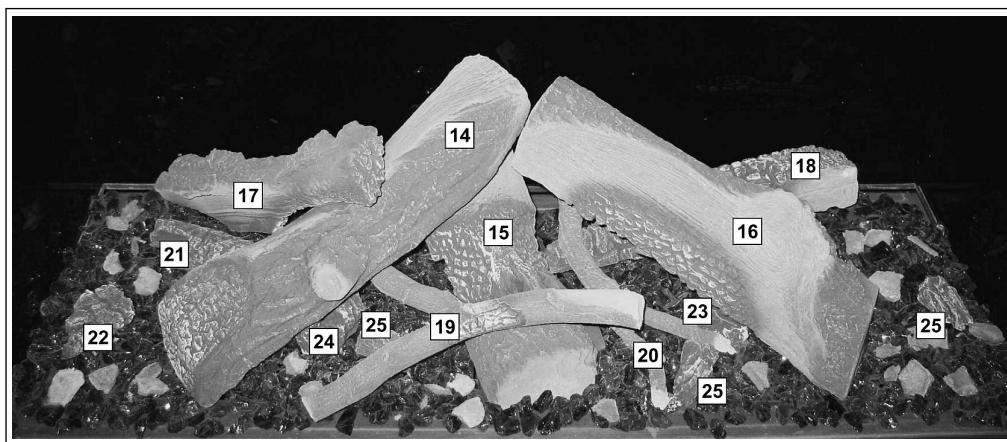


Pilot light



Pilot light

19. The ceramic log set construction, "fire glass", embers and decorative ash is completed.



Warning:

- Do not put any “fire glass” or embers in front of the pilot light burner.
- Do not sprinkle decorative ash on the pilot light burner.
- Keep the burner orifices free.
- Check that the pilot light burns properly.
- Make sure that the pilot light can burn freely over the burner.

Proper ignition of the main burner will only be guaranteed if this is the case!

When the ceramic logs, “fire glass” and embers have been placed, the glass door can be assembled on the appliance once more in accordance with the instructions. Refer to [5.2.2](#).

4.3.3 Do a final check on the fireplace

Safety conditions

Caution:

Wait 4 weeks after the installation before you use the fireplace. The cement needs to harden. A final check on the fireplace can be done directly after the installation.

Procedure

1. Start the appliance and do a check on the ignition of the pilot light and main burner. The ignition must be quiet and must produce a calm flame. To start the appliance, refer to the user manual.
2. Do a check on the main burner. The flames increase in height and change from blue/yellow to yellow.
3. If all flames are yellow, the appliance is ready for use.

5 Maintenance

5.1 Annual maintenance

- Do all procedures in this section minimum every year.

Caution:



- Use only original parts. Individual parts for replacement or accessories are available from your Barbas dealer.
- Introduced modifications to the appliance are not permitted.

5.1.1 Clean the appliance

Safety conditions

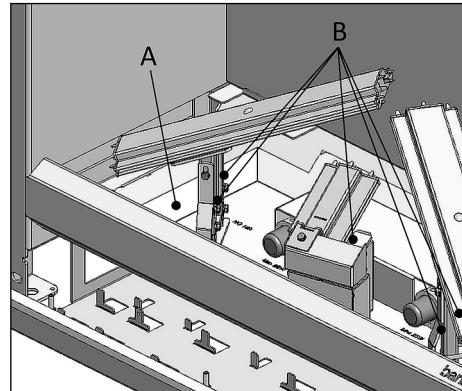
Caution:



- Turn off the gas supply to the appliance before cleaning.
- Turn off the power supply to the appliance before cleaning.

Procedure

1. Remove the glass. Refer to [5.2.1](#).
2. Remove the content from the burner bed.
3. Clean the removed content carefully with a soft brush.
4. Clean the inside of the appliance, including the main burner, the pilot light burner and the flue system.
5. Remove the grate.
6. Clean the combustion air intake
 - a) Clean the combustion air intake (A) at the bottom sides of the appliance.
 - b) Clean the primary combustion air inlet openings (B) of the main burner (front and rear).
7. Clean the ambient light bulbs. Refer to [5.2.6](#).
8. Clean the convection air route.
9. If the convection fan is installed in the appliance, clean the convection fan carefully. Use a soft brush.
10. Do a check for damage on the inside of the appliance, including these parts:
 - a) Main burner.
 - b) Pilot burner.
 - c) Combustion air intake.
 - d) Flue system. Use a flashlight if necessary.
11. Clean the glass. Refer to [5.2.5](#).
12. If the black mirror rear wall is installed in the appliance, clean the black mirror. Use glass spray or ceramic hob cleaner.
13. Prepare the appliance for use. Refer to [4.3](#).



5.1.2

Do a check on the appliance

1. Do a check for leaks on the gas pipes and the gas pipe connections. Refer to [4.2.4](#).
2. Make sure that the pilot light operates correctly. The pilot light must not show any anomalies.
3. Make sure that the main burner operates correctly. The fire must not show any anomalies.
4. Do a check of the gas supply pressure and the burner pressure.
 - a) Use the inlet pressure tap and outlet pressure tap on the gas regulator block to measure the supply pressure and the burner pressure.
 - b) Measure the pressure when the appliance is off and when the appliance burns on maximum. Refer to [7](#) for the required supply pressure and burner pressure.
5. Make sure that the ambient lighting operates correctly. Refer to the user manual.
6. If the convection fan is installed in the appliance, make sure it works correctly. Refer to the user manual.
7. Do a check on the concentric flue system and the outlet construction. Make sure that all the connections of the concentric flue system are secure.

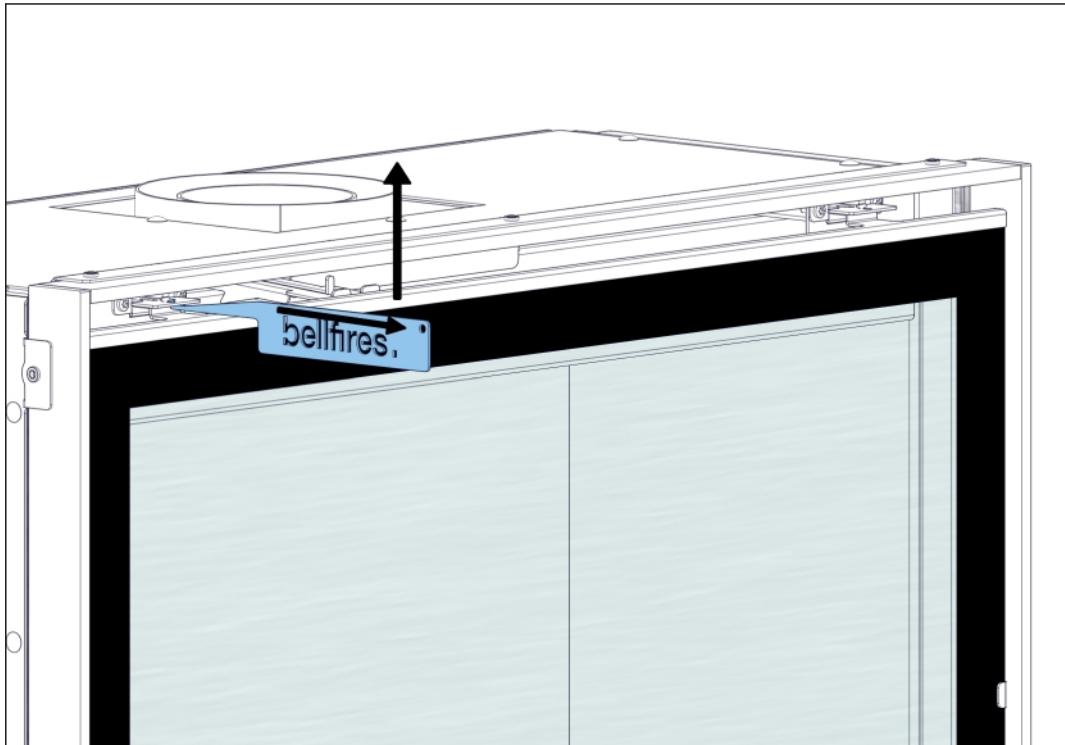
5.2

Maintenance procedures

5.2.1

Remove the door (including glass)

1. Turn off the gas supply to the appliance before removing the door.



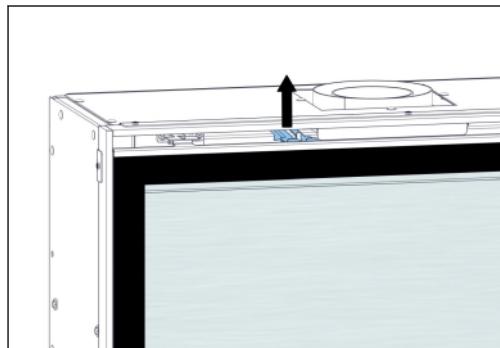
2. With the hook, pull the thin, metal spring strips on the top left and right from the studs on the door.

3. Dismantle the safety strip from the door.

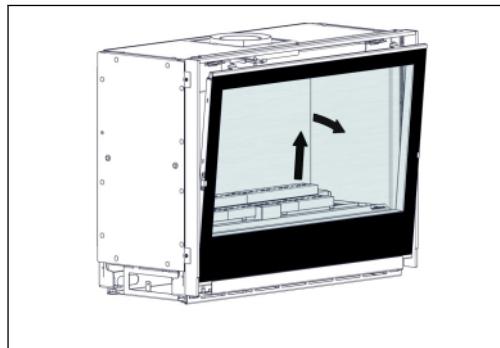


Caution:

When loosening the door and after it has been loosened, support it with your hand to prevent it falling forward !



4. Carefully tilt the door and the glass forwards at the top. Prevent damage by laying paperboard on the chimney breast, under the door. Pull the door upwards and remove it from the appliance.



5.2.2

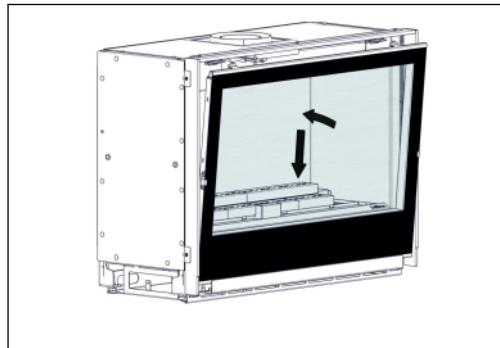
Install the door (including glass)



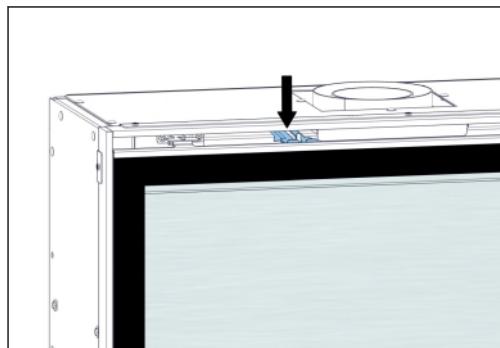
Caution:

Make sure that the door with the glass pane fits properly in the appliance and seals the inside of the appliance. If the door does not fit properly there is a risk of flue gas leakage.

1. Install the door (including glass) in the reverse order of the procedure 'Remove the door (including glass)'
2. Push the safety strip first fully back into the appliance, by lifting the strip a little.
3. Place the door and glass, and tilt it backwards.



4. Attach the safety strip on the door.

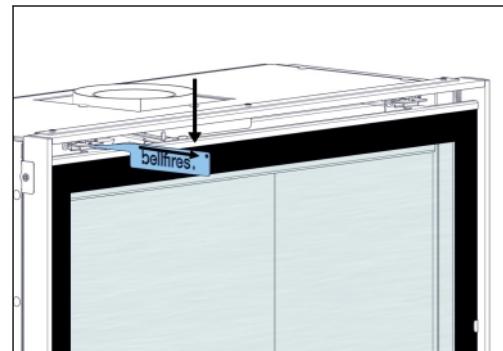


- With the hook, pull the thin, metal spring strips on the top left and right on the studs of the door.

Caution:

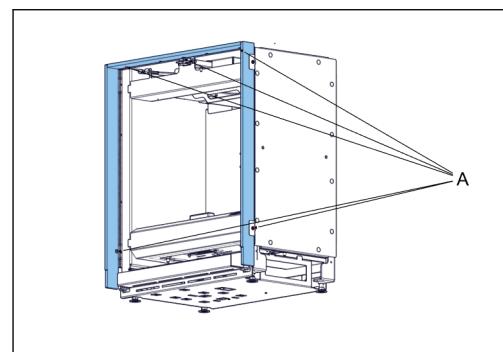


- Make sure whether the door is properly positioned underneath in the 2 holes of the front.
- Make sure whether the door is placed in the middle of the front.
- The door must fit tightly all round to the edge of the combustion chamber.
- Make sure that the spring strips, on the top, remain in their proper place.

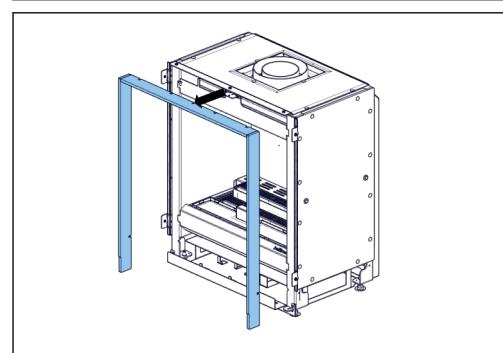


5.2.3 Remove the frame

- First remove the door (including glass). Refer to [5.2.1](#).
- Loosen the 3 hexagonal bolts on the inside of the top frame and the 2 Hexagonal bolts at the bottom left and bottom right (A) respectively a couple of turns.



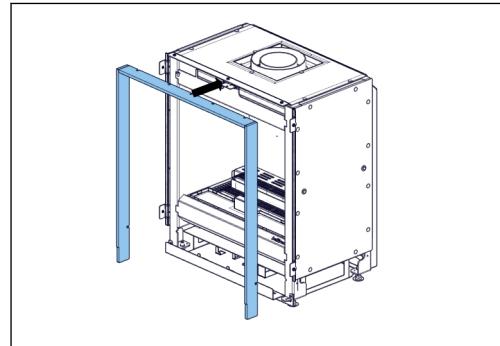
- Remove the frame.



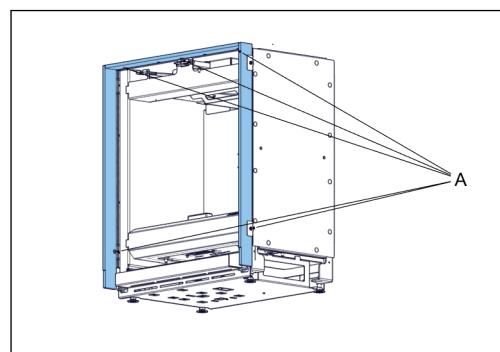
5.2.4

Install the frame

1. Push the frame on the appliance.
2. Tighten the 3 hexagonal bolts on the inside of the top frame and the 2 Hexagonal bolts at the bottom left and bottom right (A) respectively.



3. Make sure that the frame connects well to the wall.



5.2.5

Clean the glass

1. Clean the glass with a soft cloth, a sponge or paper. Use glass cleaner or ceramic hob cleaner.
2. Make sure that the glass is dry. Water droplets can leave a mark on the glass.

5.2.6

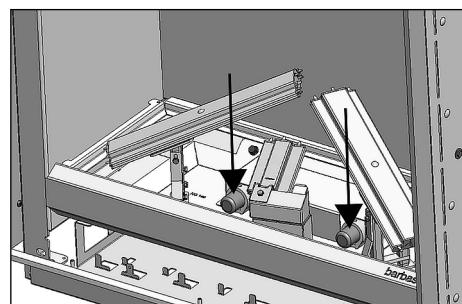
Replace the ambient light bulb when broken

1. Turn off the power supply to the appliance.
2. Remove the content from the burner bed.
3. Remove the grate.
4. Carefully unscrew the broken light bulb from the ceramic fitting.
5. Carefully turn the new light bulb in the ceramic fittings.

Caution:



- Turn the ambient light bulbs completely into the ceramic fitting!
- Use only the Barbas ambient light bulb.



6. Prepare the appliance for use. Refer to [4.3](#).
7. Turn on the power supply to the appliance.
8. Make sure that the ambient lighting operates correctly. Refer to [4.3.1](#).

6 Troubleshooting

Problem	possible cause	solution
The main fire stops to burn	The concentric flue system is not installed according to the specified instructions.	Install the concentric flue system correctly. Refer to the preparation manual.
	An incorrect flue gas restriction plate is fitted.	Install the correct gas restriction plate. Refer to 4.2.8 .
	Insufficient pressure of the gas supply.	Contact your gas supplier company
	The concentric system has a leak. The leak is possibly on the inside of the concentric flue.	Check the concentric flue system. Refer to the preparation manual for correct installation.
	There is no power supply (230 VAC).	Repair the power supply.
The appliance does not react on the remote control	The batteries of the remote control are empty.	Replace the batteries. Refer to the user manual.
The pilot burner stops to burn	There is insufficient exhaust of the flue gases.	Check the concentric flue system. Refer to the preparation manual for correct installation.
	The pilot burner is dirty.	Clean the pilot burner
	The pilot burner is defective.	Replace the pilot burner
	The thermocouple is defective	Replace the thermocouple
The light does not operate	The light bulb is defective	Replace the light bulb
The fan (option) does not operate	The fan is defective	Replace the fan
A loud noise occurs in the appliance	The overpressure door is activated.	Do a check on the appliance for problems.
The lacquer of the appliance is damaged		Use an aerosol can with heat resistant lacquer to repair any damage in the laquer.

7 Technical specification

7.1 Gas Fire Smart 90-70 PF (Premium Fire) - GB, IE, ES, IT

	Natural gas
Name	Barbas
Model	Gas Fire Smart 90-70 PF
Country	GB, IE, ES, IT
Product Identification Number (PIN)	0063 DL 3986
Indirect heating functionality	No
Type of appliance under CE-norm	C ₁₁ / C ₃₁ / C ₉₁
Category of appliance	I _{2H} natural gas G20
Energy efficiency class	B
Energy efficiency index (EEI)	82
Nominal heat input (Gross calorific value)	10.5 kW
Nominal heat output	8.0 kW
Minimum heat output (indicative)	4.0 kW
Useful efficiency (Net Calorific Value (NCV)) at nominal heat output	85.0 %
Useful efficiency (Net Calorific Value (NCV)) at minimum heat output (indicative)	80.0 %
NO _x (max.) (Gross Calorific Value (GCV))	<120 mg/kWh _{input}
NO _x class	4
Gas rate (max.)	0.99 m ³ /s/hr.
Supply pressure	20.0 mbar
Burner pressure (max.) Hot	11.1 mbar (*)
Burner pressure (max.) Cold	10.5 mbar (**)
Burner pressure (min.)	4.0 mbar (***)
Primary air inlet - Main burner Left • Left-Rear (LR) • Left-Front (LF)	LR: Ø6.5 mm LF: Ø4.5 mm
Primary air inlet - Main burner Middle • Middle-Front (MF)	MF: Ø7.0 mm
Primary air inlet - Main burner Right • Right-Rear (RR) • Right-Front (RF)	RR: Ø6.5 mm RF: Ø4.5 mm
Gas regulator block (remote control)	Maxitrol GV 60
Main burner	Premium Fire 600x240mm
Injector - Main burner Left • Left-Rear (LR) • Left-Front (LF)	LR: no 140 (= 1x Ø1.40 mm) LF: no 125 (= 1x Ø1.25 mm)

	Natural gas
Injector - Main burner Middle	
• Middle-Front (MF)	MF: no 130 (= 1x Ø1.30 mm)
Injector - Main burner Right	
• Right-Rear (RR)	RR: no 140 (= 1x Ø1.40 mm)
• Right-Front (RF)	RF: no 130 (= 1x Ø1.30 mm)
• "Front main burner" = LF + MF + RF	
• "Rear main burner" = LR + RR	
Pilot light burner	SIT 0.145.019
Pilot light burner injector	no 36 (SIT 0.977.091)
Gas connection	1/2" G / Ø15 mm
Concentric flue system connection	Ø100 mm - Ø150 mm
Batteries remote control receiver	None
batteries remote control hand transmitter	2x 1.5V AAA
Electrical connection	230 VAC / 50 Hz
Auxiliary electricity consumption at nominal heat output	0.05 kW / 0.09 kW incl. fan
Auxiliary electricity consumption at minimum heat output	0 kW
Auxiliary electricity consumption in standby mode	0 kW
Weight:	Basic appliance: 93 kg With all options: 98 kg
The specific precautions that shall be taken when the local space heater is assembled, installed or maintained, are listed in the attached documents:	<ul style="list-style-type: none"> Preparation manual Installation and maintenance manual User manual Assembly instructions for concentric flue system

(*) Both burners at maximum. Appliance is on temperature.

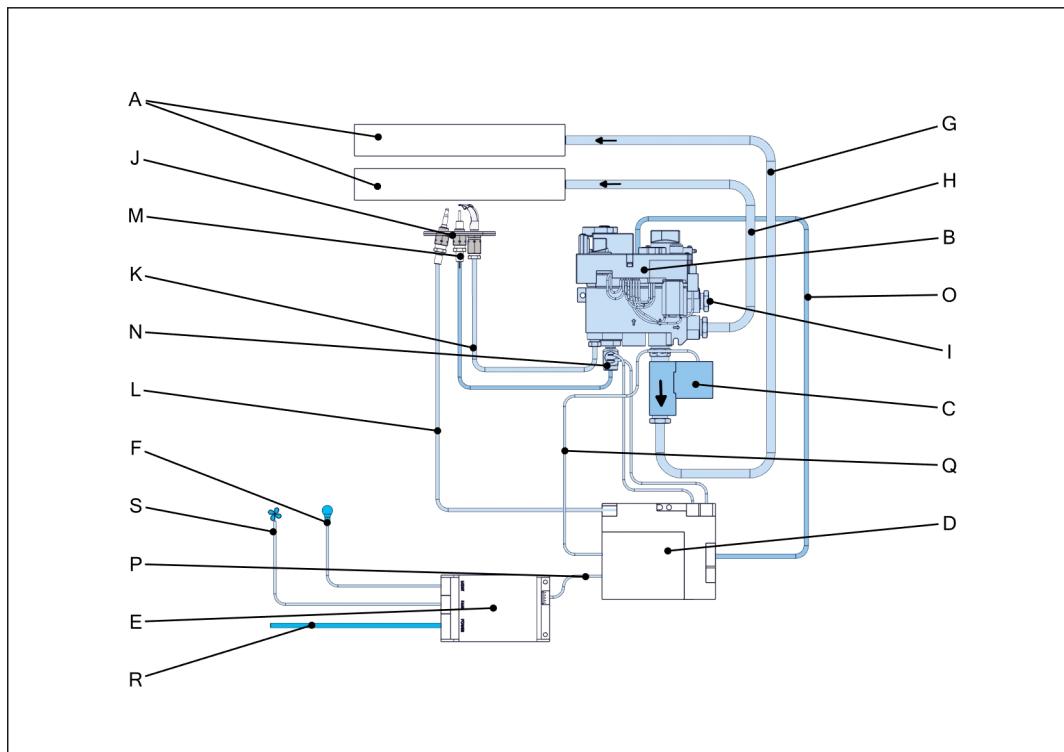
(**) Both burners at maximum. Appliance is cold.

(***) Both burners at minimum.

The heat exchanging surface is the entire front of the appliance.

Type of room temperature control : electronic room temperature control plus week timer.

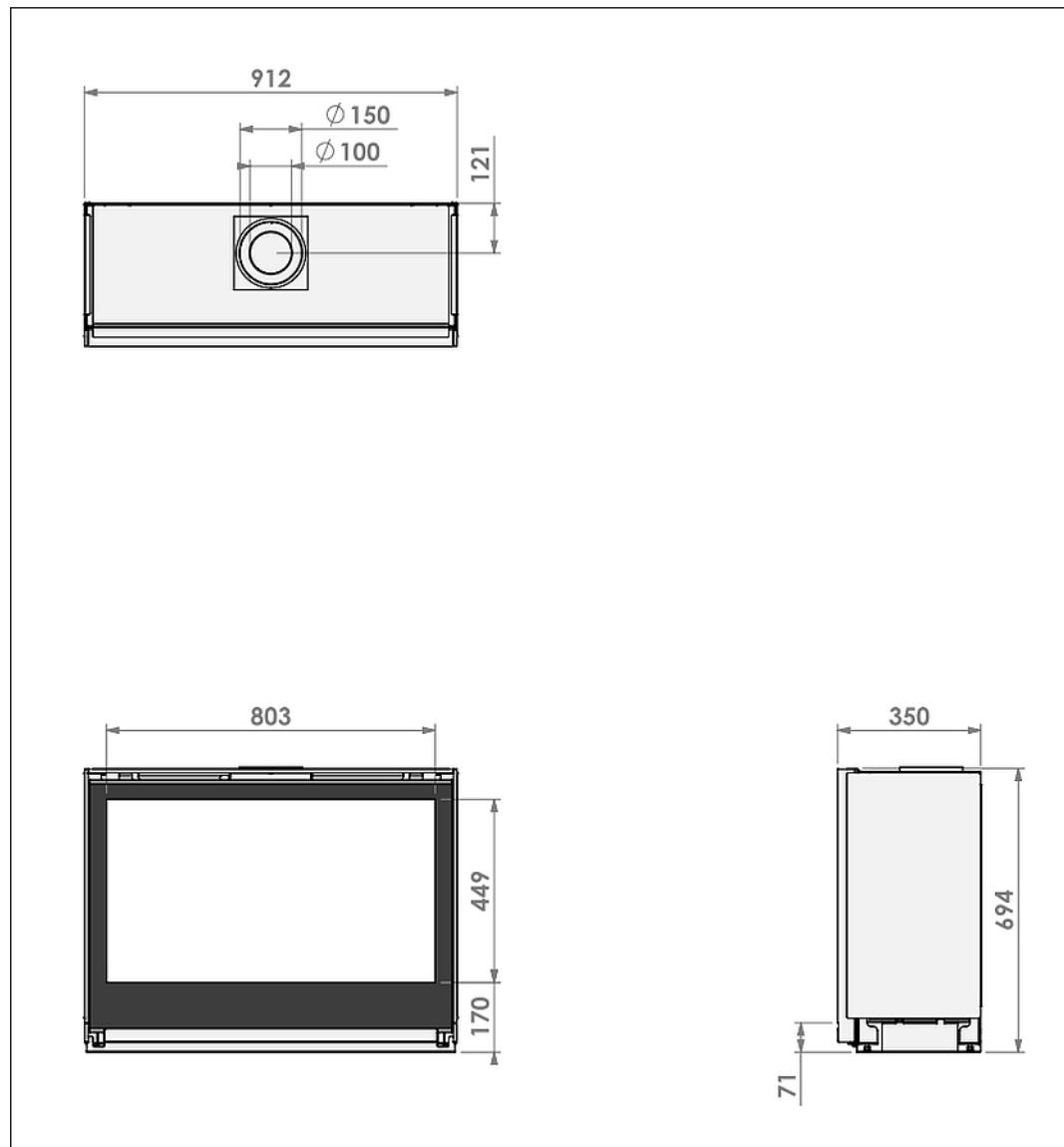
7.2 Diagram electricity and gas



Item
A Main burners
B Gas regulator block
C Gas valve of the rear burner
D Receiver
E Fan/Light module
F Ambient lighting
G Gas pipe rear burner
H Gas pipe front burner
I Gas supply connection
J Pilot light burner
K Pilot light pipe
L Piezo cable
M Thermocouple
N Thermocouple interrupter
O 8 wire cable
P 5 wire cable
Q 2 wire cable
R Connecting cable 230VAC with earthed plug
S Convection fan (option)

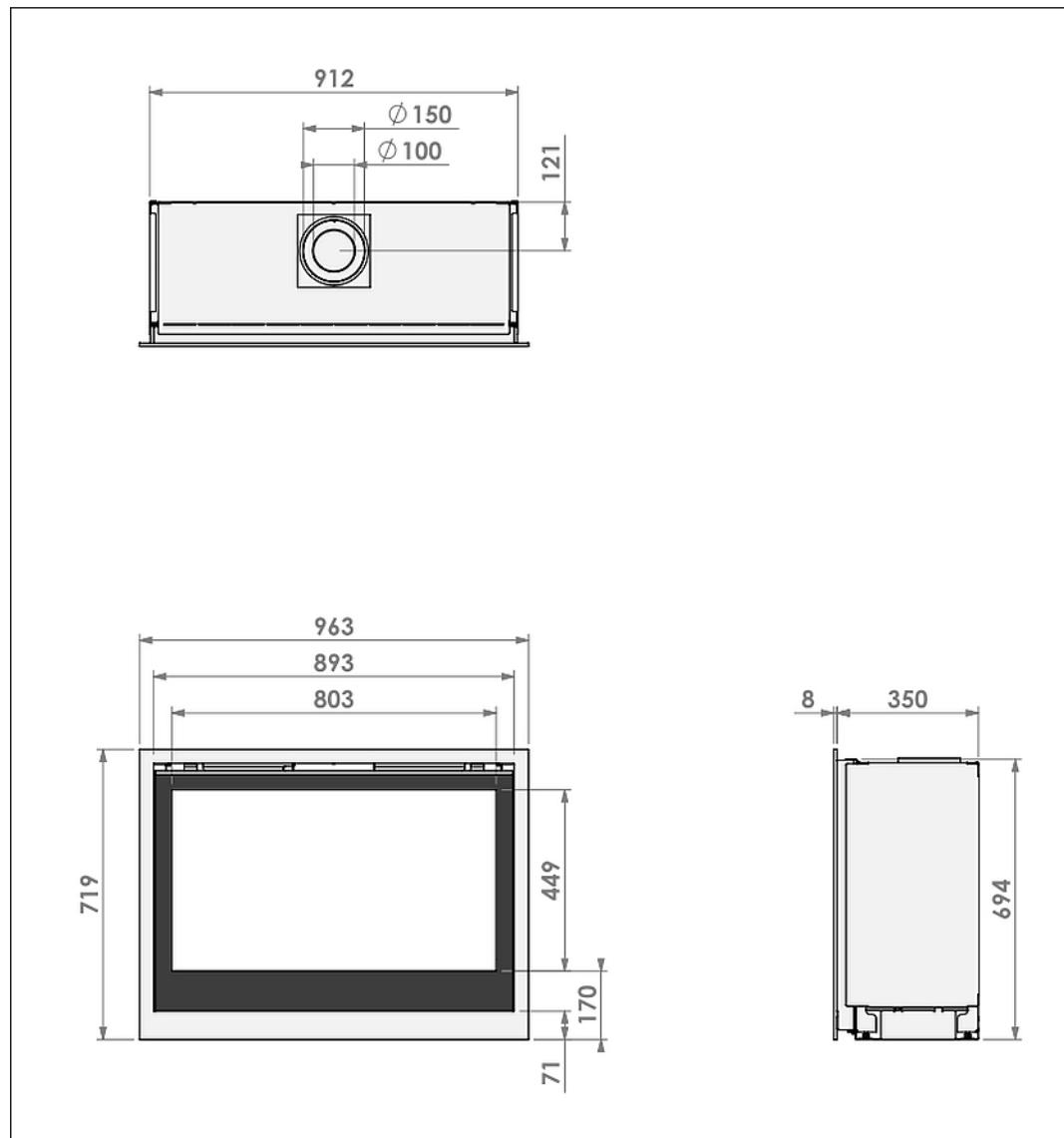
7.3

Dimensions Gas Fire Smart 90-70 with a Built-in frame



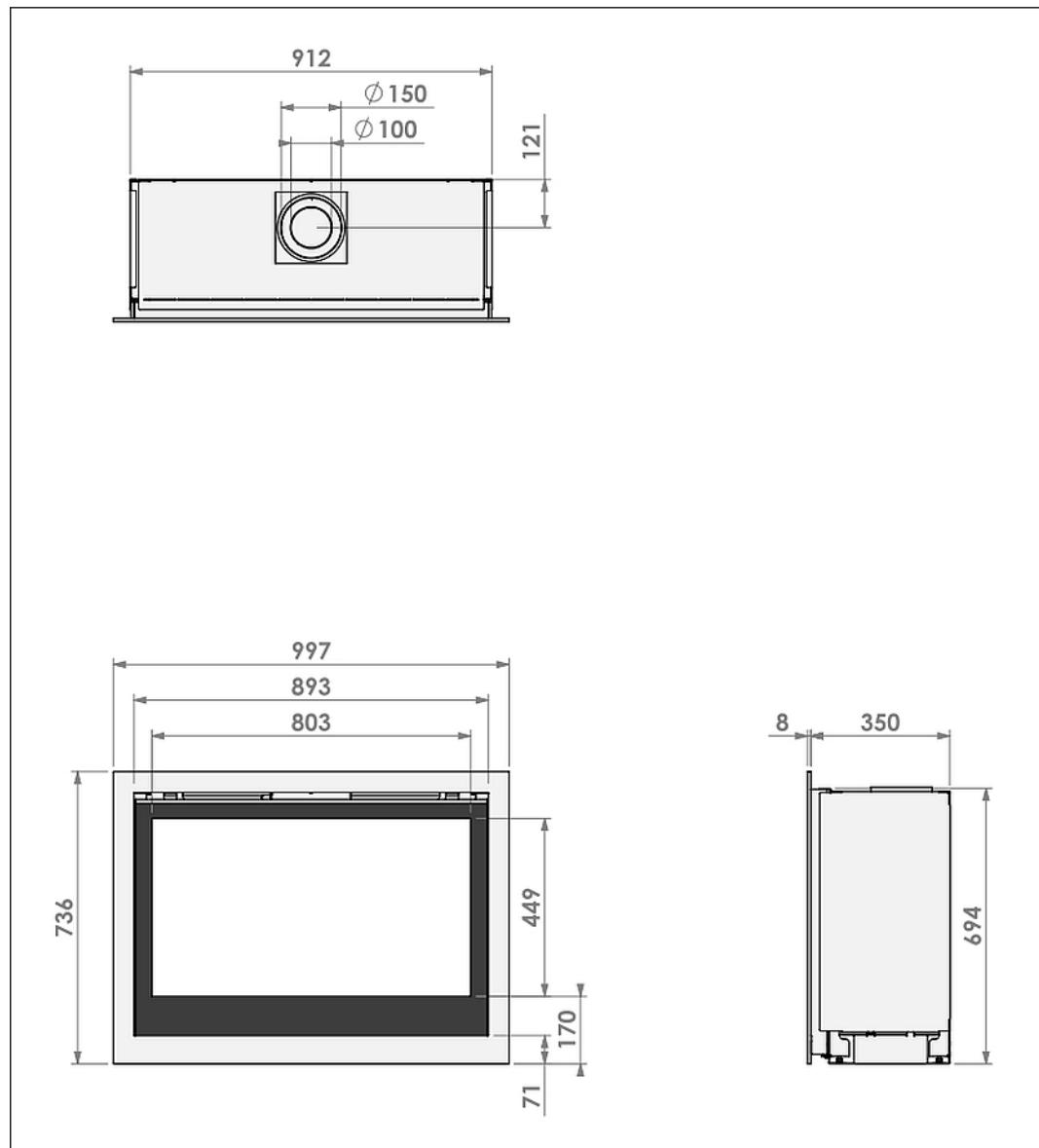
7.4

Dimensions Gas Fire Smart 90-70 with a Classic frame 35 mm



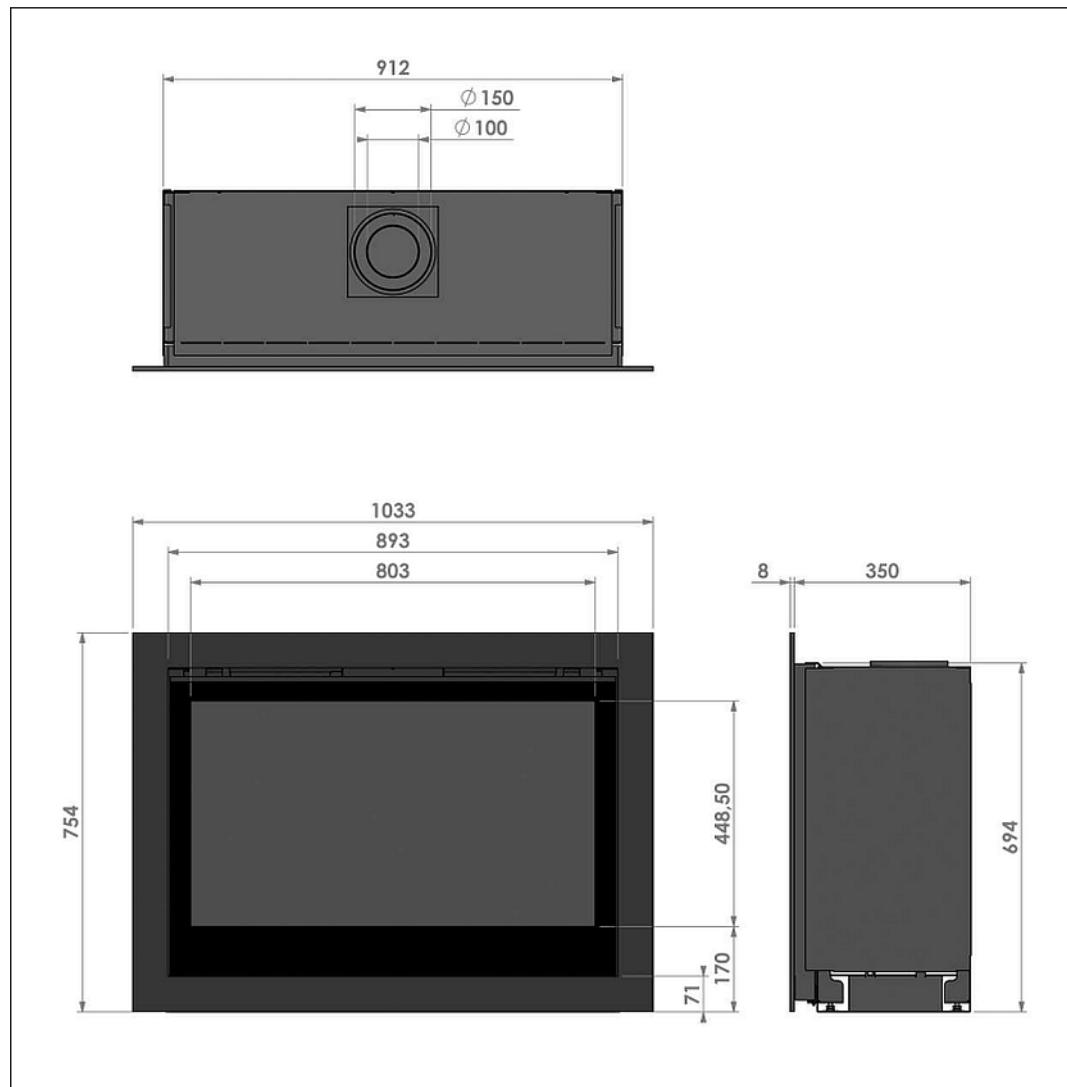
7.5

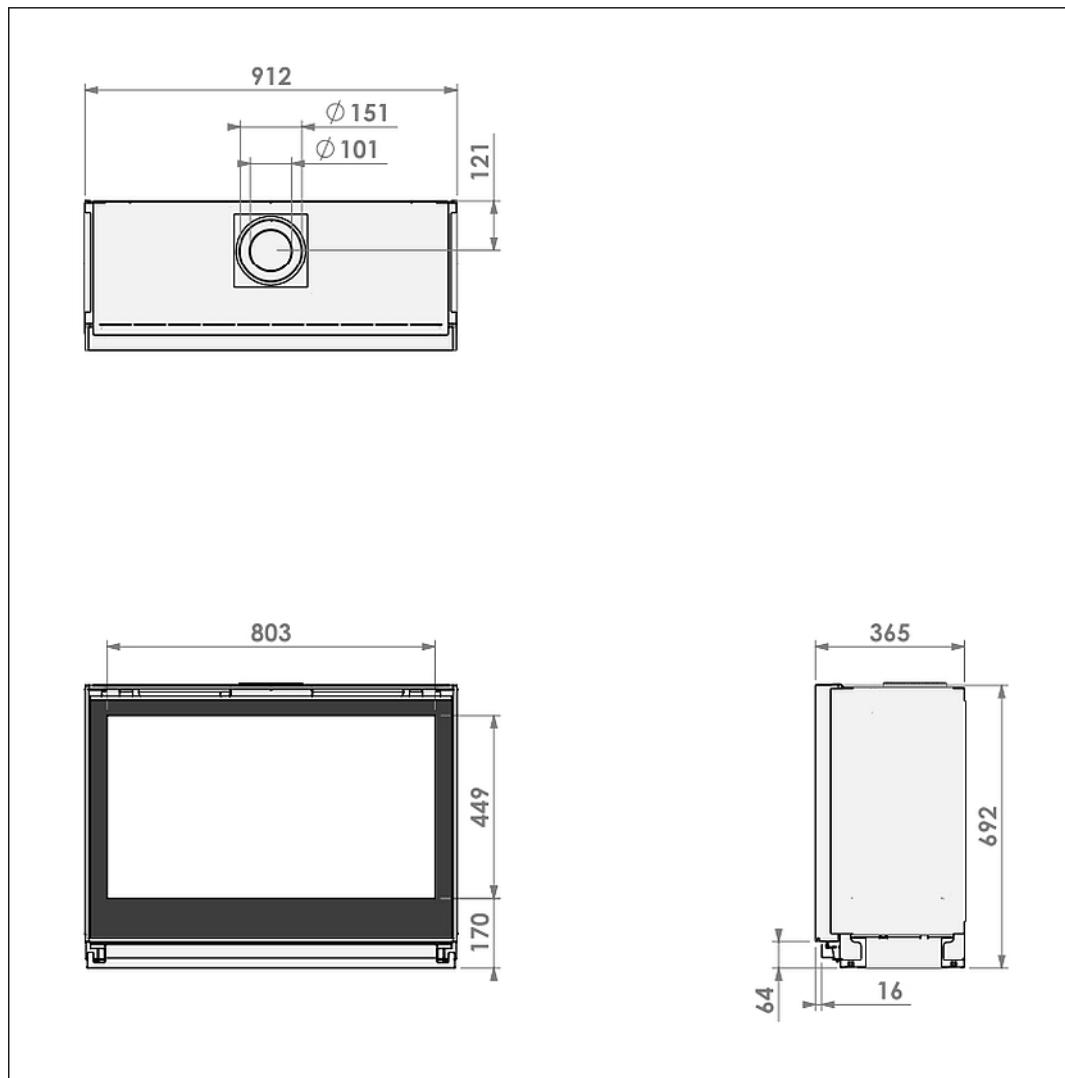
Dimensions Gas Fire Smart 90-70 with a Classic frame 52 mm



7.6

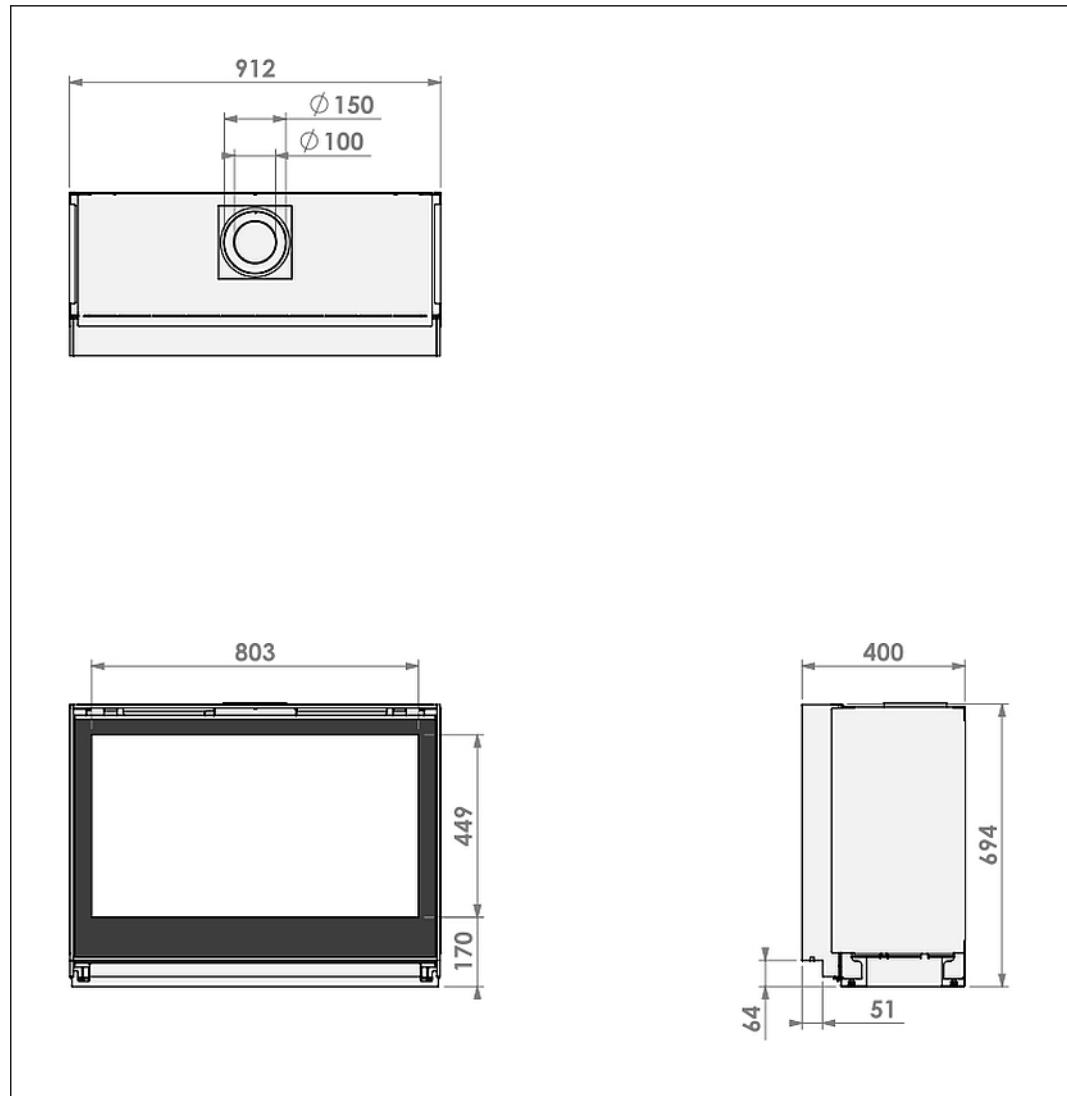
Dimensions Gas Fire Smart 90-70 with a Classic frame 70 mm

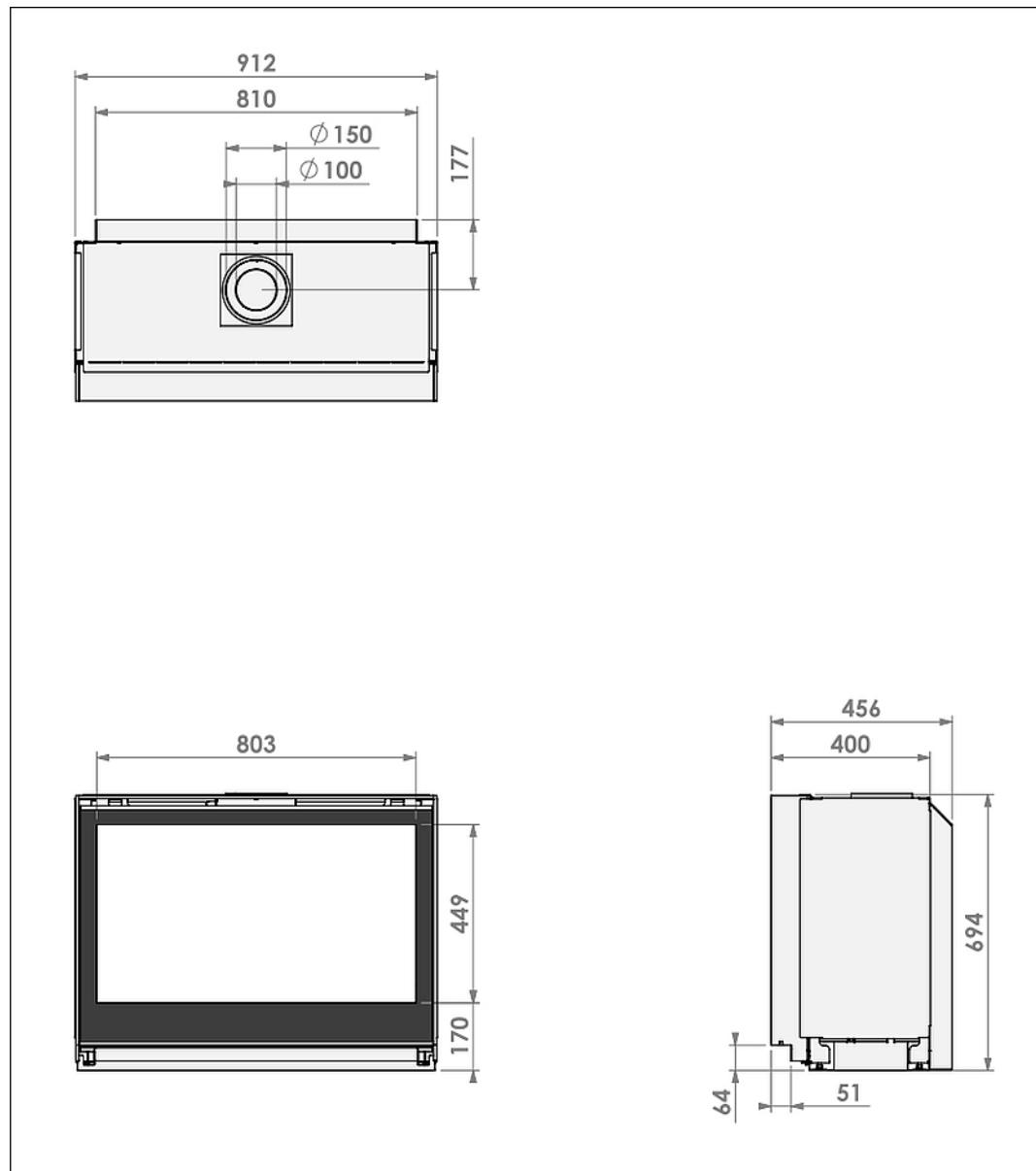


7.7**Dimensions Gas Fire Smart 90-70 with an Insert frame 15 mm**

7.8

Dimensions Gas Fire Smart 90-70 with an Insert frame 50 mm



7.9**Dimensions Gas Fire Smart 90-70 with an Insert frame 50 mm and Convection fan****7.10****Dimensions of the restriction plate**

Width of the delivered flue restriction plates in mm
Concentric flue connection Ø100 - Ø150
Roof-mounted outlet
30
40
50
65

8 Warranty Terms

To make a claim under the warranty, it is important to register the Barbas appliance after purchase via www.barbasbellfires.com.

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 enclosed documents.
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 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 been 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 two years.
4. For user parts such as glass, glass sealing 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 it 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 175531 AB Bladel

The Netherlands

Tel: +31-497339200

Email: info@Barbas.com

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

9

EU-Declaration of Conformity

barbas bellfires .

EU-Declaration of Conformity

We

Manufacturer Barbas Bellfires
Address Hallenstraat 17
5531 AB Bladel; The Netherlands
Phone +31 497 339 200
Email info@barbasbellfires.com

declare that this declaration of conformity is issued under our sole responsibility and belongs to the product below:

Product: Independent gas-fired convection heater
Type: C₁₁/C₁₂*/C₃₁/C₃₂*/C₅₁/C₅₂*
Product name: Barbas

** Only in combination with "Barbas Opti-Vent" system.*

Description of the product:

Gas Fire Panorama 70-55 PF2	Gas Fire Panorama 90-55 PF2	Gas Fire Panorama 110-55 PF2
Gas Fire Panorama 70-70 PF2	Gas Fire Panorama 90-70 PF2	Gas Fire Panorama 110-70 PF2
Gas Fire Panorama 80-50 PF2	Gas Fire Panorama 100-50 PF2	Gas Fire Panorama 120-50 PF2
Gas Fire Panorama 110-40 MF	Gas Fire Panorama 140-40 MF	
Gas Fire Front 70-60 PF2	Gas Fire Front 90-60 PF2	Gas Fire Front 110-60 PF2
Gas Fire Front 70-75 PF2	Gas Fire Front 90-75 PF2	Gas Fire Front 110-75 PF2
Gas Fire Front 80-55 PF2	Gas Fire Front 100-55 PF2	Gas Fire Front 120-55 PF2
Gas Fire Front 110-45 MF	Gas Fire Front 130-45 MF	
Box Gas 45 MF	Gas Fire Smart 45-60 MF	Gas Fire Smart 75-70 PF
Box Gas 55 MF	Gas Fire Smart 55-55 MF	Gas Fire Smart 75-80 PF
Box Gas 65 MF	Gas Fire Smart 55-60 MF	Gas Fire Smart 80-70 PF
Box Gas 75 MF	Gas Fire Smart 65-55 MF	Gas Fire Smart 80-80 PF
Box Gas 80 MF	Gas Fire Smart 65-60 MF	Gas Fire Smart 90-70 PF
	Gas Fire Smart 75-55 MF	Gas Fire Smart 90-80 PF
	Gas Fire Smart 75-60 MF	
	Gas Fire Smart 80-60 MF	
Box Gas Panorama 45-45 MF	Gas Fire Smart Panorama 45-45 MF	
Box Gas Panorama 45-59 MF	Gas Fire Smart Panorama 45-59 MF	
Box Gas Panorama 73-52 MF	Gas Fire Smart Panorama 73-52 MF	

The object of this declaration is in conformity with the relevant Union harmonisation legislation:

Regulation (EU) 2015/1188
Regulation (EU) 2016/426
Regulation (EU) 2024/1103

Used relevant harmonised standards or other technical specifications in relation to which conformity is declared:

EN 613:2021

The notified body:
Kiwa Nederland BV
P.O. Box 137
NL-7300 AC Apeldoorn

performed a product verification and issued on **July 1, 2025** *certificate no:* **20GR0534/06**

Signed for and on behalf of:
Danny Baijens, managing director
(*name and function*)

Bladel; July 1, 2025
(*place and date of issue*)

(signature) 

barbas .

Your Barbas dealer

14.05.2025 - 343444 - 511-001