

barbas .

User manual

EVO-7 50-40

EVO-7 50-40 Opti-Air

This product is not suitable for primary heating purposes



Serial number:

Production date:

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1 Declaration of Performance

1.1 EVO-7 50-40

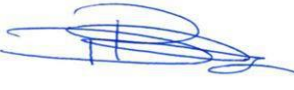
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EC-declaration of conformity	
This EC declaration of conformity applies to the product described below and describes the conformity with the following directives: 2009/125/EC Directive for the setting of eco-design requirements for energy-related products (eco-design directive) Relevant Regulation: (EU) 2015/1185	
Declaration of Performance	
According to regulation (EU) 305/2011 No. 1.231.081-1 - CPR-2013/07/01	
1. Unique identification code of the product-type	Evo-7 50-40
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/2022-01/00027-7
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 = 75 Front = 1800 Insulation thickness floor = 30
Risk of burning fuel falling out	Pass
Emission of combustion products	CO = 0.1 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 = 267 °C
Mechanical resistance (to carry a chimney/flue)	NPD
Thermal output	Pass
Nominal heat output	8.3 kW
Room heating output	8.3 kW
Water heating output	- kW
Energy efficiency	76.3 %
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; December 7, 2022
(place and date of issue)


.....
(Signature)

1.2

EVO-7 50-40 Opti-Air

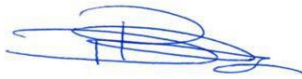
barbas bellfires.
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EC-declaration of conformity	
This EC declaration of conformity applies to the product described below and describes the conformity with the following directives: 2009/125/EC Directive for the setting of eco-design requirements for energy-related products (eco-design directive) Relevant Regulation: (EU) 2015/1185	
Declaration of Performance	
According to regulation (EU) 305/2011 No. 1.231.081-1-OA - CPR-2013/07/01	
1. Unique identification code of the product-type	Evo-7 50-40 Opti-Air
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/2022-01/00027-9
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 = 75 Front = 1800 Insulation thickness floor = 30
Risk of burning fuel falling out	Pass
Emission of combustion products	CO = 0.11 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 = 297 °C
Mechanical resistance (to carry a chimney/flue)	NPD
Thermal output	Pass
Nominal heat output	9.5 kW
Room heating output	9.5 kW
Water heating output	- kW
Energy efficiency	76.2 %
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; December 7, 2022
(place and date of issue)


.....
(Signature)

2 About this document

This document shows the necessary information to do these tasks on the EVO-7 50-40:

- Operate the appliance
- Do basic maintenance

This document refers to the EVO-7 50-40 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.

2.1 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.

2.2 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.

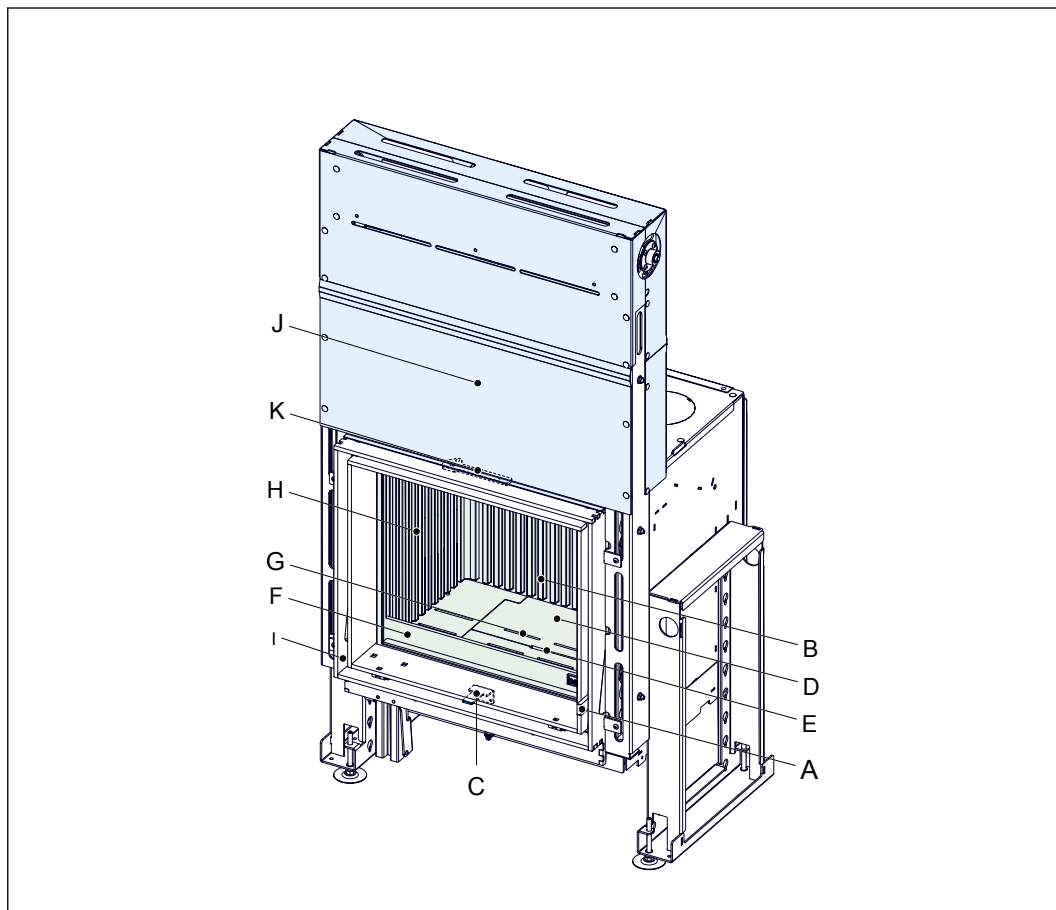
Symbol	Description
	Visual sign that there is a hazard
	Visual sign that there is a notice

2.3 Related documentation

- Installation and maintenance manual
- User manual

3 Description

3.1 Overview of the front of the appliance



- | | | | |
|---|----------------------------|---|---------------------------|
| A | Door handle | G | Primary air inlet |
| B | Glass | H | Combustion chamber panels |
| C | Control lever ¹ | I | Frame |
| D | Grate | J | Chain case cover |
| E | Ash tray | K | Door lock handle |
| F | Front log guard | | |

3.2 Overview of the Opti-Air system (option)

3.2.1 General

If the appliance is equipped with an Opti-Air system, the amount of combustion air is continuous controlled by means of measurement of the temperature inside the combustion chamber. This helps you to achieve an efficient and clean combustion at all times. You can operate the Opti-Air device with the Barbas Opti-Air app on your mobile device. With this app you have the possibility to choose different combustion levels or the possibility to control the room temperature. If you choose the latter, the Opti-Air system will automatically switch between combustion levels, dependent on the set room temperature.

¹ Only appliances without Opti-Air system.

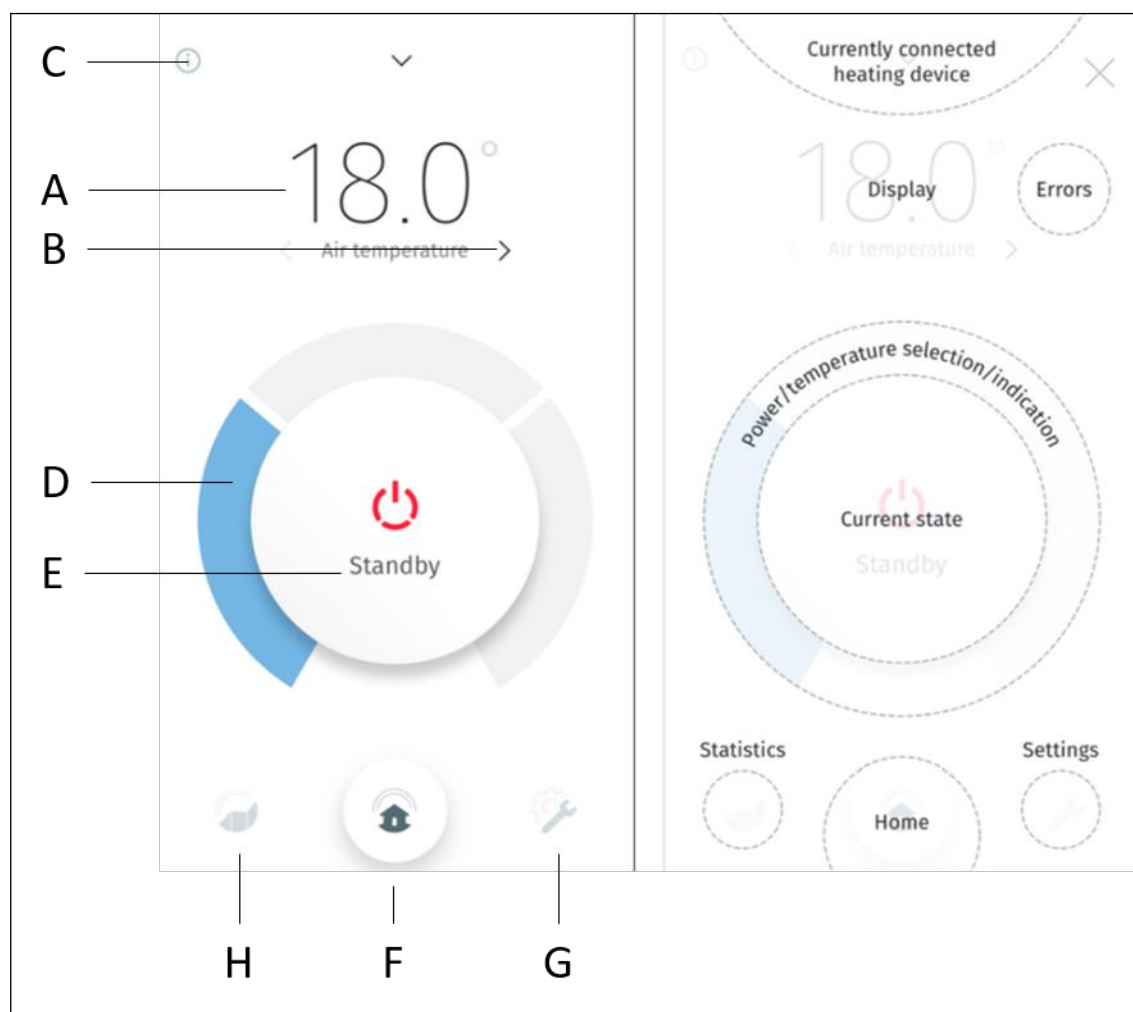



Note:

- Wood log and wood briquette combustion is a relative slow combustion process. Therefore, a change of combustion level might have a moderate effect on the room temperature. If the actual room temperature is higher than the set room temperature a relative long time is necessary to reach the set room temperature.
- With the Barbas Opti-Air system it is not possible to manually control the amount of combustion air into the appliance.

3.2.2

Overview of the Barbas Opti-Air app



	Item	Description	
A	Measurement value	Shows the measured value for room temperature, chimney draught or flue gas temperature.	
B	Parameter selector	Select presentation of room temperature, chimney draught or flue gas temperature.	
C	Help menu	Access to the help function.	
D	Combustion level selector	Used to select the combustion level. Each circle segment is an combustion level.	
E	Combustion mode indicator	Shows the current combustion mode (refer to 3.2.5 for explanation): <ul style="list-style-type: none">• Standby• Firing up• Burning• Refill• Cooling down	
F	Home button	Return to the home screen.	
G	Settings menu	Language	Change language.
		Units	Change temperature unit. °C or °F.
		Notifications	Select the type of notifications. <div>Note: The notification door open is out of order.</div>
		Homescreen Setup	<ul style="list-style-type: none">• Change the name of the appliance.• Select which parameters are shown on the homescreen.
		Advanced Settings	Only available for qualified service engineers.
		Operating Mode	Fixed Power - Manually selection of the power level. Temperature adjust - Automatic selection of the power level dependent on the set room temperature.
		Paired devices	Overview of available Opti-Air systems
H	Statistics	Shows the average values of: <ul style="list-style-type: none">• Room temperature• Combustion chamber temperature• Chimney draught	

3.2.3

Combustion levels in combination with a convection ventilator

The Opti-Air system in combination with a convection ventilator has 5 combustion levels to choose from. Each combustion level is a combination of pre-defined thermal output and pre-defined ventilator speed.

Combustion level	Thermal output	Ventilator speed
1	Minimum	Off
2	Minimum	Minimum
3	Nominal	50% of maximum speed
4	Nominal	Maximum
5	Maximum	Maximum

The Barbas Opti-Air app indicates when the **Burning** or **Refill** combustion mode starts. This is dependent on the gas temperature and the chosen combustion level.

Combustion level	Burning Gas temperature must be higher than	Refill Gas temperature must be lower than *)
First load	340 °C	Dependent on chosen combustion level
1	360 °C	350 °C
2	370 °C	360 °C
3	380 °C	365 °C
4	380 °C	365 °C
5	430 °C	400 °C

*) If the gas temperature is lower than the listed gas temperature for more than 45 minutes, the combustion mode changes to **Cooling down**.

3.2.4

Combustion levels without a convection ventilator

The Opti-Air system without a convection ventilator has 3 combustion levels to choose from. Each combustion level is a pre-defined thermal output.

Combustion level	Thermal output
1	Minimum
2	Nominal
3	Maximum

The Barbas Opti-Air app indicates when the **Burning** or **Refill** combustion mode starts. This is dependent on the gas temperature and the chosen combustion level.

Combustion level	Burning Gas temperature must be higher than	Refill Gas temperature must be lower than *)
First load	340 °C	Dependent on chosen combustion level
1	360 °C	350 °C
2	410 °C	395 °C
3	445 °C	415 °C

*) If the gas temperature is lower than the listed gas temperature for more than 45 minutes, the combustion mode changes to **Cooling down**.

3.2.5 Combustion modes

During operation at a chosen combustion level the combustion process goes through 5 different combustion modes, each with its own pre-programmed combustion characteristics. During the combustion process one of these combustion modes is active dependent on the temperature in the combustion chamber.

	Combustion mode	Description
1	Standby	The appliance is off and ready for use.
2	Firing up	Start of the appliance with the first load of wood logs. The appliance heats up.
3	Burning	The appliance is at operating temperature. The actual temperature can differ from the temperature setpoint, but the Opti-Air system tries to control the temperature toward the setpoint by changing the position of the combustion air valves.
4	Refill	The appliance has cooled down, a reload with wood logs is necessary.
5	Cooling down	The appliance was not reloaded with fuel within 45 minutes after Refill notice . Cooling down mode is active.



Note: With the Barbas Opti-Air system it is not possible to manually control the amount of combustion air into the appliance.

3.3 Intended use

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

It is not allowed to use the appliance as primary heating appliance.

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 Safety

4.1 Safety instructions for operation

**Warning:**

- Do not let the appliance unattended when the fuel burns.
- Do not put flammable items within 150 cm of the appliance.
- Do not use mineral fuel (example: coal, anthracite)
- Do not use the appliance with the door open. Smoke can escape from the appliance. Only open the appliance door for a short time to reload with fuel or to remove the ash.
- Make sure that children are supervised when they can reach the appliance.
- Make sure that there is sufficient ventilation in the room in which the appliance is installed.
- Do not use the appliance in case of visual glass damage.
- Make sure that the appliance is installed correctly. Refer to the Installation and Maintenance manual. You can find the manuals on www.barbasbellfires.com.
- Wear the glove and use the operating hook or a poke when refilling the appliance
- Make sure that your clothing does not touch the appliance. Especially synthetic clothing ignites easily and burns intensely.
- Do not use the appliance when there is fog, haze or no wind.
- Do not make modifications to the appliance. Any modification will also make your warranty invalid.

**Caution:**

- Make sure to clean your chimney minimum every year to prevent a chimney fire.
- Do not use freshly cut wood.
- Do not use more wood per load than prescribed. Overloading can cause excess smoke. See also section [5.2](#).
- Operation with the control lever fully open and open door can cause excess smoke. The appliance must not be operated with the control lever fully open or door left open except as directed in this user manual.
- Do not burn waste in the appliance.
- Do not prepare food in the appliance. This causes damage to your appliance and chimney.

**Note:**

- Do inspect and clean the appliance, the chimney and the external combustion air supply by a Barbas dealer minimum every year.
- Do not use the appliance continuously. The intended use is as intermittent appliance.

4.2 Safety instructions with regard to the environment

- Dispose of the packing materials in an environmentally friendly way.
- 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.

5 Fuel

5.1 Fuel types

**Warning:**

Do not use coal, anthracite, coal briquettes, liquid fuel or gel fuel. The appliance is not designed for these fuels. Use of these fuels is dangerous and can lead to bodily harm and to serious damage to the appliance.

Suitable fuels are:

- Hard wood (example: birch, beech, oak, ash).
- Soft wood (example: spruce, pine, poplar).
- Wood briquettes without binder.

Before use, wood must dry for minimum 2 years when freshly chopped. Kiln-dried wood must dry for an extra half year. Dried wood logs must have a moisture content of 10 - 20 %.

Unsuitable fuels are:

- Painted wood.
- Impregnated wood.
- MDF, chipboard.
- Any kind of combustible waste.
- Paraffin impregnated compressed wood logs
- Freshly chopped wood
- Coal, anthracite and other bituminous fuels
- Lignite, peat

Using unsuitable fuels cause excess smoke, black glass, combustible deposits in the chimney and can damage the appliance.

5.2 Recommended fuel amount

5.2.1 Fuel amount (without Opti-Air)

Load the appliance with the amount of fuel as listed hereunder. Put the load as one layer on the floor of the combustion chamber. For the amount of fuel for the first load see section [6.3.1](#).

**Caution:**

The amount of fuel specified here should not be exceeded, overloading can cause excess smoke.

	Wood logs	Wood briquettes
Amount	2 pieces	2 pieces
Weight	Approximately 1 kg per piece	Approximately 0.8 kg per piece
Length	Approximately 30 cm	Approximately 30 cm
Outline	Approximately 30 cm	Approximately 30 cm

The above listed amount burns for approximately 45 minutes. This time can be different, dependent on the chimney draught and the position of the combustion air valve.

5.2.2 Fuel amount (with Opti-Air)

It is recommended to load the appliance with the amount of fuel as listed in the tables hereunder. Put the load as one layer on the floor of the combustion chamber. For the amount of fuel for the first load see section [6.4.2](#).



Caution:

The amount of fuel specified here should not be exceeded, overloading can cause excess smoke.

Combustion level (appliance has a convection ventilator)	Thermal output	Number of wood logs / wood briquettes	Weight
1	Minimum	2	wood logs: approx 1.1 kg per piece wood briquettes: approx 0.9 kg per piece
2	Minimum	2	
3	Nominal	2	
4	Nominal	2	
5	Maximum	2	

Combustion level (appliance does not have a convection ventilator)	Thermal output	Number of wood logs / wood briquettes	Weight
1	Minimum	2	wood logs: approx 1.1 kg per piece
2	Nominal	2	
3	Maximum	2	wood briquettes: approx 0.9 kg per piece

Use wood logs or wood briquettes (without binder) with a length of approximately 30 cm and an outline of approximately 30 cm.

The above listed amount burns for approximately 45 minutes. This time can be different, dependent on the chimney draught and the position of the combustion air valve.

6 Operation

6.1 Preparation before first use

Report any defects to your dealer immediately.

1. Make sure that the appliance is not damaged.
2. Make sure that the glass is not damaged.
3. Make sure that the door opens and closes completely.
4. Remove document and components from the combustion chamber.
5. Make sure that the control lever moves easy. (Not applicable for appliances with the Barbas Opti-Air system)
6. Make sure that the ash tray is empty.
7. Make sure that the ventilation and - if applicable - convection inlet and outlet openings are open
8. Make sure that all package material, stickers, etc, has been removed from the vicinity of the appliance after installation.
9. If applicable, download and install the Barbas Opti-Air app. Refer to section [6.4.1](#) for detailed instructions.

6.2 First use of the appliance



Caution:

- Do not use the appliance for 4 weeks after installation. This time is necessary for the building materials to set.
- Make sure there is sufficient ventilation in the room in which the appliance is installed.



Note:

The appliance has a heat-resistant coating. When you use the appliance for the first time, the coating can cause an unpleasant, but harmless smell.

Before first use make sure that a newly-build chimney breast is dry. Walls that have not dried sufficiently attract particles released from your appliance when suddenly opening the door of the appliance during use.

After first few times of use of the appliance, a light deposit on the inside of the glass may occur caused by curing of the paint. This can be removed with glass cleaner or ceramic hob cleaner.

6.3 Firing the appliance (without Opti-Air)



Note: Refer to section [6.4](#) if the appliance has the Opti-Air system installed.

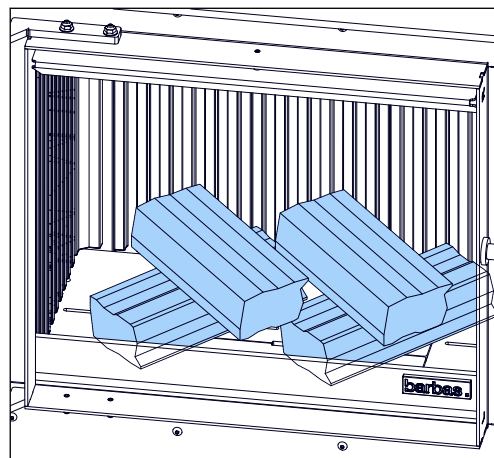
6.3.1 First load and ignition

At the beginning the appliance and chimney is cold. It is important that both the appliance and chimney reach a temperature that guarantees a good functioning of the appliance. A too low temperature results in incomplete combustion and a poor chimney draught. To avoid this do the following:

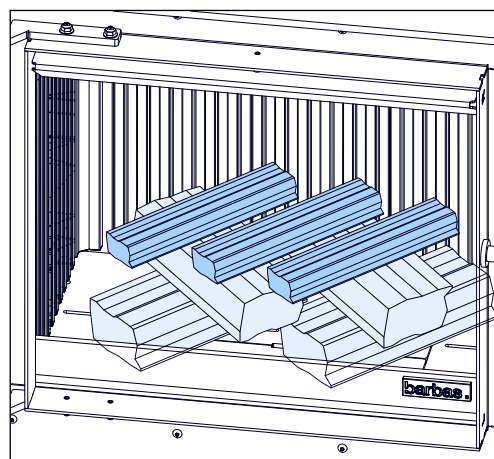
**Warning:**

Do not use the appliance when there is fog or haze or no wind.

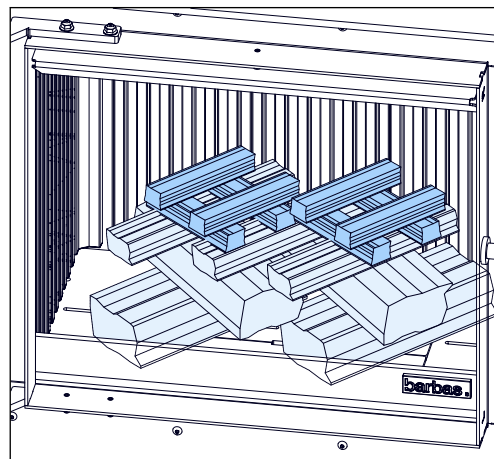
1. Put the control lever in the far right position.
2. When present, open the valve in the external combustion air supply line.
3. When present, open the chimney valve completely.
4. Open the door of the appliance.
5. Put 4 wood logs crosswise on the floor of the combustion chamber.



6. Put a layer of small wood pieces and a firestarter cube on top of the wood logs.



7. Put some kindling wood above the firestarter cubes.



8. Light the firestarter cubes with a lighter or a match.
9. Close the door of the appliance.

After approximately 20 minutes the wood logs burn. Dependent on the quality of the chimney the wood logs burn for approximately 1 hour. Do not open the door of the appliance before the last flames have almost disappeared.

6.3.2

Reload with fuel



Caution:

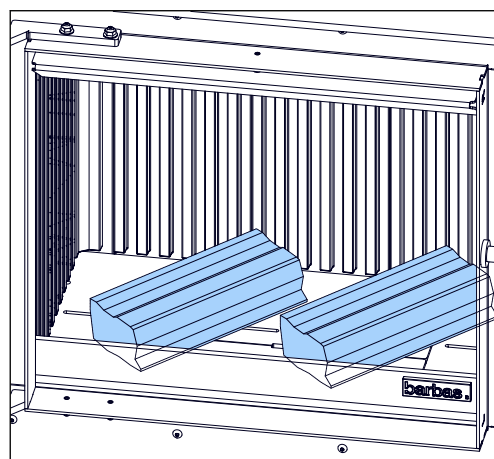
If there is insufficient burning material in the firebed to light a new fuel charge, excessive smoke emission can occur. Refueling must be done onto a sufficient quantity of glowing embers and ash to make sure that the new fuel charge will ignite in a reasonable period. If there are too few embers in the fire bed, add suitable kindling to prevent excessive smoke.



Note:

The procedure hereunder is a general description. The best reloading moment is dependent on the flue draught. A high flue draught requires reloading when the flames have completely disappeared. If the flue draught is low, reloading must be done when there are still flames.

1. Wait until the last flames have almost disappeared.
2. Set the control lever in the far right position.
3. Open the door.
4. Reload the appliance with the recommended amount of fuel. Refer to section [5.2.1](#).
5. Close the door.
6. After ignition of the fuel, move the control lever to a position that gives a quiet burning fire.
7. If desired and applicable, start the convection ventilator.



6.3.3

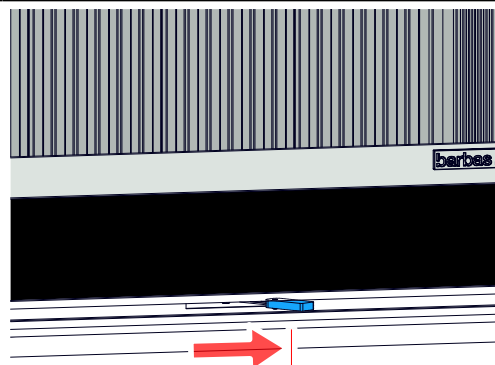
Control the burn process



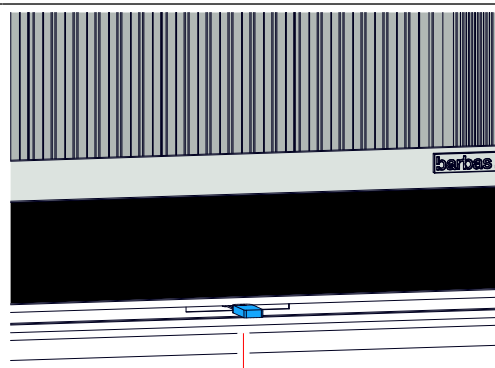
Note: If the appliance has the Opti-Air option refer to section [6.4](#) for instructions on the control of the burn process.

Control the burn process with the control lever. This lever controls the amount of primary combustion air and both the secondary combustion air and airwash amount.

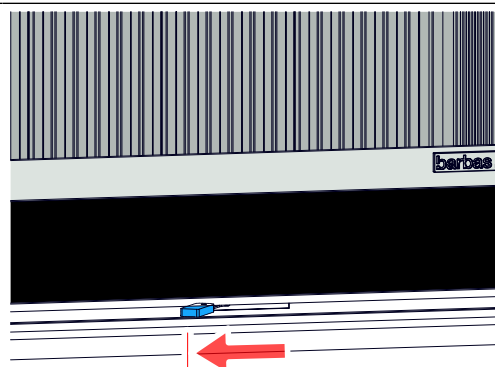
Control lever in the far right position:
primary air inlet maximum open
secondary air inlet maximum open
airwash inlet maximum open



Control lever in the center position:
primary air inlet is closed
secondary air inlet maximum open
airwash inlet maximum open



Control lever in the far left position:
primary air inlet is closed
secondary air inlet is closed
airwash inlet is closed



Warning:

Setting the control lever in the far left position (all air inlets closed) when the fuel is burning leads to excessive emission of hazardous gasses (example: carbon monoxide) and soot deposit on the glass of the door and in the chimney. Never close the air inlets when the fuel is burning. Always keep the secondary air inlet and air wash inlet open by setting the control lever somewhere in-between the center position and the far left position.



Caution:

Continuous firing with the primary air inlet fully open (control lever in the far right position) causes a white-hot fire that can damage the appliance. Use the primary air only during the first fuel load and for ignition of a new fuel load.

6.3.4

General firing tips

- The appliance works best when it has heated up as described in section [6.3.1](#). Insufficient heating up leads to a low chimney draught, black deposits on the glass and incomplete combustion. Good combustion is recognized by bright orange flames, invisible smoke and no soot deposits on the glass. Use the control lever to get good combustion. Refer to section [5.1](#) for advice on the required fuel quality.
- Make sure the door of the appliance is closed when in use. Only open the door for ignition and to refuel.
- Do not remove all the ashes. An ash layer in the combustion chamber forms a heat insulating layer, that helps the fuel to ignite easy.
- Do not set the control lever in the far left position (all combustion air inlets closed) when the appliance is used. This will cause severe smoke development, soot formation and increases the chance of a chimney fire.
- After the first load, do not overload the appliance with fuel. Refer to section [5.2.1](#) for the recommended amount of fuel. Too much fuel leads to incomplete combustion, soot formation and a chance of a chimney fire.

6.4

Firing the appliance with the optional Barbas Opti-Air system

If the appliance has the optional Opti-Air system, the appliance automatically controls the amount of combustion air. With the Barbas Opti-Air app for Android and iOS it is possible to select from 5 different combustion levels or to select room temperature control.

Refer to section [3.2](#) for a detailed description of the Opti-Air system.

6.4.1

Installation of the Opti-Air app

1. Download the Barbas Opti-Air app from Google Play (Android) or the App Store (iOS) and install it on your mobile phone or tablet.
2. Start the Barbas Opti-Air on your mobile device.
3. Make sure bluetooth is on and can recognize other devices.
4. Start to make a connection with bluetooth with device **Airmaster**.
5. When asked, enter the PIN code 000000.
6. The app is now ready for use.



Note: It is possible to install the Barbas Opti-Air app on multiple mobile devices. However, the app can only be active on 1 mobile device at the same time. Before making connection between the appliance and a second mobile device, disconnect the bluetooth connection between the appliance and the first mobile device.

6.4.2

First load and ignition with Opti-Air

During operation, the Opti-Air system only works with closed door. Only open the door for a short time for ignition and reloading with fuel.



Warning:

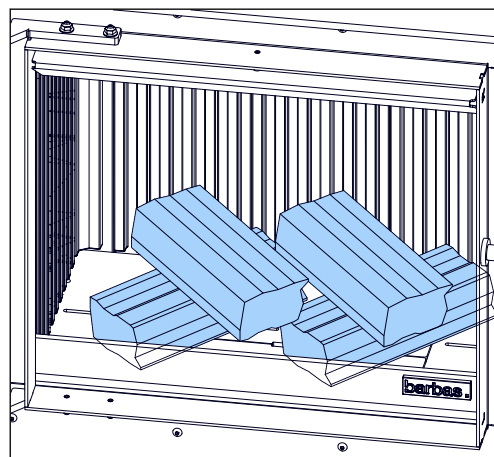
Do not use the appliance when there is fog or haze or no wind.

**Important:**

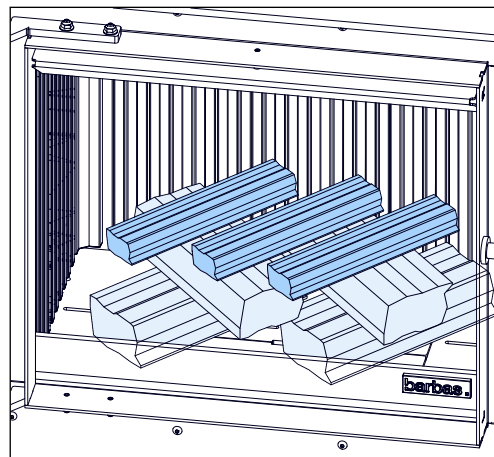
During the first load, and after the combustion mode **Burning** has been entered it is not possible for 25 minutes to switch to another combustion level . To make sure the appliance heats up sufficiently, the Opti-Air system starts the combustion on the highest combustion level. During the first load, after 25 minutes into **Burning** it is possible to change the combustion level.

During the first load, the combustion mode changes from **Firing up** to **Burning** when the gas temperature is higher than 340°C.

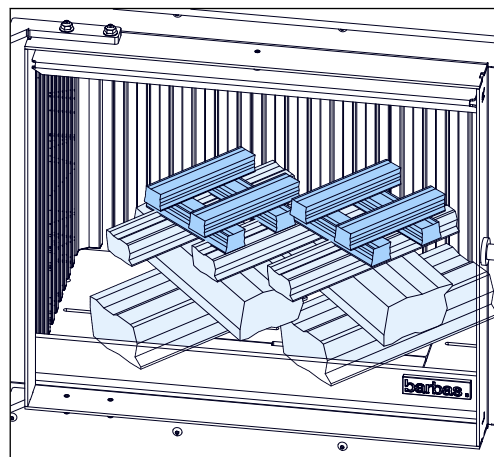
1. When present, open the chimney valve completely.
2. Open the door of the appliance.
3. Put 6 wood logs crosswise on the floor of the combustion chamber.



4. Put a layer of small wood pieces and 2 firestarter cubes on top of the wood logs.



5. Put some kindling wood above the firestarter cubes.



6. Light the fire starter cubes with a lighter or a match.
7. Close the door of the appliance.

After approximately 20 minutes the wood logs burn. Dependent on the quality of the chimney the wood logs burn for approximately 1 to 1.5 hours. Do not open the door of the appliance before the last flames have almost disappeared or the "Refill" notification has appeared.

6.4.3

Reload with fuel



Caution:

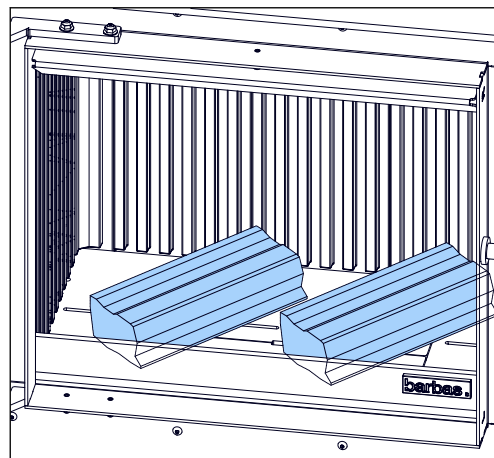
If there is insufficient burning material in the firebed to light a new fuel charge, excessive smoke emission can occur. Refueling must be done onto a sufficient quantity of glowing embers and ash to make sure that the new fuel charge will ignite in a reasonable period. If there are too few embers in the fire bed, add suitable kindling to prevent excessive smoke.



Note:

The procedure hereunder is a general description. The best reloading moment is dependent on the flue draught. A high flue draught requires reloading when the flames have completely disappeared. If the flue draught is low, reloading must be done when there are still flames.

1. Wait until the last flames have almost disappeared.
2. Set the control lever in the far right position.
3. Open the door.
4. Reload the appliance with the recommended amount of fuel. Refer to section [5.2.2](#).
5. Close the door.
6. After ignition of the fuel, move the control lever to a position that gives a quiet burning fire.
7. If desired and applicable, start the convection ventilator.



6.4.4

General firing tips

- The Opti-Air control system works best when the appliance is heated up as described in section [6.4.2](#). An Insufficient amount of fuel during ignition prevents the Opti-Air system to work as designed, since the appliance temperature will be too low for the Opti-Air system to reach its optimal setpoint. Refer to section [5.2.2](#) for advice on the required fuel amount.
- Make sure the door of the appliance is closed when in use. Only open the door for ignition and to refuel.
- Do not remove all the ashes. An ash layer in the combustion chamber forms an insulating layer, that helps the fuel to ignite easy.

- After the first load, do not overload the appliance with fuel. Refer to section [5.2.2](#) for the recommended amount of fuel. The Opti-Air system prevents the appliance to reach an excessive high temperature, but a large overload can cause excessive emissions and loss of efficiency.

6.5 Convection ventilator

6.5.1 Convection ventilator (option)

1. Start the convection ventilator by turning the dimmer knob clockwise in the ON position.
2. Set the desired ventilator speed by turning the dimmer knob.
3. Stop the convection ventilator by turning the dimmer knob counterclockwise into the OFF position

6.5.2 Convection ventilator with Opti-Air system

The ventilator speed is dependent on the chosen combustion level. Refer to section [3.2.3](#) for more information.



Note: The ventilation set-up function in the Barbas Opti-Air app is not active.

7 Maintenance

7.1 Maintenance schedule

**Caution:**

Clean the glass when it is dirty. If the glass is not cleaned when it is dirty the glass can become permanently dull.

Task	Frequency	Procedure
Remove the ashes	When necessary	Refer to section 7.2
Clean the glass	When necessary	Refer to section 7.2
Maintenance by your fitter	Yearly	Refer to your dealer
Chimney sweep	Yearly (or more often when necessary)	Refer to the Installation and maintenance manual
Appliance inspection	Yearly	Refer to the Installation and maintenance manual

7.2 Remove the ashes

1. Make sure that the appliance has cooled down and there are no glowing embers.
2. Remove the ashes with a small scoop.
3. Lift the grate with the operating hook and remove the grate.
4. Remove the ashtray and empty it.
5. Make sure there are no ashes in the space under the ash tray. Remove these ashes when necessary.
6. Put the ash tray back in the appliance.
7. Put the grate back in the appliance.

7.3 Clean the glass

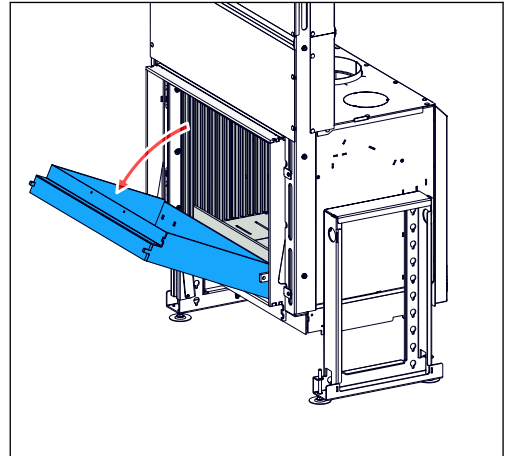
1. Make sure the appliance has cooled down and there are no glowing embers in the combustion chamber.
2. To avoid any up swirl of ashes during cleaning, remove the ashes from the appliance.
3. Clean the glass on both sides with a soft cloth, a sponge or paper. Use glass cleaner or ceramic hob cleaner. Refer to section [7.3.1](#) for access to the inside of the door.
4. Make sure that the glass is dry. Water droplets can leave a mark on the glass.

**Note:**

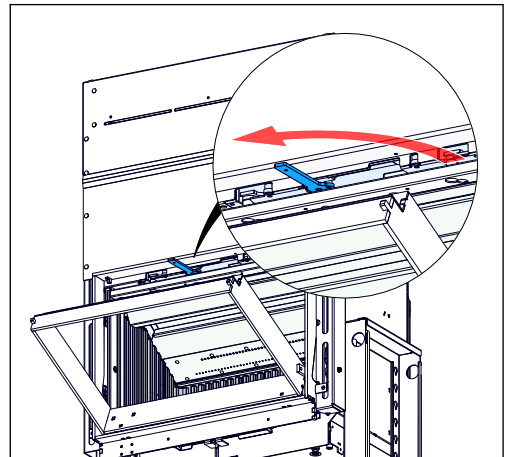
Damaged or broken glass must be replaced before the appliance can be used again.

7.3.1 Access to inside of door

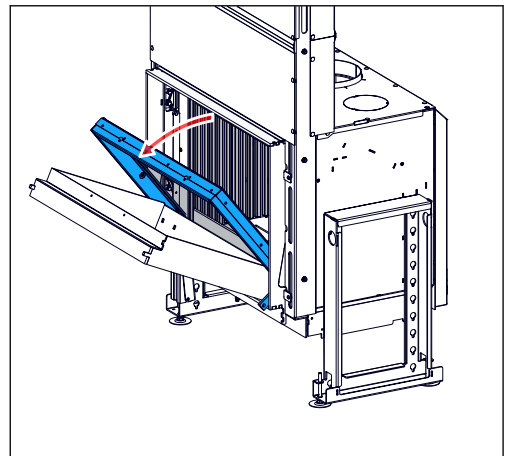
1. Make sure the door is closed.
2. Rotate the frame forward.



3. Rotate the door lock 90 degrees clockwise.



4. Rotate the door forward.
5. The inside of the door and the glass is now accessible for inspection and cleaning.



6. To close the door and frame do steps 2 to 4 in reverse order. Make sure the door lock is locked.

7.4

Opti-Air system

1. Remove the ventilation air inlet grate.
2. Get the battery holder. Put a screwdriver in the small notch of the lid and pull out the battery.
3. Replace the 9 V battery and close the battery holder.
4. Put the battery holder and ventilation air inlet grate back.


Post requirements

- Change the 9 V back-up battery every year.




8 Troubleshooting

8.1 Troubleshooting

Problem	Possible cause	Possible solution
Chimney fire (recognized by a roaring sound in the chimney)	Ignition of soot and tar deposits in the chimney.	<ul style="list-style-type: none"> Set the control lever in the far left position. Call the emergency services. (112) Put out the fire in the appliance with sand.  <p>Warning: Never use water to put out the fire.</p> <ul style="list-style-type: none"> Ventilate the house. <p>After the chimney has been extinguished, sweep the chimney and inspect for damage.</p> <p>Sweep the chimney minimum once a year by a certified chimney sweep.</p>
The wood logs do not ignite	The moisture content of the wood logs is too high	<ul style="list-style-type: none"> Use dried wood logs with a moisture content of 10 - 20 %. Use wood briquettes
	The combustion chamber is not warm enough	<ul style="list-style-type: none"> Do the recommended ignition procedure. Refer to section 6.3.1. Use the recommended amount of fuel. Refer to section 5.2.1.
The wood logs burn too fast	Primary air inlet is open.	Close the primary air supply. Adjust the amount of secondary air and air wash with the control lever. Refer to section 6.3.3 .
	The chimney draught is too high	<ul style="list-style-type: none"> Reduce the amount of secondary air and airwash with the control lever. Refer to section 6.3.3 Contact your installer.
The temperature of the room does not rise sufficient	The fuel amount is too low	Use the recommended amount of fuel. Refer to section 5.2.1 .
	The chimney draught is too high	Contact your installer.
Excessive smoke escapes when the door of the combustion chamber is open	The chimney draught is too low	<ul style="list-style-type: none"> Do the recommended ignition procedure. Refer to section 6.3.1. Contact your installer.

Problem	Possible cause	Possible solution
The glass becomes black	The combustion chamber is not hot enough	<ul style="list-style-type: none"> Use the recommended amount of fuel. Refer to section 5.2.1. Increase the amount of combustion air with the control lever. Refer to section 6.3.3.
	The moisture content of the wood logs is too high	<ul style="list-style-type: none"> Use dried wood logs with a moisture content of 10 - 20 %. Use wood briquettes
	The seal around the door is damaged	Contact your dealer.
The convection ventilator makes unusual noise	The convection ventilator is defect	Contact your dealer
The convection air outlets show a grey discoloration	Household particles (for example from pets, clothing, cigarettes, candles) flow via the convection air inlet alongside the hot appliance. The particles burn when in contact with the hot appliance. The residual black particles flow via the convection air outlet to the room.	<ul style="list-style-type: none"> Make sure that you daily clean the surround of the convection air inlet. Remove the air inlet and air outlet grates and clean the grates. Put the grates back after cleaning. Make sure the room is sufficient ventilated Avoid as much as possible the presence of household particles. It is recommended to use a vacuum cleaner every day.

8.2 Troubleshooting on Opti-Air system

Problem	Possible cause	Possible solution
The app cannot connect with the Opti-Air system	Bluetooth is off	Switch on bluetooth on the mobile device
	Another mobile device is connected	<p>Switch off bluetooth on the other mobile device and try again.</p> <p>If the mobile device still not connects, unplug the 230 VAC power supply, wait approximately 1 minute and reconnect the power supply.</p> <div>  <p>Note: Do not unplug the 18 VDC power supply to the Opti-Air system. This may cause damage to the system. Only unplug the 230 VAC power supply.</p> </div>
The combustion mode does not change to Burning after "Firing Up".	The amount of fuel is insufficient during Firing up .	<p>Do the recommended ignition procedure. Refer to section 6.4.2.</p> <p>Contact your dealer if the problem stays.</p>
The combustion mode changes to Cooling down after "Firing Up".	The amount of fuel is insufficient during Firing up .	<p>Do the recommended ignition procedure. Refer to section 6.4.2.</p> <p>Contact your dealer if the problem stays.</p>
The combustion mode does not change to Burning after Refill .	The amount of fuel is insufficient.	Use the recommended amount of fuel. Refer to section 5.2.2 and section 6.4.3 .
Notification Sensor error in the app.	Defect of one of the sensors.	Contact your dealer.

9 Information on disposal of the appliance

- Dispose of an obsolete appliance according to instructions of the authorities or the installer.
- The information in this section is informative. Always obey the national and local regulations on recycling and disposal of the appliance or parts of the appliance.
- Before disassembly and disposal of the appliance, remove ashes and unburnt fuel from the appliance. Dispose ashes as rest waste. Do not dispose ashes as organic waste.

Appliance component	Material	Disassembly	Recycling / Disposal
Combustion chamber (walls)	Cast iron	Refer to the Installation Manual	Dispose as metal waste
Combustion chamber (walls and baffle)	Vermiculite	Refer to the Installation Manual	Vermiculite in contact with combustion gases cannot be re-used or recycled. Dispose as rest waste.
Combustion chamber (grate and bottom)	Steel	Refer to the Installation Manual	Dispose as metal waste
Combustion chamber (baffle)	Heat shield	Refer to the Installation Manual	Dispose as metal waste
Glass	Ceramic glass	Remove glass holder with suitable tools. Remove gaskets and cord from the glass	Dispose as rest waste or ceramic waste. Do not dispose as glass waste.
Ventilator	Electronics	Remove from convection air inlet box with suitable tools.	Dispose as electronic waste
Opti-Air system	Electronics	Remove from air inlet box with suitable tools. Remove gaskets from the Opti-Air system.	Dispose as electronic waste
Appliance body	Steel	Make sure to remove all components other than metal	Dispose as metal waste
Ash tray	Steel	Remove from appliance	Dispose as metal waste
Combustion air inlet box	Steel	Remove from appliance	Dispose as metal waste
Convection air / combustion air inlet box	Steel	Remove from appliance.	Dispose as metal waste
Insulating plates used for the fireplace	Calcium silicate	Remove from appliance .	Dispose as building construction waste (stone)
Gaskets	Glass fibre cord or plates	Remove from appliance and components	Dispose as glass fibre (non-flammable waste)

10 Technical data

Name	Barbas	Barbas
Model	EVO-7 50-40	EVO-7 50-40 Opti-Air
Tested in accordance with	EN 13229:2001-A2:2004 EN 16510-1 annex D, E, F BS 3841-2:1994	EN 13229:2001-A2:2004 EN 16510-1 annex D, E, F BS 3841-2:1994
Energy efficiency index (according EU 2015/1186)	101	100
Energy efficiency class	A	A
Fuel	<ul style="list-style-type: none"> • Wood logs • Wood briquettes (without binder) 	<ul style="list-style-type: none"> • Wood logs • Wood briquettes (without binder)
Nominal fuel load	2.0 kg	2.2 kg
Nominal heat output (net)	8.3 kW	9.5 kW
Minimum heat output (net)	7 kW	7 kW
Useful efficiency (Net Calorific Value (NCV)) at nominal heat output	> 75 %	> 75 %
Useful efficiency (Net Calorific Value (NCV)) at minimum heat output (indicative)	> 80 %	> 80 %
Seasonal efficiency	66 %	66 %
Indirect heating function	No	No
Room sealed	Yes *)	Yes *)
Leak rate at 10 Pa	1.7 m ³ /h (at 273 K, 1013 hPa)	1.7 m ³ /h (at 273 K, 1013 hPa)
Battery Opti-Air system	-	9 V block PP3
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"> • Installation and maintenance manual • User manual 	<ul style="list-style-type: none"> • Installation and maintenance manual • User manual

*) Only room sealed if attached to an external combustion air supply line.

Product information according regulation (EU) 2015/1185

Model identifier		Cuatro-7 60-60										
Equivalent models		Evo-7 50-40										
Indirect heating function		No										
Direct heat output		8.3 kW										
Indirect heat output		- kW										
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Emissions at nominal heat output (*)				Emissions at minimum heat output (*) (**)					
			[mg/Nm³ (13 % O₂)]				[mg/Nm³ (13 % O₂)]					
			PM	OGC	CO	NO _x	PM	OGC	CO	NO _x		
Wood logs, moisture content < 25 %	yes	no	≤ 40	≤ 120	≤ 1500	≤ 200	N.A.	N.A.	N.A.	N.A.		
Compressed wood, moisture content < 12 %	no	no										
Other woody biomass	no	no										
Non-woody biomass	no	no										
Anthracite and dry steam coal	no	no										
Hard coke	no	no										
Low temperature coke	no	no										
Bituminous coal	no	no										
Lignite briquettes	no	no										
Peat briquettes	no	no										
Blended fossil fuel briquettes	no	no										
Other fossil fuel	no	no										
Blended biomass and fossil fuel briquettes	no	no										
Other blend of biomass and solid fuel	no	no										
Characteristics when operating with the preferred fuel												
Seasonal space heating efficiency η _s [%]		66										
Energy efficiency index (EEI)		101										
Item	Symbol	Value	Unit	Item				Symbol	Value	Unit		
Heat output				Useful efficiency (NCV as received)								
Nominal heat output		P _{nom}	8.3	kW	Useful efficiency at nominal heat output				η _{th, nom}	76.3	%	
Minimum heat output (indicative)		P _{min}	N.A.	kW	Useful efficiency at minimum heat output (indicative)				η _{th, min}	N.A.	%	
Auxiliary power consumption			Type of heat output/room temperature control (select one)									
At nominal heat output	e _{l max}	0.069	kW	Single-stage heat output, no room temperature control							yes	
At minimum heat output	e _{l min}	N.A.	kW	Two or more manual stages, no room temperature control							no	
In standby mode	e _{l s}	N.A.	kW	With mechanic thermostat room temperature control							no	
Permanent pilot flame power requirement			With electronic room temperature control									no
Pilot flame power requirement (if applicable)	P _{pilot}	N.A.	kW	With electronic room temperature control plus day timer							no	
				With electronic room temperature control plus week timer							no	
			Other control options (multiple selection possible)									
			Room temperature control, with presence detection							no		
			Room temperature control, with open window detection							no		
			With distance control option							no		
Contact details		Barbas Bellfires BV Hallenstraat 17 5531 AB BLADEL The Netherlands				www.barbas.com						
(*) PM = particulate matter, OGC = organic gaseous compounds, CO = carbon monoxide, NO _x = nitrogen oxides (**) Only required if correction factors F(2) or F(3) are applied.												

Model identifier	Cuatro-7 60-60 Opti-Air										
Equivalent models	Evo-7 50-40 Opti-Air										
Indirect heating function	No										
Direct heat output	9.5 kW										
Indirect heat output	- kW										
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Emissions at nominal heat output (*) [mg/Nm³ (13 % O₂)]				Emissions at minimum heat output (*)/(**) [mg/Nm³ (13 % O₂)]				
			PM	OGC	CO	NO _x	PM	OGC	CO	NO _x	
Wood logs, moisture content < 25 %	yes	no	≤ 40	≤ 120	≤ 1500	≤ 200	N.A.	N.A.	N.A.	N.A.	
Compressed wood, moisture content < 12 %	no	no									
Other woody biomass	no	no									
Non-woody biomass	no	no									
Anthracite and dry steam coal	no	no									
Hard coke	no	no									
Low temperature coke	no	no									
Bituminous coal	no	no									
Lignite briquettes	no	no									
Peat briquettes	no	no									
Blended fossil fuel briquettes	no	no									
Other fossil fuel	no	no									
Blended biomass and fossil fuel briquettes	no	no									
Other blend of biomass and solid fuel	no	no									
Characteristics when operating with the preferred fuel											
Seasonal space heating efficiency η_s [%]	66										
Energy efficiency index (EEI)	100										
Item	Symbol	Value	Unit	Item				Symbol	Value	Unit	
Heat output				Useful efficiency (NCV as received)							
Nominal heat output	P _{nom}	9.5	kW	Useful efficiency at nominal heat output				$\eta_{th, nom}$	76.2	%	
Minimum heat output (indicative)	P _{min}	N.A.	kW	Useful efficiency at minimum heat output (indicative)				$\eta_{th, min}$	N.A.	%	
Auxiliary power consumption			Type of heat output/room temperature control (select one)								
At nominal heat output	e _{l,max}	0.075	kW	Single-stage heat output, no room temperature control							no
At minimum heat output	e _{l,min}	N.A.	kW	Two or more manual stages, no room temperature control							no
In standby mode	e _{l,sb}	N.A.	kW	With mechanic thermostat room temperature control							no
Permanent pilot flame power requirement			With electronic room temperature control							yes	
Pilot flame power requirement (if applicable)	P _{pilot}	N.A.	kW	With electronic room temperature control plus day timer							no
				With electronic room temperature control plus week timer							no
			Other control options (multiple selection possible)								
			Room temperature control, with presence detection							no	
			Room temperature control, with open window detection							no	
			With distance control option							no	
Contact details	Barbas Bellfires BV Hallenstraat 17 5531 AB BLADEL The Netherlands						www.barbas.com				
(*) PM = particulate matter, OGC = organic gaseous compounds, CO = carbon monoxide, NO _x = nitrogen oxides											
(**) Only required if correction factors F(2) or F(3) are applied.											

12 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 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 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.

barbas .

Your Barbas dealer