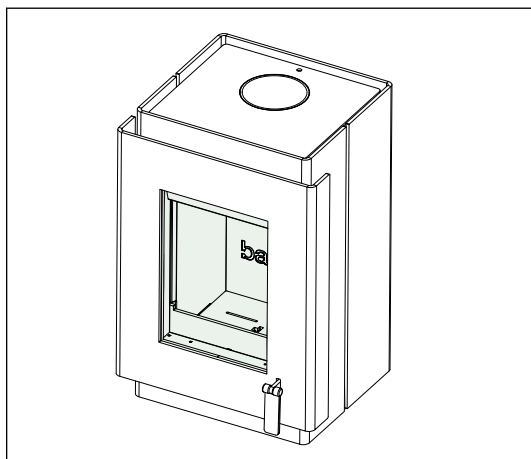


barbas .

Installation and maintenance manual

BOX 40-40-70



This product is not suitable for primary heating purposes



Serial number:

Production date:

© Barbas Bellfires BV

This document or parts thereof may not be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, nor otherwise, without the prior written permission of Barbas Bellfires BV. This document could contain technical inaccuracies or typographical errors. Barbas Bellfires BV reserves the right to revise this document from time to time in the contents thereof.

Contact information

Barbas Bellfires BV

Hallenstraat 17, 5531 AB Bladel, The Netherlands

E-mail: info@barbas.com

www.barbas.com

Contents

1	Declaration of Performance.....	5
1.1	BOX 40-40-70.....	5
1.2	BOX 40-40-70 with wall support frame.....	6
2	About this document.....	7
2.1	How to work with this document.....	7
2.2	Warnings and cautions used in this document.....	7
2.3	Related documentation.....	7
3	Description.....	8
3.1	Overview of the front of the appliance.....	8
3.2	Overview of the bottom of the appliance.....	9
3.3	Overview of the rear of the appliance	10
3.4	Intended use.....	10
4	Safety.....	11
4.1	Safety instructions for installation.....	11
4.2	Safety instructions with regard to the environment.....	11
5	Clearances.....	12
5.1	Safety distances	12
5.2	Safety distances BOX 40-40-70 with support frame	13
6	Installation requirements.....	15
6.1	Requirements on the installation of the appliance.....	15
6.2	Installation on a natural stone platform.....	15
6.3	Requirements on the chimney.....	15
6.4	Requirements on the external combustion air pipe.....	16
7	Installation.....	17
7.1	Install the appliance.....	17
7.2	Connect the optional external air supply.....	17
7.2.1	Connect the optional external air supply (rear connection).....	17
7.2.2	Connect the optional external air supply (bottom connection).....	18
7.3	Connect the flue gas pipe.....	18
7.4	Final check on the appliance.....	19
8	Installation of the BOX 40-40-70 with support frame.....	20
8.1	Install the support frame.....	20
8.2	Connect the external air supply.....	21
8.3	Install the appliance on the support frame.....	22
8.4	Connect the flue gas pipe.....	23
8.5	Final check on the appliance.....	23

9	Maintenance.....	24
9.1	Appliance.....	24
9.2	Combustion air supply.....	24
9.3	Chimney.....	24
9.4	Removal of the grate and ash tray.....	24
9.5	Removal of the heat shield and baffle.....	25
	9.5.1 Remove the heat shield.....	25
	9.5.2 Remove the baffle.....	26
9.6	Installation of the ash tray and grate	26
9.7	Installation of the baffles.....	27
	9.7.1 Install the baffle.....	27
	9.7.2 Install the heat shield.....	27
10	Technical data.....	29
10.1	Technical data	29
10.2	Product information according regulation (EU) 2015/1185.....	31
11	Dimensions.....	32
11.1	Dimensions BOX 40-40-70	32
11.2	Dimensions BOX 40-40-70 with wall support frame.....	33
12	Warranty Terms.....	35

1 Declaration of Performance

1.1 BOX 40-40-70



Crafted to wonder

EU-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) <i>Relevant Regulation: (EU) 2015/1185</i>			
Declaration of Performance			
No. 2.206.080-0 - CPR-2013/07/01			
Unique identification code of the product type: Intended use: Manufacturer: System of AVCP: Harmonised technical specifications: Notified body: Essential characteristics	BOX 40-40-70 Space heating in residential buildings Barbas Bellfires BV; Hallenstraat 17; 5531 AB Bladel; The Netherlands 3 EN 16510-2-1:2022 No. 1639		
Mechanical resistance and stability		Load bearing capacity	
		120 kg	
Safety in case of fire - Protection of combustible materials		Minimum distance to combustible materials	
Bottom (d _a):		3 cm	
Floor in front (d _e):		50 cm	
Ceiling (d _c):		50 cm	
Rear (d _a):		30 cm	
Side (d _s):		25 cm	
Side radiation area (d _s):		50 cm	
Front (d _a):		120 cm	
Hygiene, health and the environment		At nominal heat output At part load heat output	
Carbon monoxide emission (CO)	680 mg/m ³	1370 mg/m ³	
Nitrogen oxides emission (NO _x)	108 mg/m ³	91 mg/m ³	
Emission of organic gaseous carbon (OGC)	42 mg/m ³	118 mg/m ³	
Particulate matter emission (PM)	28 mg/m ³	45 mg/m ³	
Safety and accessibility in use		Data for installation to a chimney	
Flue gas outlet temperature		At nominal heat output At part load heat output	
330 °C		276 °C	
Minimum flue draught		7.5 Pa	
Flue gas mass flow		3.8 g/s	
Fire safety of installation to the chimney		T400 G minimum	
Energy economy and heat retention		Appliance's thermal heat output and energy efficiency	
Space heat output		At nominal heat output At part load heat output	
5.3 kW		3.7 kW	
Efficiency		78.7 %	
Seasonal space heating efficiency		70.1 %	
Energy efficiency index (EEI)		106	
Energy efficiency class		A	
		Space heating efficiency	
Electric power consumption		At nominal heat output At part load heat output Standby mode	N/A N/A N/A
Sustainable use of natural resources		Environmental sustainability	
		NPD	
The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.			
Signed for and on behalf of the manufacturer by:			
Danny Baijens, CEO 		Bladel, The Netherlands 25 August 2025	

1.2 BOX 40-40-70 with wall support frame

barbas bellfires.
Crafted to wonder

EU-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			
No. 2.206.084-0 - CPR-2013/07/01			
Unique identification code of the product type:	BOX 40-40-70 with support frame		
Intended use:	Space heating in residential buildings		
Manufacturer:	Barbas Bellfires BV; Hallenstraat 17; 5531 AB Bladel; The Netherlands		
System of AVCP:	3		
Harmonised technical specifications:	EN 16510-2-1:2022		
Notified body:	No. 1639		
Essential characteristics			
Mechanical resistance and stability		Load bearing capacity	
		120 kg	
Safety in case of fire - Protection of combustible materials		Minimum distance to combustible materials	
Bottom (d _a):		10 cm	
Floor in front (d _f):		200-500	
Ceiling (d _c):		50 cm	
Rear (d _r):		non flammable wall	
Side (d _s):		25 cm	
Side radiation area (d _l):		50 cm	
Front (d _p):		120 cm	
Hygiene, health and the environment		At nominal heat output	
Carbon monoxide emission (CO)		680 mg/m ³	
Nitrogen oxides emission (NO _x)		108 mg/m ³	
Emission of organic gaseous carbon (OGC)		42 mg/m ³	
Particulate matter emission (PM)		28 mg/m ³	
		At part load heat output	
		1370 mg/m ³	
		91 mg/m ³	
		118 mg/m ³	
		45 mg/m ³	
Safety and accessibility in use		Data for installation to a chimney	
Flue gas outlet temperature		At nominal heat output	
Minimum flue draught		At part load heat output	
Flue gas mass flow		276 °C	
Fire safety of installation to the chimney		7.5 Pa	
		3.8 g/s	
		T400 G minimum	
Energy economy and heat retention		Appliance's thermal heat output and energy efficiency	
Space heat output		At nominal heat output	
Efficiency		At part load heat output	
		5.3 kW	
		3.7 kW	
		80.1 %	
		78.7 %	
Seasonal space heating efficiency		Space heating efficiency	
Energy efficiency index (EEI)			
Energy efficiency class			
		70.1 %	
		106	
		A	
Electric power consumption		At nominal heat output	At part load heat output
		N/A	N/A
			Standby mode
			N/A
Sustainable use of natural resources		Environmental sustainability	
		NPD	
The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.			
Signed for and on behalf of the manufacturer by:			
Danny Baijens, CEO		Bladel, The Netherlands 25 August 2025	

2 About this document

This document shows the necessary information to do the installation and maintenance on the BOX 40-40-70.

This document referred to the BOX 40-40-70 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 appliance, installation or to property.

Note

A note shows more information.

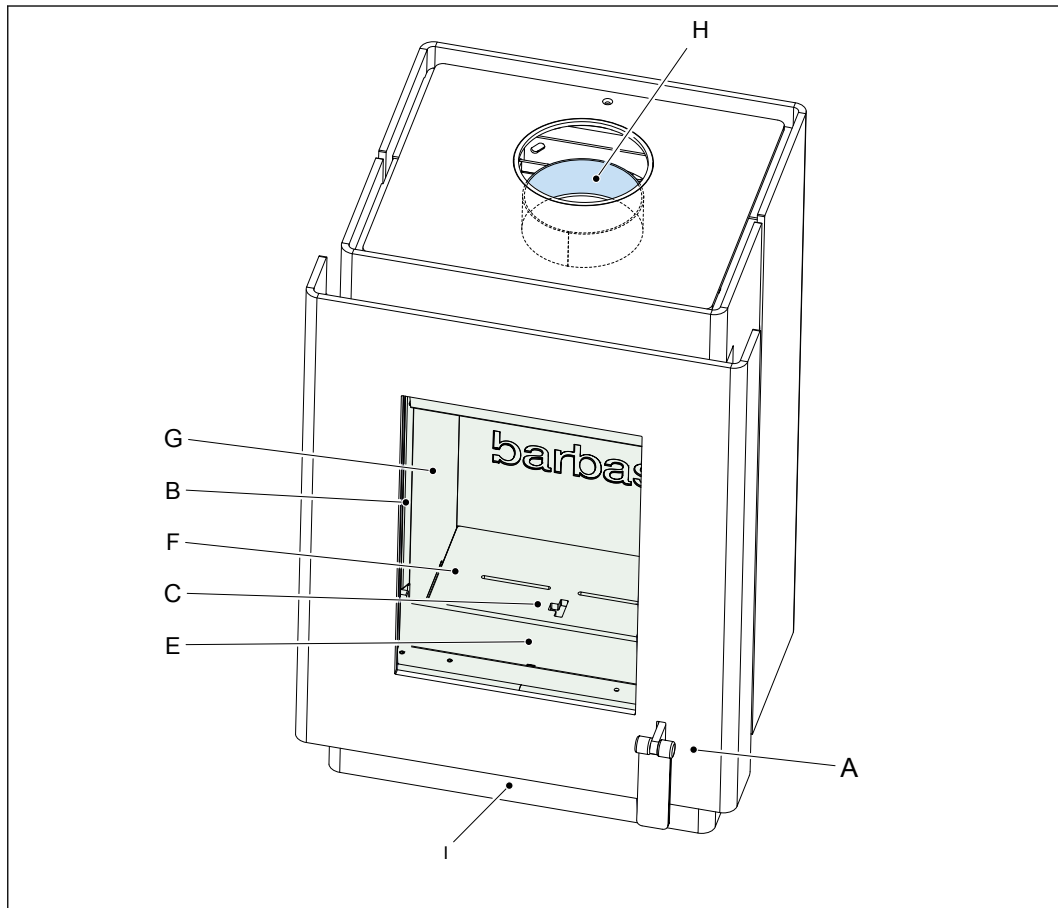
Symbol	Description
	Visual sign that there is a hazard
	Visual sign that there is a notice

2.3 Related documentation

- Installation and maintenance manual
- User manual

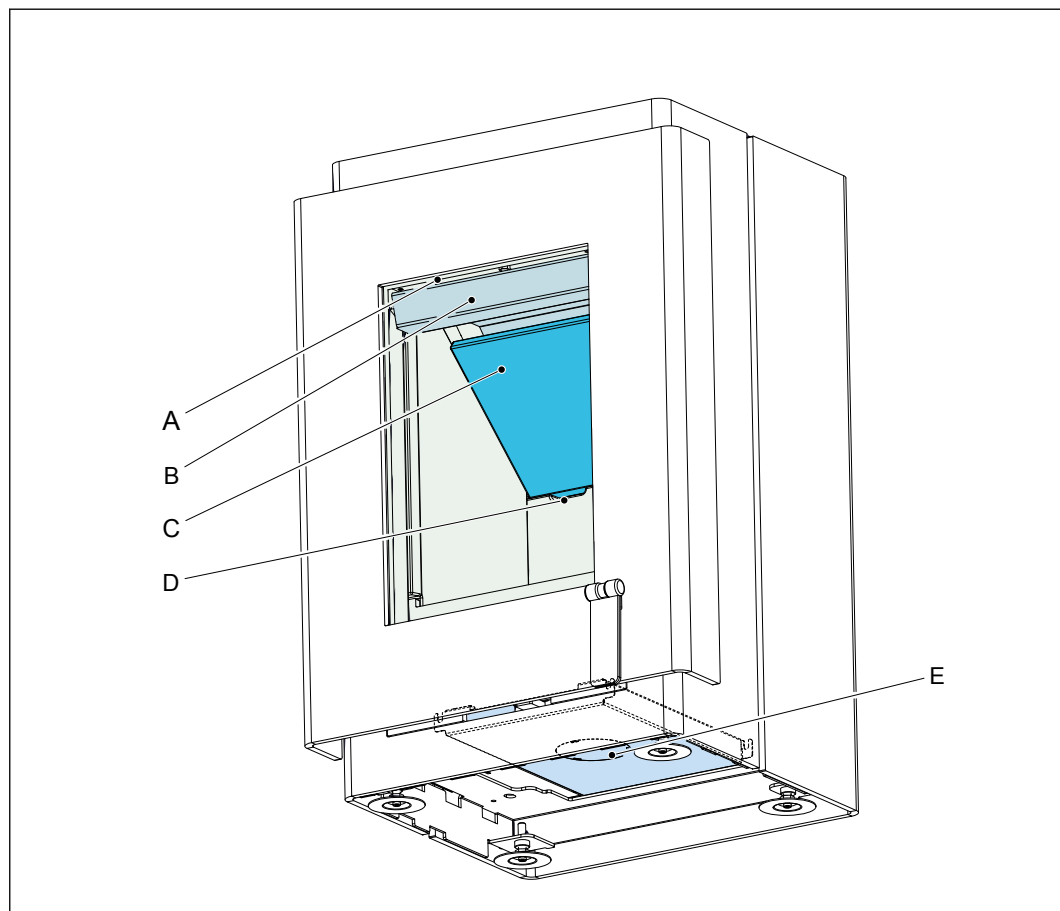
3 Description

3.1 Overview of the front of the appliance



- | | | | |
|---|-------------------|---|----------------------------|
| A | Door handle | F | Ash tray (under the grate) |
| B | Glass | G | Combustion chamber panels |
| C | Primary air inlet | H | Flue connection |
| D | Grate | I | Control lever |
| E | Log guard | | |

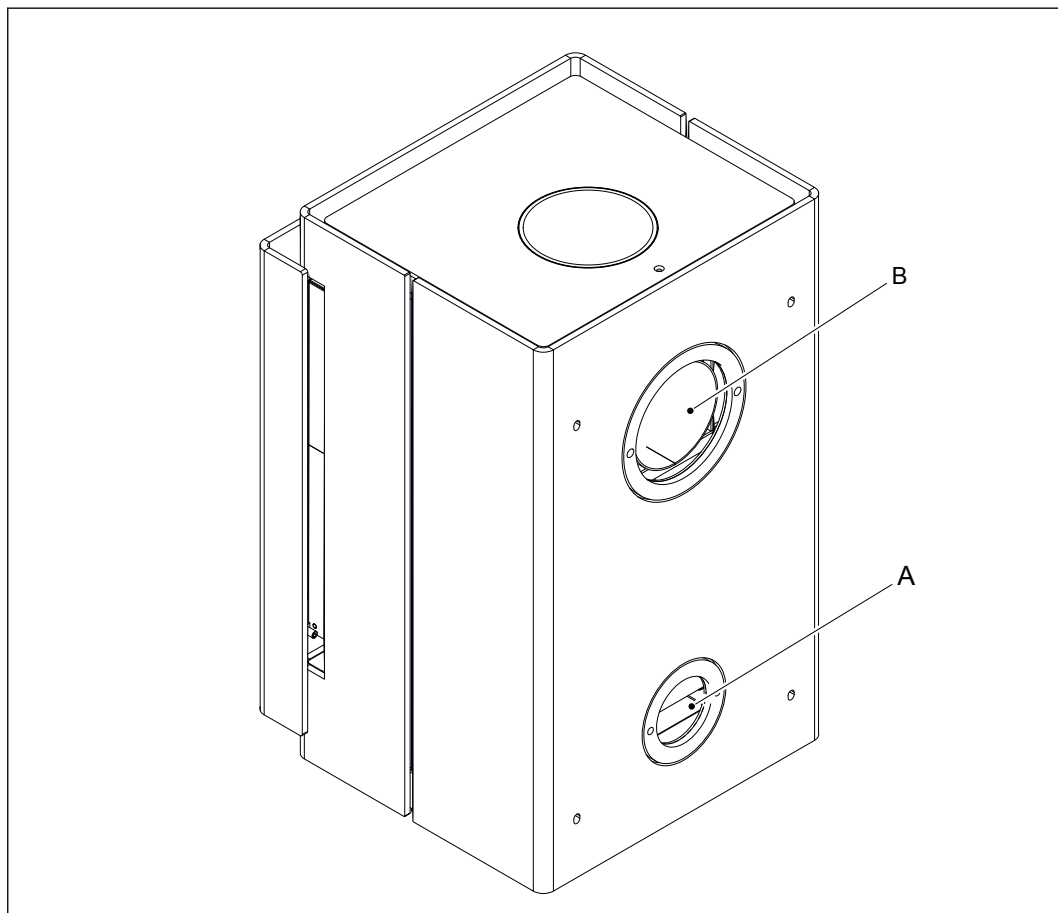
3.2 Overview of the bottom of the appliance



A Air wash inlet
B Heat shield
C Baffle

D Secondary air inlet
E Connection for external combustion
air supply

3.3 Overview of the rear of the appliance



A Connection for external combustion
air supply

B Rear flue connection

3.4 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 and waste.

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.

It is not allowed to connect the appliance on a shared flue gas channel.

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 installation

**Warning:**

- Installation must be done by a qualified installer.
- Install the appliance in accordance with the following installation instructions and the national and local applicable regulations.
- Make sure that the area around the fireplace is free of flammable material at all times. The minimal safe distance is 180 cm.
- If applicable, contact the authorities if it is allowed to connect the appliance to a flue that is also connected to another appliance.
- Do not install the appliance directly against a flammable wall or non-flammable wall. Refer to section 5 for minimum clearances between the appliance and the wall.
- Install a carbon monoxide alarm. The carbon monoxide alarm should be battery-powered and designed to operate for the life of the carbon monoxide alarm, following which it should be replaced. Alternatively a mains powered carbon monoxide alarm can be used, however this must be fitted with a sensor failure warning device.

**Caution:**

- Install the appliance on a floor with adequate load-bearing capacity. Refer to section 10 for the weight of the appliance.
- Make sure that the chimney has no creaks and is in general good order.
- Install a suitable cap on the chimney outlet to avoid birds' nests build in the chimney.
- Parts in the appliance can be moved during transportation. Make sure these parts are in the correct position.
- Do not use masking tape on the appliance. Masking tape can damage the finish of the appliance.
- Make sure that the chimney temperature class is minimum T400 sootfire resistant.
- Do not install the appliance in a room with a ventilation system that makes pressures below -15 Pa.

4.2 Safety instructions with regard to the environment

- Refer to the user manual for disposal and recycling of the appliance.
- Dispose of an obsolete appliance according to instructions of the authorities or the fitter.
- Obey the local regulations.

5 Clearances



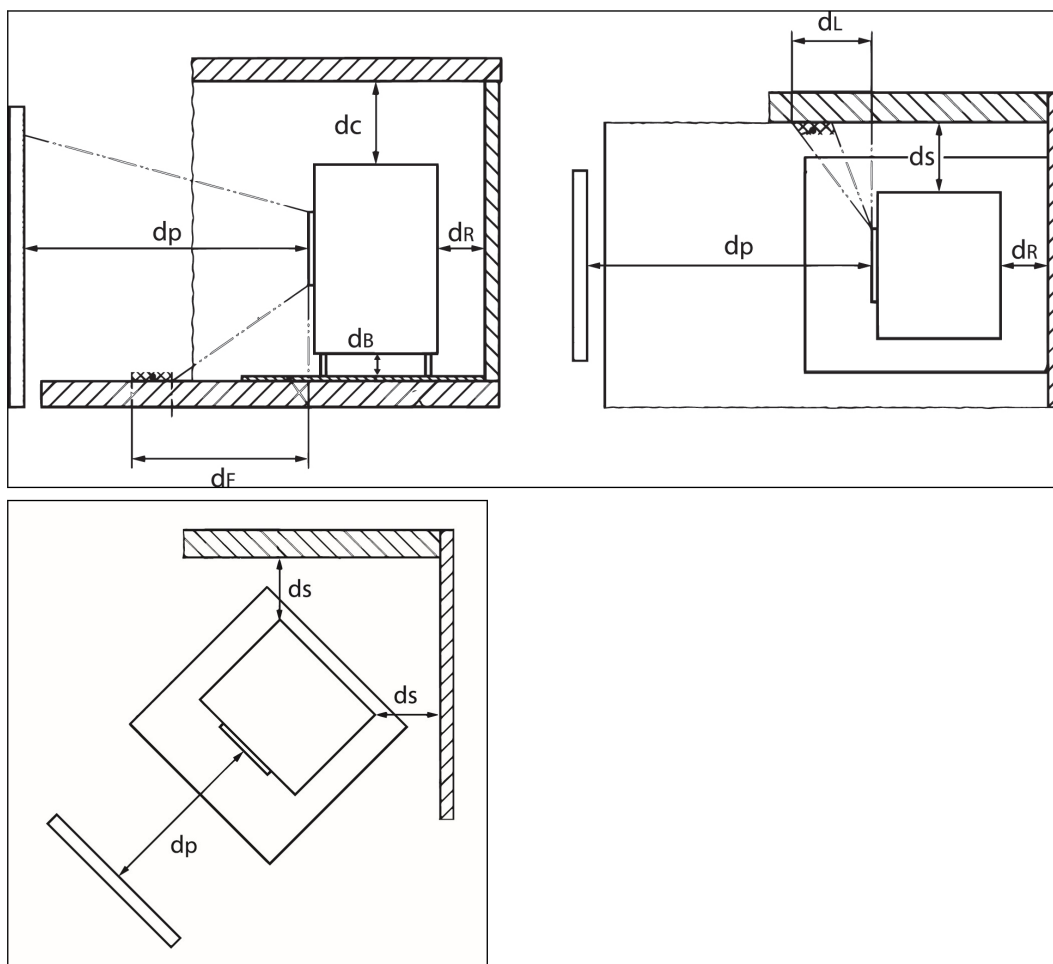
Warning:

- Obey the instructions in this section. Failure to follow these instruction can create a fire hazard.
- Do not put the appliance directly against a flammable or non-flammable wall.



Caution: Make sure that flammable materials near the appliance can never reach a temperature above 85 degrees centigrade

5.1 Safety distances



BOX 40-40-70			
Label	Minimum distance to flammable materials in cm	Remark	Minimum distance to non-flammable materials in cm
d_P	120		80
d_S	25		5
d_R	30		5
d_B	3	Install a non-flammable hearth with a thickness of minimum 3 cm (floorstone) when the appliance is put on a flammable floor. The width of the hearth must be minimum 15 cm from each side of the appliance. The minimum depth of the hearth in front of the appliance is minimum 50 cm. If the appliance is put on a flammable platform, make sure the depth of the non-flammable hearth is the same size as the platform in front of the appliance.	-
d_F	50		-
d_C	50		5
d_L	50		-

5.2

Safety distances BOX 40-40-70 with support frame



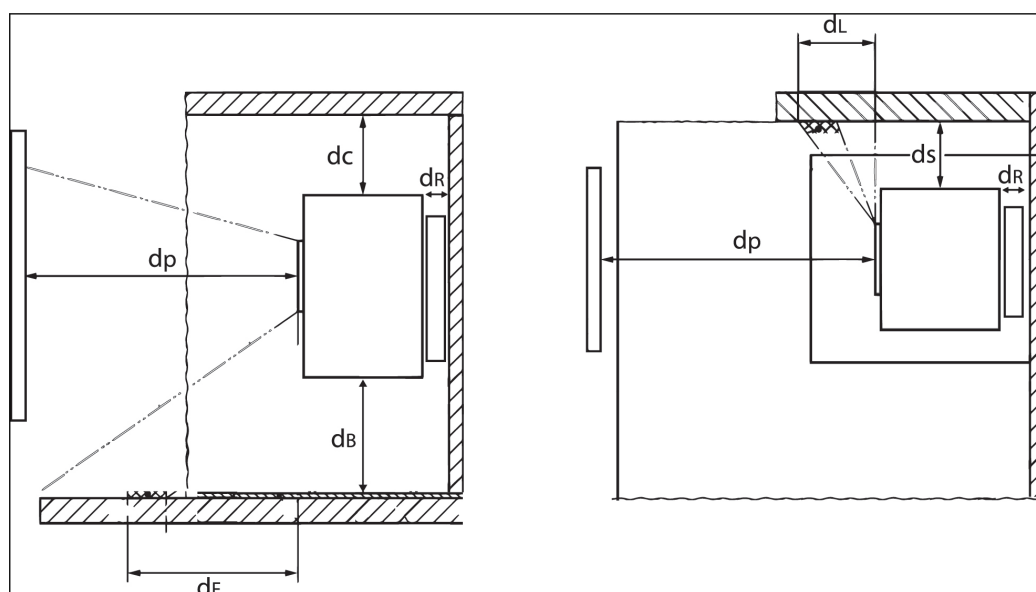
Warning:

Do not install the appliance against a flammable wall.

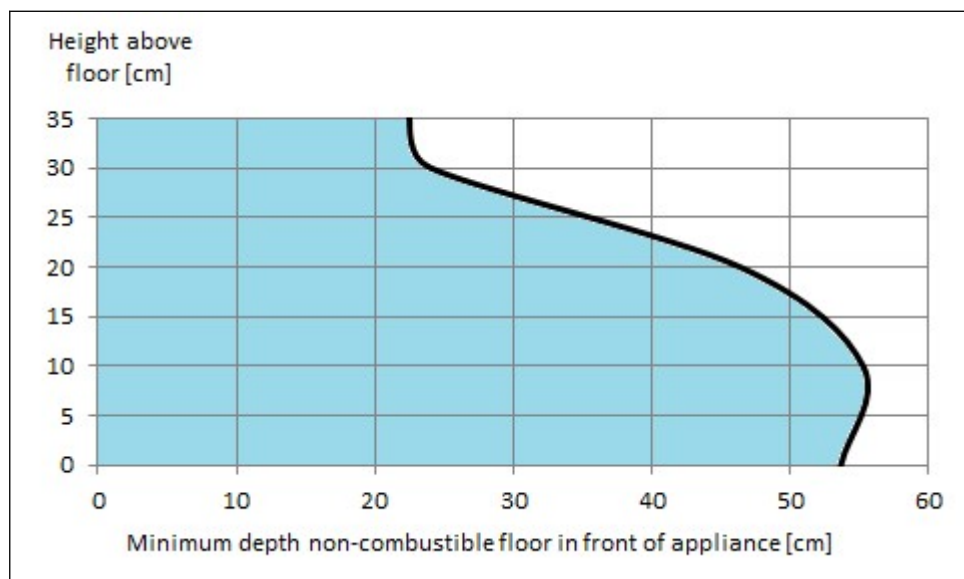


Note:

Use the support frame to attach the appliance on a non-flammable wall.



BOX 40-40-70 with support frame			
Label	Minimum distance to flammable materials in cm	Remark	Minimum distance to non-flammable materials in cm
d _P	120		10
d _S	25		50
d _R	See remark	Do not install on a flammable wall.	-
d _B	3	Install a non-flammable floor plate with a thickness of minimum 3 cm (floor stone) when the appliance is put on a flammable floor. The width of the floor plate must be minimum 15 cm from each side of the appliance. The depth of the floor plate in front of the appliance is dependent on the distance between the underside of the appliance and the floor. Refer to the graph hereunder.	-
d _F	20 - 50		-
d _C	50		5
d _L	50		equal to thickness of the support frame



Example for the graph: If the bottom of the BOX 40-40-70 with support frame is 25 cm above the floor (vertical axis on the graph), the depth of the non-flammable floor in front of the appliance (horizontal axis on the graph) is minimum 35 cm.

6 Installation requirements

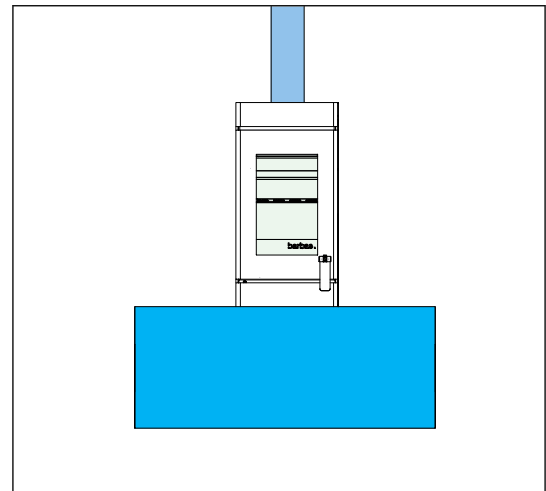
6.1 Requirements on the installation of the appliance

- Make sure that the location agrees with the safety requirements. Refer to section 4.1.
- Make sure the floor is made of concrete or a solid pedestal of non-combustible material.
- Make sure the floor is level. After placement it is not possible to level the appliance.
- Make sure the floor can support the weight of the appliance. Refer to section 10 for the weight of the appliance.
- Make sure that the floor temperatures below and in front of the appliance cannot be higher than 85 °C, during use of the appliance. Refer to section 5.
- The non-combustible floor must have a width that extends at least 150 mm from each side of the appliance and a minimum depth in front of the appliance according the requirements in section 5.
- Make sure the room where the appliance is installed has correct ventilation.
- Make sure that combustion air can flow into the appliance without obstruction.
- If applicable, it is recommended to install a valve in the external combustion air pipe.

6.2 Installation on a natural stone platform

Obey the requirements if the appliance is put on a natural stone platform.

- The platform must have minimum thickness of 3 cm.
- The platform must support the weight of the appliance directly underneath it.
- Ask your natural stone dealer for additional advice regarding the specific type of stone in combination with the appliance.



6.3 Requirements on the chimney

- Make sure the design and installation of the chimney is in accordance with EN 15287-2:2008, EN 13384-1:2015+A1:2019 and the good operation of the chimney is proven according EN 13384-2:2015+A1:2019 for the situation on site.
- Make sure that in case of use of an existing (masonry) chimney, it is in good order and applicable for the appliance. Ask your dealer or chimney sweeper for advice.
- Make sure the flue system obeys the national and local applicable regulations.
- Make sure the weight of the chimney is not supported by the appliance.
- Only connect the appliance to a chimney that is also connected with other appliances if it is permitted by local regulations and if the chimney allows to connect multiple appliances to it. Ask your installer for advice.
- The flue system must have a temperature class designation of minimum T400.
- The inner diameter of the chimney must be minimum 100 mm over the total length.

- Use a steel chimney pipe with a wall thickness of minimum 2 mm between the appliance and the existing chimney.
- Do not use more than 2 bends of 45°.
- Do not use horizontal flue pipes.
- The chimney outlet must be minimum 6 meter above the top of the appliance.
- The chimney outlet must be minimum 40 cm above the top of a sloped roof.
- The chimney outlet must be minimum 1 meter above a flat roof.
- The chimney outlet must be free from any objects (buildings, trees, etc.) within a horizontal range of minimum 5 meter.
- Make sure to remove the chimney valve when present in the existing chimney.
- Make sure your fire insurance policy covers any damage caused by a chimney fire.

6.4 Requirements on the external combustion air pipe

- Make sure the external combustion air pipe obeys the national and local applicable regulations.
- The inner diameter of the combustion air pipe must be minimum 80 mm over the total length.
- Use a flexible stainless steel or aluminum pipe.
- The maximum length of the external combustion air pipe is 5 meter.
- Do not use more than 1 bend of 90°.
- Make sure to cover the inlet of the external combustion inlet pipe with a suitable grate.
- It is recommended to install a valve in the external combustion air valve, to avoid debris or fallen leaves in the line and to avoid water vapour condensation in the appliance.

7 Installation

7.1 Install the appliance

1. Put the appliance in the designated position.
2. Obey the safety distances. Refer to section [5](#).
3. If necessary, put a nonflammable floor plate in front of the appliance. Refer to section [5](#).
4. Make sure that the flue connection on top of the appliance is correct in line with the flue pipe to the ceiling.
5. Make sure the appliance is installed horizontally. Use a spirit lever.

7.2 Connect the optional external air supply

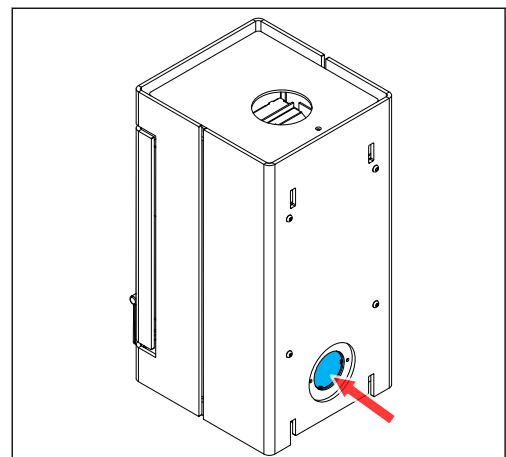
- The appliance has the possibility to connect a supply pipe for external combustion air. During operation the appliance gets combustion air from this air duct. The appliance however, is not a room-sealed appliance according to the requirements for room-sealed appliances.
- The external air supply connection is only available when ordered with the appliance.
- It is strongly recommended to install a valve in the external combustion air supply pipe, to avoid debris in the pipe and to avoid water vapor condensation in the appliance when not in use.

Connection to the rear of the appliance, refer to section [7.2.1](#).

Connection to the bottom of the appliance, refer to section [7.2.2](#).

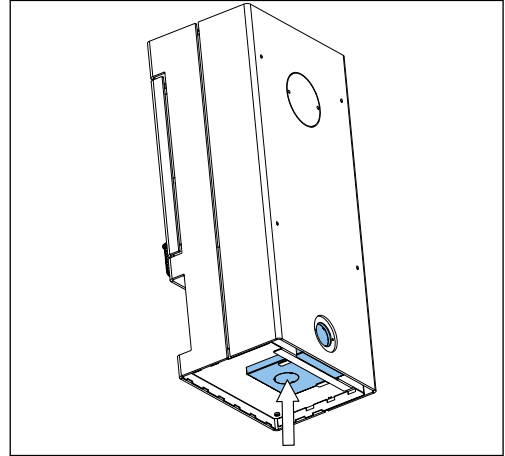
7.2.1 Connect the optional external air supply (rear connection)

1. Remove the round break out plate at the rear of the appliance with a hammer.
2. Put the connection ring in the open external air inlet opening.
3. Bend out the 3 lips on the connection ring to attach the connection ring on the inlet opening.
4. Identify the location in the outer wall for the external combustion air supply inlet.
5. Make a hole in the outer wall with at a minimum diameter of 80.
6. Put a flexible aluminum pipe in the hole.
7. Install a grate in the hole in the outer wall and attach the flexible aluminum pipe to it.
8. Attach the other end of the flexible aluminum pipe on the connection ring. Use a hose clamp.



7.2.2 Connect the optional external air supply (bottom connection)

1. Remove the round break out plate at the bottom of the appliance with a hammer.
2. If necessary, put the connection ring in the open external air inlet opening.
3. Bend out the 3 lips on the connection ring to attach the connection ring on the inlet opening.
4. Identify the location in floor for the external combustion air supply inlet.
5. Make a hole in the floor with at a minimum diameter of 80.
6. Put a flexible aluminum pipe in the hole.
7. Attach the other end of the flexible aluminum pipe on the connection ring. Use a hose clamp.



7.3 Connect the flue gas pipe

Preliminary requirements

- If the appliance is installed on an unlined, masonry flue with a large diameter, use an insulated flue lining system .
- Make sure the design and installation of the chimney is in accordance with EN 15287-2:2008, EN 13384-1:2015+A1:2019 and the good operation of the chimney is proven according EN 13384-2:2015+A1:2019 for the situation on site.

Only do this procedure after finish of the procedure in section [7.2](#).



Caution: During operation of the appliance the outer side of the flue system becomes hot. Refer to section [5.1](#) for minimum distances to flammable material.



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

Procedure

1. Connect the flue to the flue gas connection on the appliance. If necessary use a steel flue adaptor.
2. If the flue is connected to an existing (masonry) chimney, make sure that the gap between the flue and the existing chimney is sealed with ceramic wool or any other applicable component (ask your flue system supplier for advice)
3. Make sure that all mechanical connections of the flue system are correctly used.
4. Make sure that all of the flue system is gas-tight,

7.4 Final check on the appliance

1. Make sure the door closes and opens easy.
2. Make sure the control lever moves easy to left and right without undue noise.
3. Make sure the plates on the side and rear wall of the combustion chamber and the baffles are in the correct position.

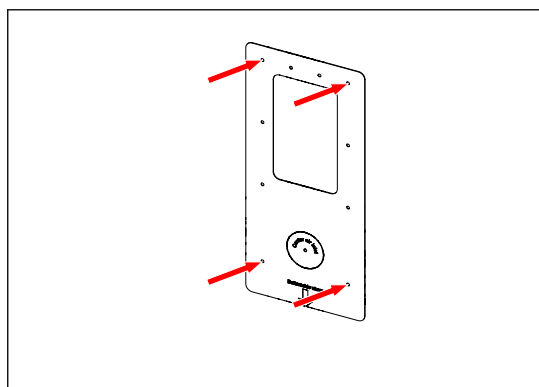
Contact your dealer if the final check shows a defect.

8 Installation of the BOX 40-40-70 with support frame

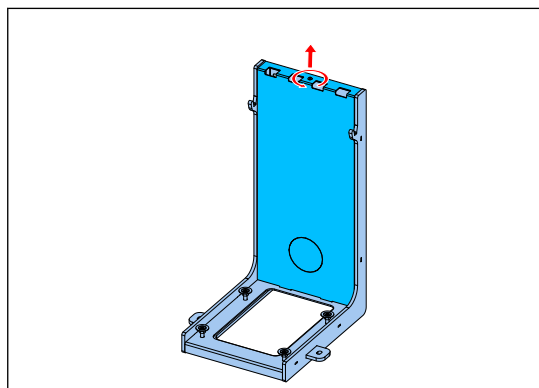
1. Install the support frame. Refer to section [8.1](#).
2. Install the external combustion air supply . Refer to section [8.2](#).
3. Install the appliance on the support frame. Refer to section [8.3](#).
4. Connect the flue gas pipe. Refer to section [8.4](#).
5. Do a final check. Refer to section [8.5](#).

8.1 Install the support frame

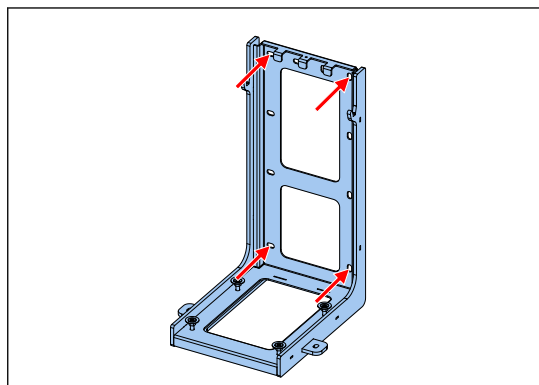
1. Use the steel template to mark the locations on the wall for the 4 corner screws by which the support frame is attached to the wall and to mark the location for the external air supply. Make sure the template is horizontal when marking the locations. Use a spirit level.



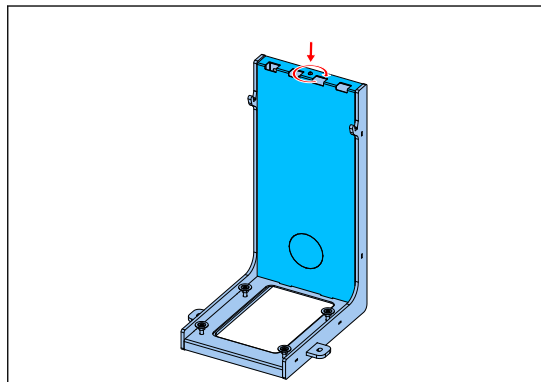
2. Drill the 4 holes.
3. Remove the heat shield from the support frame. Use a 3 mm allen key.



4. Attach the support frame to the wall with appropriate screws. Use plugs when necessary.



5. Attach the heat shield to the support frame with the allen screw. Use a 3 mm allen key

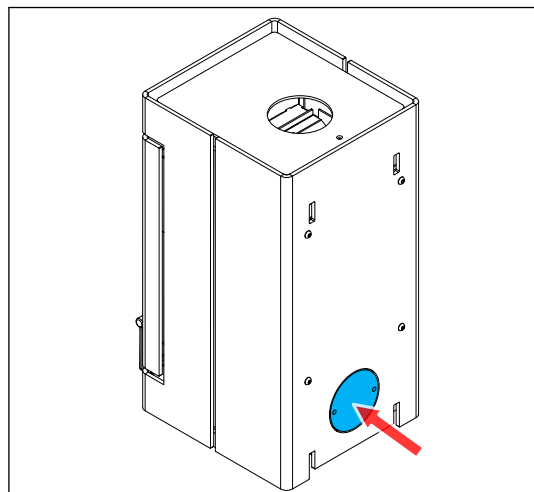


6. Identify the location in the wall for the external combustion air supply inlet.
7. Make a hole in the wall with a minimum diameter sufficient for a flexible aluminum pipe with a diameter of 80 mm.
8. Continue the installation procedure with section [8.2](#).

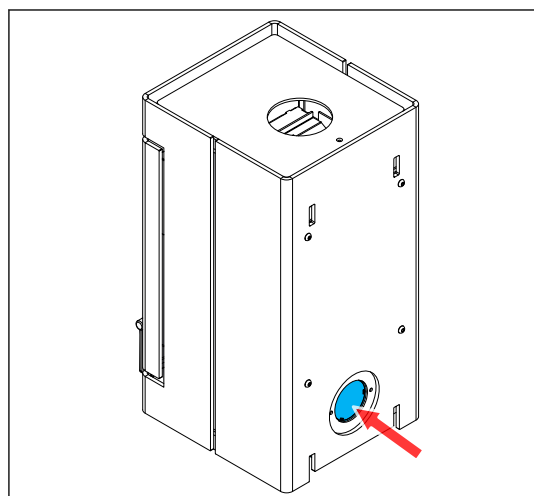
8.2 Connect the external air supply

Only do this procedure after finish of the procedure in section [8.1](#).

1. Remove the 2 screws that hold the round plate at the rear of the appliance. A round break out plate is now visible.



2. Remove the round break out plate with a hammer.



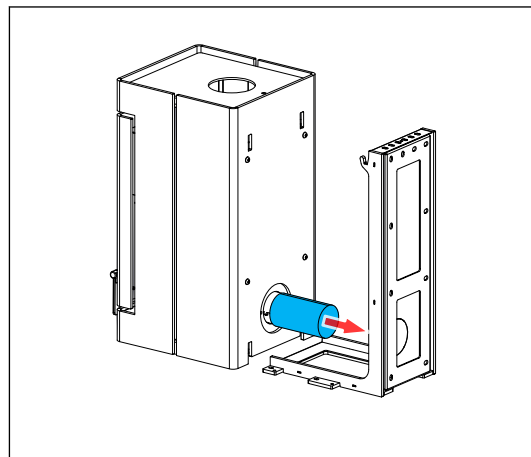
3. Put the connection ring in the open external air inlet opening.
4. Bend out the 3 lips on the connection ring to attach the connection ring on the inlet opening.

5. Attach a flexible aluminum pipe with a length of approximately 53 mm plus the thickness of the wall . Use a hose clamp or screws.
6. Continue the installation procedure with section [8.3](#).

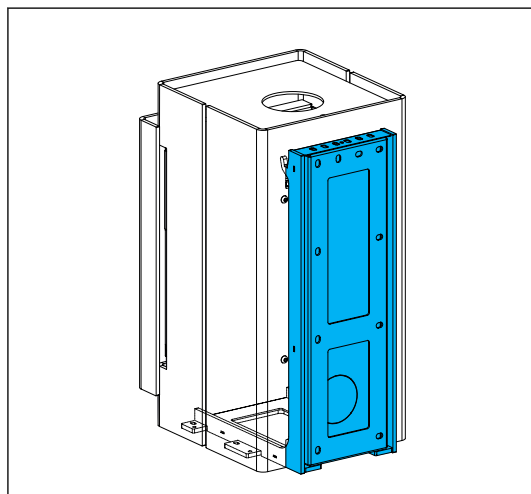
8.3 Install the appliance on the support frame

Only do this procedure after finish of the procedure in section [8.2](#).

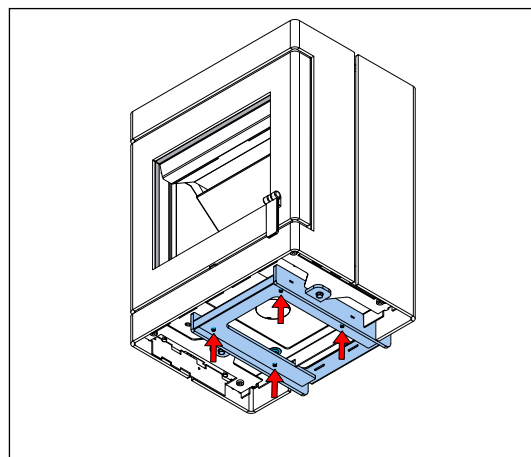
1. Lift the appliance until the flexible aluminum pipe is on the same height as the hole in the wall.
2. Move the appliance in the direction of the wall and guide the flexible pipe into the hole in the wall.



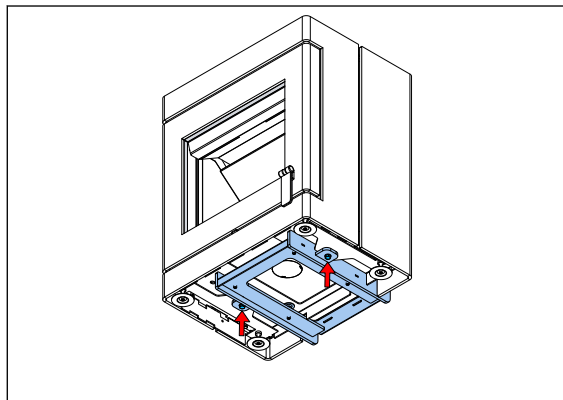
3. Move the appliance further on the support frame. Lower the appliance until it sits tight on the support frame.



4. Make sure the appliance is horizontal on the support frame. If necessary, adjust the adjustable feet with a 4 mm allen key. Use a spirit level.



5. Attach the appliance on the support frame with the 2 screws.



8.4 Connect the flue gas pipe

Preliminary requirements

- If the appliance is installed on an unlined, masonry flue with a large diameter, use an insulated flue lining system .
- Make sure the design and installation of the chimney is in accordance with EN 15287-2:2008, EN 13384-1:2015+A1:2019 and the good operation of the chimney is proven according EN 13384-2:2015+A1:2019 for the situation on site.

Only do this procedure after finish of the procedure in section [8.3](#).



Caution: During operation of the appliance the outer side of the flue system becomes hot. Refer to section [5.2](#) for minimum distances to flammable material.



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

Procedure

1. Connect the flue to the flue gas connection on the appliance. If necessary use a steel flue adaptor.
2. If the flue is connected to an existing (masonry) chimney, make sure that the gap between the flue and the existing chimney is sealed with ceramic wool or any other applicable component (ask your flue system supplier for advice)
3. Make sure that all mechanical connections of the flue system are correctly used.
4. Make sure that all of the flue system is gas-tight,

8.5 Final check on the appliance

1. Make sure the door closes and opens easy.
2. Make sure the control lever moves easy to left and right without undue noise.
3. Make sure the plates on the side and rear wall of the combustion chamber and the baffles are in the correct position.

Contact your dealer if the final check shows a defect.

9 Maintenance

**Warning:**

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

Do all procedures in this section when necessary.

9.1 Appliance

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

9.2 Combustion air supply

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

9.3 Chimney

**Note:**

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

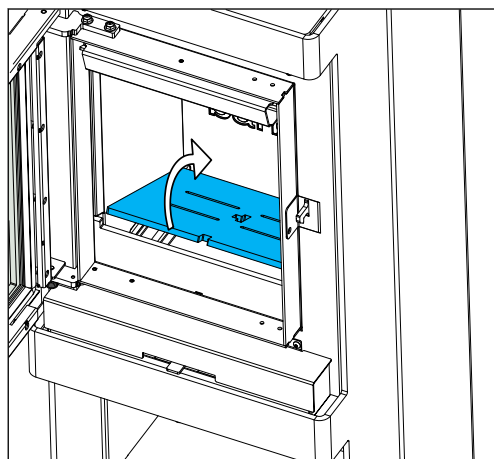
1. Remove the heat shield, lower baffle and upper baffle before the chimney sweep work. Refer to section [9.5](#) for the procedure to remove the heat shield and the baffles.
2. Sweep and inspect the chimney
3. Make sure there is no blockage in the chimney, for example by birds' nests.
4. Examine for cracks, loose parts and flue gas leakage. It is recommended to use an inspection camera.
5. Install the heat shield, lower baffle and upper baffle. Refer to section [9.7](#) for the procedure to install the heat shield and the baffles.

9.4 Removal of the grate and ash tray

**Note:**

Make sure to remove all ashes and unburnt wood from the combustion chamber before the start of this procedure.

1. Lift the grate and remove from the combustion chamber.
2. Lift the ash tray and remove from the combustion chamber. Make sure ashes do not fall onto the air valve.
3. Empty the ash tray and dispose the ashes as rest waste.



9.5

Removal of the heat shield and baffle



Note:

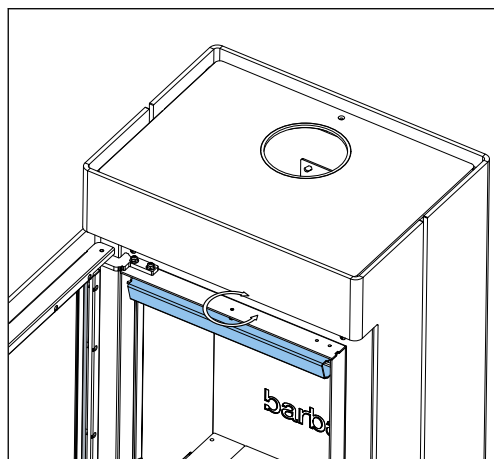
Make sure to remove all ashes and unburnt wood from the combustion chamber before the start of this procedure.

1. Remove the heat shield. Refer to section [9.5.1](#).
2. Remove the baffle. Refer to section [9.5.2](#).

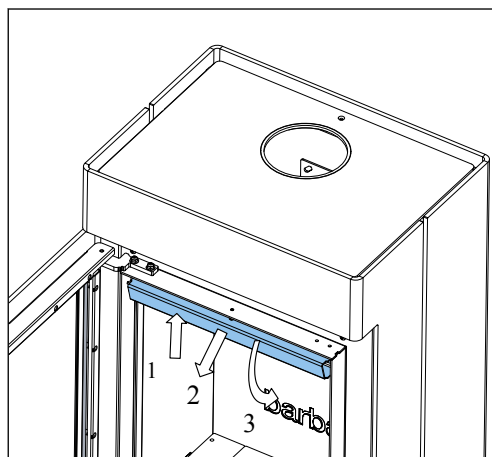
9.5.1

Remove the heat shield

1. Open the door.
2. Loosen the nut above the heat shield with a 3 mm hexagonal key and a 10 mm fork spanner. Turn the nut down with the fork spanner and turn the screw up with the hexagonal key until the screw is loose from the heat shield.



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

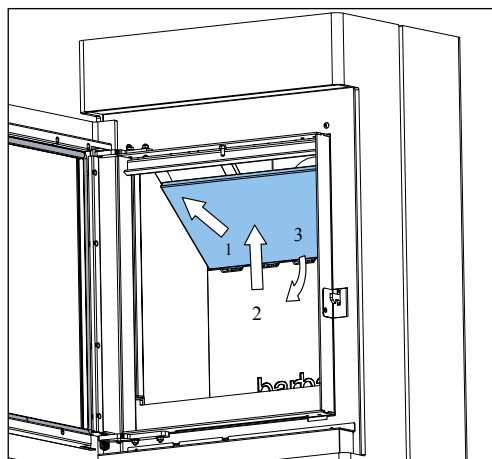


9.5.2

Remove the baffle

Only do this procedure after finish of the procedure in section [9.5.1](#).

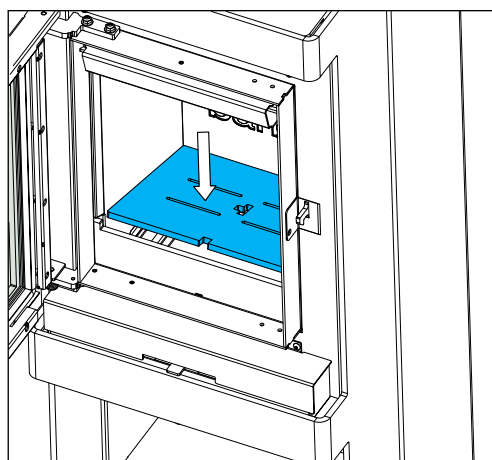
1. Push up the rear side of the baffle and move it as far back as possible.
2. Lower the front side of the baffle and remove the baffle from the appliance.



9.6

Installation of the ash tray and grate

1. Put the ash tray on bottom of the combustion chamber.
2. Put the grate in the combustion chamber. Make sure the notch in the grate is facing to the front of the appliance.
3. Put the grate on the ashtray

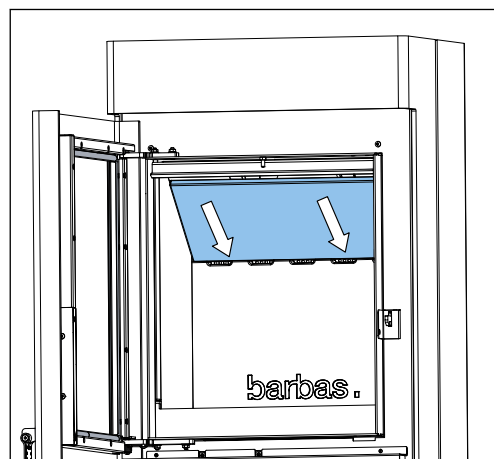
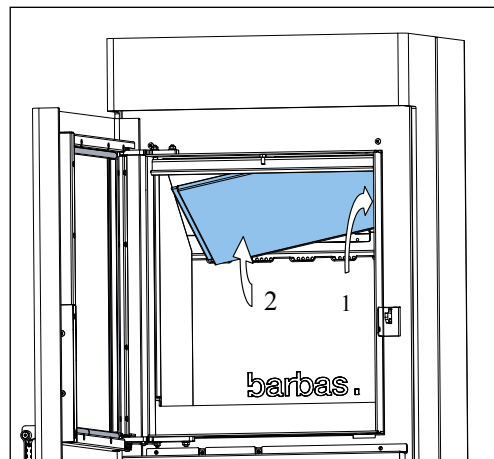


9.7 Installation of the baffles

1. Install the baffle. Refer to section [9.7.1](#).
2. Install the heat shield. Refer to section [9.7.2](#).

9.7.1 Install the baffle

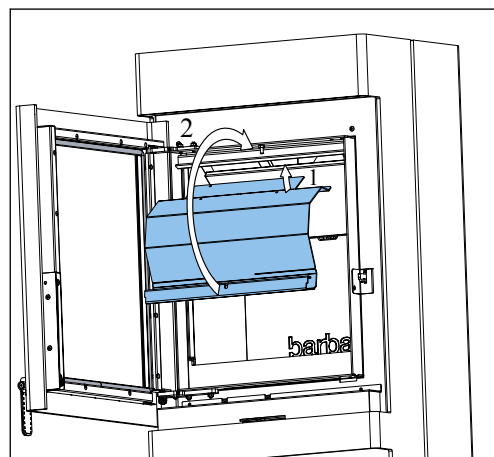
1. Move the baffle up under an angle into the combustion chamber (1) and put the right side of the baffle above the side panels (2) on the right.
2. Move the left side of the baffle up and put it on top of the side panels on the left. If it does not fit, make sure the side panels are firmly seated against the side wall of the appliance.
3. Put the rear side of the baffle against the rear wall (3).
4. Make sure the baffle is horizontal and against the rear wall.



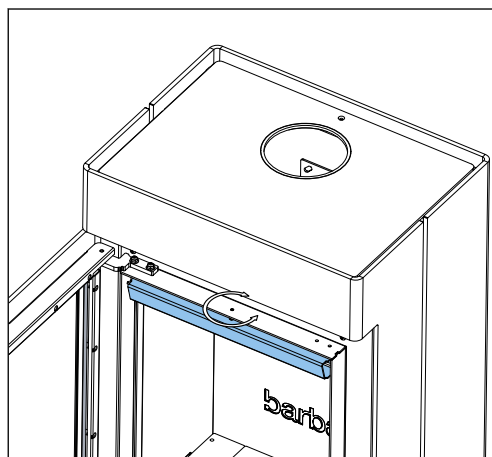
9.7.2 Install the heat shield

Only do this procedure after finish of the procedure in section [9.7.1](#).

1. Move the heat shield up and put the rear side above the baffle (1).
2. Move the front of the heat shield up (2) and put the edge on the metal strip under the air wash inlet (3).



3. Turn the screw down with a 3 mm hexagonal key until it is in the screw hole in the heat shield.
4. Turn the nut up with a 10 mm fork spanner and tighten it.



10 Technical data

10.1 Technical data

Name	Barbas	
Model	- BOX 40-40-70 - BOX 40-40-70 with support frame	
EPREL registration number	2110577	
Tested in accordance with	EN16510-2-1	
Energy efficiency index	106	
Energy efficiency class	A	
Fuel	Wood logs, Wood briquettes	
Indirect heating function	No	
Room sealed	No	
Leak rate at 10 Pa	not applicable	
Seasonal efficiency	70.1 %	
	At nominal heat output	At part load heat output
Fuel load	1.2 kg	0.8 kg
Heat output (net)	5.3 kW	3.7 kW
Useful efficiency	80.1 %	78.7 %
Emissions (at 13 % O₂, 273 K, 1013 hPa)		
• carbon monoxide (CO)	680 mg/Nm ³	1370 mg/Nm ³
• particles (PM)	28 mg/Nm ³	45 mg/Nm ³
• organic gaseous compounds (OGC)	42 mg/Nm ³	118 mg/Nm ³
• nitrogen oxides (NO _x)	108 mg/Nm ³	91 mg/Nm ³
Flue gas mass flow	4.5 g/s	3.8 g/s
Flue gas outlet temperature	330 °C	276 °C
Flue gas temperature	275 °C	230 °C
Minimum chimney draught	12 Pa	8 Pa
Minimum temperature class of the chimney	T 400	
Flue gas connection	Outer diameter 128 mm, suitable for a pipe with an inner diameter of 130 mm	
External combustion air connection	80 mm	
- BOX 40-40-70 - BOX 40-40-70 with support frame	135 kg 155 kg	
Minimum distance to flammable materials	Refer to chapter 5	
Used materials		

• Combustion chamber side and back panels	Vermiculite 750 kg/m ³
• Combustion floor and grate	Steel
• Lower baffle	Vermiculite 750 kg/m ³
• Heat shield	Steel
• Front glass	Heat resistant ceramic glass
The specific precautions that shall be taken when the local space heater is assembled, installed or maintained, are listed in the attached documents:	• Installation and maintenance manual • User manual
Maximum capacity to carry a chimney	120 kg *)

Additional information in order to achieve relevant test results for market surveillance

Mass of basic fire bed	120 g
Criterion for the end of the test cycle	5 vol% CO ₂

*) if the weight of the chimney or part of the chimney, being carried by the appliance, is more than indicated, the chimney must be supported with a wall bracket.

10.2

Product information according regulation (EU) 2015/1185

Model identifier	BOX 35-40-105										
Equivalent models	BOX 35-40-85; BOX 35-40-70; BOX 40-40-85; BOX 40-40-70										
Indirect heating function	No										
Direct heat output	5.3 kW										
Indirect heat output	- kW										

Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Emissions at nominal heat output (*) [mg/Nm ³ (13 % O ₂)]				Emissions at minimum heat output (**) [mg/Nm ³ (13 % O ₂)]			
			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_{se} [%]	70		
Energy efficiency index (EEI)	106		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Heat output				Useful efficiency (NCV as received)			
Nominal heat output	P _{nom}	5.3	kW	Useful efficiency at nominal heat output	$\eta_{th, nom}$	80.1	%
Minimum heat output (indicative)	P _{min}	3.7	kW	Useful efficiency at minimum heat output (indicative)	$\eta_{th, min}$	78.7	%

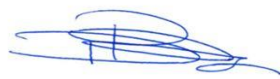
Auxiliary power consumption				Type of heat output/room temperature control (select one)		
At nominal heat output	e _{l, max}	N.A.	kW	Single-stage heat output, no room temperature control	yes	
At minimum heat output	e _{l, min}	N.A.	kW	Two or more manual stages, no room temperature control	no	
In standby mode	e _{l, sb}	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.

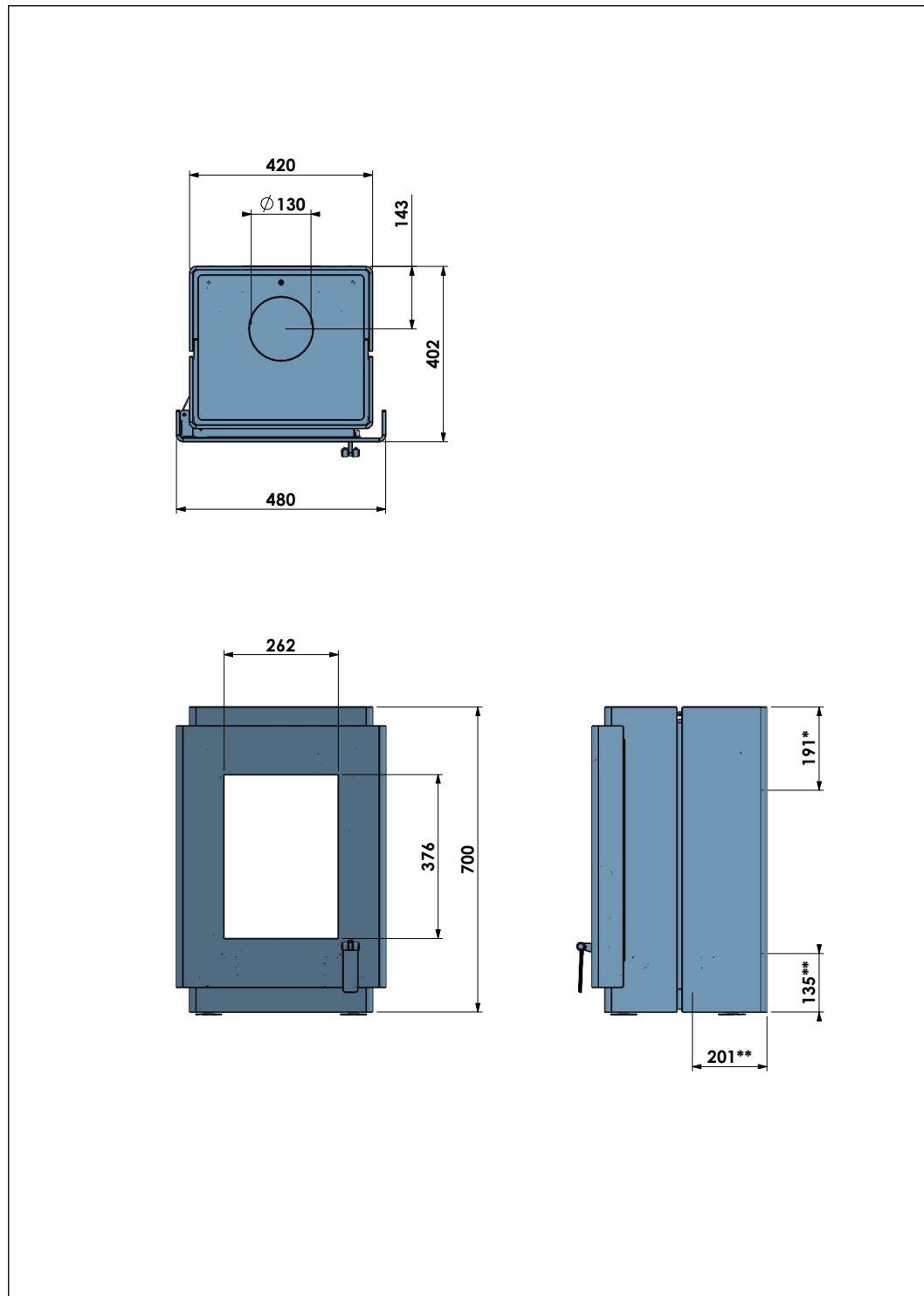
Signed for and on behalf of the manufacturer by:
Danny Baijens, CEO

Bladel; 21 August 2024



11 Dimensions

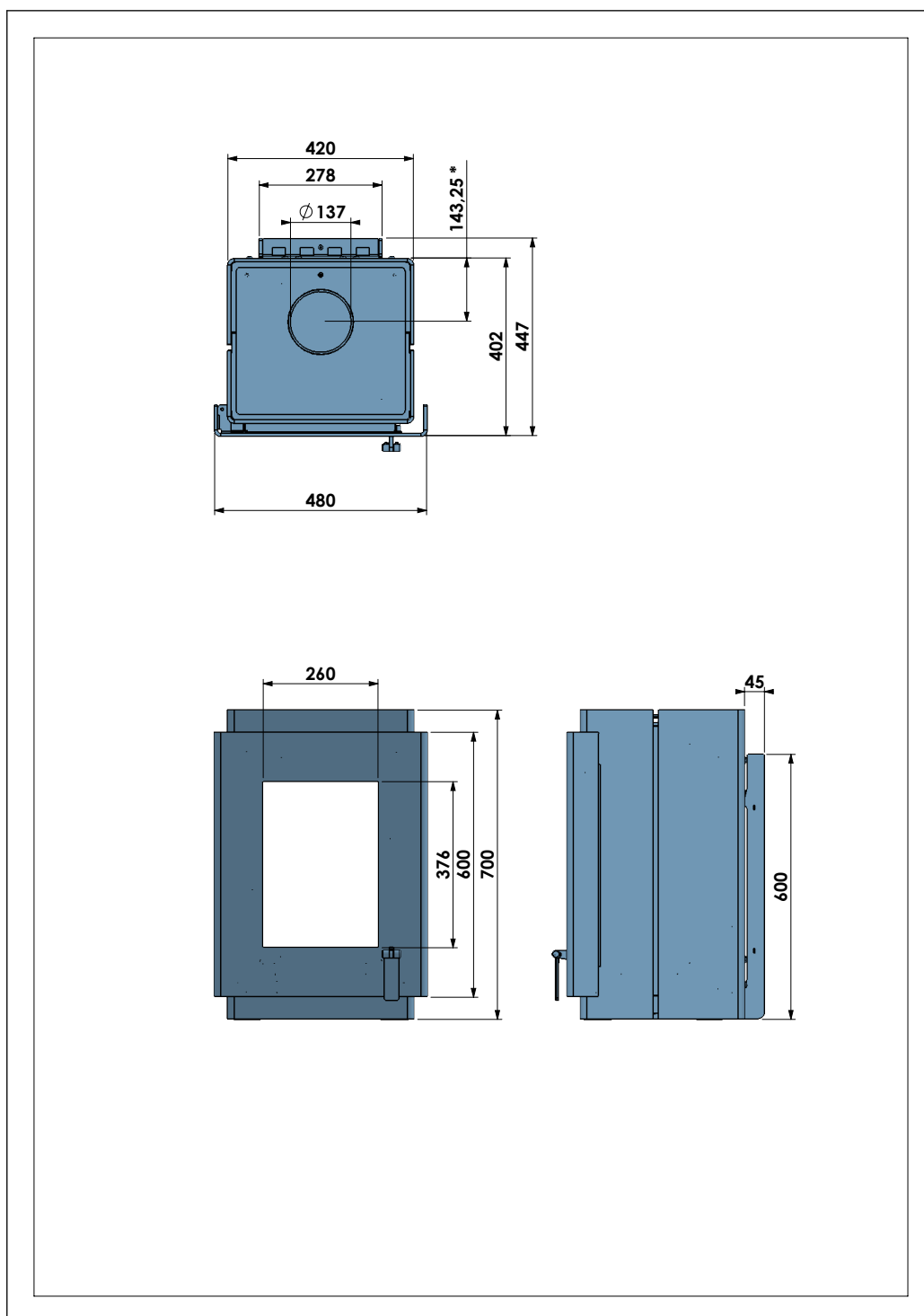
11.1 Dimensions BOX 40-40-70



*) Optional chimney connection ($\varnothing 100$) at the rear.

**) Combustion air inlet openings ($\varnothing 80$) at the rear and bottom of the appliance.

11.2 Dimensions BOX 40-40-70 with wall support frame



*) Combustion air inlet openings ($\varnothing 80$) at the rear and bottom of the appliance.

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 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.

barbas .

Your Barbas dealer