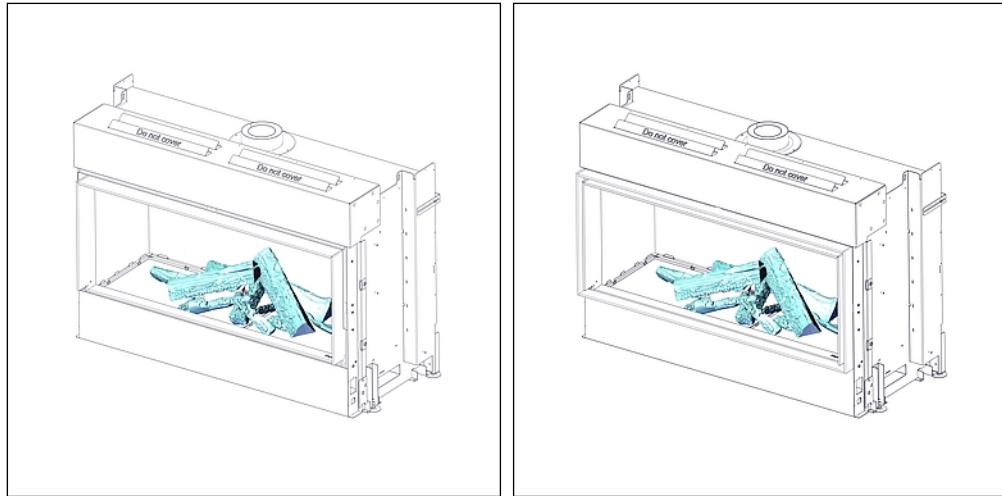


barbas .

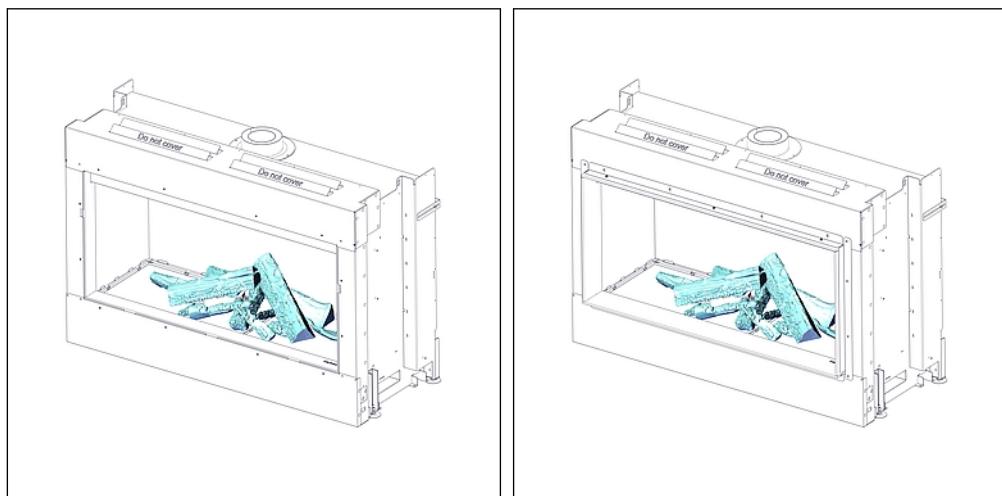
Installation and maintenance manual

Gas Fire Front 110-75 PF2

---- Floating Frame ----- Floating Frame + ----



---- Hidden Door ----- Hidden Door + ----

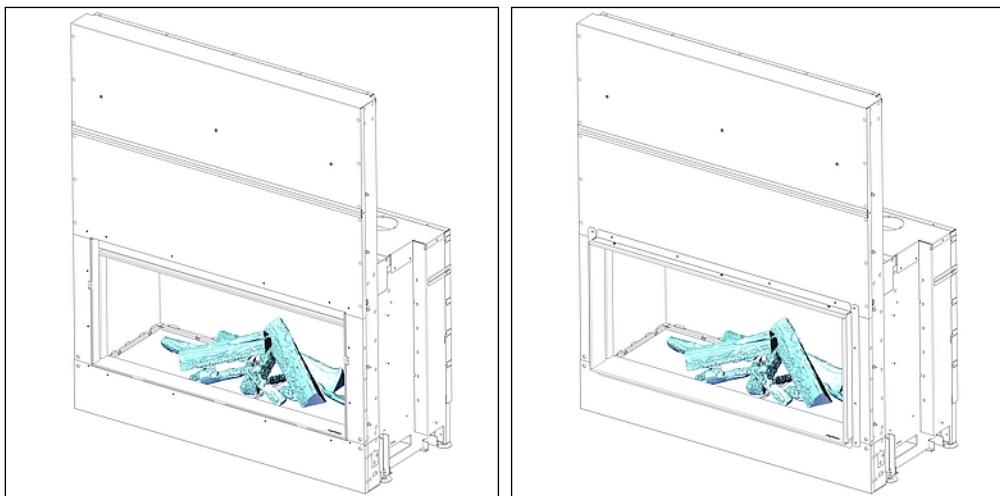


UK
CA

Serial number:

Production date:

Hidden Door & Fire Screen -- Hidden Door + & Fire Screen



© 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.barbasbellfires.com

Contents

1	About this document.....	7
1.1	How to work with this document.....	7
1.2	Warnings and cautions used in this document.....	7
1.3	Related documentation.....	7
2	Description.....	8
2.1	Intended use.....	8
2.2	Installation options.....	8
2.3	Overview of the appliance.....	9
2.4	Overview of the burner bed and the pilot light.....	11
2.5	Overview of the ceramic log set.....	12
2.6	Overview of the control elements.....	15
2.6.1	Overview of the rear of the gas regulator block.....	15
2.6.2	Overview of the front of the gas regulator block.....	16
2.6.3	Overview of the connections on the gas regulator block.....	17
2.6.4	Overview of the receiver.....	18
2.6.5	Overview of the fan/light module.....	19
2.7	Examples of a typical installation.....	20
3	Safety.....	22
3.1	Safety devices on the appliance.....	22
3.2	Safety instructions for installation.....	22
3.3	Safety instructions with regard to the environment.....	23
4	Clearances.....	24
4.1	Insulating material requirements.....	24
4.2	Clearances to flammable walls.....	24
4.3	Clearance to flammable floor (under the appliance).....	25
4.4	Clearances to flammable ceiling.....	25
4.5	Clearances to non-flammable walls.....	26
4.6	Clearances to a non-flammable ceiling.....	27
4.7	Clearances in front of the appliance.....	29
4.8	Mantel clearances.....	29
4.9	Clearances for concentric flue system.....	32
4.10	Clearances for TV installation.....	33

5	Installation.....	36
5.1	Installation requirements.....	36
5.1.1	Requirements on the installation of the appliance.....	36
5.1.2	Requirements on the chimney.....	36
5.1.3	Requirements on the ventilation/convection air openings.....	37
5.2	Installation procedure.....	38
5.2.1	Preparation.....	38
5.2.2	Install the appliance.....	38
5.2.3	Horizontally align the appliance.....	41
5.2.4	Make the gas connection.....	44
5.2.5	Do a check on the gas connections.....	44
5.2.6	Make the electrical connection.....	44
5.2.7	Connect the concentric flue system.....	45
5.2.8	Connect the convection set (optional).....	45
5.2.9	Install the flue gas restriction plate.....	46
5.2.10	Build the fireplace.....	48
5.2.11	Extra: TV installation above the appliance.....	49
5.3	Prepare the appliance for use.....	50
5.3.1	Do a check on the overpressure hatches.....	50
5.3.2	Do a check on the operation of the lighting.....	50
5.3.3	Do a check on the operation of the integrated fire screen (optional on an Hidden Door (+)).....	50
5.3.4	Put the ceramic logs on the burners.....	51
5.3.5	Do a final check on the fireplace.....	53
6	Maintenance.....	54
6.1	Annual maintenance.....	54
6.1.1	Clean the appliance.....	54
6.1.2	Do a check on the appliance.....	56
6.2	Maintenance procedures.....	56
6.2.1	Remove the glass pane Floating Frame (+).....	56
6.2.2	Install the glass pane Floating Frame (+).....	57
6.2.3	Remove the glass pane Hidden Door (+).....	60
6.2.4	Install the glass pane Hidden Door (+).....	62
6.2.5	Remove the glass pane Hidden Door (+) with fire screen.....	66
6.2.6	Install the glass pane Hidden Door (+) with fire screen.....	68
6.2.7	Disassembly of burners and burner bed.....	72
6.2.8	Clean the standard glass.....	72
6.2.9	Clean the anti-reflective glass.....	73
6.2.10	Replace the ambient light bulb when broken.....	73
7	Troubleshooting.....	75
8	Technical specification.....	76
8.1	Barbas Gas Fire Front 110-75 PF2- GB, IE, ES, IT.....	76
8.2	Diagram electricity and gas.....	79
8.3	Dimensions of the restriction plate.....	79

9	Dimensions.....	80
9.1	Gas Fire Front 110-75 PF2 with Floating Frame.....	80
9.2	Gas Fire Front 110-75 PF2 with Floating Frame +.....	81
9.3	Gas Fire Front 110-75 PF2 with Floating Frame and adjustable legs.....	82
9.4	Gas Fire Front 110-75 PF2 with Floating Frame + and convection casing.....	83
9.5	Gas Fire Front 110-75 PF2 with Hidden Door.....	84
9.6	Gas Fire Front 110-75 PF2 with Hidden Door +.....	85
9.7	Gas Fire Front 110-75 PF2 with Hidden Door and adjustable legs.....	86
9.8	Gas Fire Front 110-75 PF2 with Hidden Door and convection casing.....	87
9.9	Gas Fire Front 110-75 PF2 with Hidden Door and integrated fire screen.....	88
9.10	Gas Fire Front 110-75 PF2 with Hidden Door + , convection casing and integrated fire screen.....	89
9.11	BARBAS Airbox 160 with 4 insert models.....	90
9.12	BARBAS Airbox 320 with 4 insert models.....	91
10	Warranty Terms.....	92
11	EU-Declaration of Conformity.....	94

1 About this document

This document shows the necessary information to do these tasks on the Gas Fire Front 110-75 PF2

- Installation
- Maintenance

This document refers to the Gas Fire Front 110-75 PF2 as 'the appliance'. This document is an essential part of your appliance. Read it carefully before you do work on the appliance. Keep it in a safe place.

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

1.1 How to work with this document

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

1.2 Warnings and cautions used in this document

Warning

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

Caution

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

Note

A note shows more information.

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

1.3 Related documentation

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

2 Description

2.1 Intended use

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

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

2.2 Installation options

The appliance has a Premium Fire (PF2) double burner.

- The appliance can be installed with 4 adjustable height legs.
- The appliance can be equipped with a convention case with 4 convection air outlet openings at the top of the appliance.
- The appliance can be installed with anti-reflective ceramic glass. Retrofit is possible. Contact your dealer for more information.
- The appliance with an Hidden Door (+) can be equipped with a factory-fitted integrated sliding fire screen.
- In those cases the length of the concentric flue channel is longer than prescribed in the Preparation Manual, the appliance can be installed with the Opti-Vent system.
- The appliance can be installed with a WiFi box for operation with a mobile device. Retrofit is possible. Contact your dealer for more information.
- A mantel iron can be installed on the appliance. The mantel iron makes it possible to build the brickwork of the fireplace beyond the height of the appliance.

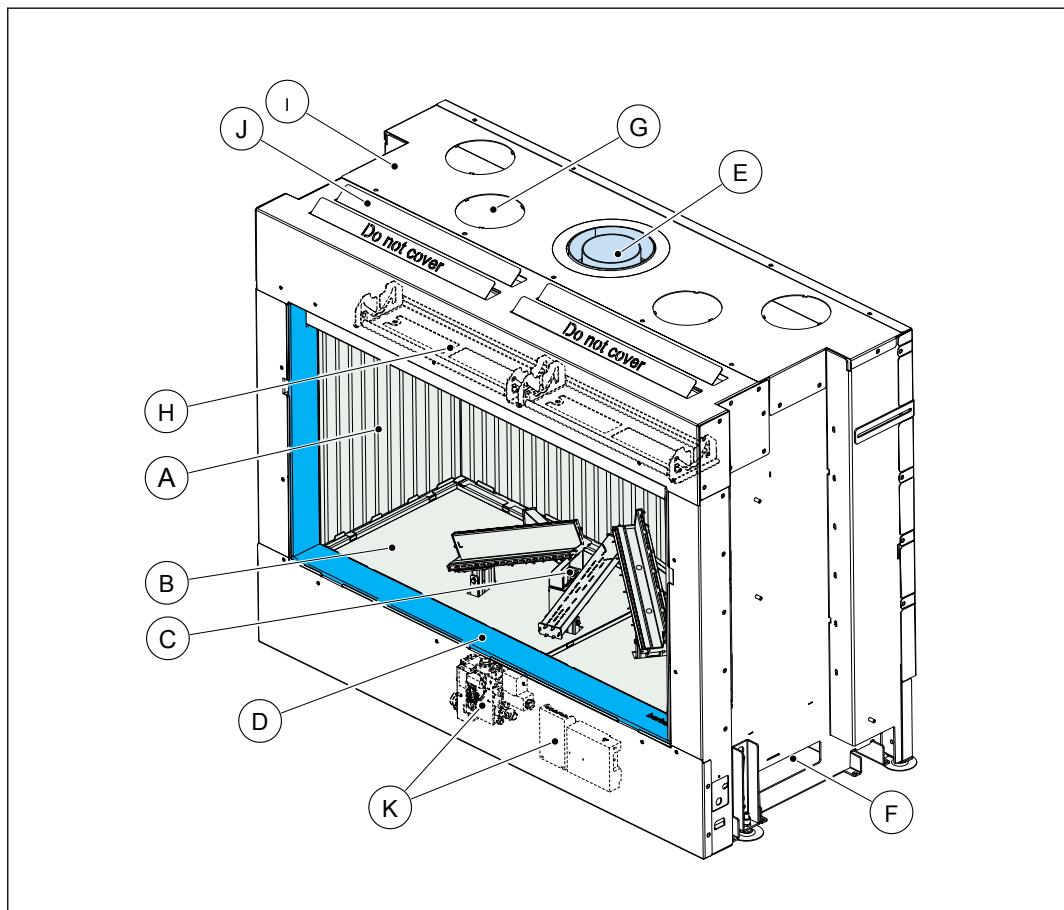


Note:

Unless specified differently, retrofit of the installation options is not possible.

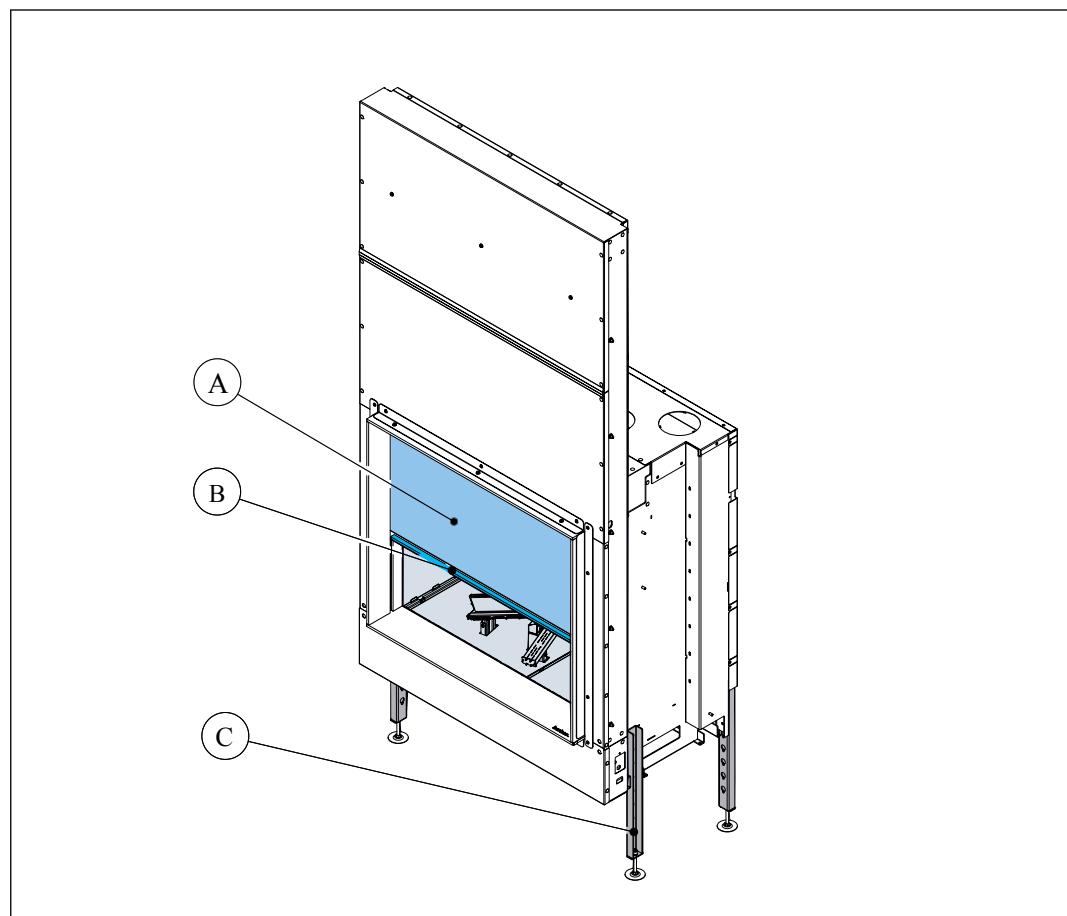
2.3

Overview of the appliance



- | | | | |
|---|--|---|----------------------------------|
| A | Ceramic glass | G | Outlet convection air (optional) |
| B | Burner bed | H | Overpressure hatch |
| C | Pilot light burner | I | Convection casing (optional) |
| D | Decorative frame ('Hidden Door' version) | J | Overpressure relief openings |
| E | Concentric flue connection | K | Gas control and electronic parts |
| F | Inlet convection air | | |

Figure 1. Overview of Gas Fire Front 110-75 PF2

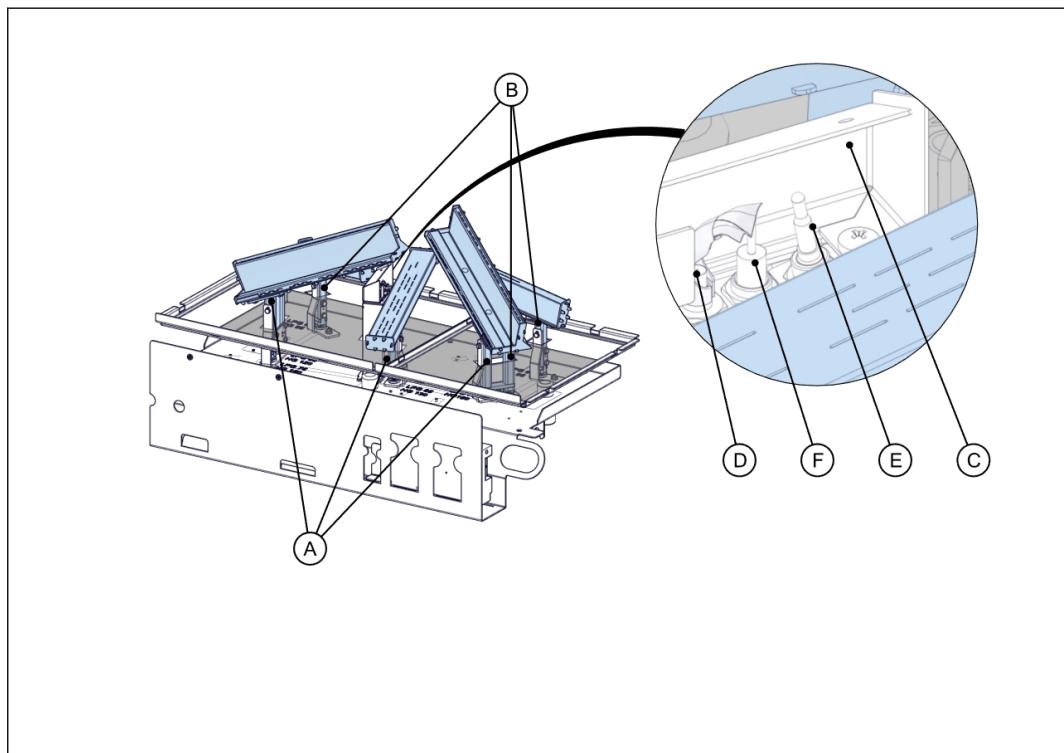


- A Fire screen (optional on an Hidden Door (+))
B Grip for sliding the fire screen
C Adjustable legs (optional)

Figure 2. Overview of Gas Fire Front 110-75 PF2 with the options: fire screen and adjustable legs

2.4

Overview of the burner bed and the pilot light



- | | | | |
|---|----------------------------------|---|---|
| A | First main burner | D | Pilot light burner |
| B | Second main burner | E | Thermocouple - to detect if the pilot light is on |
| C | Protection cover for pilot light | F | Ignition electrode - to ignite the pilot burner |

Figure 3. Burner bed and pilot light

2.5

Overview of the ceramic log set

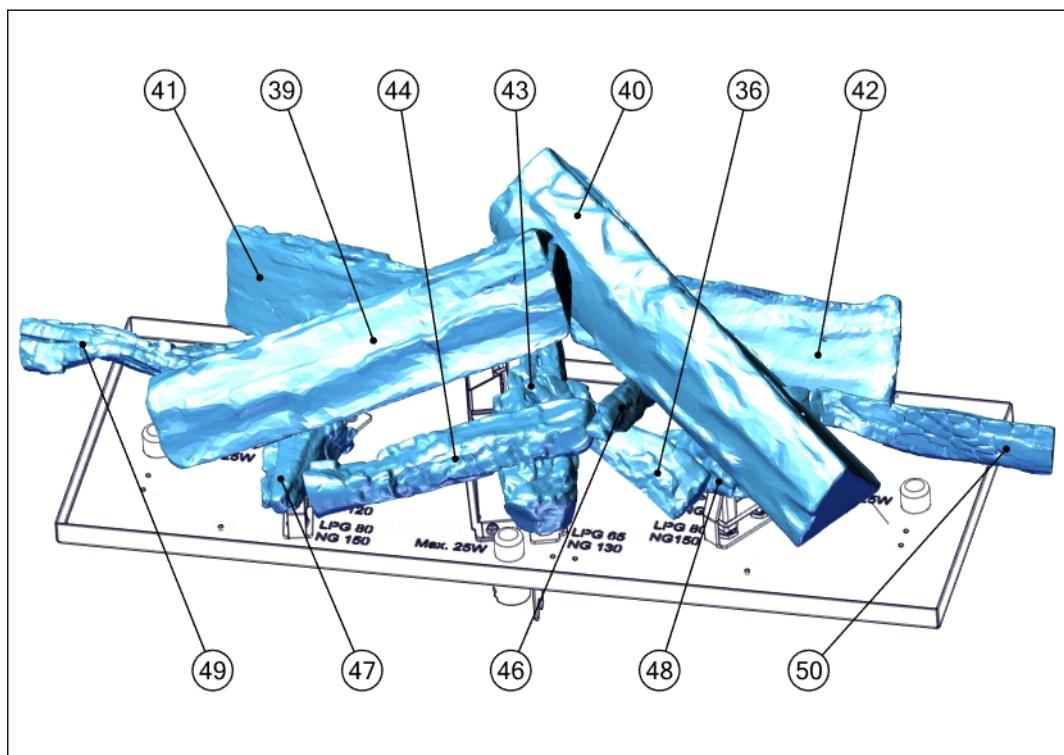


Figure 4. Overview of ceramic log set

Table 1: Ceramic log set parts

No.	Log	No.	Log
36		39	
40		41	
42		43	Log with pilot opening 
44		46	

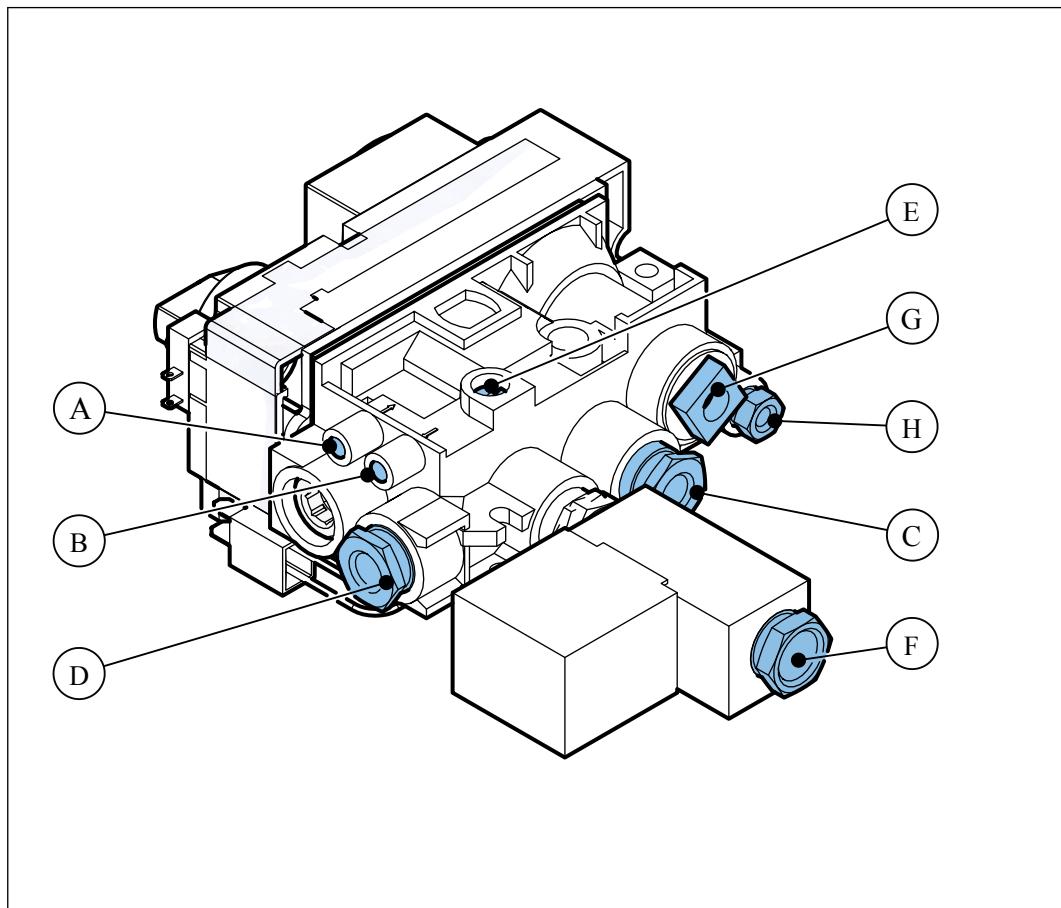
No.	Log	No.	Log
47		48	
49		50	

Table 2: Fire glass

No.	'Fire glass' Dark Amber	No.	'Fire glass' Black
			

2.6 Overview of the control elements

2.6.1 Overview of the rear of the gas regulator block

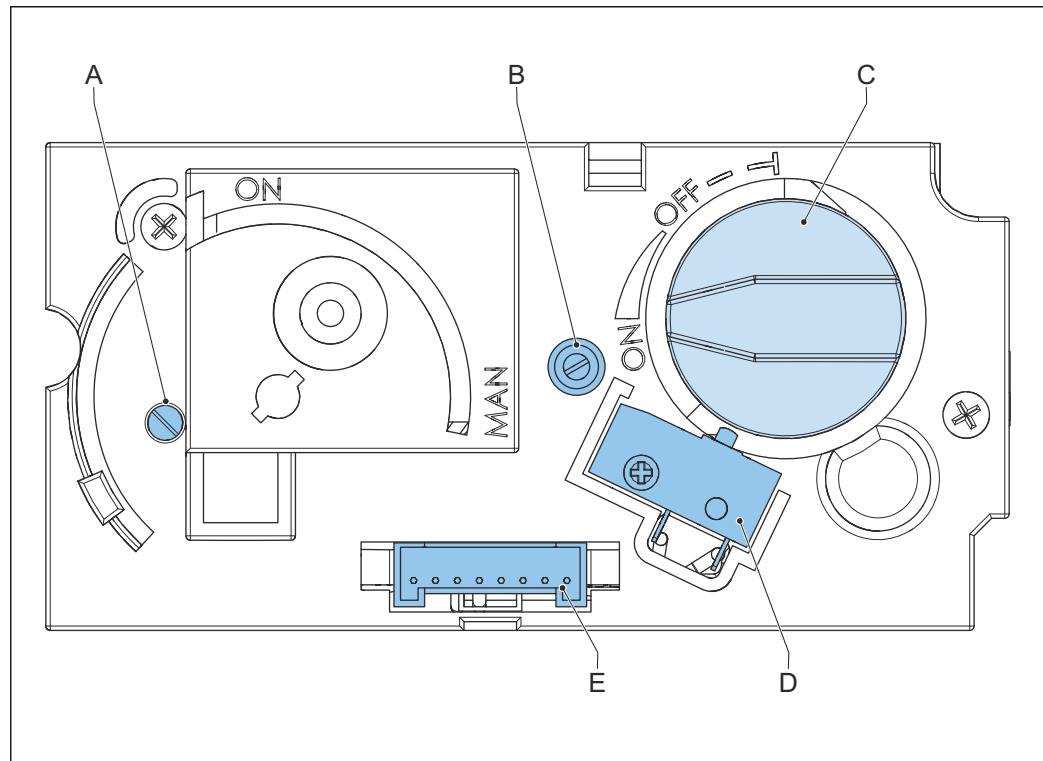


- | | | | |
|---|-----------------------------|---|--|
| A | Inlet pressure tap | E | Adjustment screw for minimum burner pressure |
| B | Outlet pressure tap | F | Gas connection for the rear burner |
| C | Gas supply connection | G | Thermocouple interrupter connection |
| D | Gas connection front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

Figure 5. Gas regulator block (rear)

2.6.2

Overview of the front of the gas regulator block

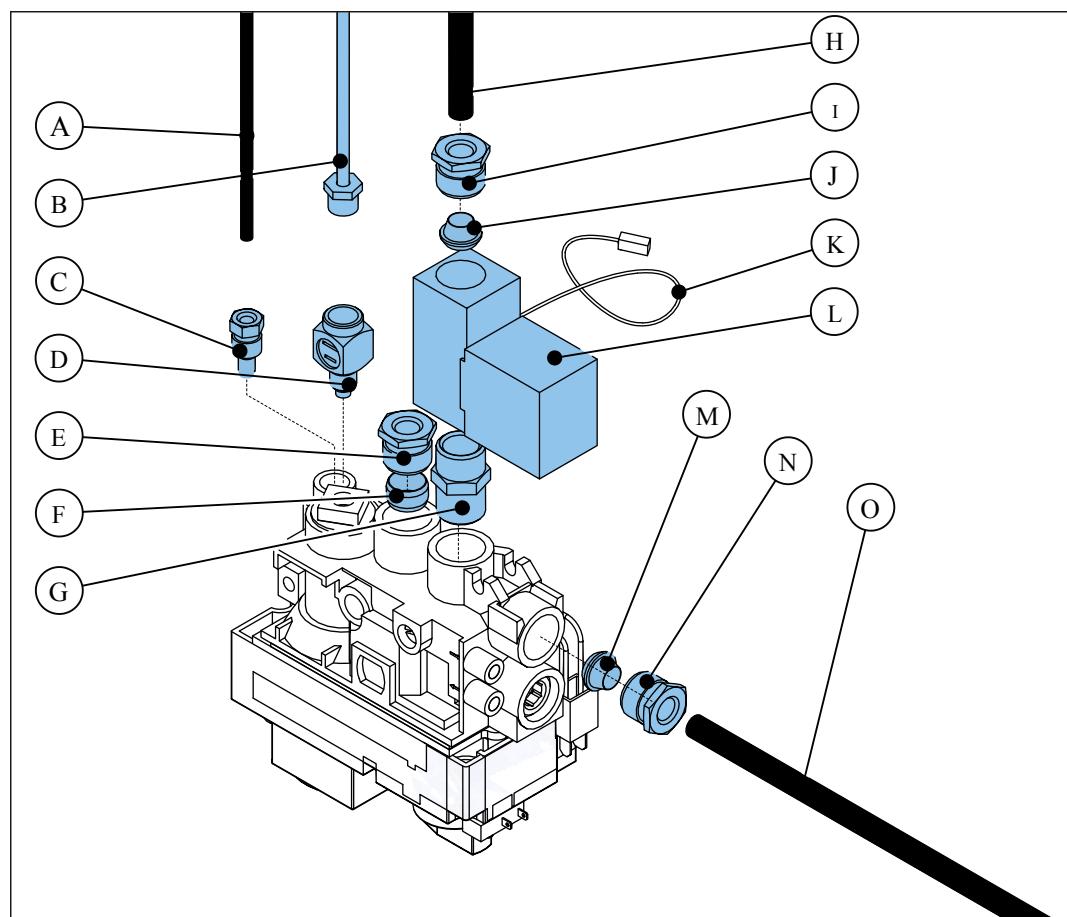


- | | | | |
|---|---|---|--|
| A | Adjustment screw for the pilot light gas pressure | D | Micro switch to detect the motor knob end position |
| B | Adjustment screw for maximum burner pressure | E | 8-wire cable connection |
| C | Motor knob of the internal main gas valve | | |

Figure 6. Gas regulator block (front)

2.6.3

Overview of the connections on the gas regulator block



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

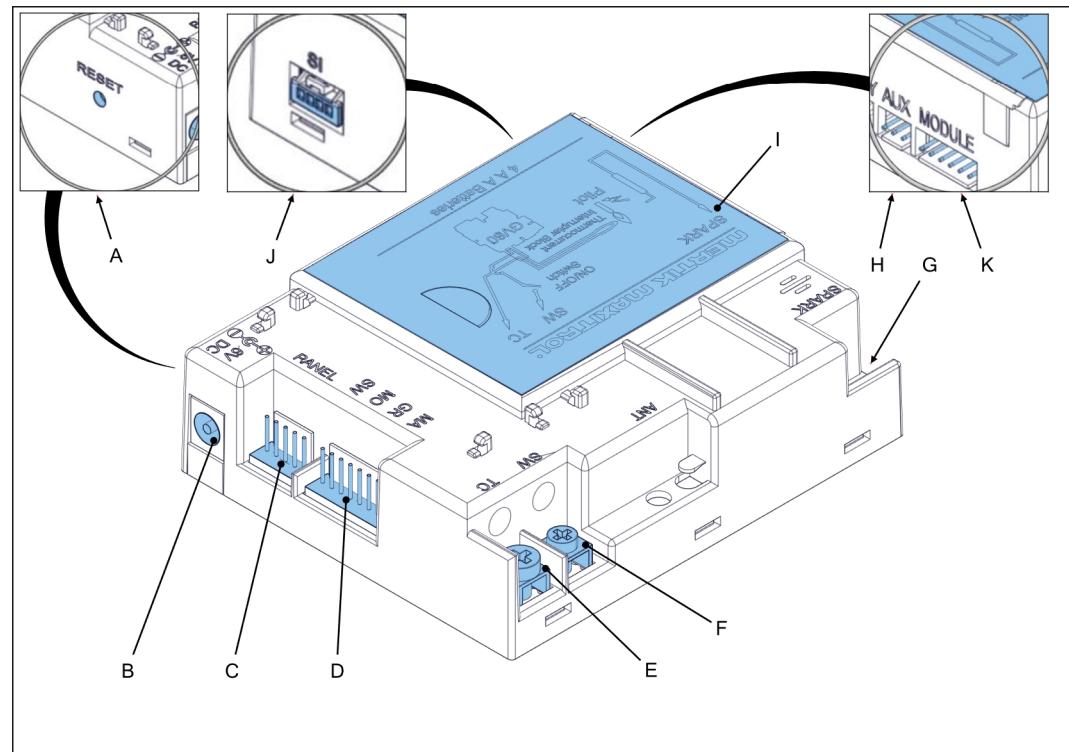
Figure 7. Connections on the gas regulator block

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

² Connects the valve to the receiver

2.6.4

Overview of the receiver

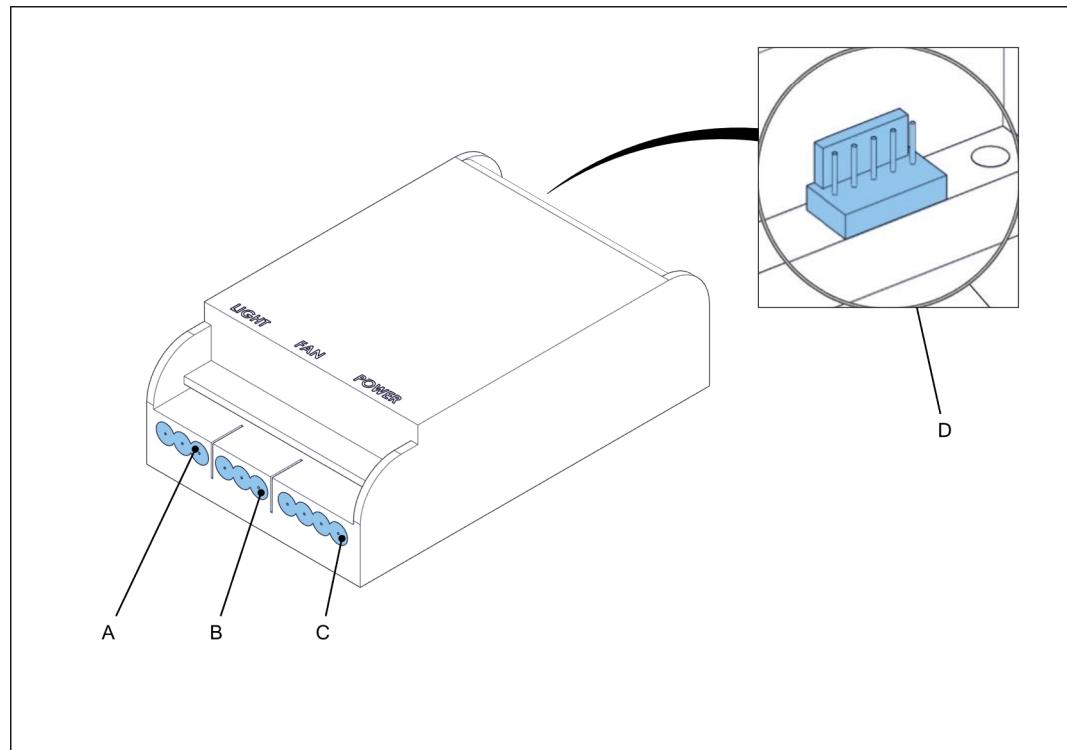


- | | | | |
|---|--|---|---|
| A | Reset button | G | Piezo cable connection |
| B | Connection for 6 VDC adapter | H | Connection to the gas valve rear burner (AUX) |
| C | Not used | I | Battery compartment cover |
| D | 8 wire cable connection | J | Connection for an optional wifi-box (SI) |
| E | Thermocouple voltage / current IN (red connection) | K | Connection for the fan/light module (MODULE) |
| F | Thermocouple voltage / current OUT (yellow connection) | | |

Figure 8. Receiver

2.6.5

Overview of the fan/light module



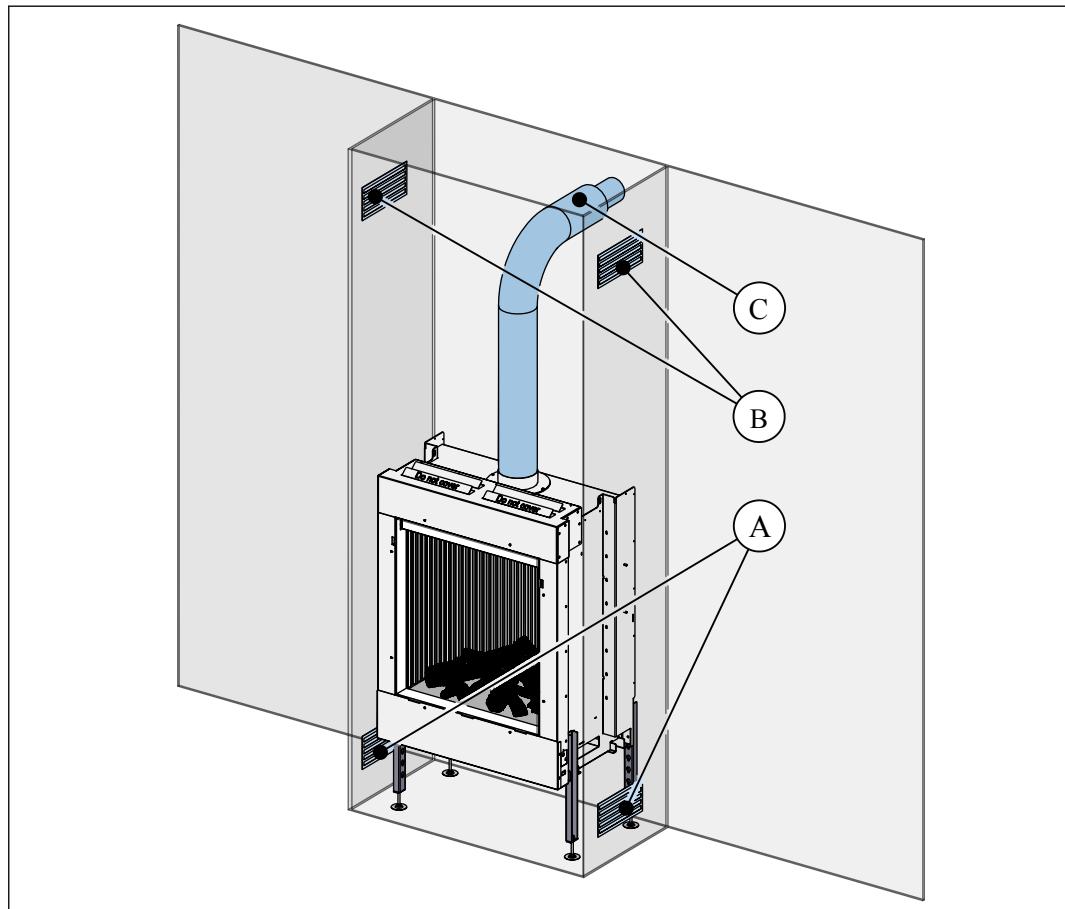
- | | | | |
|---|-----------------------------------|---|---------------------------------|
| A | Connection for the ambient lights | C | connection for the power supply |
| B | Connection for a convection fan | D | Connection for the receiver |

Figure 9. Fan/light module

2.7

Examples of a typical installation

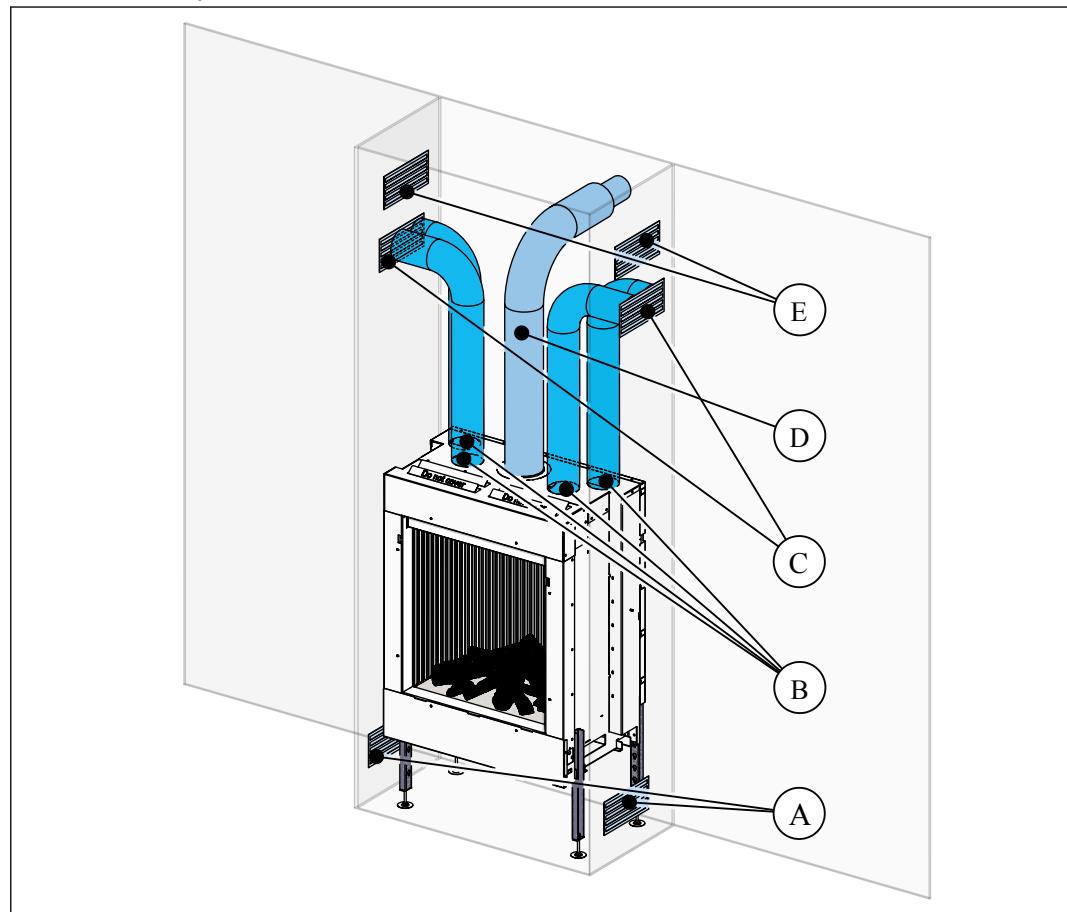
Example of a typical installation with a wall outlet for the concentric flue, your installation can be different.



- A Ventilation air inlet openings. Total minimum 220 cm²
- B Ventilation air outlet openings. Total minimum 440 cm²
- C Concentric flue system

Figure 10. Typical installation of an appliance without convection set

Example of a typical installation with the convection set and a wall outlet for the concentric flue, your installation can be different.



- | | | | |
|---|--|---|--|
| A | Convection / ventilation air inlet openings. Total minimum 220 cm ² | D | Concentric flue system |
| B | Connection for convection set (4x) | E | Ventilation air outlet openings. Total minimum 220 cm ² |
| C | Convection air outlet opening. Total minimum 440 cm ² | | |

Figure 11. Typical installation of an appliance with convection set

3 Safety

3.1 Safety devices on the appliance

Name	Description
Thermo-electric pilot light shut off	Prevents unforseen discharge of gas from the main burner.
Overpressure hatch	If an overpressure occurs in the appliance, the hatch opens for a short duration. When the hatch opens, a loud noise can occur. If an overpressure occurs, the installer must do a thorough check on the appliance.
Overpressure door (Only on 'Floating Frame (+)' door)	If an overpressure occurs in the appliance, the door opens for a short duration. When the door opens, a loud noise can occur. If an overpressure occurs, the installer must do a thorough check on the appliance.
Integrated fire screen (Optional on Hidden Door (+))	Prevents unforseen touching of the hot glass.

3.2 Safety instructions for installation

Warning:



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

Caution:



- Only use the items that are supplied or described in the preparation manual and other related documentation.
- Do not use masking tape on the appliance. Masking tape can damage the finish of the appliance.
- Do not insulate the appliance. If necessary, only install strips of white, loose insulation wool that is heat resistant up to at least 1000 °C. Install the insulation strips with a width of maximally 15 cm to protect the walls. Only install these strips on top and on the side of the appliance.
- Do not use fiberglass, rockwool, or any other sort of insulation material. These materials produce pungent odor and can produce discoloration of the fireplace.
- Make sure that brickwork is build with a clearing of at least 3 mm between the sides and the top of the appliance and the brickwork. The appliance can expand during operation due to heating.
- Do not build the brickwork higher than the casing without the use of a mantel iron.

3.3

Safety instructions with regard to the environment

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

4 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.

4.1 Insulating material requirements

- Use insulating plates with a maximum thermal conductivity of 0.10 W/m.K or a thermal resistance of minimum 10 K.m/W. The table hereunder shows some examples of suitable insulating plate materials.
- Do not use rockwool or glass wool. These materials cause a pungent and unpleasant odor when the appliance is heated.
- Do not use mineral wool

Table 3: Examples of insulation plates

Examples of suitable plate material	Thermal conductivity
Promat Promatect L insulating board	0.083 W/m.K
Skamol Skamotec 225	0.06 W/m.K
Skamol Super-Isol	0.08 W/m.K

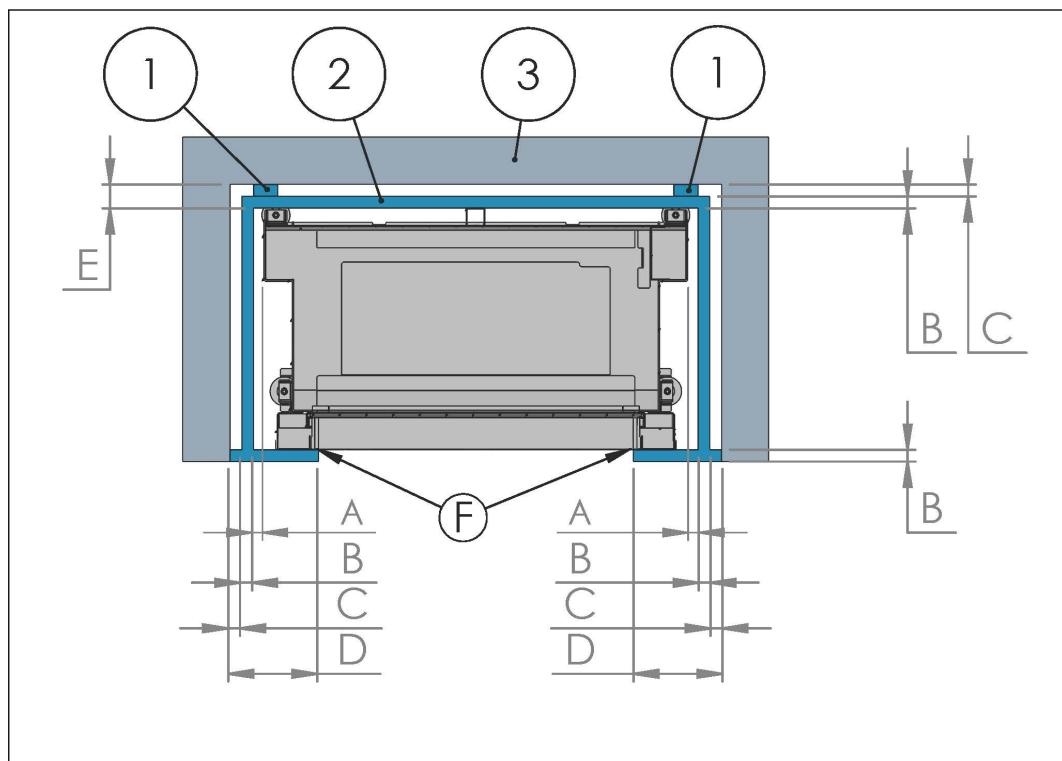
4.2 Clearances to flammable walls

Put a non-flammable insulation plate between the appliance and the rear wall and side wall according figure 11.

Table 4 shows the minimum thickness of the insulation plates and the minimum clearances to flammable materials and walls.



Attention: Make sure there is a 3 mm clearance between the appliance and the surrounding construction, to allow for expansion of the appliance during use.



1 Non-flammable spacer 3 Flammable wall
2 Non-flammable insulation plate

Figure 12. Clearances to flammable wall - Top view

Table 4: dimensions and minimum clearances to a flammable wall

Description		Insulation plate 25 mm	Insulation plate 35 mm
A	Air gap	25 mm	25 mm
B	Thickness plate	25 mm	35 mm
C	Air gap / Spacer	25 mm	15 mm
D	A+B+C	75 mm	75 mm
E	B+C	50 mm	50 mm
F	Minimum 3 mm clearance between appliance and surrounding construction		

4.3

Clearance to flammable floor (under the appliance)

Put a non-flammable insulation plate with a minimum thickness of 25 mm under the appliance. To avoid damage to this non-flammable plate, put ceramic or steel tiles (approx. 10 x 10 cm) under the feet of the appliance.

Put a non-flammable floor stone (hearth plate) if the underside of the appliance is less than 10 cm above a flammable floor.

4.4

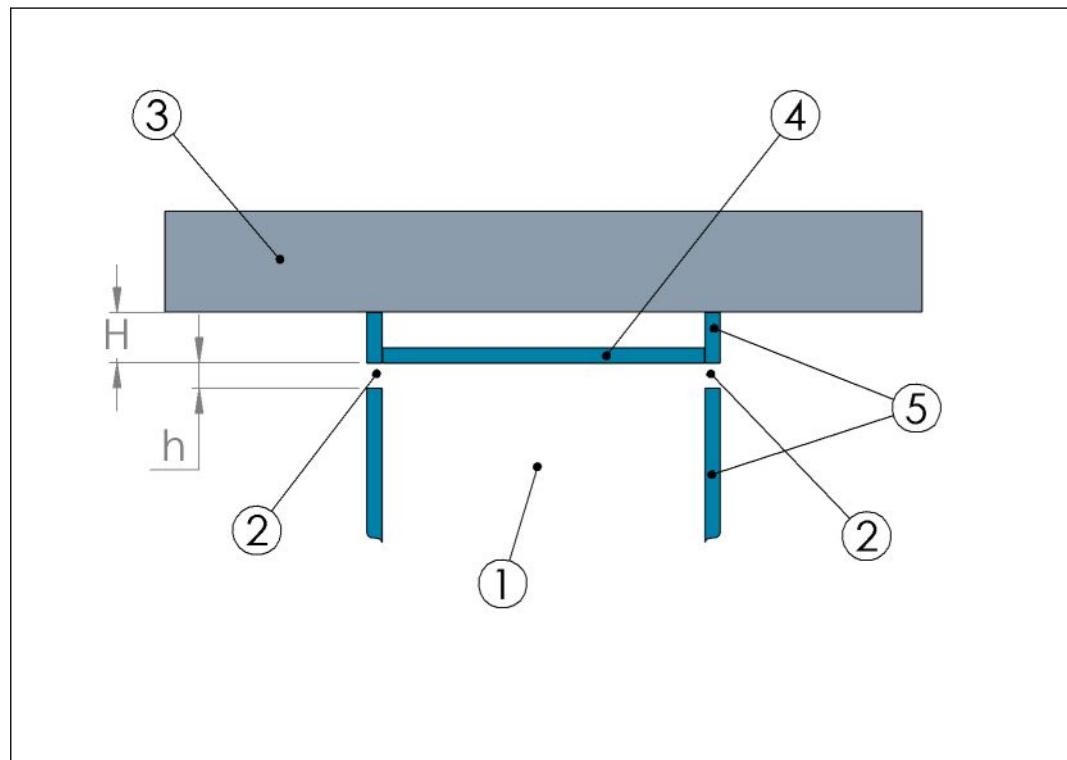
Clearances to flammable ceiling

Put a non-flammable insulation plate (false ceiling) of minimum 2.5 cm thickness at a height of minimum 50 cm above the appliance. Keep a free space of minimum 10 cm between the insulation plate and the flammable ceiling.

Alternative without a false ceiling: Make an open space of minimum 50 cm height between the chimney enclosure top side (complete width and depth of the enclosure) and the flammable ceiling

Figure 12 shows the minimum thickness of the insulation plates and the minimum clearances to a flammable ceiling

Make sure the total area of the convection air outlet opening is minimum 440 cm².



- | | | | |
|---|-------------------------------|---|----------------------------------|
| 1 | Chimney enclosure | 4 | Insulation plate (false ceiling) |
| 2 | Convection air outlet opening | 5 | Insulation plates |
| 3 | Flammable ceiling | | |

Figure 13. Clearances to flammable ceiling - Front view

Table 5: Minimum dimension and clearance to flammable ceiling

		With false ceiling, minimum 25 mm thickness	Without false ceiling
h	Area of the convection air outlet opening	Minimum 440 cm ²	Minimum 50 cm open space between ceiling and chimney enclosure
H	Height of the false ceiling minimum distance convection air outlet opening - flammable ceiling	Minimum 12.5 cm (= 10 cm free space + 25 mm false ceiling)	Not applicable (the top side of the chimney enclosure is open with a clearance of minimum 50 cm to the flammable ceiling).

4.5

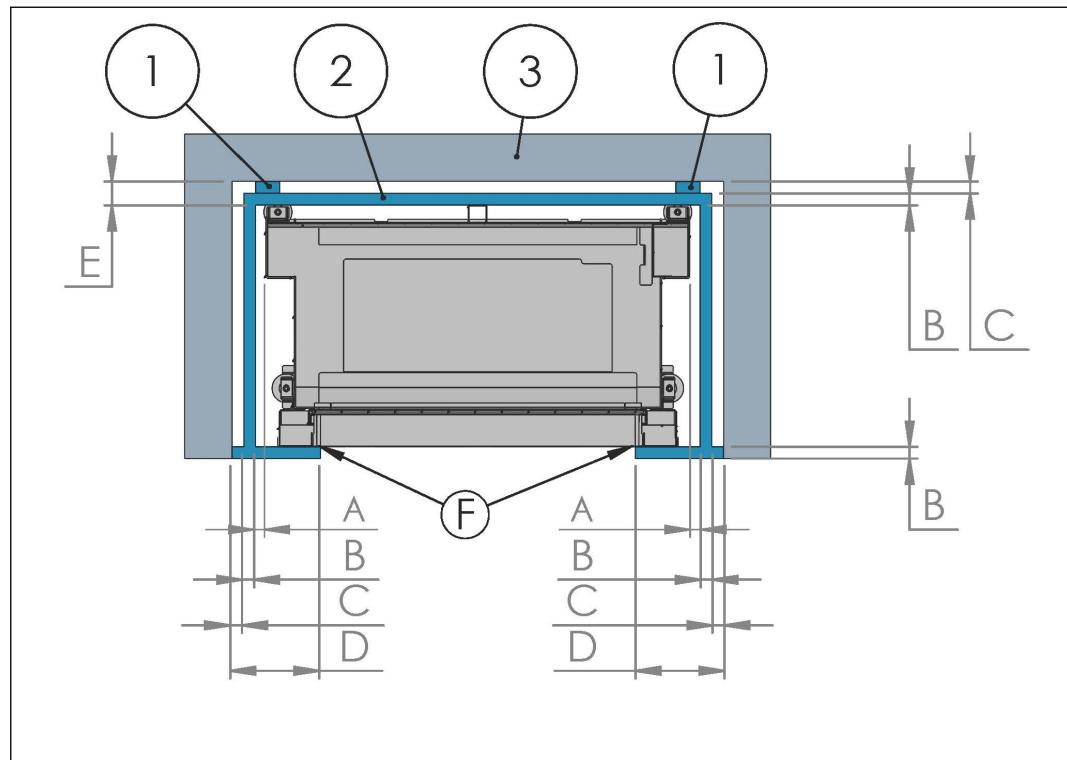
Clearances to non-flammable walls

Put a non-flammable insulation plate between the appliance and the rear wall and side wall according figure 13.

Figure 13 and table 6 show the minimum thickness of the insulation plates and the minimum clearances to non-flammable materials and walls.



Attention: Make sure there is a 3 mm clearance between the appliance and the surrounding construction, to allow for expansion of the appliance during use.



		Insulation plate 12 mm	Insulation plate 25 mm	Insulation plate 35 mm
A	Air gap	20 mm	15 mm	15 mm
B	Thickness plate	12 mm	25 mm	35 mm
C	Air gap / Spacer	20 mm	15 mm	0 mm
D	A+B+C	52 mm	55 mm	50 mm
E	B+C	32 mm	35 mm	35 mm
F	Minimum 3 mm clearance between appliance and surrounding construction			

4.6

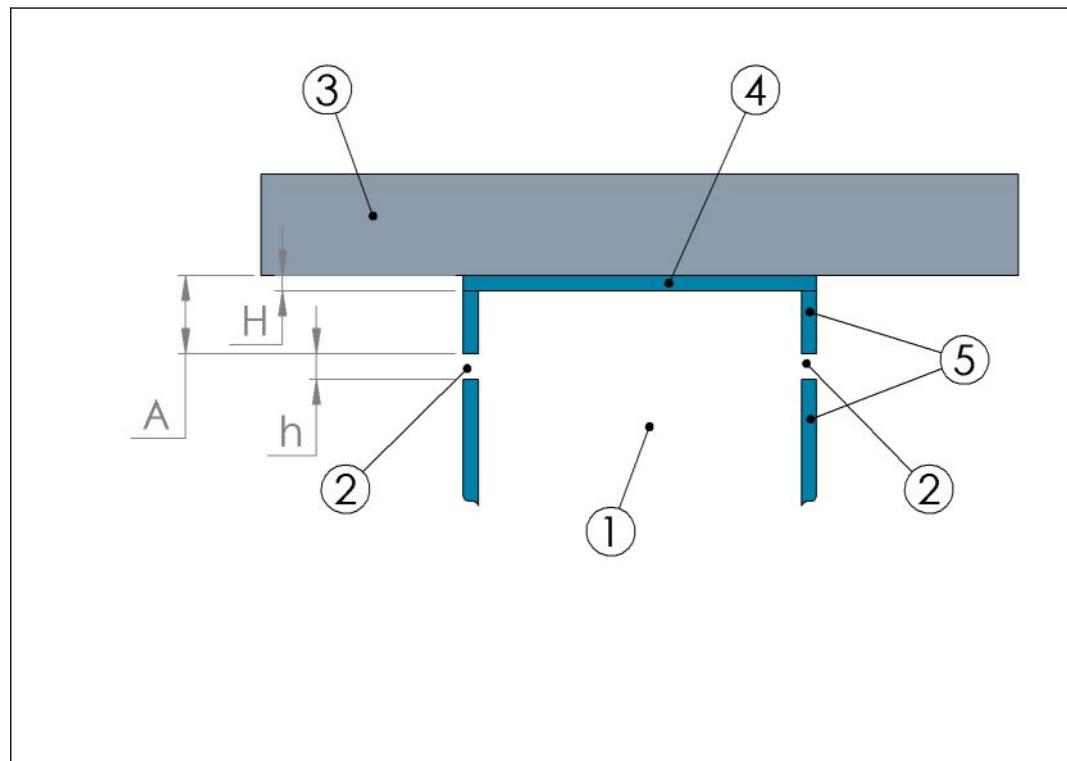
Clearances to a non-flammable ceiling

Put a non-flammable insulation plate (false ceiling) of minimum 2.5 cm thickness at a height of minimum 50 cm above the appliance.

Alternative without a false ceiling: Make an open space of minimum 20 cm height between the chimney enclosure top side (complete width and depth of the enclosure) and the non-flammable ceiling

Figure 14 shows the minimum thickness of the insulation plates and the minimum clearances to a non-flammable ceiling

Make sure the total area of the convection air outlet opening is minimum 440 cm².



- | | | | |
|---|-------------------------------|---|----------------------------------|
| 1 | Chimney enclosure | 4 | Insulation plate (false ceiling) |
| 2 | Convection air outlet opening | 5 | Insulation plates |
| 3 | Non-Flammable ceiling | | |

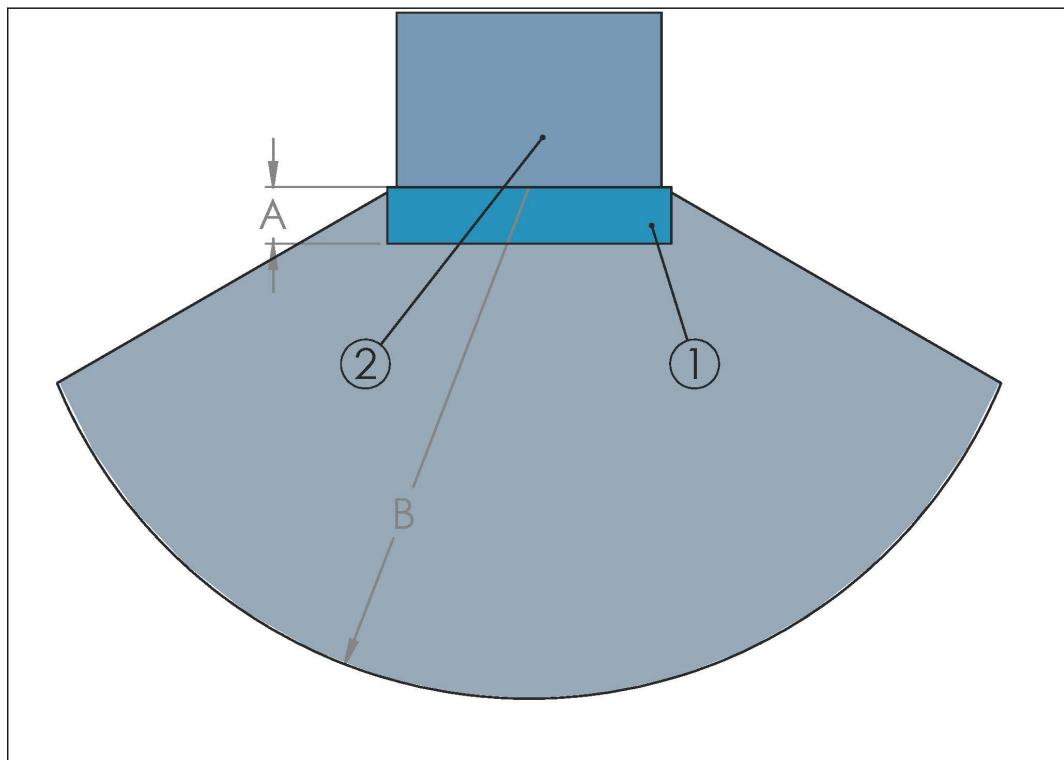
Figure 15. Clearances to non-flammable ceiling - Front view

Table 7: Minimum dimension and clearance to non-flammable ceiling

		With false ceiling, minimum 25 mm thickness	Without false ceiling
h	Area of the convection air outlet opening	Minimum 440 cm ²	Minimum 20 cm open space between ceiling and chimney enclosure
H	Height of the false ceiling	Minimum 25 mm (= thickness false ceiling)	Not applicable (the top side of the chimney enclosure is open with a clearance of minimum 20 cm to the ceiling).
A	Distance between convection air outlet opening and ceiling	Minimum 13 cm	Minimum 20 cm open space between ceiling and chimney enclosure

4.7

Clearances in front of the appliance



1 Non-flammable floor stone (hearth plate), minimum thickness 12 mm 2 Appliance

Figure 16. Minimum distances in front of the appliance

A	Minimum 30 cm
B	Minimum 100 cm (1 meter) radius from the center point of the appliance.

4.8

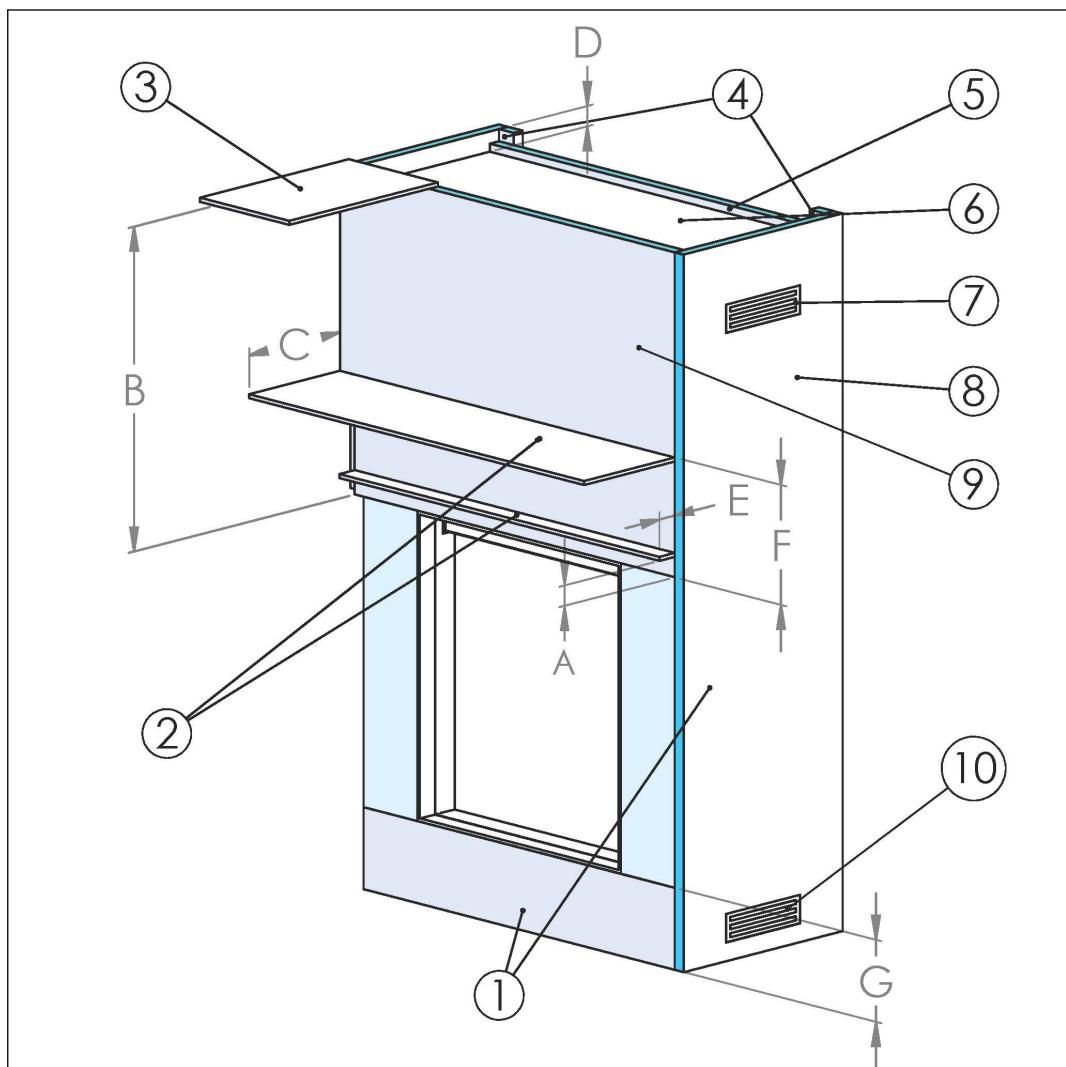
Mantel clearances

Caution:



All insulation plates in this chapter must be made of non-flammable material.

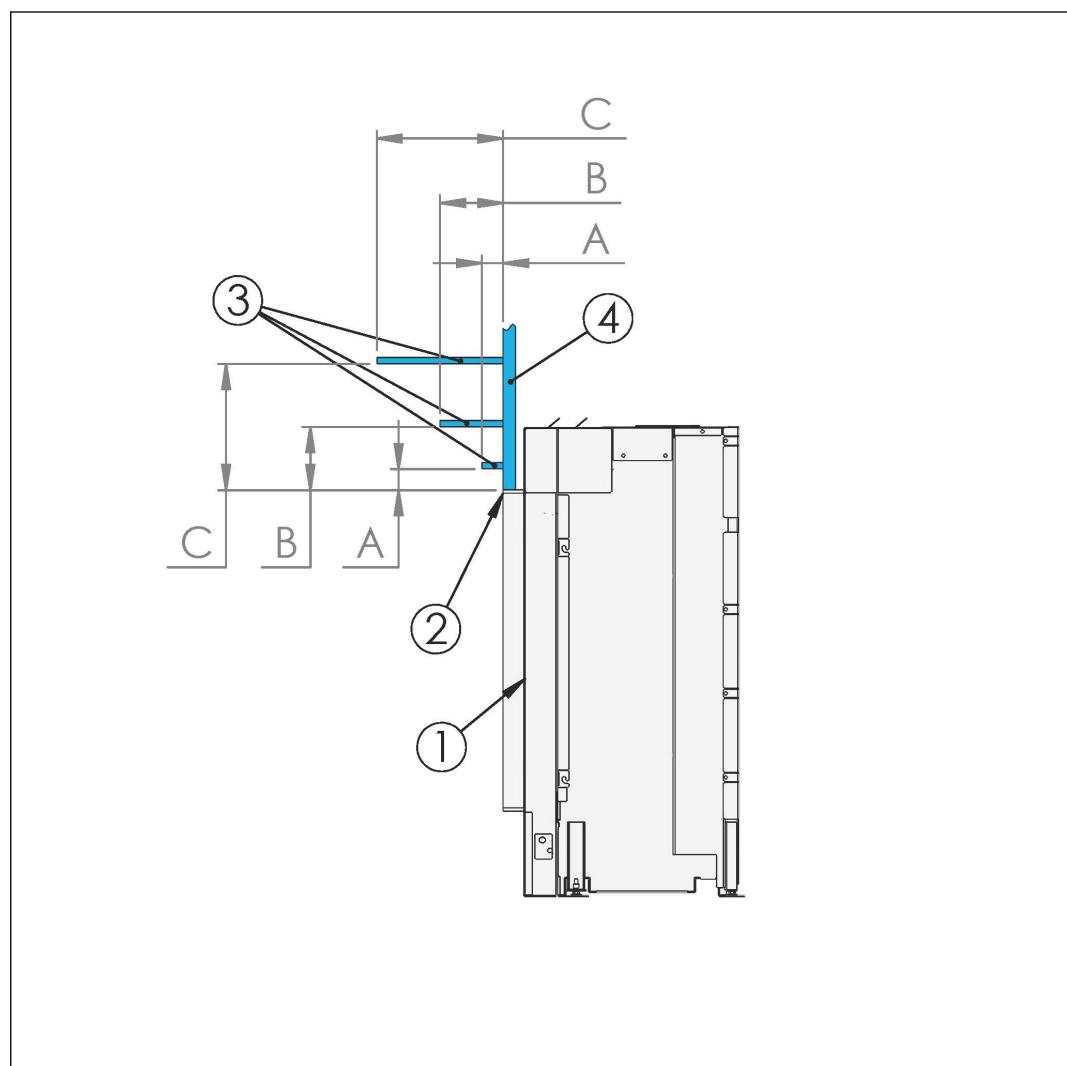
Put a mantel piece of flammable material minimum 5 cm from the top and sides of the appliance



- | | | | |
|---|-----------------------------|----|---|
| 1 | insulation plate | 6 | Non-flammable false ceiling |
| 2 | Flammable mantel piece | 7 | Convection / ventilation air outlet |
| 3 | Ceiling | | openings. Total minimum 440 cm ² |
| 4 | Non-flammable spacer | 8 | Insulation plate side panel |
| 5 | Insulation plate back panel | 9 | Insulation plate front panel |
| | | 10 | Convection / ventilation air inlet |
| | | | openings. Total minimum 220 cm ² |

Figure 17. Mantel piece clearances

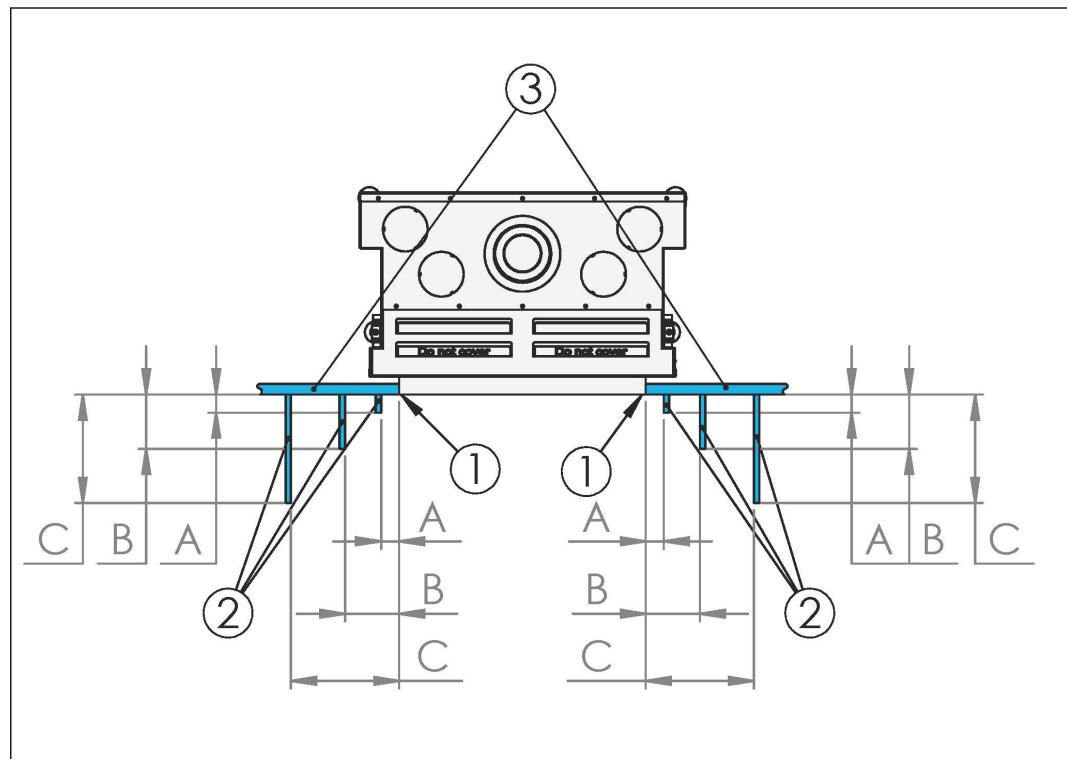
A	Minimum 5 cm from top of glass
B	Flammable ceiling: minimum 60 cm from glass / Non flammable ceiling: minimum 50 cm from glass
C	Mantel piece depth maximum 30 cm
D	Flammable ceiling: minimum 10 cm / Non flammable ceiling: minimum 0 cm
E	Mantel piece depth: maximum 5 cm
F	Minimum 30 cm from top of glass
G	Minimum 5 cm
H	Minimum 10 cm to flammable floor (or put a non flammable floor stone (hearth plate) with a depth of minimum 30 cm in front of the complete width of the glass)



- | | | | |
|---|-------------------------|---|------------------------|
| 1 | Appliance | 3 | Flammable mantel piece |
| 2 | Top of front glass pane | 4 | insulation plate |

Figure 18. Top mantel piece clearances

	Height of mantel piece / Depth of mantel piece
A	5 cm
B	15 cm
C	30 cm



1 Side of front glass pane
2 Flammable mantel piece

3 Insulation plate

Figure 19. Side mantel piece clearances

	Width of mantel piece / Depth of mantel piece
A	5 cm
B	10 cm
C	15 cm

4.9

Clearances for concentric flue system

Do not insulate the concentric flue pipe.

Concentric flue pipe safety distances to flammable material:

- Vertical pipe (all sides): B = minimum 2.5 cm.
- Horizontal pipe top: A = minimum 7.5 cm.
- Horizontal pipe bottom and sides: B = minimum 2.5 cm.

The figures show the minimum clearances from a horizontal and a vertical concentric flue pipe to flammable material.

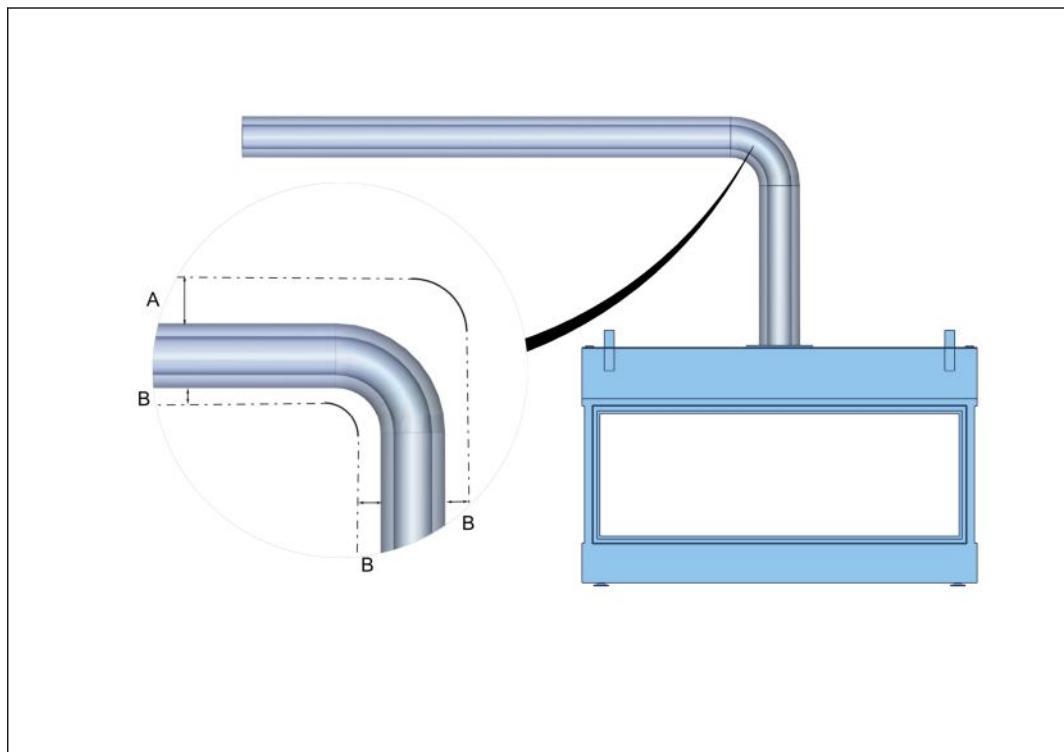


Figure 20. Clearances concentric flue

4.10 Clearances for TV installation



Caution: Prevent that the temperature around the TV and the TV cables becomes higher than normal. The clearances given in this chapter prevent a too high temperature when the TV installed above the appliance.

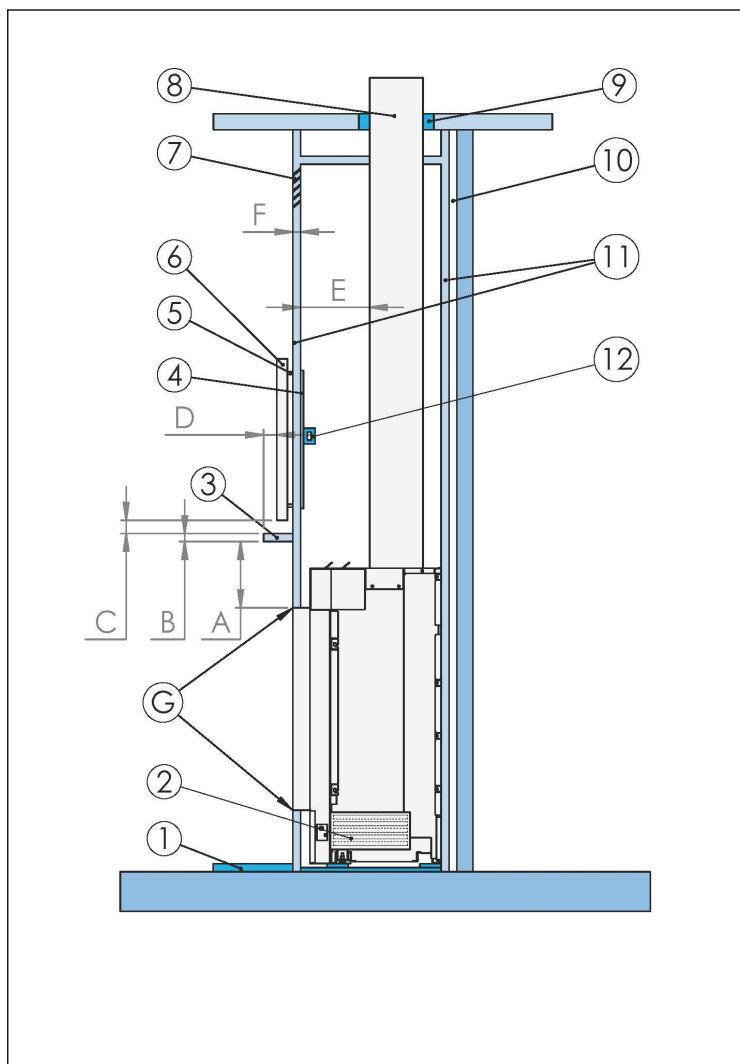


Important:

- Make sure to use a non-flammable insulation plate with a thickness of minimum 4 cm for the front of the chimney enclosure. Refer to chapter [4.1](#) for specifications.
- Put the power supply and signal cables in a insulated cable duct behind the front of the chimney enclosure. Make the insulated cable duct of minimum 12 mm non-flammable insulation plates. Refer to chapter [4.1](#) for specifications.
- To prevent too much heat radiation to the TV, install a mantel piece between the TV and the top of the appliance.

Two methods to install the TV are possible:

- Surface mounted
- Flush mounted

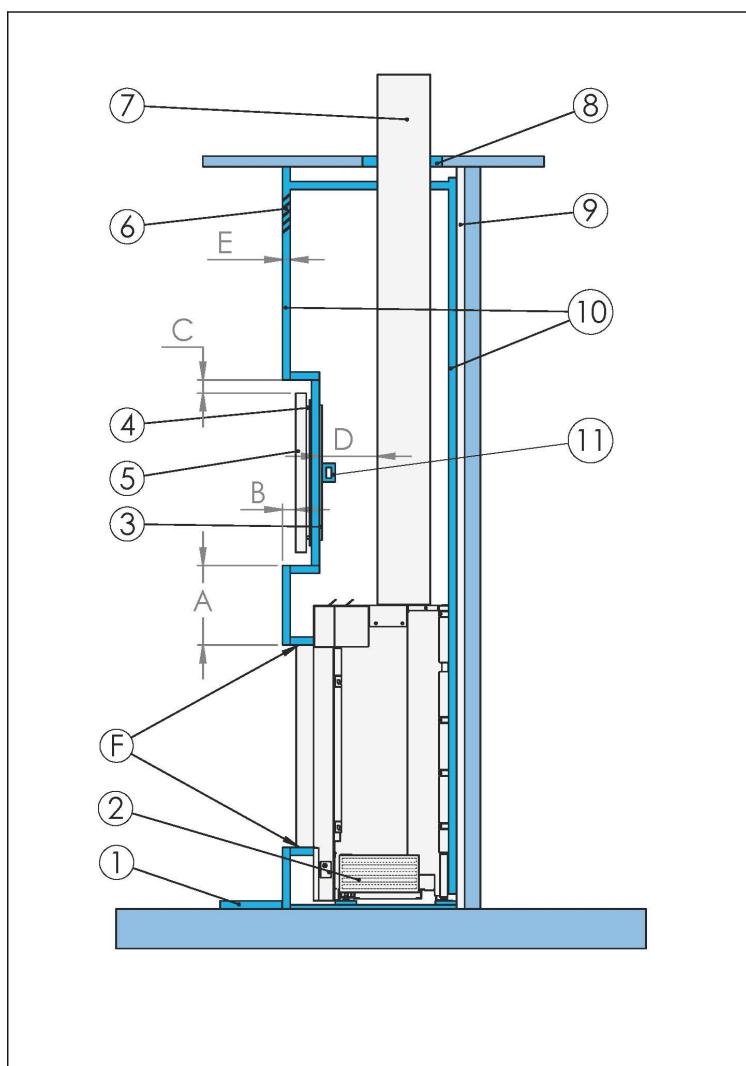


- | | | | |
|---|-----------------------|----|-------------------------------------|
| 1 | Non-flammable hearth | 7 | Convection air outlet |
| 2 | Convection air inlet | 8 | Concentric flue |
| 3 | Mantel piece | 9 | Non-flammable material ³ |
| 4 | Steel studs | 10 | Air gap and spacers |
| 5 | TV wall mount bracket | 11 | Non-flammable insulation plate |
| 6 | TV | 12 | Cable duct |

Figure 21. TV installation - surface mounted

A	Minimum 25 cm between mantel piece and top of glass pane
B	Minimum thickness 2.5 cm
C	Minimum 5 cm clearance between bottom of TV and top of mantel piece
D	Minimum 2.5 cm horizontal clearance between front of TV and front of mantel piece
E	Minimum 2.5 cm
F	Minimum thickness 4 cm
G	Minimum 3 mm clearance between appliance and surrounding construction

³ Specifications according the installation instructions of the manufacturer of the concentric flue system and local regulations.



- | | | | |
|---|-----------------------|----|-------------------------------------|
| 1 | Non-flammable hearth | 7 | Concentric flue |
| 2 | Convection air inlet | 8 | Non-flammable material ⁴ |
| 3 | Steel studs | 9 | Air gap and spacers |
| 4 | TV wall mount bracket | 10 | Non-flammable insulation plate |
| 5 | TV | 11 | Cable duct |
| 6 | Convection air outlet | | |

Figure 22. TV installation - flush mounted

A	Minimum 30 cm
B	Minimum 2.5 cm horizontal clearance between front of TV and front of the fireplace enclosure
C	Minimum 5 cm clearance at all 4 sides of the TV
D	Minimum 2.5 cm
E	Minimum thickness 4 cm
F	Minimum 3 mm clearance between appliance and surrounding construction

⁴ Specifications according the installation instructions of the manufacturer of the concentric flue system and local regulations.

5 Installation

5.1 Installation requirements

5.1.1 Requirements on the installation of the appliance



Important:

- Make sure the floor is made of concrete or a solid pedestal of non-flammable material.
- Make sure the floor can support the weight of the appliance. Refer to chapter [8](#) for the weight of the appliance.
- Make sure that the floor temperatures below and in front of the appliance cannot be higher than 85 °C, during use of the appliance. If necessary, put a non-flammable plate on the floor in front of the appliance.
- Refer to chapter [4](#) for clearances to flammable and non-flammable materials.
- Make sure the distance between the underside of the appliance and the floor is minimum 1 cm.
- Make sure that the details of the rating plate of the appliance agree with the gas type and gas pressure of the gas supply.
- Make sure that the location agrees with the requirements. Refer to the preparation manual.
- Make sure to install ventilation openings in the fireplace enclosure. Refer to chapter [5.1.3](#) for dimensions of the ventilation openings.
- Make sure there is a 3 mm clearance on the sides and top of the appliance to allow for expansion of the appliance during use.
- Do not insulate the appliance with insulation material. Only use ceramic wool strips (minimum 1000 °C heat resistant) with a width of maximum 15 cm on the sides and top of the appliance, to protect the wall against direct heat contact.

5.1.2 Requirements on the chimney

- This appliance has been approved in combination with the components of the concentric flue systems listed in the preparation manual, according to the European standards for gas appliances and may therefore only be used with these components.
- Only use the following brands for the installation of the concentric flue system:

Table 8: Overview of allowed concentric flue system brands

Manufacturer	System	Flue gas extraction
Barbas	Muelink & Grol system	Natural draught
Poujoulat	DUOGAS system	Natural draught
Ontop	Metaloterm US system	Natural draught
Jeremias/STB	H-TWIN system	Natural draught
Jeremias	TWIN-GAS system	Natural draught
Modinox	PLA system	Natural draught
Barbas	Opti-Vent system	Forced draught

- Do not use a combination of parts from different brands for the installation of the concentric flue system.
- Do not insulate the concentric flue system.

5.1.3**Requirements on the ventilation/convection air openings**

- Install the following minimum openings in the fireplace enclosure to prevent overheating of the appliance and fireplace enclosure.

Table 9: Overview of the minimum required ventilation/convection air openings.

Ventilation/ convection air <u>in-</u> <u>let</u> opening at the bottom of the fireplace en- closure	Ventilation/convection air <u>outlet</u> opening at the top of the fireplace enclosure			
	Appliance <u>with-</u> <u>out</u> convection casing	Appliance <u>with</u> convection casing		
		Openings at the top of the con- vection casing are open.	2 openings at the top of the con- vection casing connected with flexible convec- tion pipes Ø125mm to 2 outlet openings.	4 openings at the top of the con- vection casing connected with flexible convec- tion pipes Ø125mm to 4 outlet opening connections.
			Partly via 2 flexi- ble convection pipes: Minimum net 220 cm ²	Partly via 4 flexi- ble convection pipes: Minimum net 440 cm ²
			Partly via the in- side of the fire- place enclosure: Minimum net 220 cm ²	Partly via the in- side of the fire- place enclosure: Minimum net 220 cm ²
220 cm ² (*)	440 cm ² (**)	440 cm ² (**)	Total 440 cm ² (**)	Total 660 cm ² (***)

The ventilation/convection air openings can be realized with the decorative 'BARBAS AirBox' insert air vents, by using:

- (*): 2x Barbas AirBox 160 or 1x Barbas AirBox 320
- (**): 2x Barbas AirBox 320
- (***): 2x Barbas AirBox 320 + 2x Barbas AirBox 160

Table 10: Overview of the available sizes and models of the BARBAS AirBox

BARBAS AirBox	Model	Air vent opening surface
AirBox 160	Insert Frameless	110 cm ²
	Insert Slim Frame	
	Insert Classic Frame	
	Insert Built-in Frame	
AirBox 320	Insert Frameless	220 cm ²
	Insert Slim Frame	
	Insert Classic Frame	
	Insert Built-in Frame	

See chapter [9.11](#) and [9.12](#) for the dimensions.

5.2

Installation procedure



Note:

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

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

5.2.1

Preparation

Do the following preparatory work before the start of the installation of the appliance:

- Make sure the gas supply line is near the intended location of the appliance, to make it possible to connect the gas supply line with the appliance gas connection.
- Install a 230 VAC earthed electrical socket near the intended location of the appliance.
- If the optional Opti-Vent flue system will be installed, make sure to install an extra 230 VAC earthed electrical socket near the intended location of the appliance
- Build the insulating walls behind the intended location of the appliance according the requirements of chapter [4](#) before the installation of the appliance starts.

5.2.2

Install the appliance

Warning:



The appliance is top-heavy at the front. Prevent the appliance from falling forward when carrying and installing.

Caution:



Do not lift the appliance with any kind of forklift. This will cause damage to the underside of the appliance. Only use the carrying handles to move the appliance.

1. Install the carrying tubes on the appliance. Use the carrying handles to move the appliance.



Note: The carrying handles are not included with the appliance.

2. Remove the carrying handles.

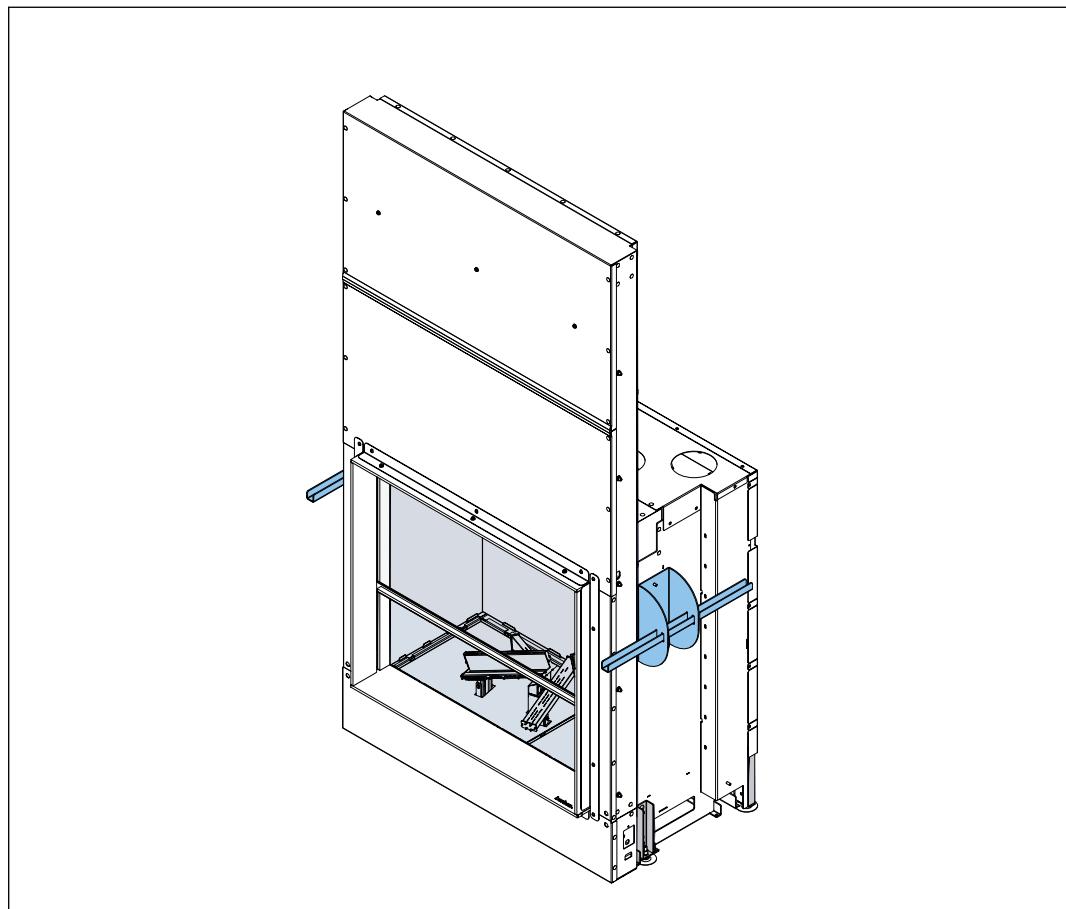


Figure 23. Appliance with carrying handles



Important:

Remove the elastic band and the transportation security eye bolt at the back of the appliance, when the appliance is equipped with an integrated fire screen, before installing.

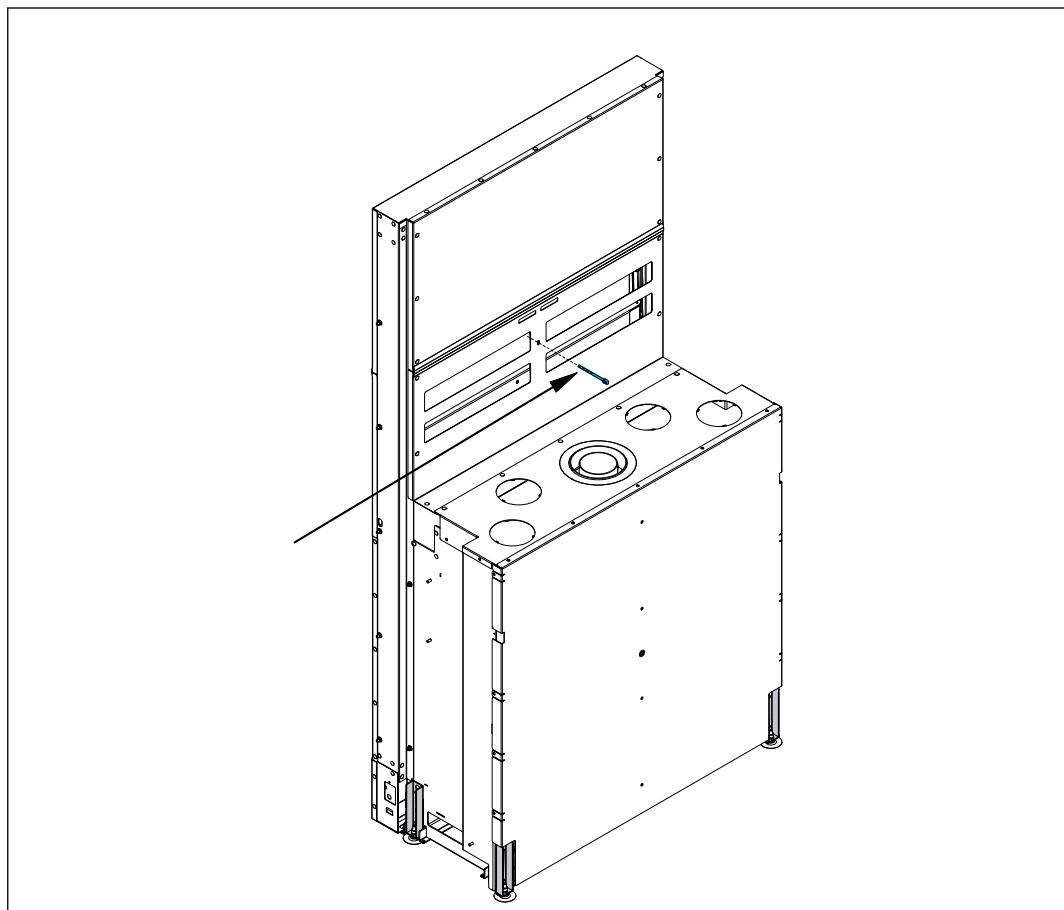


Figure 24. Removal of the elastic band and the transportation security eye bolt

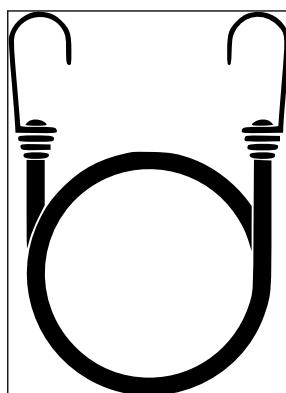


Figure 25. Elastic band

5.2.3 Horizontally align the appliance

Aligning with adjustable feet

1. Make sure the distance x is minimum 1 cm.

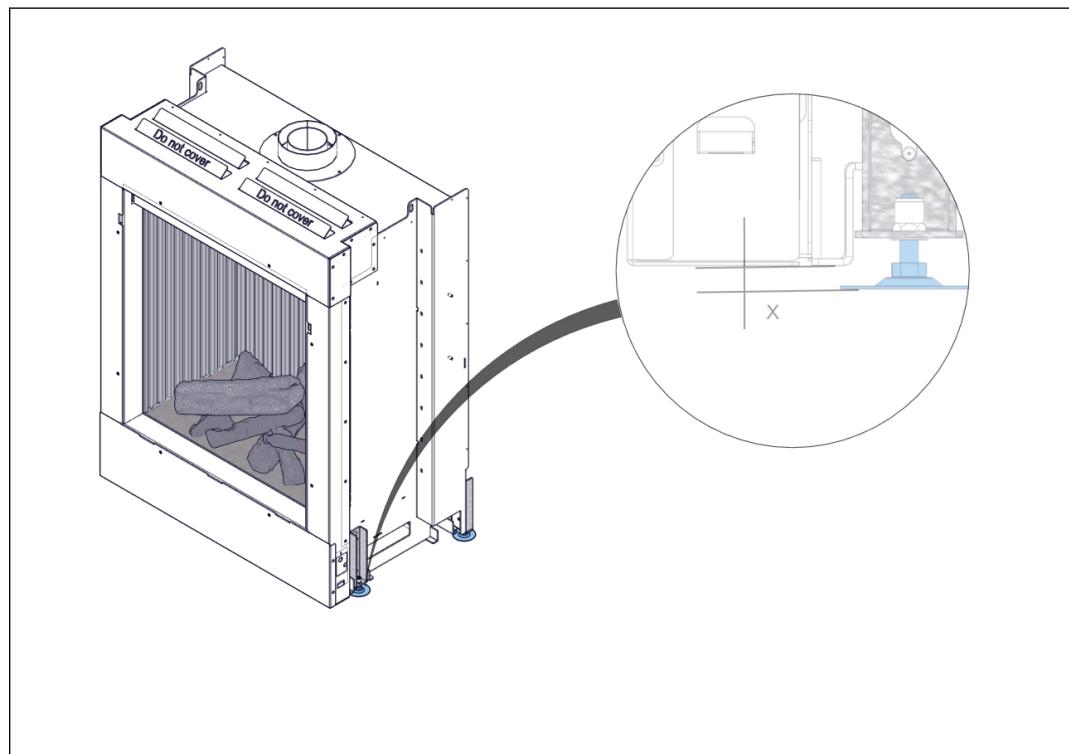


Figure 26. Aligning with adjustable feet

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

Aligning with adjustable height legs (optional)

1. Attach the 4 adjustable height legs on the appliance and set to the required height. Use a 13 mm fork spanner.

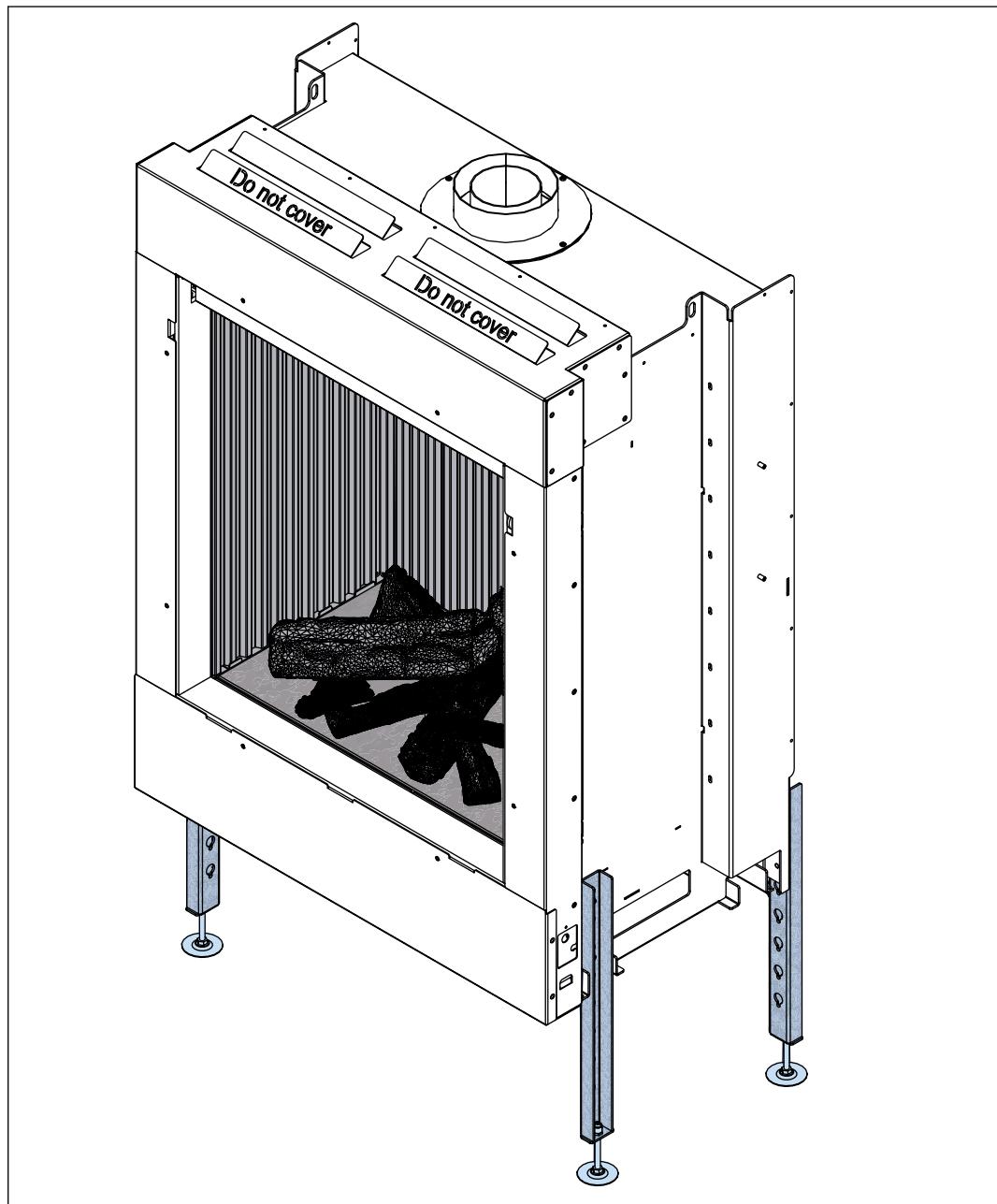


Figure 27. Aligning with adjustable height legs

2. Adjust the 4 adjustable feet with a 13 mm fork spanner until the appliance is level. Use a spirit level.

Attach the appliance to the rear wall

1. Attach the appliance to the rear wall with 2 wedge bolts and the mounting brackets..
2. Make sure the appliance is horizontal. Use a spirit level. If necessary adjust the mounting brackets.

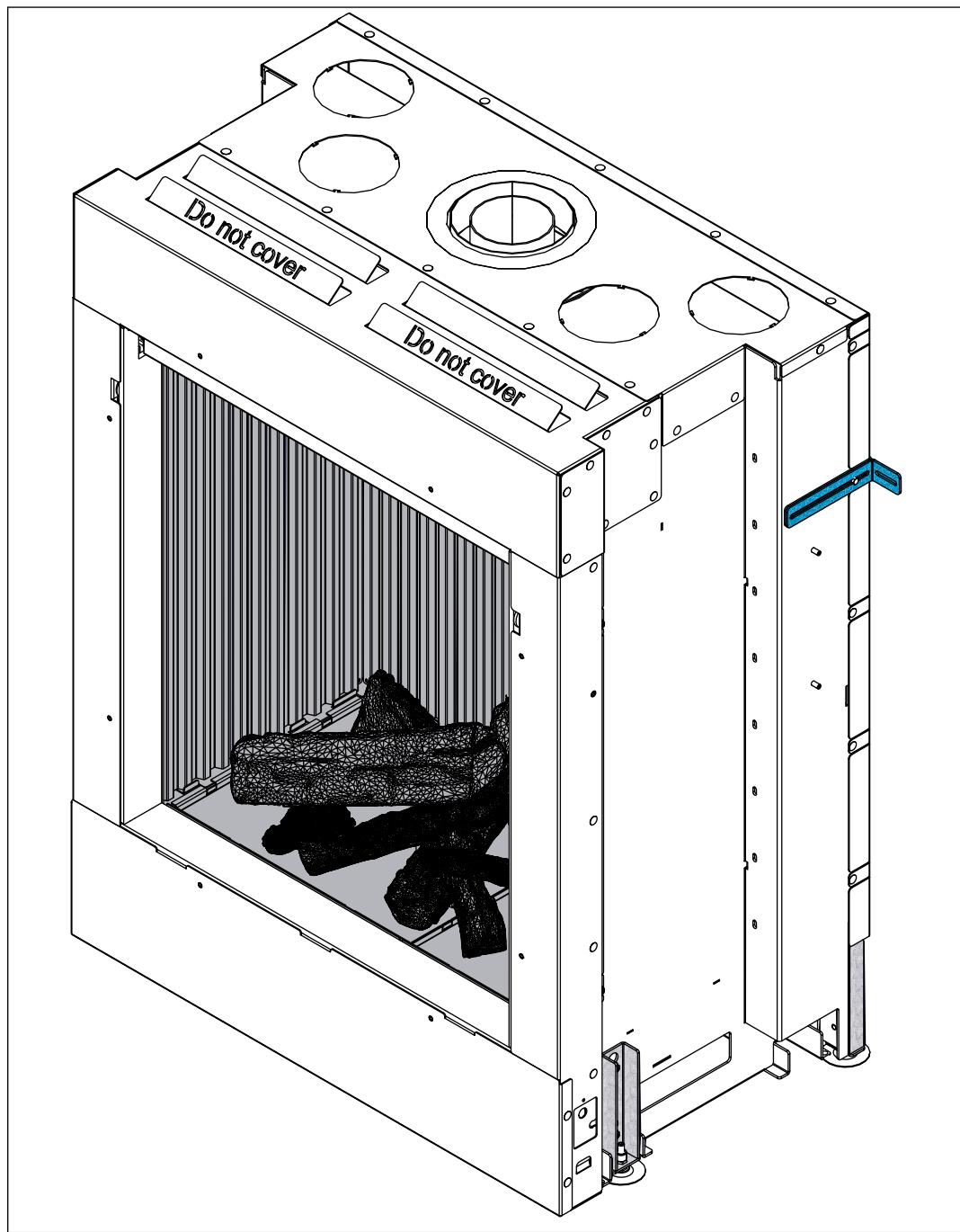


Figure 28. Attachment to the rear wall

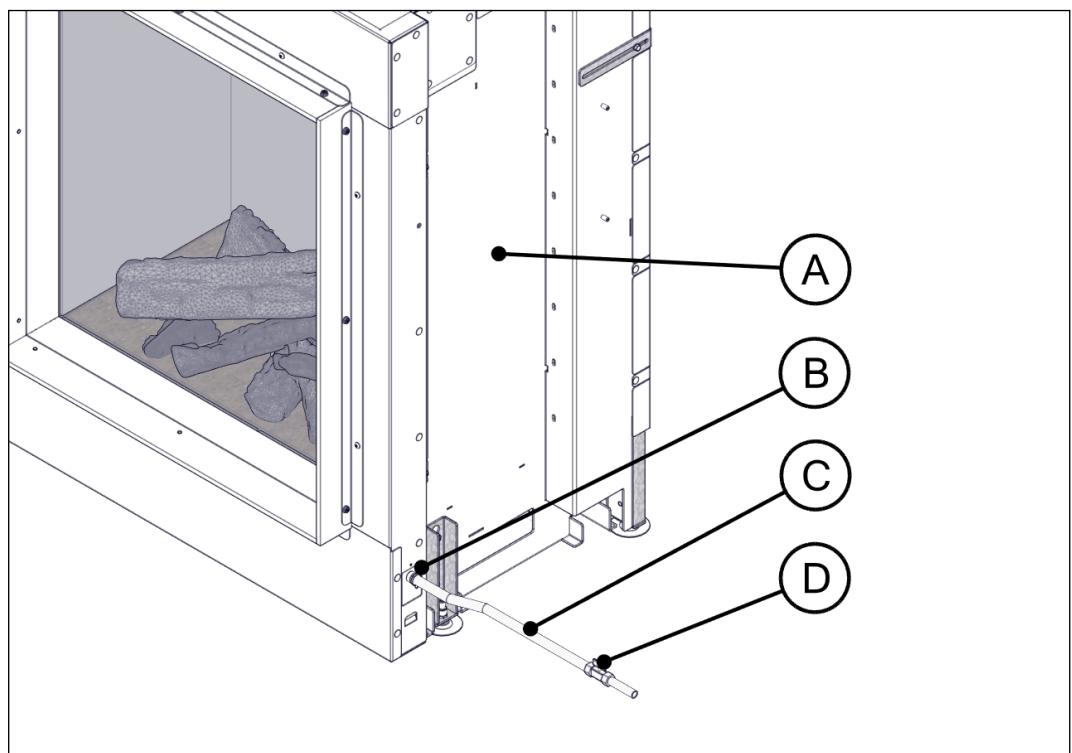
5.2.4

Make the gas connection



Important: In some countries national regulations prescribe the installation of a gas valve in the gas supply line to the appliance at an accessible location near the appliance. Contact your local gas supplier or your qualified gas installer for more information on this.

1. Connect the gas supply line to the gas connection of the appliance.
2. Make sure that the gas is connected correctly.



- | | | | |
|---|---------------------------------|---|---|
| A | Gas appliance | C | Gas supply line |
| B | Gas connection of the appliance | D | Gas valve (when prescribed by the national regulations) |

Figure 29. Position of the appliance gas connection



Note:

The appliance is factory-fitted with the prescribed gas connection in accordance with national regulations.

5.2.5

Do a check on the gas connections

- Make sure that the gas connections do not leak. Use a mixture of 50% liquid soap and 50% water or a leak tester to test for gas tightness.

5.2.6

Make the electrical connection

Caution:



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

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

5.2.7

Connect the concentric flue system

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

5.2.8

Connect the convection set (optional)

1. Put the collar adaptors in the open convection air outlet openings.

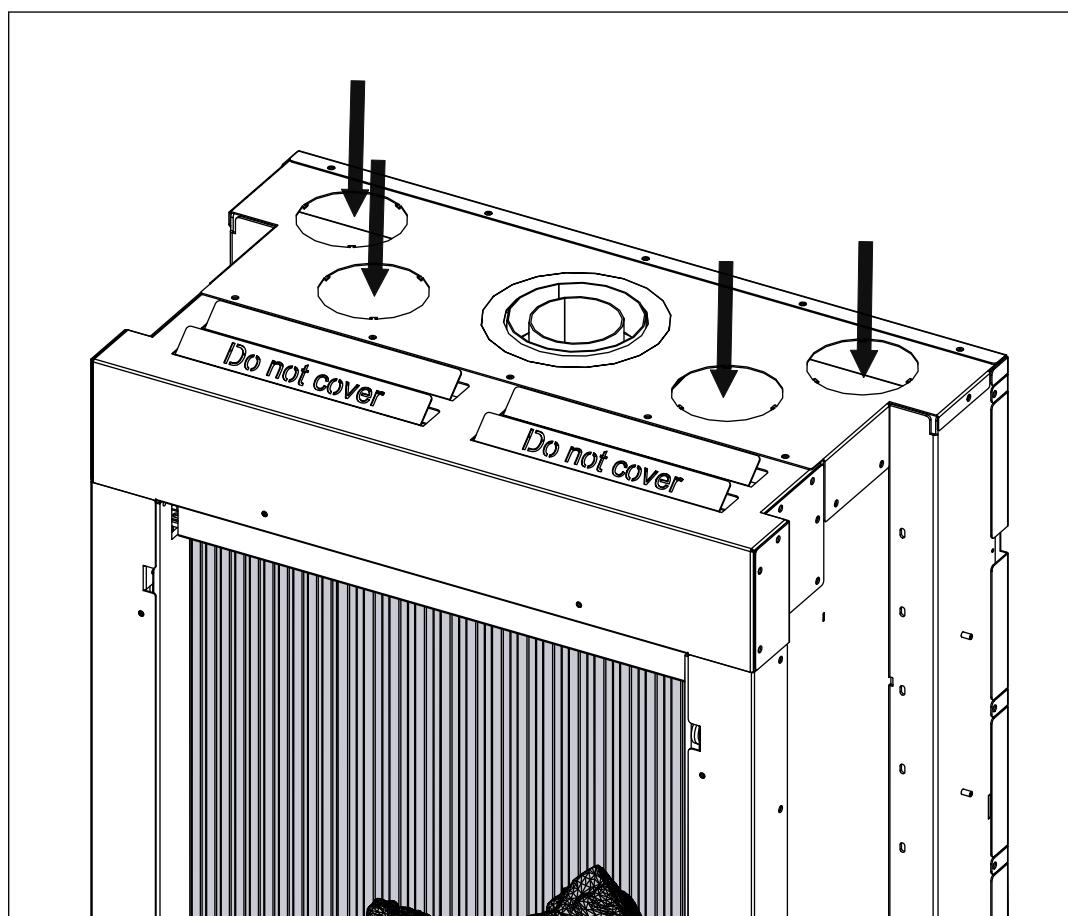


Figure 30. Position of convection air outlet openings

2. Bend out the 3 lips on each collar adaptor, to attach the collar adaptor on the outlet opening.

3. Connect the flexible aluminum pipes (B) on the collar adaptors (A) . Use the hose clamps (C).
4. Connect the flexible aluminum pipes to the AirBox fitting boxes in the chimney enclosure. See chapter [5.1.3](#) for the AirBox boxes.

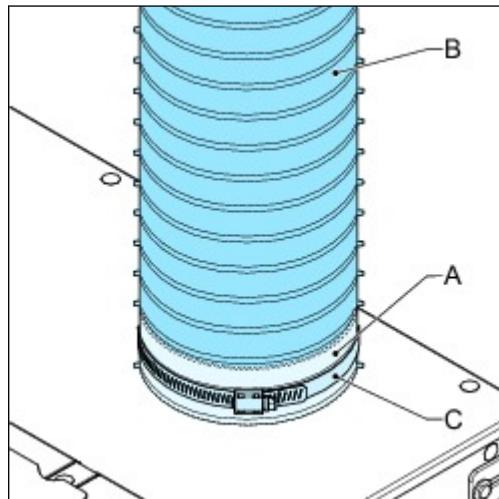


Figure 31. Connection of flexible pipe

5.2.9

Install the flue gas restriction plate

Safety conditions

Caution:



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

Procedure

1. Remove the glass pane. See chapter [6.2](#) for instructions .
2. Remove the baffle plate (C), by unscrewing two screws.

3. Install the restriction plate (A) with the fasteners (B) in the appliance. Use the restriction plate specified in the preparation manual.
4. Install the baffle plate (C) again with the two screws.

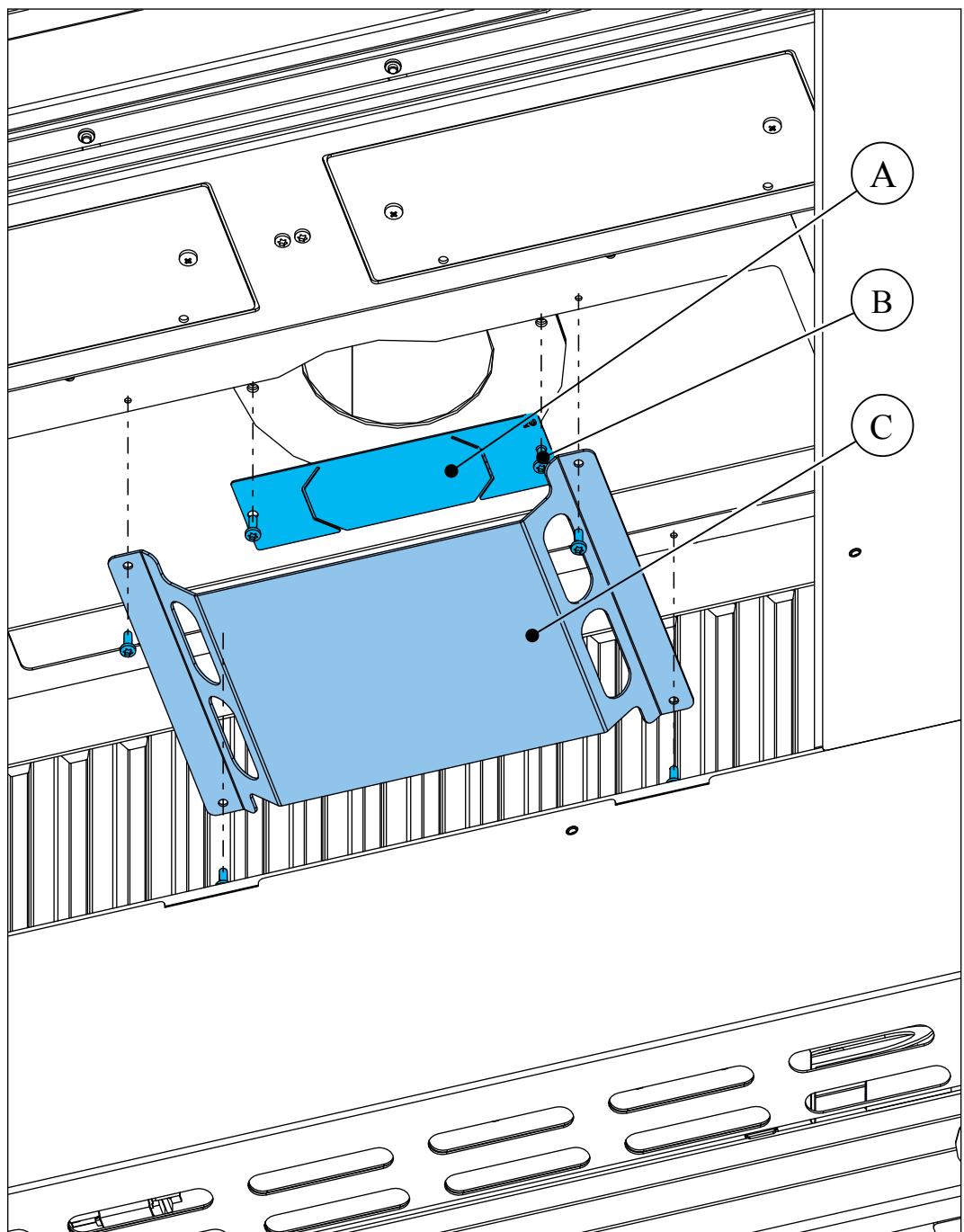


Figure 32. Restriction plate and baffle

5.2.10 Build the fireplace

Safety conditions



Warning: Do not cover the top side of the appliance with brickwork, plates or any other material.



Caution:

- Remove the door (including glass). See [6.2](#).
- Remove the frame to prevent damage of the frame during work. See [6.2](#).
- Make sure that the gas piping remains free of cement or other building material. Otherwise, the gas piping can start to leak.
- Make sure that brickwork is built with a clearing of at least 3 mm between the sides and top of the appliance and the brickwork. The appliance can expand during operation due to heating.
- Do not use masking tape on the appliance. Masking tape can damage the finish of the appliance.
- Do not build the brickwork higher than the casing without the use of a mantel iron.



Note:

- Make sure that the front opening of the appliance remains entirely free of building materials. The glass plate must remain easy to dismantle and mount.
- Make sure that the thickness of any plastering is taken into account when making the brickwork.
- If you use other material than bricks, install the material in accordance with the instructions of the supplier of the material.

Procedure

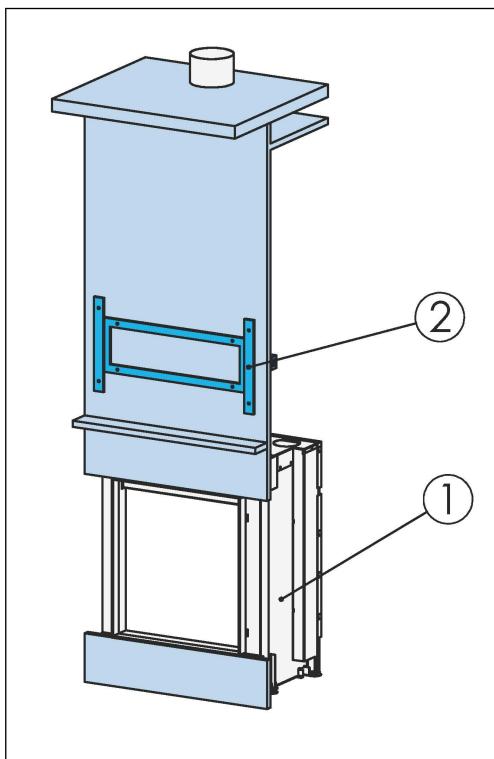
1. Identify the positions where the inlet openings and the outlet openings, for the AirBox inserts or the grates, must be put. See chapter [4](#) and refer to the preparation manual.
2. Build the brickwork around the appliance up to the upper frame.
3. If applicable, install a mantel iron.
 - a) Put ceramic felt on the top of the mantel iron. Brickwork can be built on top of the ceramic felt.
4. Build the fireplace around the appliance.
5. Install the AirBox inserts or the grates, on the inlet openings and the outlet openings.
6. Make sure the overpressure hatches are placed correct. Refer to chapter [5.3.1](#) for instructions.
7. Install the glass pane. See [6.2](#).
 - a) Hidden Door
 - b) Hidden Door +
 - c) Floating Frame
 - d) Floating Frame +
8. Install the frame on the appliance. See chapter [6.2](#).

5.2.11 Extra: TV installation above the appliance



Important:

- Use a TV wall mount bracket that is applicable for the TV.
- To attach the TV wall mount bracket, make sure to use steel studs at the back of the front plate of the chimney enclosure.



1 Appliance

2 TV wall mount bracket

Figure 33. TV installation above the appliance (front view)

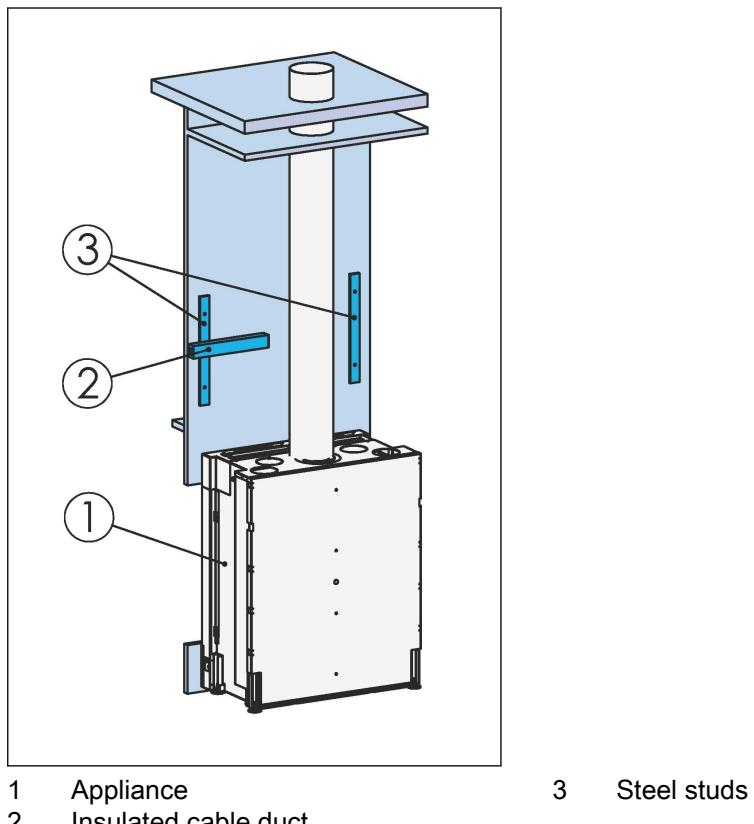


Figure 34. TV installation above the appliance (rear view)

5.3 Prepare the appliance for use

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

5.3.1 Do a check on the overpressure hatches

1. Make sure that the overpressure hatches are loose. Push the overpressure hatches up and lower them back in position.
2. Do a check on the gasket of the overpressure hatches. The gasket must seal the opening.
3. If necessary, replace the gasket. Lift the hatch and twist it to remove the hatch and to get access to the gasket.

5.3.2 Do a check on the operation of the lighting

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

5.3.3 Do a check on the operation of the integrated fire screen (optional on an Hidden Door (+))

- Make sure that the sliding of the fire screen functions properly. To operate the fire screen with the grip, refer to the user manual.

5.3.4

Put the ceramic logs on the burners

Refer to chapter [2.5](#) for an overview of the wood logs and their numbers.

Caution: Handle the ceramic logs with care.



1. Make sure all items of the ceramic log set are there. Refer to chapter [2.5](#).
2. Remove the 2 screws that hold the two front burners on the gas supply line.

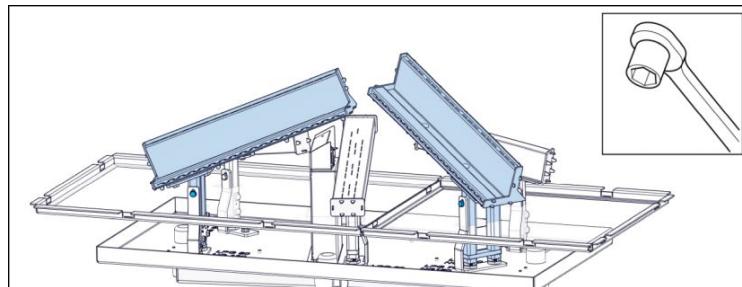


Figure 35.

3. Remove both front burners.

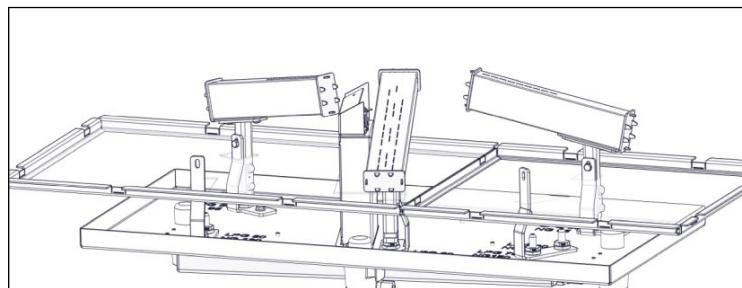


Figure 36.

4. Put ceramic log no. 43 on the center burner.

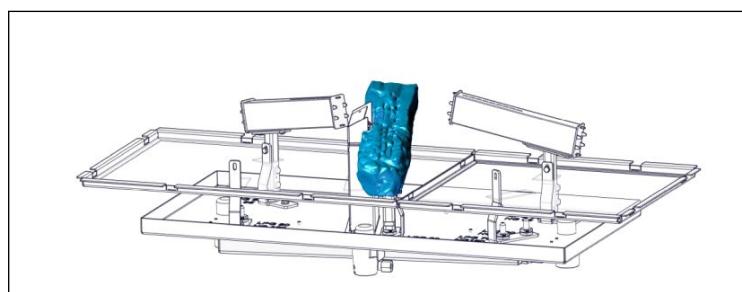


Figure 37.

5. Put ceramic log no. 41 on the left back burner and ceramic log no. 42 on the right back burner.

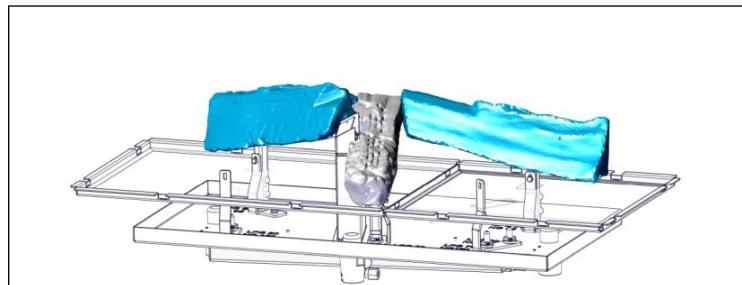


Figure 38.

6. Attach both front burners on the gas supply line with the 2 screws.

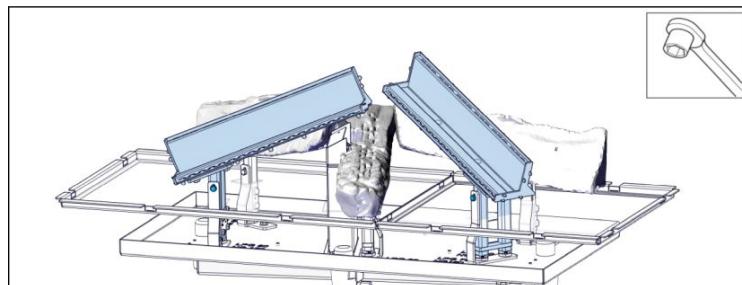


Figure 39.

7. Put ceramic log no. 39 on the left front burner and ceramic log no. 40 on the right front burner.

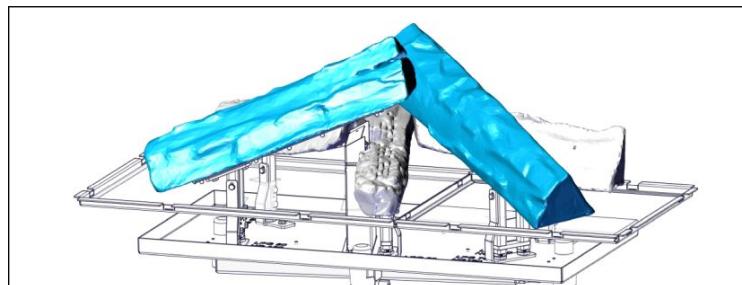


Figure 40.

8. Do a check on the ignition of the burners
 - a) Make sure the ceramic logs are in the correct position as described above.
 - b) Make sure the plug is in the wall socket.
 - c) Make sure the main gas valve is open.
 - d) Start the appliance and do a check on the ignition of the pilot burner and main burners. Refer to the user manual for the start procedure.
 - e) If the ignition of the pilot burner and main burners is correct, stop the appliance with the remote control. Refer to the user manual for the stop procedure.
 - f) Continue with the installation after the appliance has cooled down.
9. Apply the fire glass equally on the grate. Use the fire glass 'Black' along the edges of the grate. Cover the rest of the grate with a mixture of fire glass 'Black' and fire glass 'Dark Amber' .

10. Put ceramic logs no. 36, 44, 46 and 47 on the fire glass as shown on the picture.

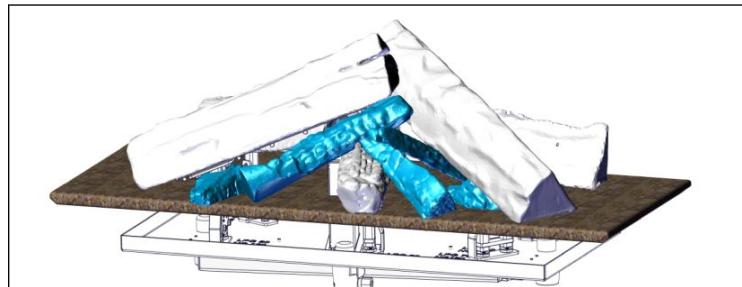


Figure 41.

11. Put ceramic logs No. 49 and 50, left and right next to the burner, flat on the fire glass.

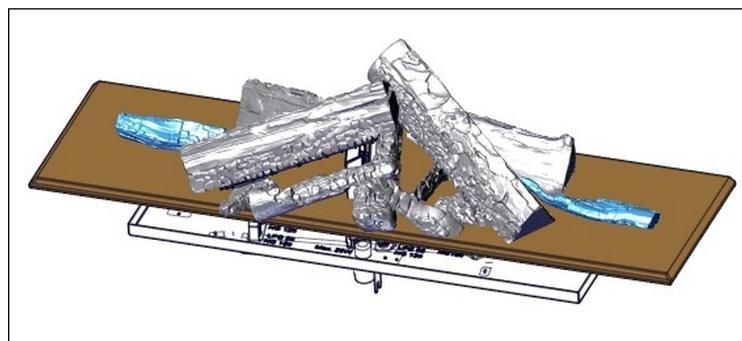


Figure 42.

12. Install the glass pane. Refer to chapter [6.2](#) for the correct procedure.

5.3.5

Do a final check on the fireplace

Safety conditions

Caution:



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

Procedure

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

6 Maintenance

6.1 Annual maintenance

- Do all procedures in this section minimum every year.

Caution:



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

6.1.1 Clean the appliance

Safety conditions

Caution:



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

Procedure

1. Remove the glass. Refer to chapter [6.2](#).
2. Remove the content from the burner bed.
3. Clean the removed content carefully with a soft brush.
4. Clean the inside of the appliance, including the main burner, the pilot light burner and the flue system.

5. Remove the grate.

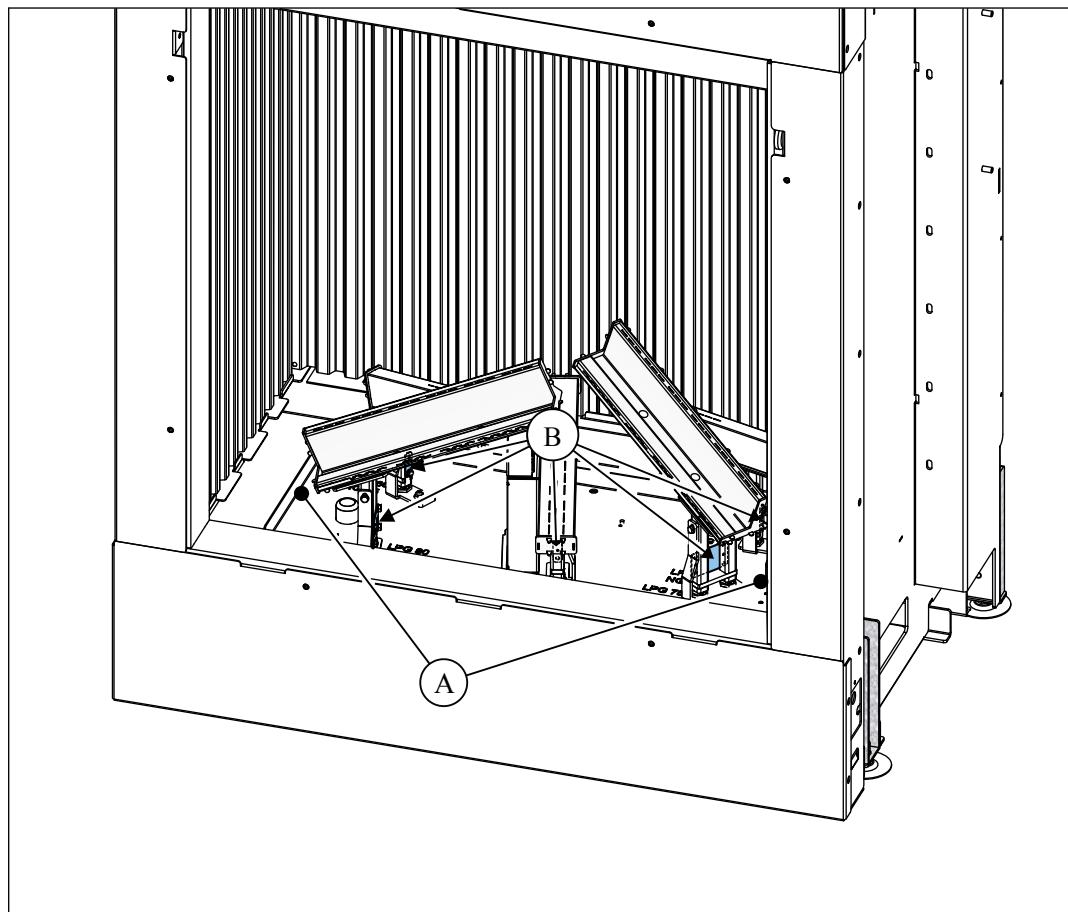


Figure 43. Position of air intake and primary air inlet openings

6. Clean the combustion air intake
 - a) Clean the combustion air intake (A) at the bottom sides of the appliance.
 - b) Clean the primary combustion air inlet openings (B) of the main burners.
7. Clean the ambient light bulbs. Refer to chapter [6.2.10](#).
8. Clean the convection air route.
9. Do a check for damage on the inside of the appliance, including these parts:
 - a) Main burners.
 - b) Pilot burner.
 - c) Combustion air intake.
 - d) Overpressure hatches.
 - e) Flue system. Use a flashlight if necessary.
10. Clean the glass. For standard glass, refer to chapter [6.2.8](#). For anti-reflective glass refer to chapter [6.2.9](#).
11. If the black mirror rear wall is installed in the appliance, clean the black mirror. Use glass spray or ceramic hob cleaner.
12. Install the glass pane. Refer to chapter [6.2](#).
13. Prepare the appliance for use. Refer to chapter [5.3.5](#).

6.1.2

Do a check on the appliance

1. Do a check for leaks on the gas pipes and the gas pipe connections. Refer to chapter [5.2.5](#).
2. Make sure that the pilot light operates correctly. The pilot light must not show any anomalies.
3. Make sure that the main burner operates correctly. The fire must not show any anomalies.
4. Do a check of the gas supply pressure and the burner pressure.
 - a) Use the inlet pressure tap and outlet pressure tap on the gas regulator block to measure the supply pressure and the burner pressure.
 - b) Measure the pressure when the appliance is off and when the appliance burns on maximum. Refer to chapter [8](#) for the required supply pressure and burner pressure.
5. Make sure that the ambient lighting operates correctly.
6. Do a check on the concentric flue system and the outlet construction. Make sure that all the connections of the concentric flue system are secure.

6.2

Maintenance procedures

6.2.1

Remove the glass pane Floating Frame (+)

Warning: Before the start of this procedure make sure the appliance is off and cooled down to room temperature.

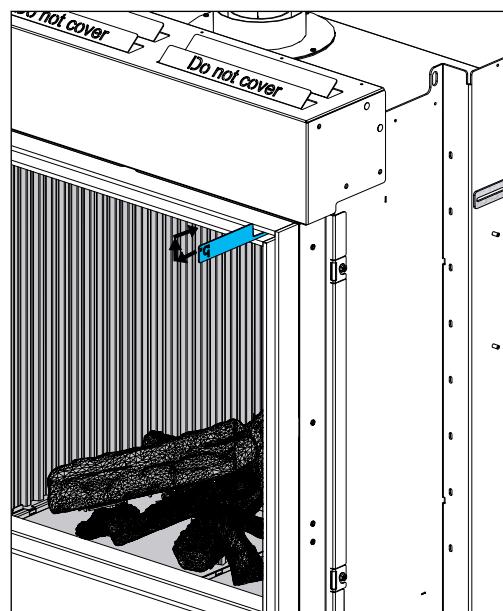


Caution: Use protective gloves.



Floating Frame / Floating Frame +

1. Turn off the gas supply to the appliance before removing the glass pane.
2. With the hook, pull the metal spring strip on the top, left and right, from the studs on the door.

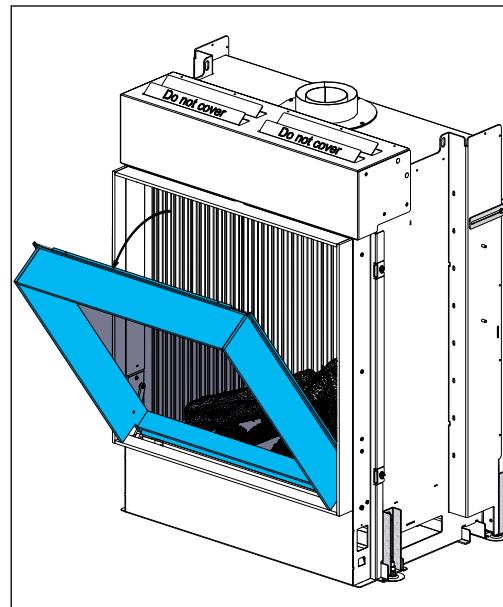


3. Carefully tilt the door forward.

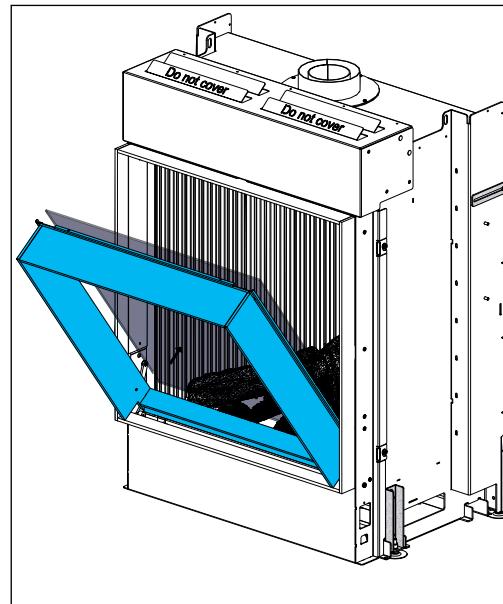
Caution:



The glass pane lays loose in the door!



4. Carefully remove the glass pane.



6.2.2

Install the glass pane Floating Frame (+)

Caution:



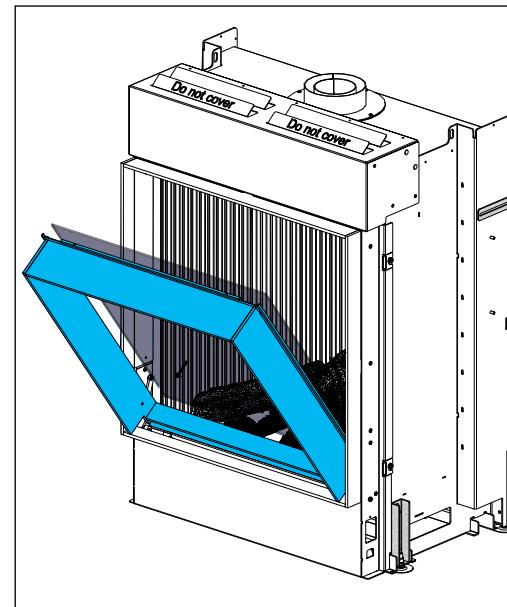
Use protective gloves.

Caution:

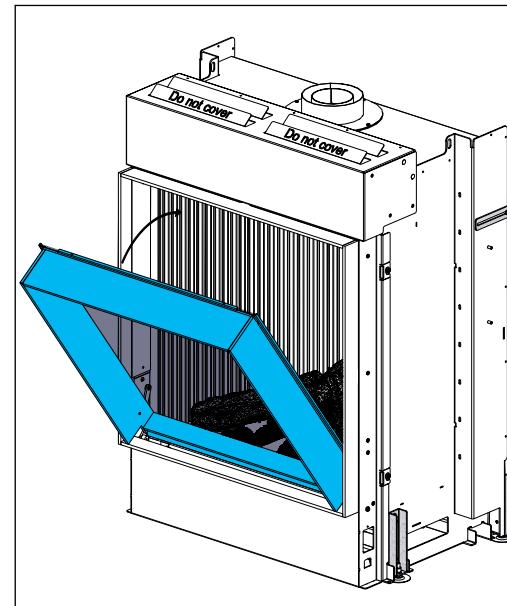


Make sure that the glass pane fits properly in the appliance and seals the inside of the appliance. If the glass pane does not fit properly there is a risk of flue gas leakage.

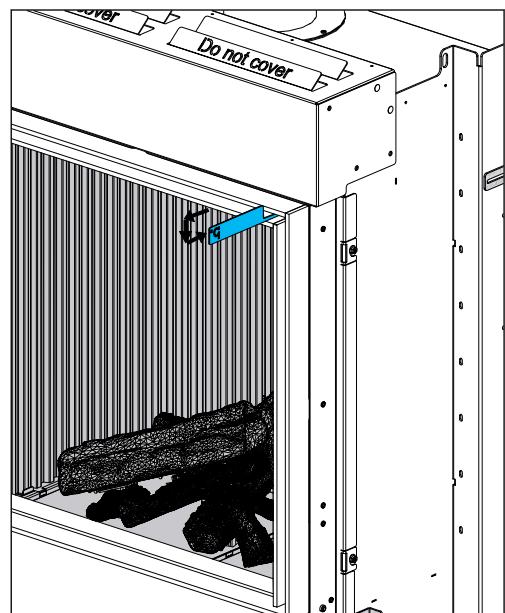
1. Install the glass pane and door in the reverse order of the procedure 'Remove the glass pane Floating Frame (+)'.
2. Carefully place the glass pane in the door.



3. Close the door with the glass pane, by tilting it backwards.



4. With the hook, pull the metal spring strip on the top, left and right, on the studs on the door.



6.2.3

Remove the glass pane Hidden Door (+)

Warning:



Before the start of this procedure make sure the appliance is off and cooled down to room temperature.

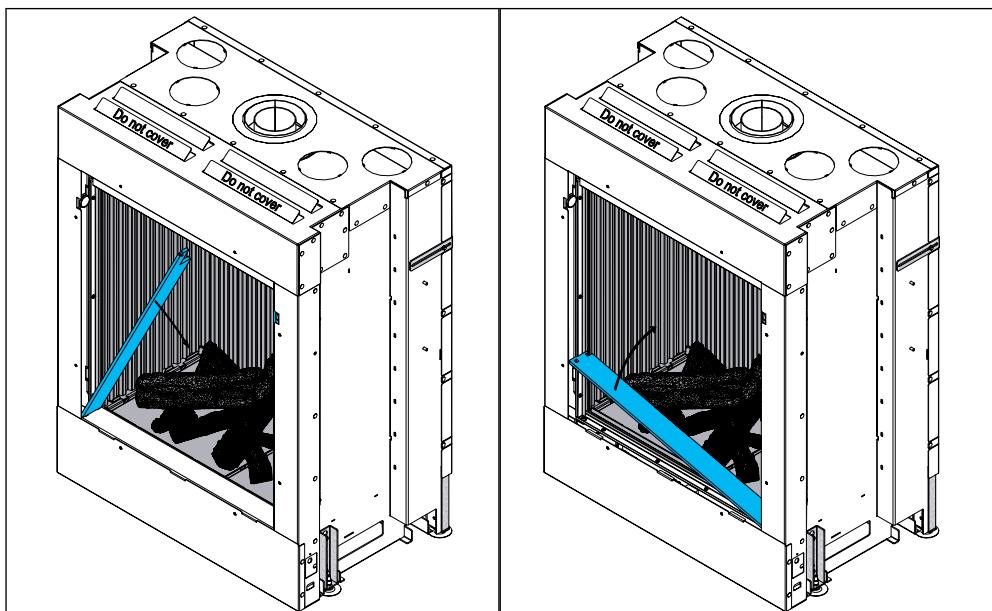
Caution:



Use protective gloves.

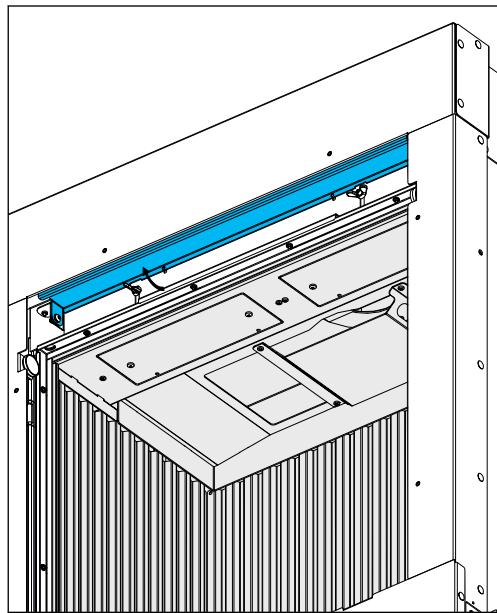
Hidden Door / Hidden Door +

1. Turn off the gas supply to the appliance before removing the glass pane.

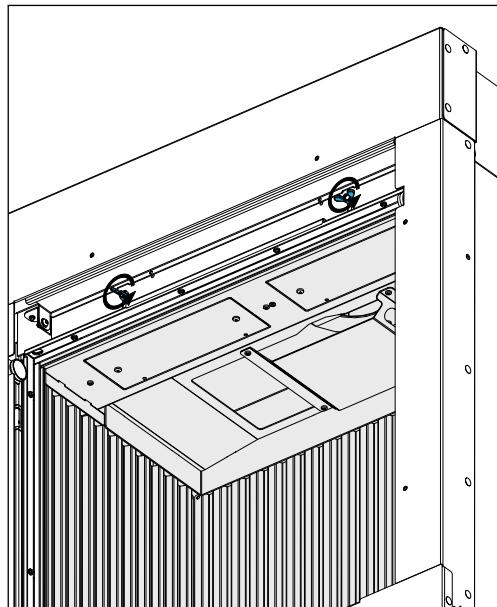


2. Remove the side panels and front panel.

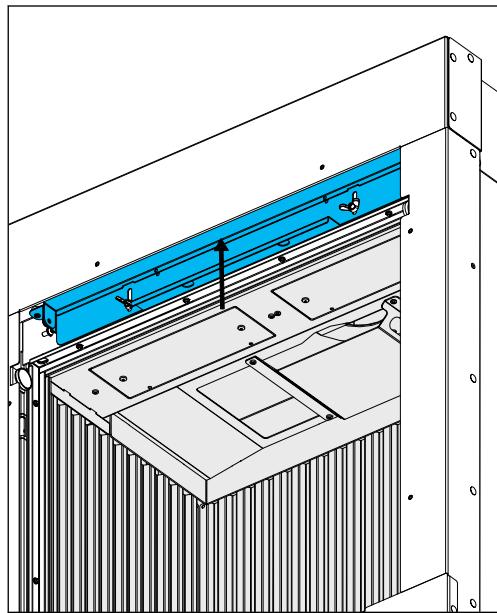
3. Tilt the top panel upwards.



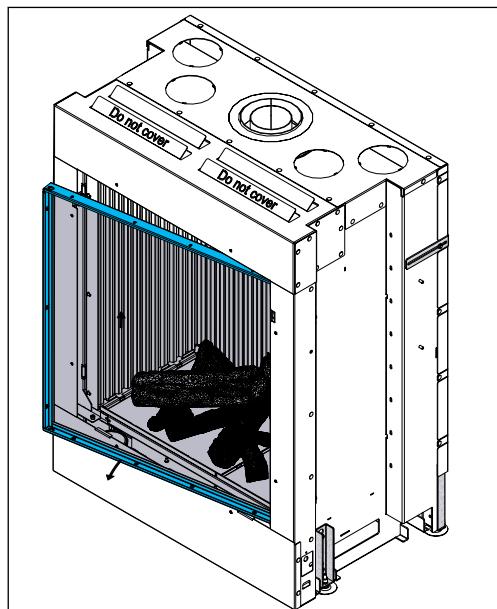
4. Loosen the wing nuts a few turns. Do not remove the wing nuts and strip.



5. Slide the strip upwards.



6. Lift the frame with the glass slightly and remove it sideways.



6.2.4

Install the glass pane Hidden Door (+)

Caution:



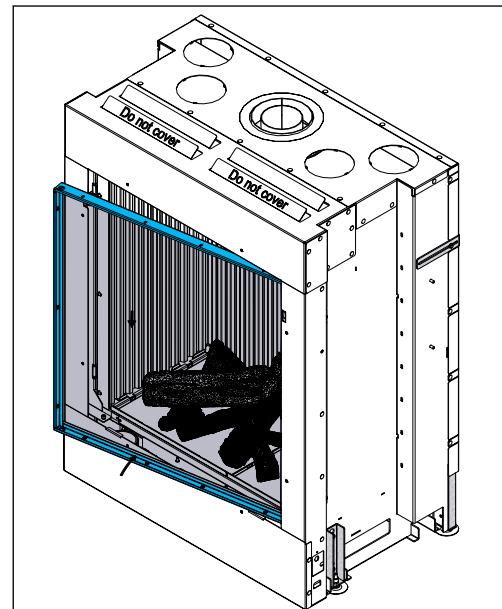
Use protective gloves.

Caution:

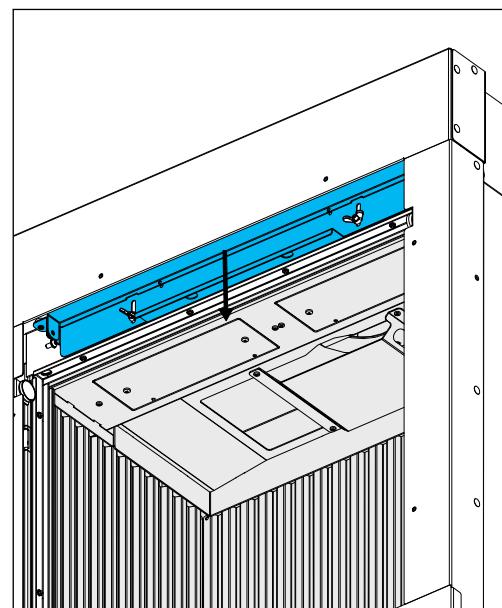


Make sure that the glass pane fits properly in the appliance and seals the inside of the appliance. If the glass pane does not fit properly there is a risk of flue gas leakage.

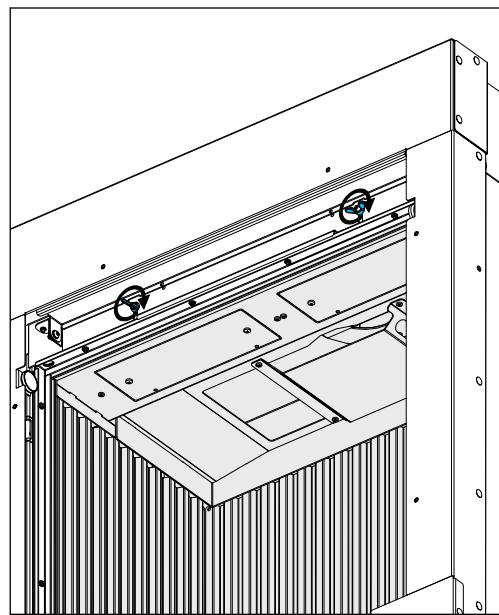
1. Install the glass pane and panels in the reverse order of the procedure 'Remove the glass pane Hidden Door (+)'.
2. Slide the frame with the glass sideways into the appliance and then lower it slightly.



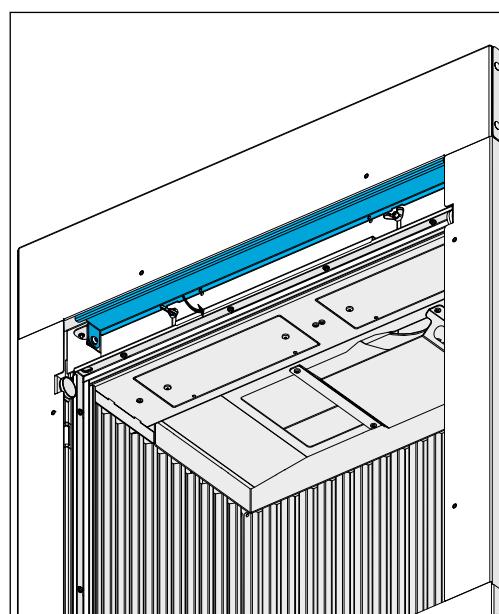
3. Slide the strip downwards.

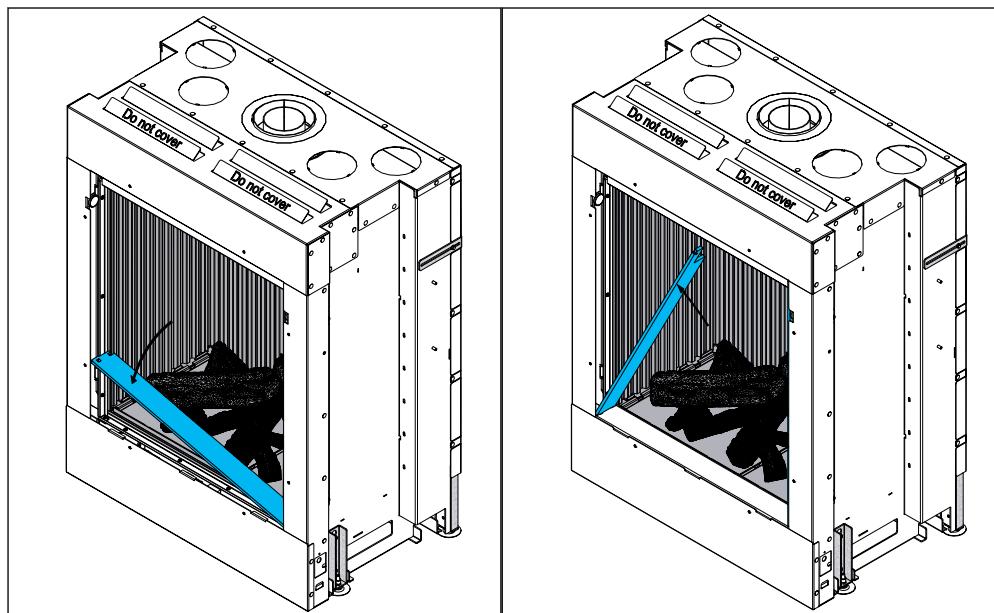


4. Tighten the nut wings.



5. Tilt the top panel upwards.





6. Install the front panel and side panels.

6.2.5

Remove the glass pane Hidden Door (+) with fire screen

Warning:

- Before the start of this procedure make sure the appliance is off and cooled down to room temperature.
- Make sure that the fire screen is set in the service position.

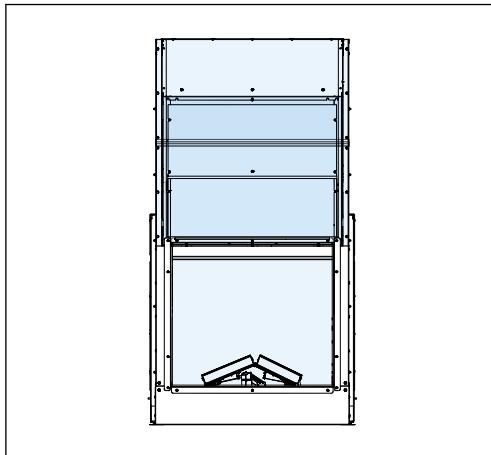


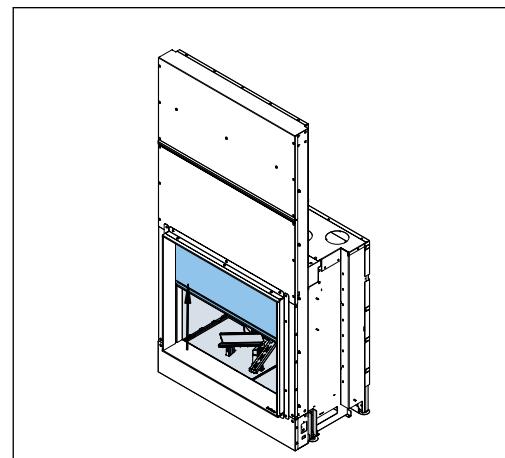
Figure 44. Fire screen in the service position

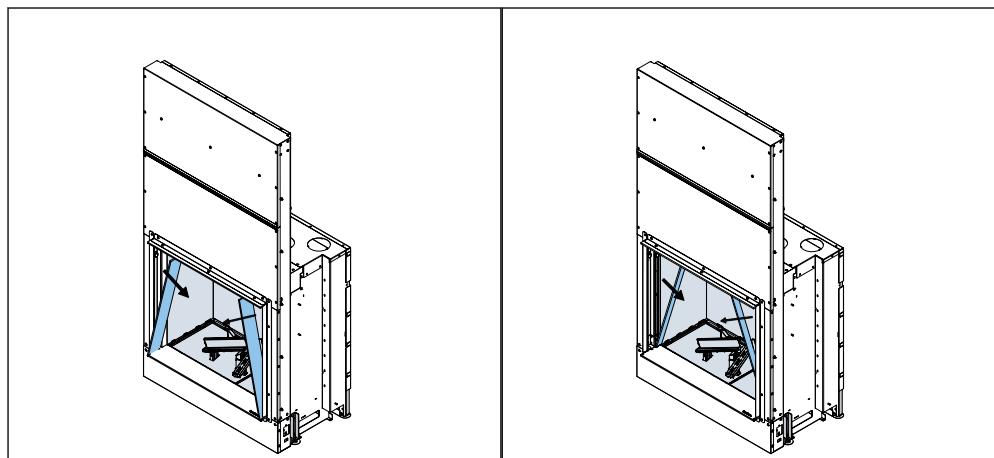
Caution:

Use protective gloves.

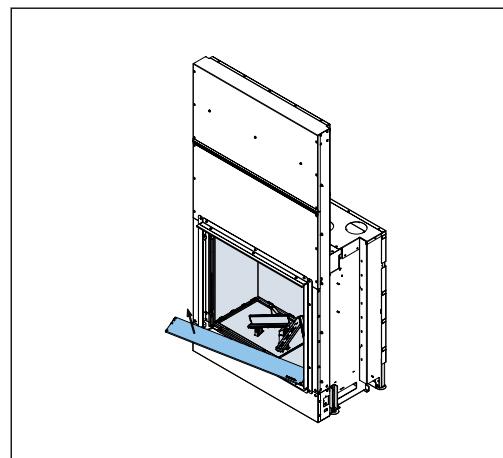
Hidden Door / Hidden Door +

1. Turn off the gas supply to the appliance before removing the glass pane.
2. Do slide the fire screen totally upwards to the service position.

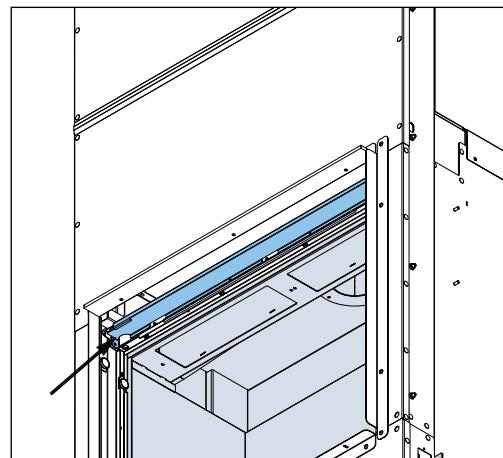




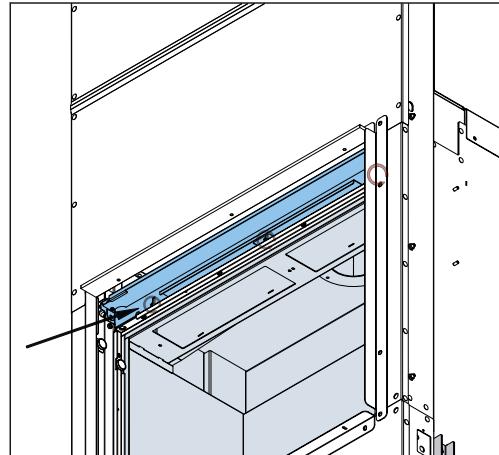
3. Remove the side panels.
4. Remove the front panel.



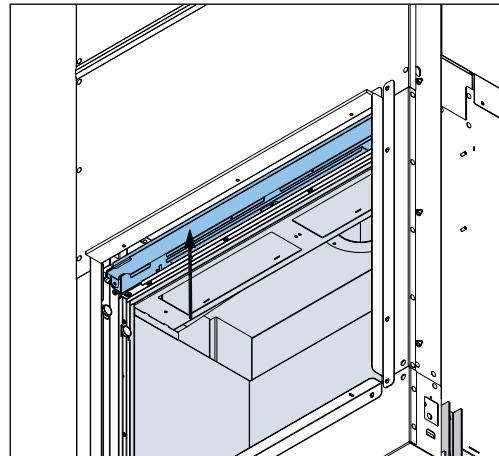
5. Tilt the top panel upwards.



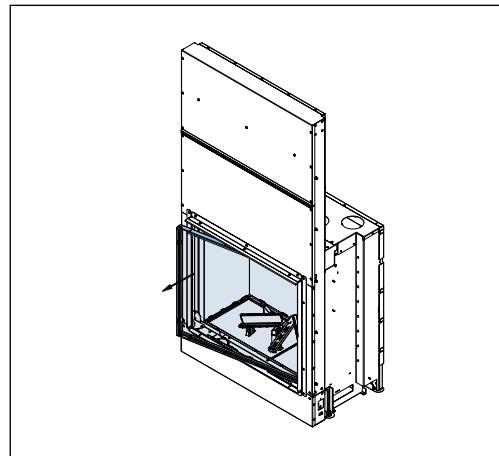
6. Loosen the wing nuts a few turns. Do not remove the wing nuts and strip.



7. Slide the strip upwards.



8. Lift the frame with the glass slightly and remove it sideways.



6.2.6

Install the glass pane Hidden Door (+) with fire screen

Caution:



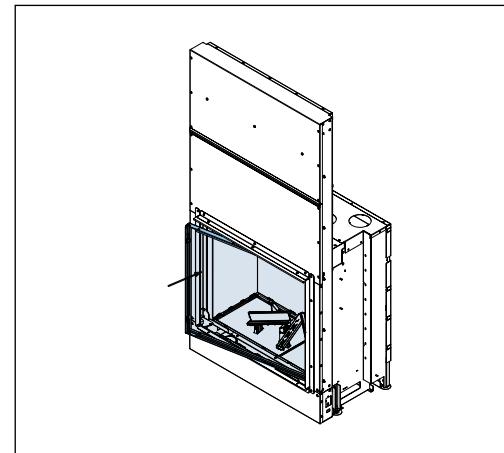
Use protective gloves.

Caution:

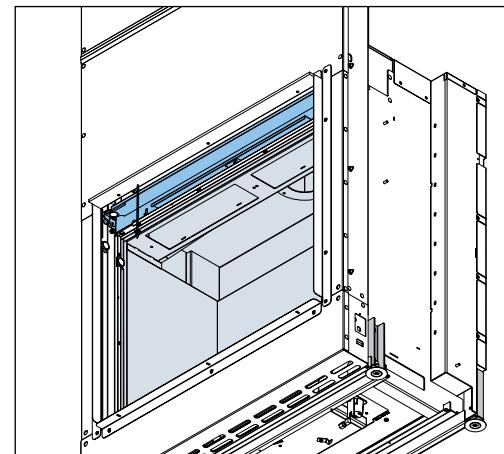


Make sure that the glass pane fits properly in the appliance and seals the inside of the appliance. If the glass pane does not fit properly there is a risk of flue gas leakage.

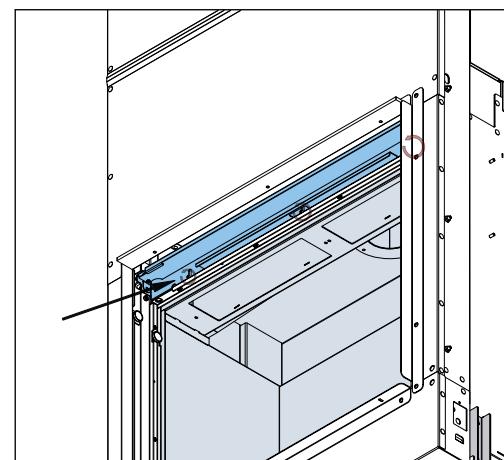
1. Install the glass pane and panels in the reverse order of the procedure 'Remove the glass pane Hidden Door (+) with fire screen'.
2. Make sure that the fire screen is set in the service position.
3. Slide the frame with the glass sideways into the appliance and then lower it slightly.



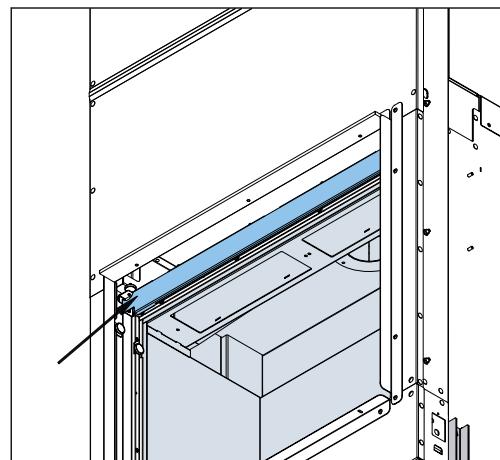
4. Slide the strip downwards.



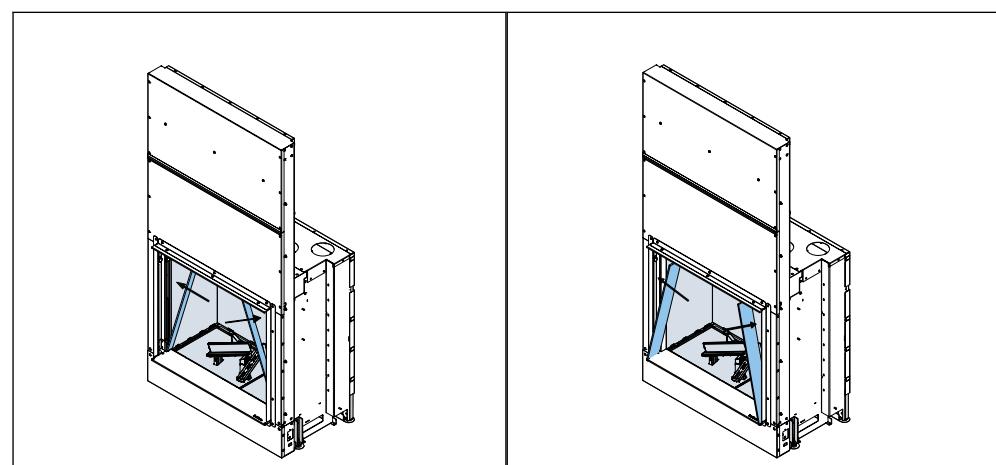
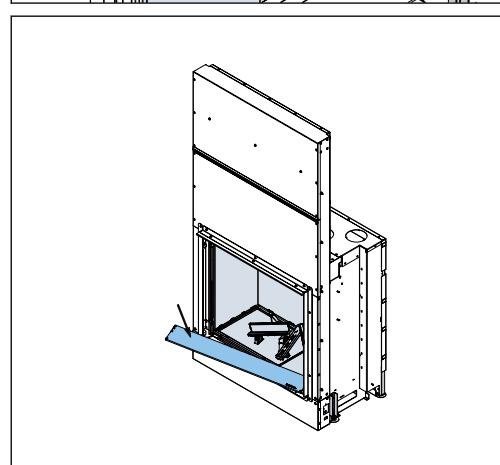
5. Tighten the nut wings.



6. Tilt the top panel upwards.

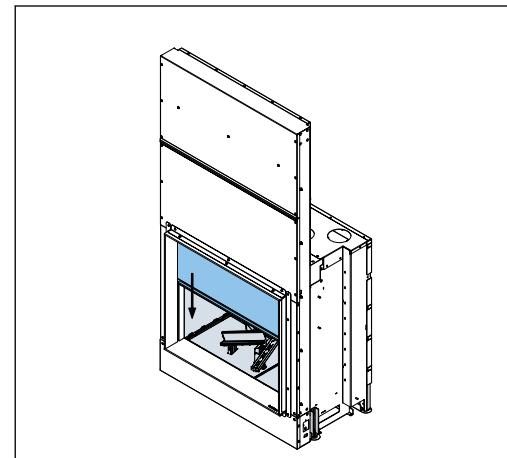


7. Install the front panel.



8. Install the side panels.

9. Do a check that the fire screen can slide up and down properly.



6.2.7

Disassembly of burners and burner bed

Warning: Before the start of this procedure make sure the appliance is off and cooled down to room temperature.

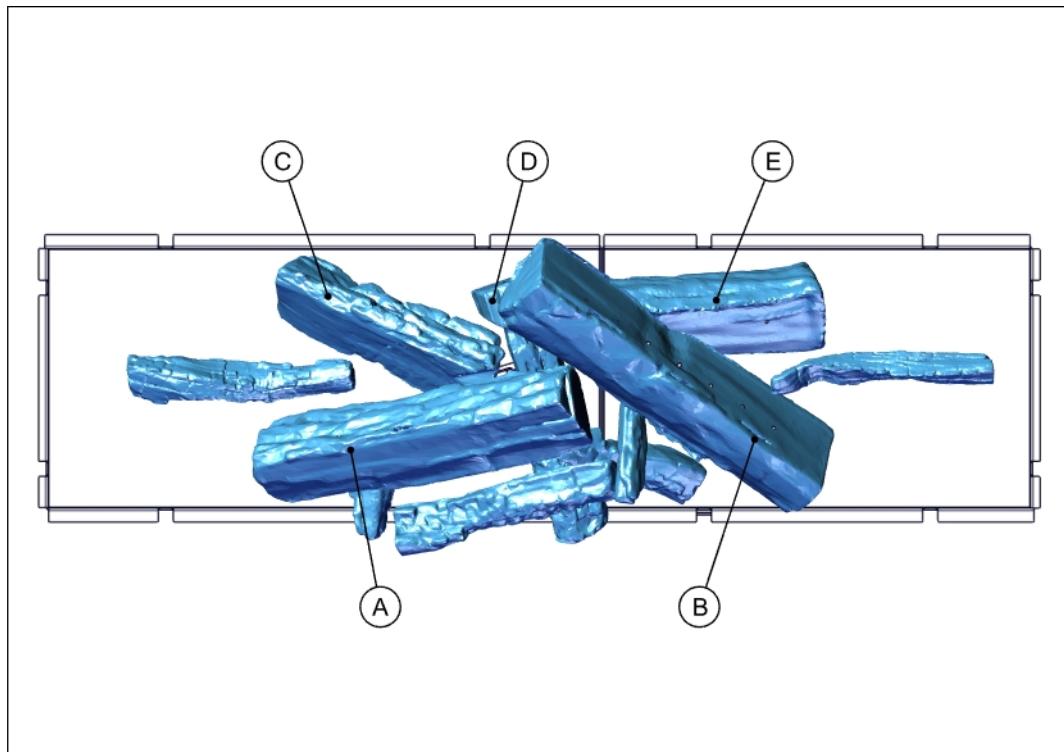


Figure 45. Position of ceramic wood logs and burners

1. Remove the glass pane. Refer to chapter [6.2](#).
2. Carefully remove the small decorative wood logs.
3. Carefully remove ceramic wood logs A and B.
4. Unscrew the 2 screws holding burners A and B.
5. Remove burners A and B.
6. Carefully remove ceramic wood logs C, D and E.
7. Unscrew the 3 screws holding burners C, D and E.
8. Remove burners C, D and E.
9. Remove the fire glass
10. Remove the 2 grates.

To assemble the burner and burner bed do the procedure above in reverse order. See also chapter [2.5](#).

6.2.8

Clean the standard glass

Warning: Before the start of this procedure make sure the appliance is off and cooled down to room temperature.



Caution:



If you have anti-reflective glass, refer to chapter [6.2.9](#), to avoid damage to the anti-reflective coating on the glass.

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

6.2.9

Clean the anti-reflective glass

Warning: Before the start of this procedure make sure the appliance is off and cooled down to room temperature.



Caution:



- Do not use hard (scouring) sponges, steel wool, abrasive products, caustic products, or cleaning agents that contain ammonia. The use of these items on the glass can damage the coating layers.
- Use neutral cleaning agents to clean the glass. This includes products like 'Instanet' or 'Glassex'.

1. Clean the glass with a soft cloth or a sponge.
2. Make sure that the glass is dry. Water droplets can leave a mark on the coating.

6.2.10

Replace the ambient light bulb when broken

Warning: Before the start of this procedure make sure the appliance is off and cooled down to room temperature.



1. Turn off the power supply to the appliance.
2. Remove the glass pane. Refer to chapter [6.2](#).
3. Remove the burners and burner bed. Refer to chapter [6.2.7](#).

4. Carefully unscrew the broken light bulb from the ceramic fitting.

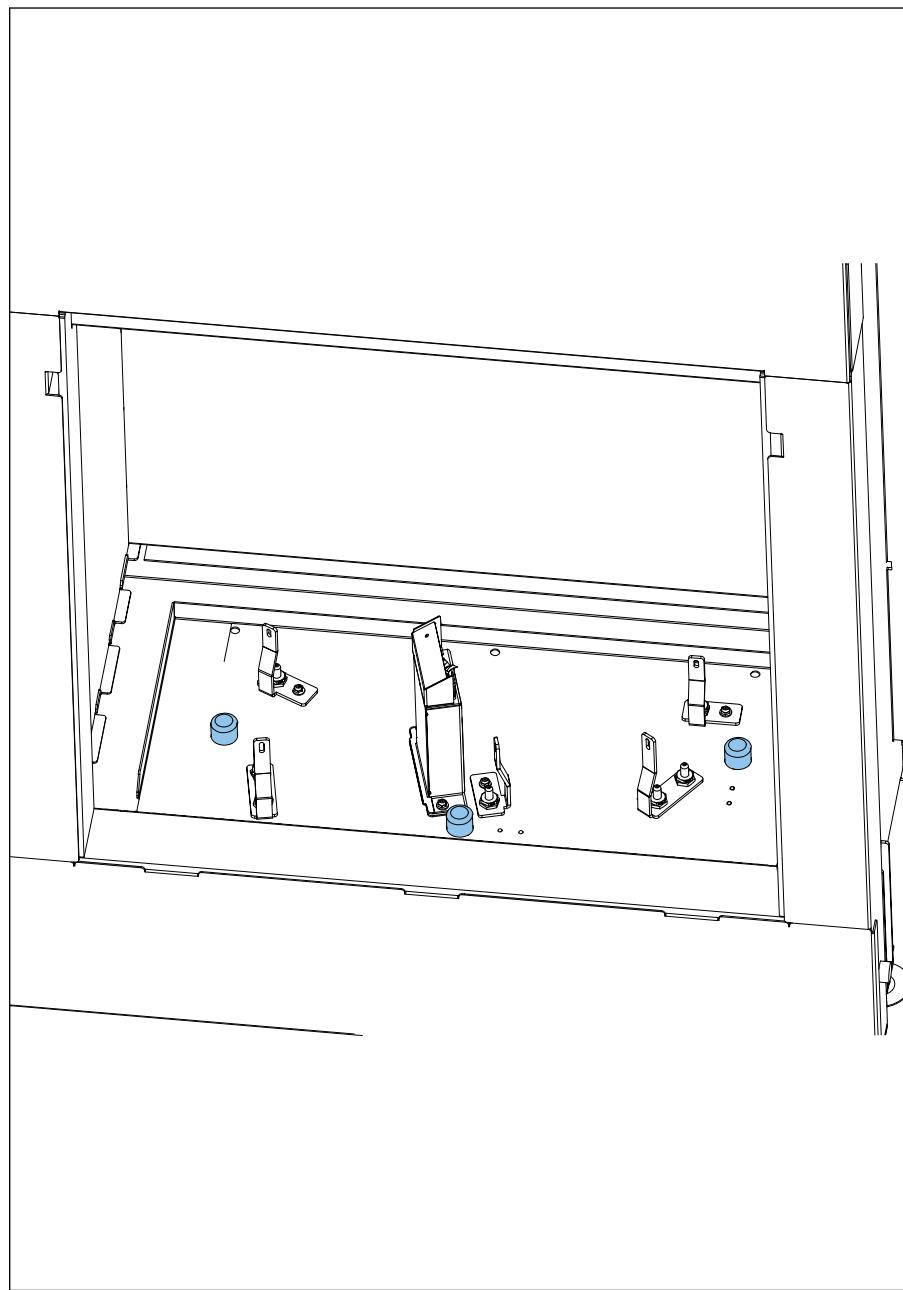


Figure 46. Position of ambient light bulbs

5. Carefully turn the new light bulb in the ceramic fittings.

Caution:



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

6. Make sure that the ambient lighting operates correctly. To operate the lights with the remote control, refer to the user manual.
7. Assemble the burner bed and the burners and glass pane. Refer to chapter [2.4](#) and chapter [2.5](#) for assembly instructions.
8. Turn on the power supply to the appliance.
9. Do a final check of the appliance. Refer to chapter [5.3.5](#).

7 Troubleshooting

Table 11: Troubleshooting

Problem	possible cause	solution
The main fire stops to burn	The concentric flue system is not installed according to the specified instructions.	Install the concentric flue system correctly. Refer to the preparation manual.
	An incorrect flue gas restriction plate is fitted.	Install the correct gas restriction plate. Refer to chapter 5.2.9 and chapter 8.3 .
	Insufficient pressure of the gas supply.	Contact your gas supplier company
	The concentric system has a leak. The leak is possibly on the inside of the concentric flue.	Check the concentric flue system. Refer to the preparation manual for correct installation.
	There is no power supply (230 VAC).	Repair the power supply.
The appliance does not react on the remote control	The batteries of the remote control are empty.	Replace the batteries. Refer to the user manual.
The pilot burner stops to burn	There is insufficient exhaust of the flue gases.	Check the concentric flue system. Refer to the preparation manual for correct installation.
	The pilot burner is dirty.	Clean the pilot burner
	The pilot burner is defective.	Replace the pilot burner
	The thermocouple is defective	Replace the thermocouple
The light does not operate	The light bulb is defective	Replace the light bulb. See chapter 6.2.10 .
A loud noise occurs in the appliance	The overpressure hatches are activated.	Do a check on the appliance for problems.
The lacquer of the appliance is damaged		Use an aerosol can with heat resistant lacquer to repair any damage in the lacquer.

8 Technical specification

8.1 Barbas Gas Fire Front 110-75 PF2- GB, IE, ES, IT

Table 12: Appliance classification

	Natural gas G20	Butane G30 Propane G31 Biopropane G31
Category of appliance	I _{2H} natural gas G20	I ₃₊ butane G30/propane G31/ biopropane G31
Country	GB, IE, ES, IT	
Product identification number (PIN)	0063 DL 3986	
Indirect heating functionality	No	
Type of appliance under EN 613	C ₁₁ / C ₁₂ ^(*) / C ₃₁ / C ₃₂ ^(*) / C ₉₁ / C ₉₂ ^(*)	
Energy efficiency class	A	
Energy efficiency index (EEI)	90	

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

Table 13: Technical performance / settings data

	Natural gas G20	Butane G30	Propane G31 Biopropane G31
Nominal heat input (Gross calorific value)	12.5 kW	12.5 kW	12.0 kW
Nominal heat output	9.6 kW	9.6 kW	9.2 kW
Minimum heat output (indicative)	5.3 kW	5.6 kW	5.5 kW
Useful efficiency (Net Calorific Value (NCV)) at nominal heat output	91.8 %	93 %	93 %
Useful efficiency (Net Calorific Value (NCV)) at minimum heat output (indicative)	87 %	88 %	88 %
NO _x (max.) (Gross Calorific Value (GCV))	<120 mg/kWh _{input}	<120 mg/kWh _{input}	<120 mg/kWh _{input}
NO _x class	4	4	4
Gas rate (max.)	1.19 m ³ /s/hr.	970 g/h	860 g/h
Supply pressure	20.0 mbar	29.0 mbar	37.0 mbar
Burner pressure (max.) Hot	11.1 mbar (*)	29.0 mbar (*)	36.0 mbar (*)
Burner pressure (max.) Cold	10.4 mbar (**)	29.0 mbar (**)	36.0 mbar (**)
Burner pressure (min.)	3.0 mbar (***)	9.4 mbar (***)	12.1 mbar (***)

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

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

(***) Both burners at minimum.

Heat changing surface: Entire front of the appliance.

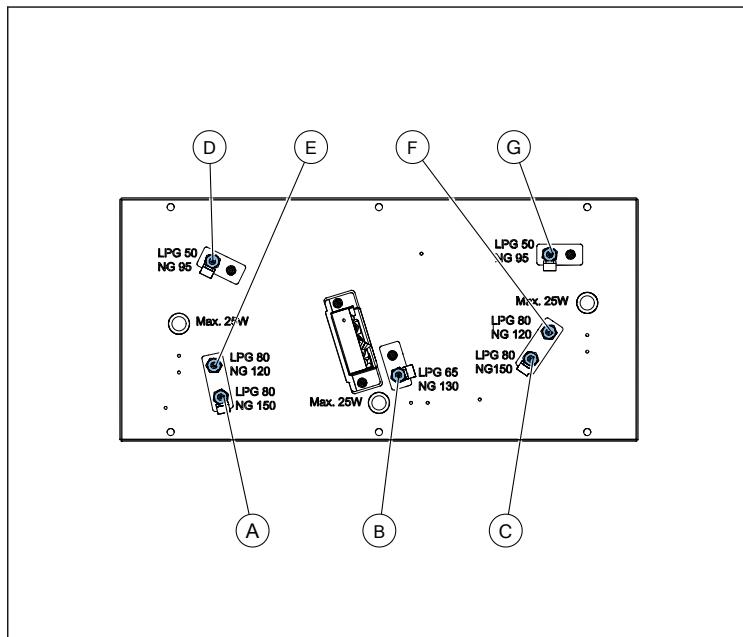


Figure 47. Position of primary air inlets and gas injectors

Table 14: Dimensions of primary air inlet / gas injectors

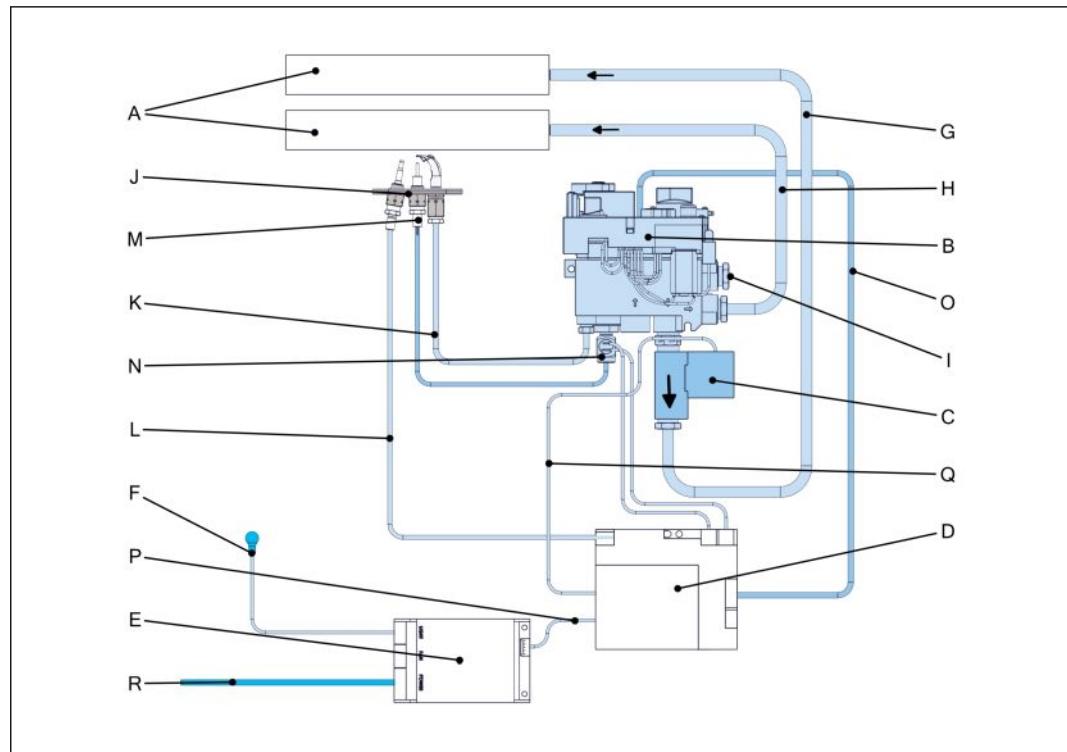
	No.	Natural gas G20	Butane G30 Propane G31 Biopropane G31
Primary air inlet first main burner	A	Ø4.0 mm	1x [Ø8x12 mm]
	B	Ø4.0 mm	1x [Ø8x12 mm]
	C	Ø4.0 mm	1x [Ø8x12 mm]
Primary air inlet second main burner	D	Ø4.0 mm	2x [Ø8x15 mm + 2x Ø3.5 mm]
	E	Ø0.0 mm	1x [Ø8x12 mm]
	F	Ø0.0 mm	1x [Ø8x12 mm]
	G	Ø4.0 mm	2x [Ø8x15 mm + 2x Ø3.5 mm]
First main burner gas injector	A	Ø1.50 mm	Ø0.80 mm
	B	Ø1.30 mm	Ø0.65 mm
	C	Ø1.50 mm	Ø0.80 mm
Second main burner gas injector	D	Ø0.95 mm	Ø0.50 mm
	E	Ø1.20 mm	Ø0.80 mm
	F	Ø1.20 mm	Ø0.80 mm
	G	Ø0.95 mm	Ø0.50 mm
Pilot light burner injector		no. 36 (SIT 0.977.091)	no. 23 (SIT 0.977.150)

Table 15: Miscellaneous appliance data

Gas regulator block (remote control)	Maxitrol GV 60
Main burner	PF2 660 x 300 mm NG&P&B
Pilot light burner	SIT 0.145.019
Gas connection	Rc 1/2" male
Concentric flue system connection	Ø100 mm - Ø150 mm Ø130 mm - Ø200 mm
Batteries remote control receiver	None
batteries remote control hand transmitter	2x 1.5V AAA
Electrical connection	230 VAC / 50 Hz
Auxiliary electricity consumption at nominal heat output	0.075 kW
Auxiliary electricity consumption at minimum heat output	0 kW
Auxiliary electricity consumption in standby mode	0 kW
Weight	Basic appliance: 168 kg With all options: 264 kg
The specific precautions that shall be taken when the local space heater is assembled, installed or maintained, are listed in the attached documents:	<ul style="list-style-type: none"> • Preparation manual • Installation and maintenance manual • User manual • Assembly instructions for concentric flue system

8.2

Diagram electricity and gas



- | | | | |
|---|-------------------------------------|---|---|
| A | Main burners | J | Pilot light burner |
| B | Gas regulator block | K | Pilot light pipe |
| C | Gas valve of the second main burner | L | Piezo cable |
| D | Receiver | M | Thermocouple |
| E | Light module | N | Thermocouple interrupter |
| F | Ambient lighting | O | 8-wire cable |
| G | Gas pipe second main burner | P | 5-wire cable |
| H | Gas pipe first main burner | Q | 2-wire cable |
| I | Gas supply connection | R | 230 VAC (earthed) connecting cable and plug |

Figure 48. Diagram electrical and gas components

8.3

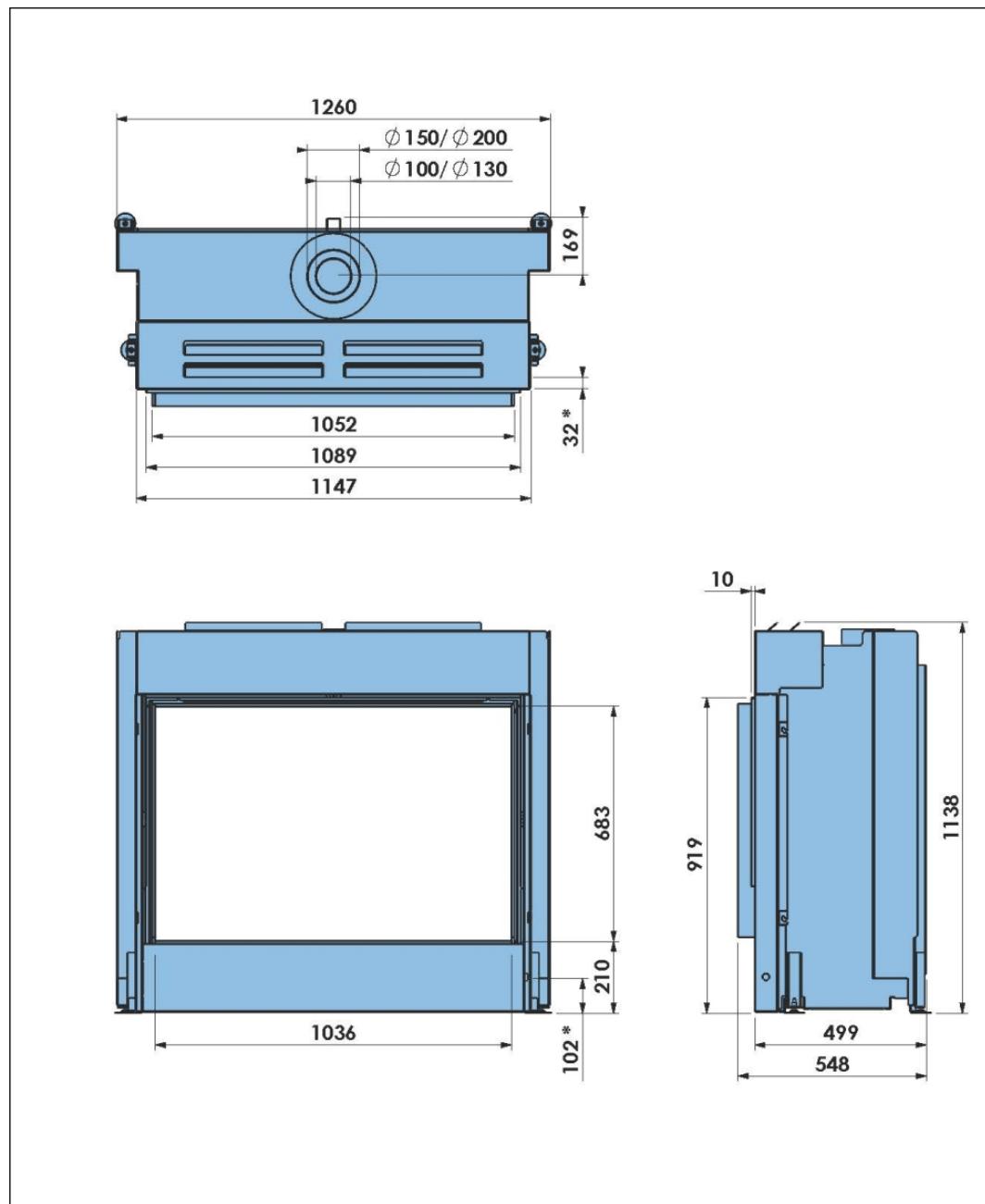
Dimensions of the restriction plate

Table 16: Restriction plate dimensions

Width of the delivered flue restriction plates in mm	
Concentric flue connection Ø100 - Ø150	Concentric flue connection Ø130 - Ø200
Roof-mounted outlet	Horizontal wall outlet
30 mm	40mm
40 mm	50 mm
50 mm	65 mm
65 mm	80 mm

9 Dimensions

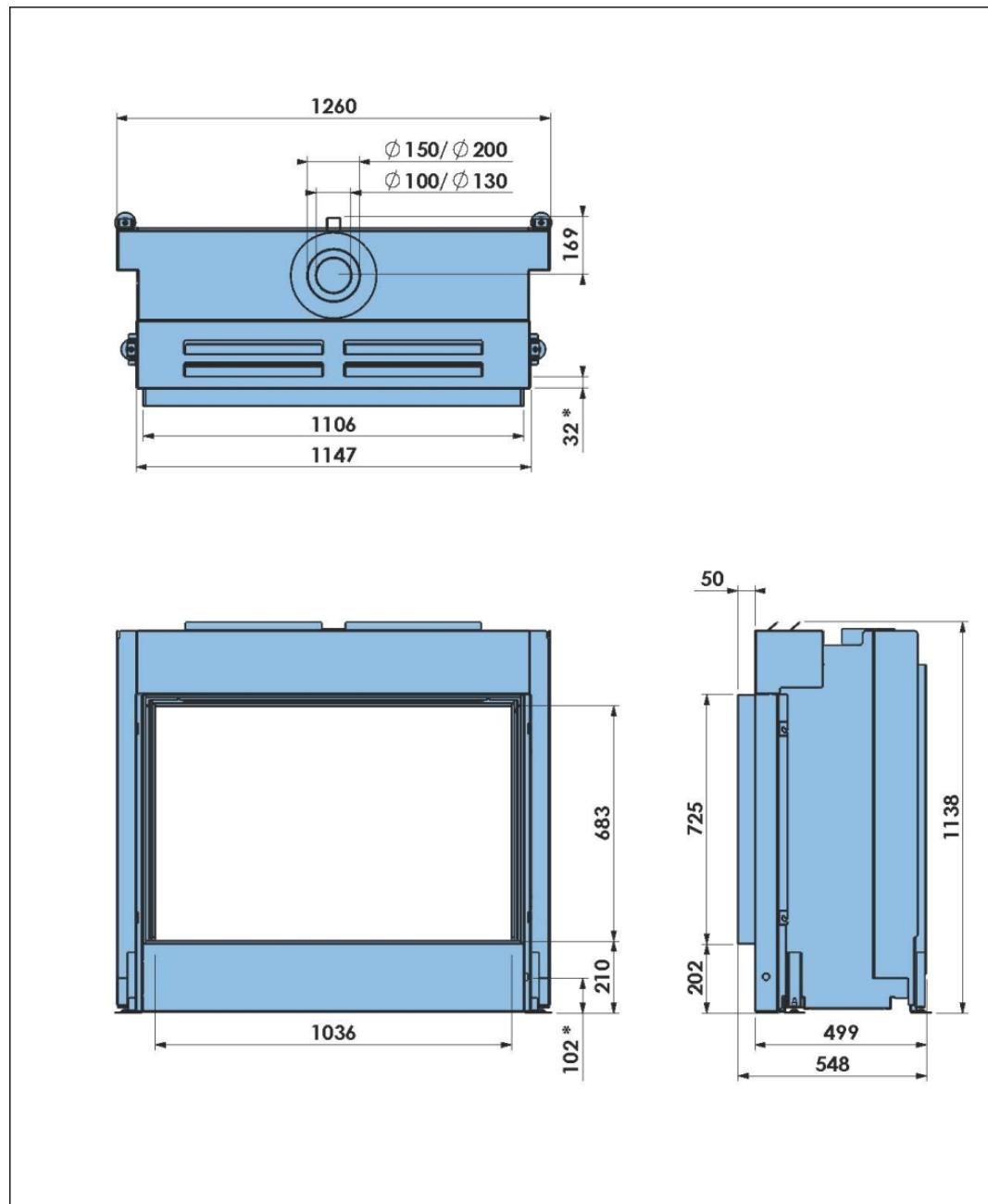
9.1 Gas Fire Front 110-75 PF2 with Floating Frame



* = Gas connection

9.2

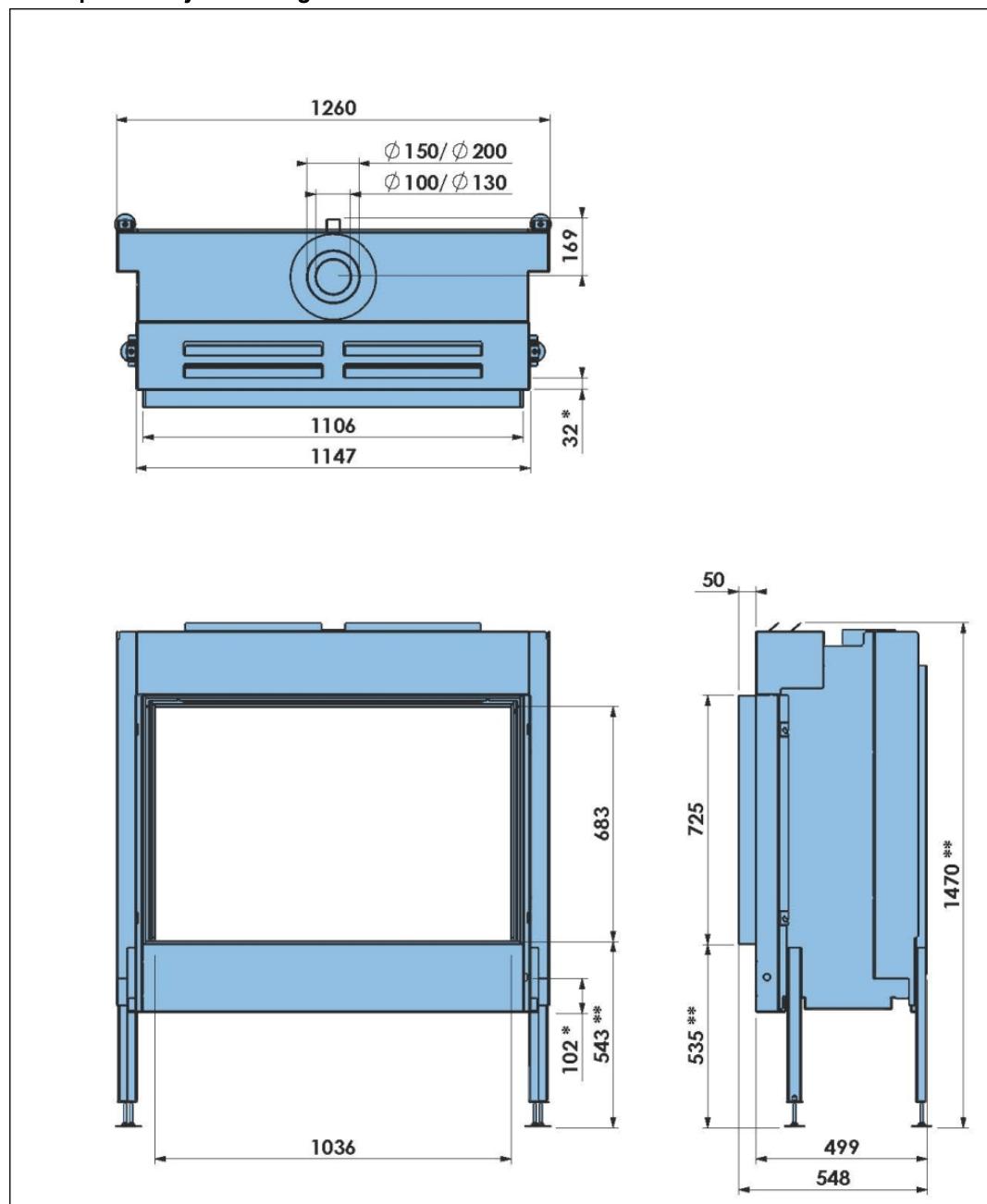
Gas Fire Front 110-75 PF2 with Floating Frame +



* = Gas connection

9.3 Gas Fire Front 110-75 PF2 with Floating Frame and adjustable legs

With optional adjustable legs



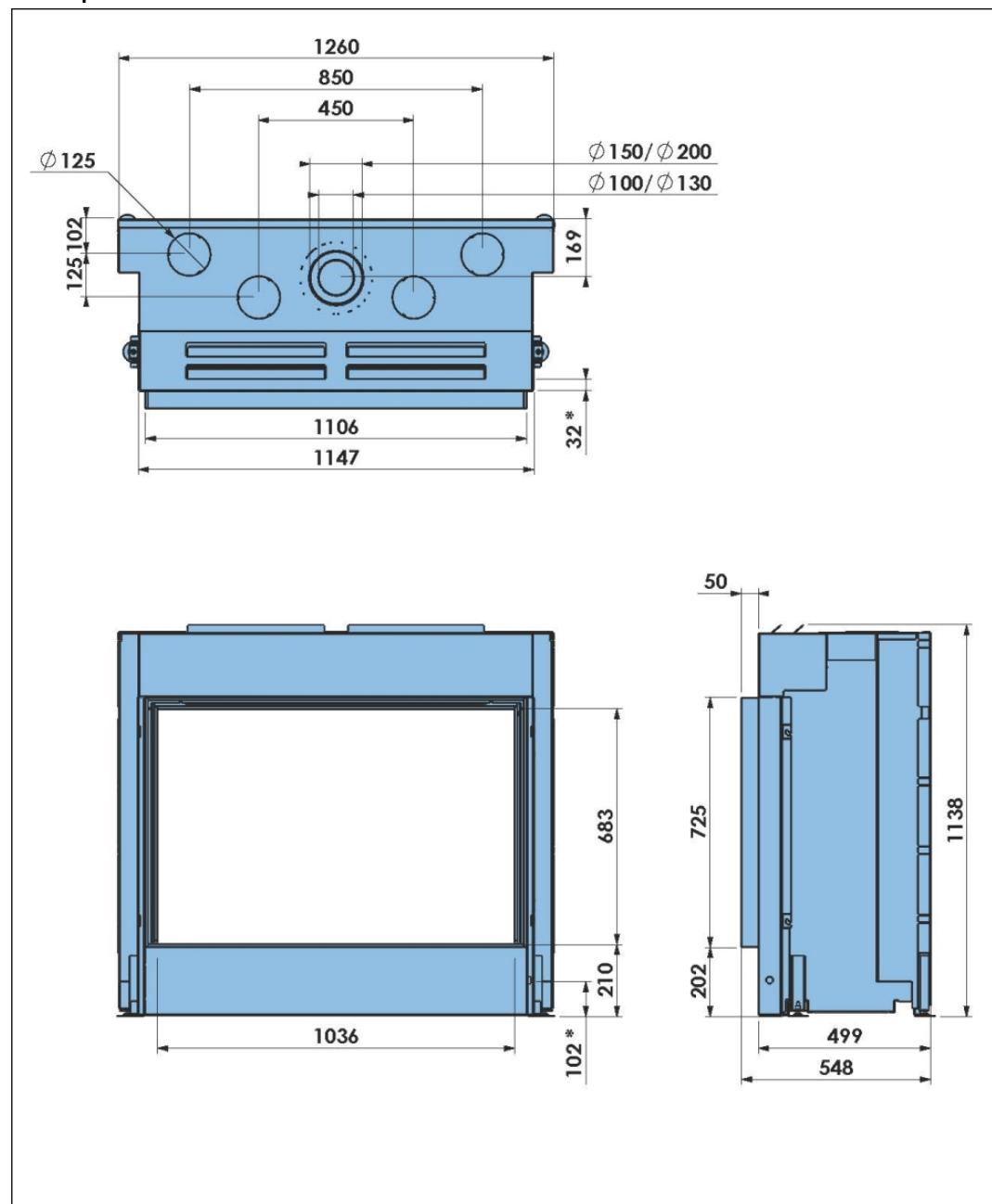
* = Gas connection

** = Maximum height with adjustable legs

9.4

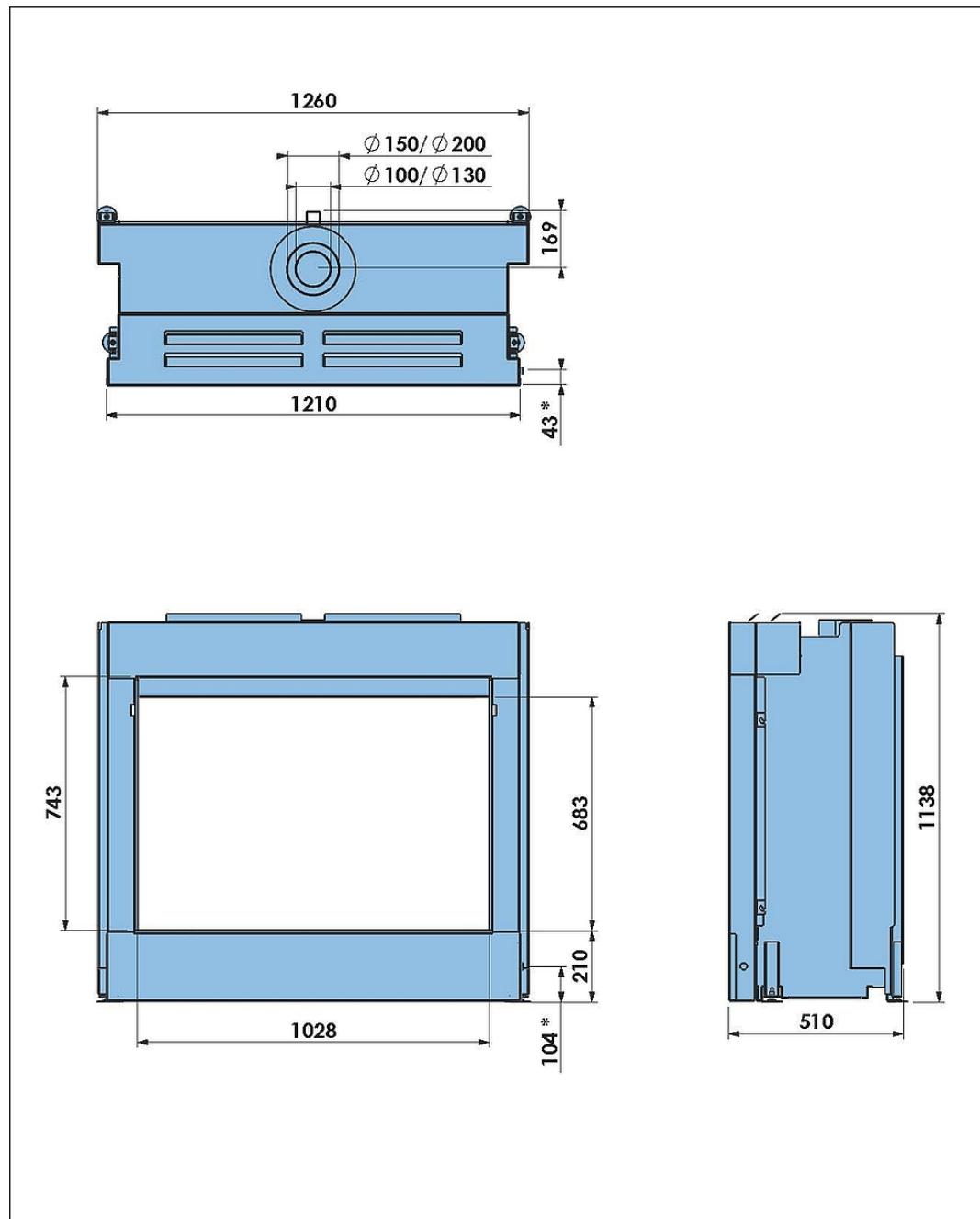
Gas Fire Front 110-75 PF2 with Floating Frame + and convection casing

With optional convection case



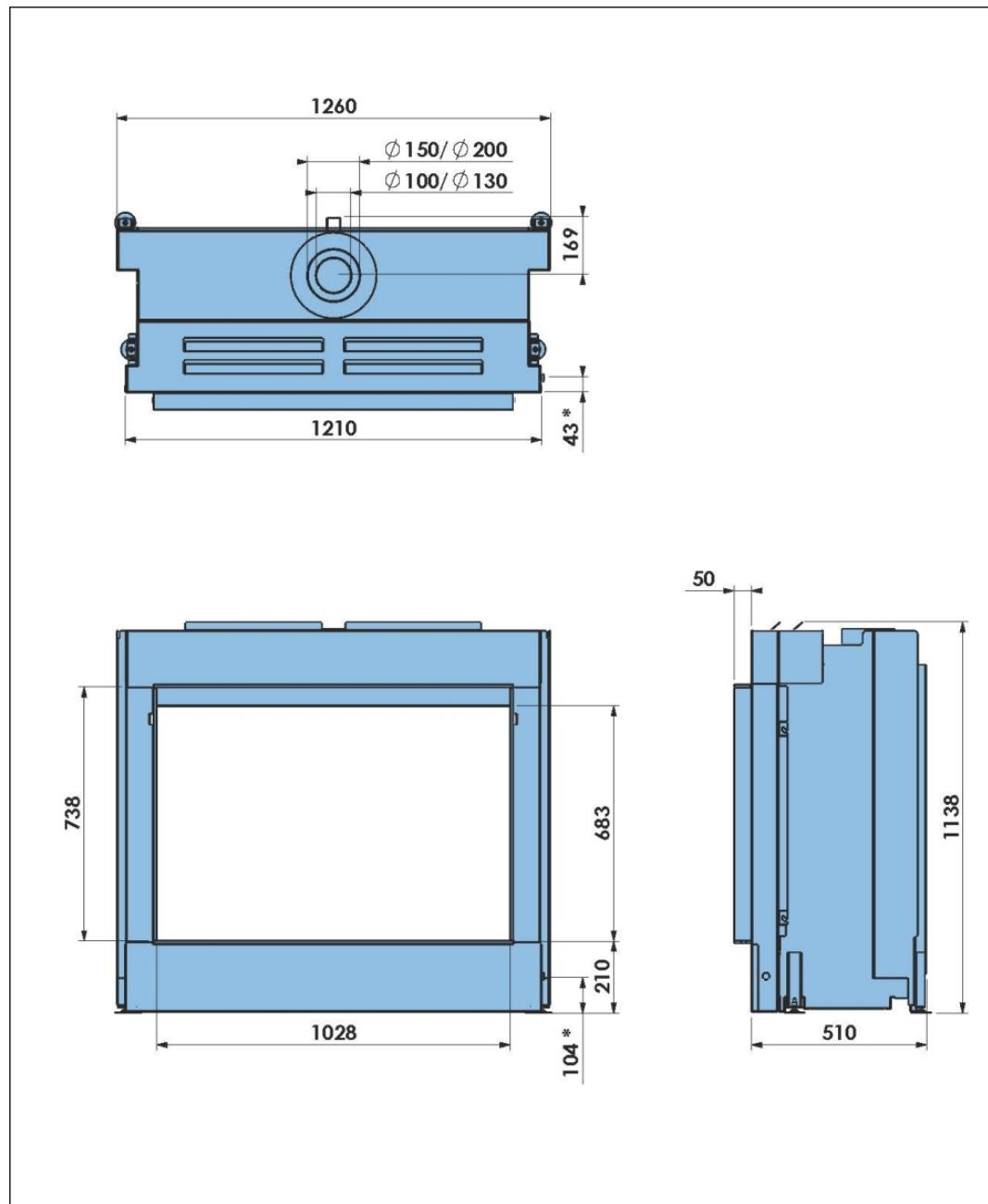
9.5

Gas Fire Front 110-75 PF2 with Hidden Door



9.6

Gas Fire Front 110-75 PF2 with Hidden Door +

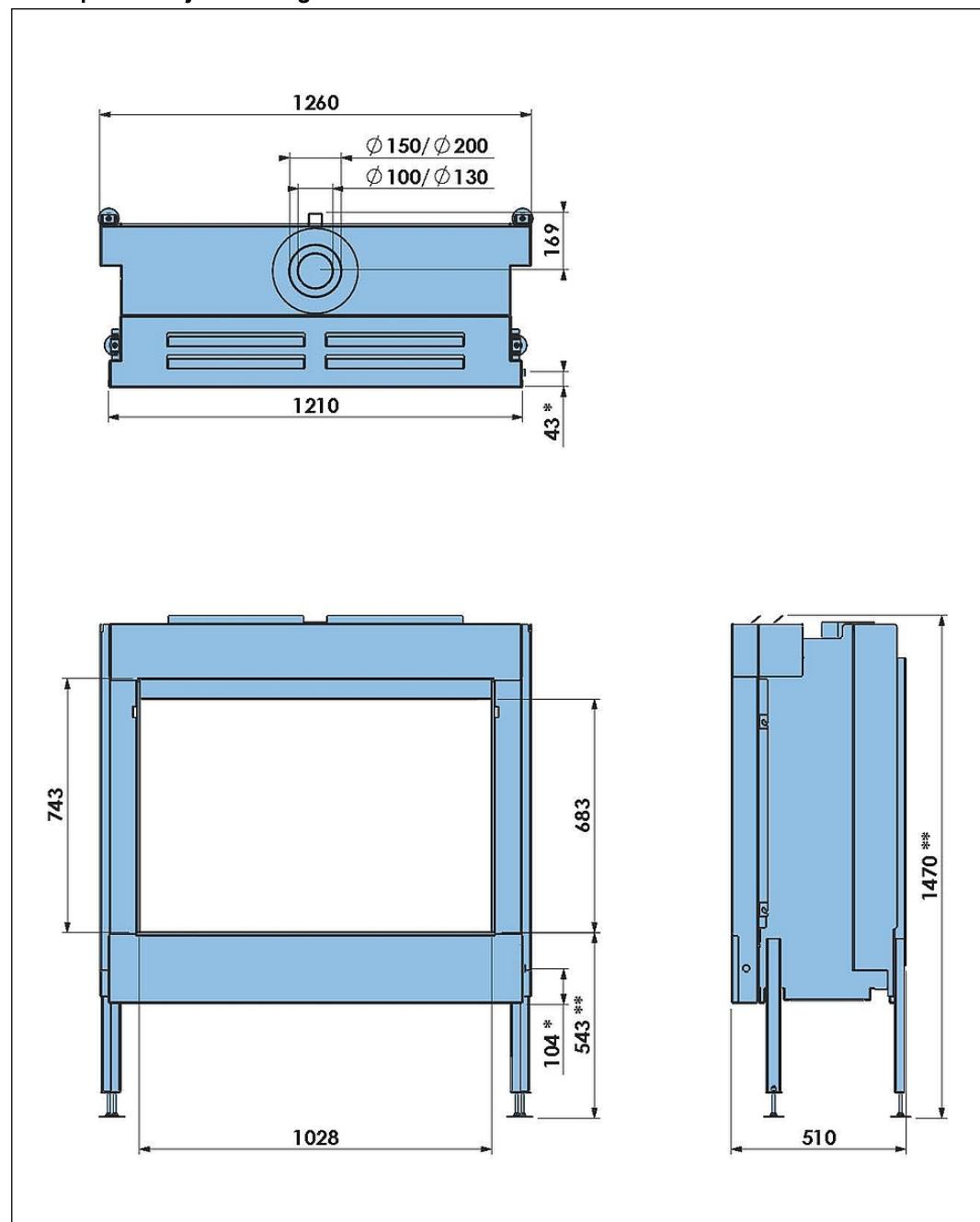


* = Gas connection

9.7

Gas Fire Front 110-75 PF2 with Hidden Door and adjustable legs

With optional adjustable legs



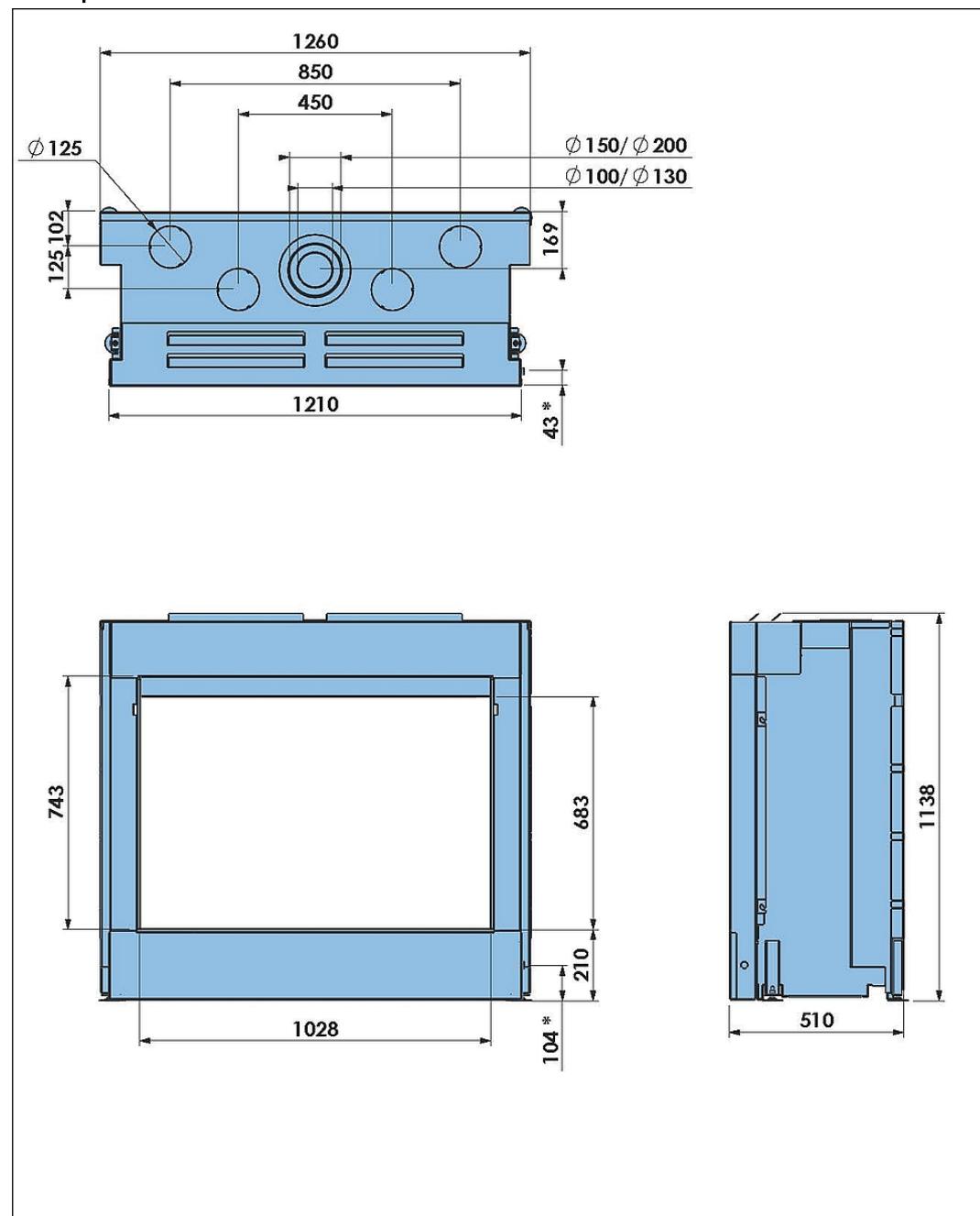
* = Gas connection

** = Maximum height with adjustable legs

9.8

Gas Fire Front 110-75 PF2 with Hidden Door and convection casing

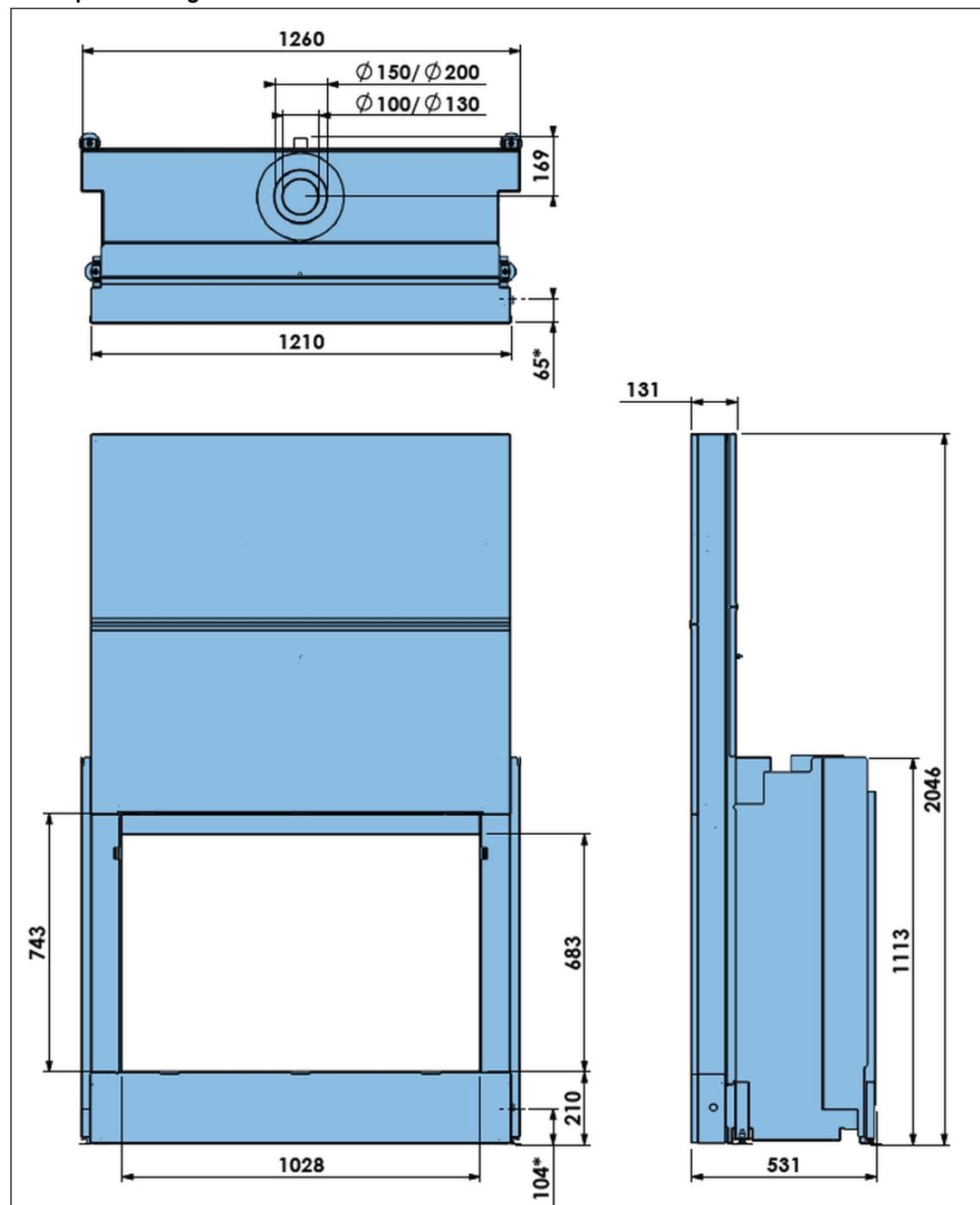
With optional convection case



* = Gas connection

9.9 Gas Fire Front 110-75 PF2 with Hidden Door and integrated fire screen

With optional integrated fire screen

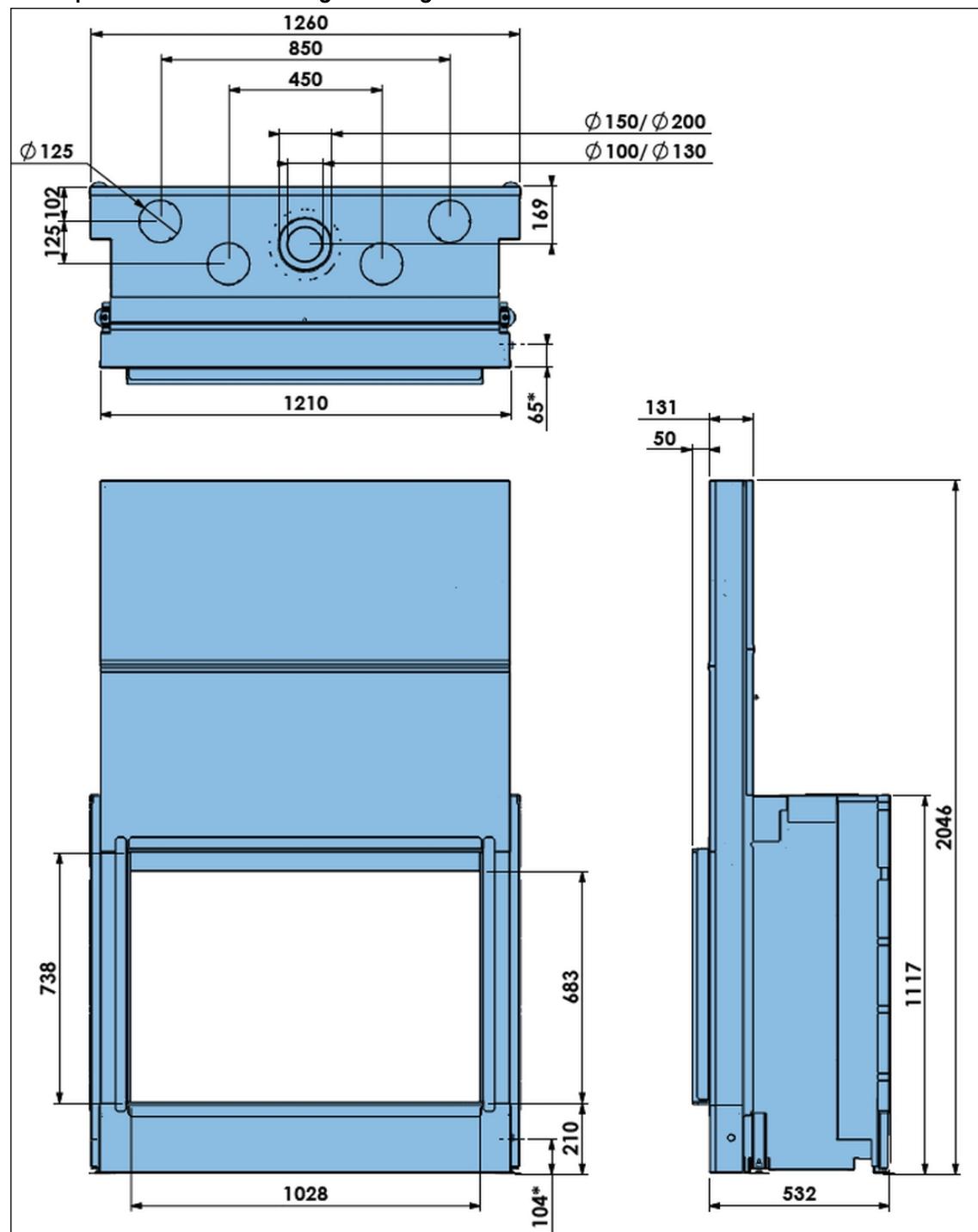


* = Gas connection

9.10

Gas Fire Front 110-75 PF2 with Hidden Door + , convection casing and integrated fire screen

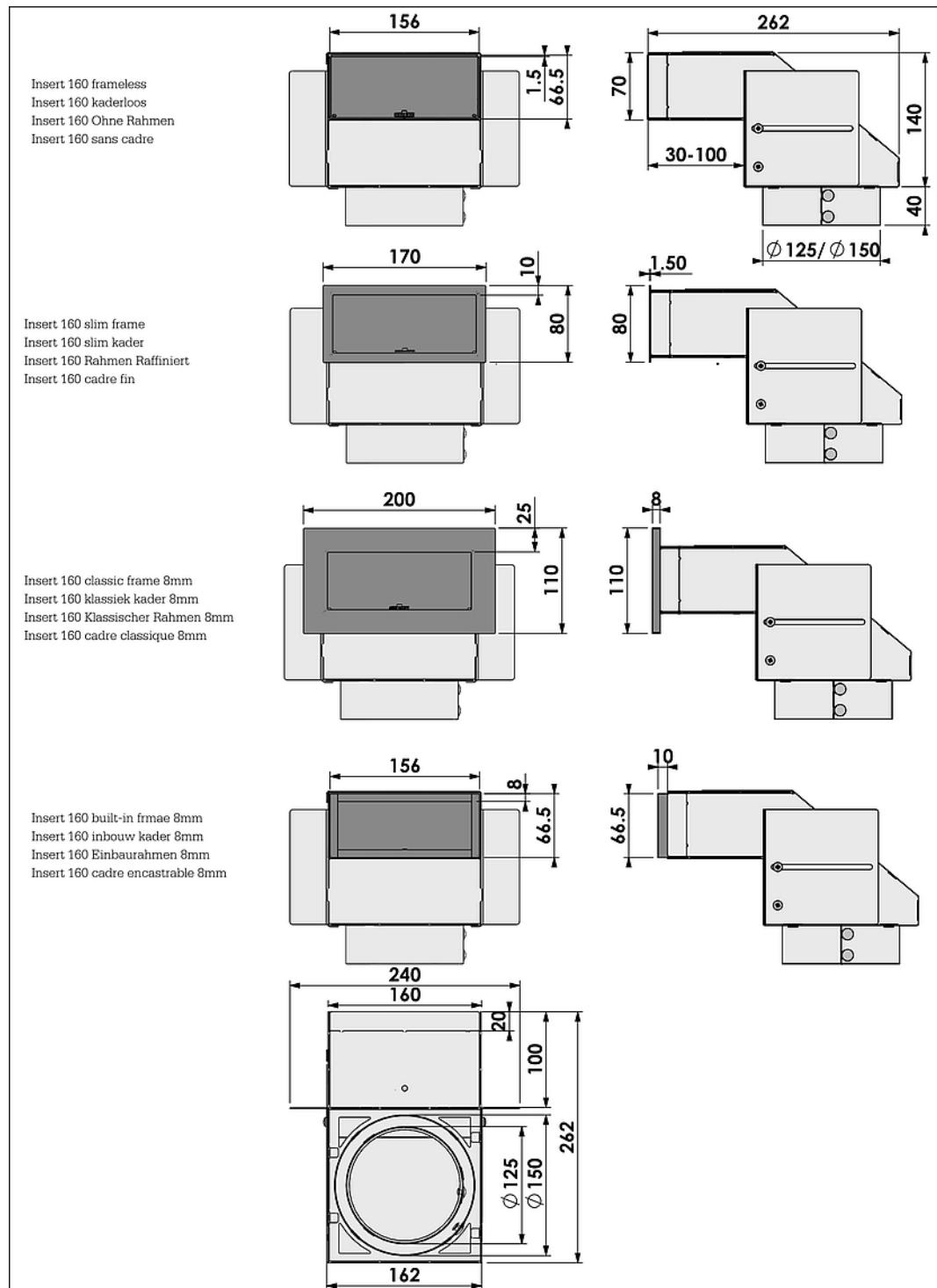
With optional convection casing and integrated fire screen



* = Gas connection

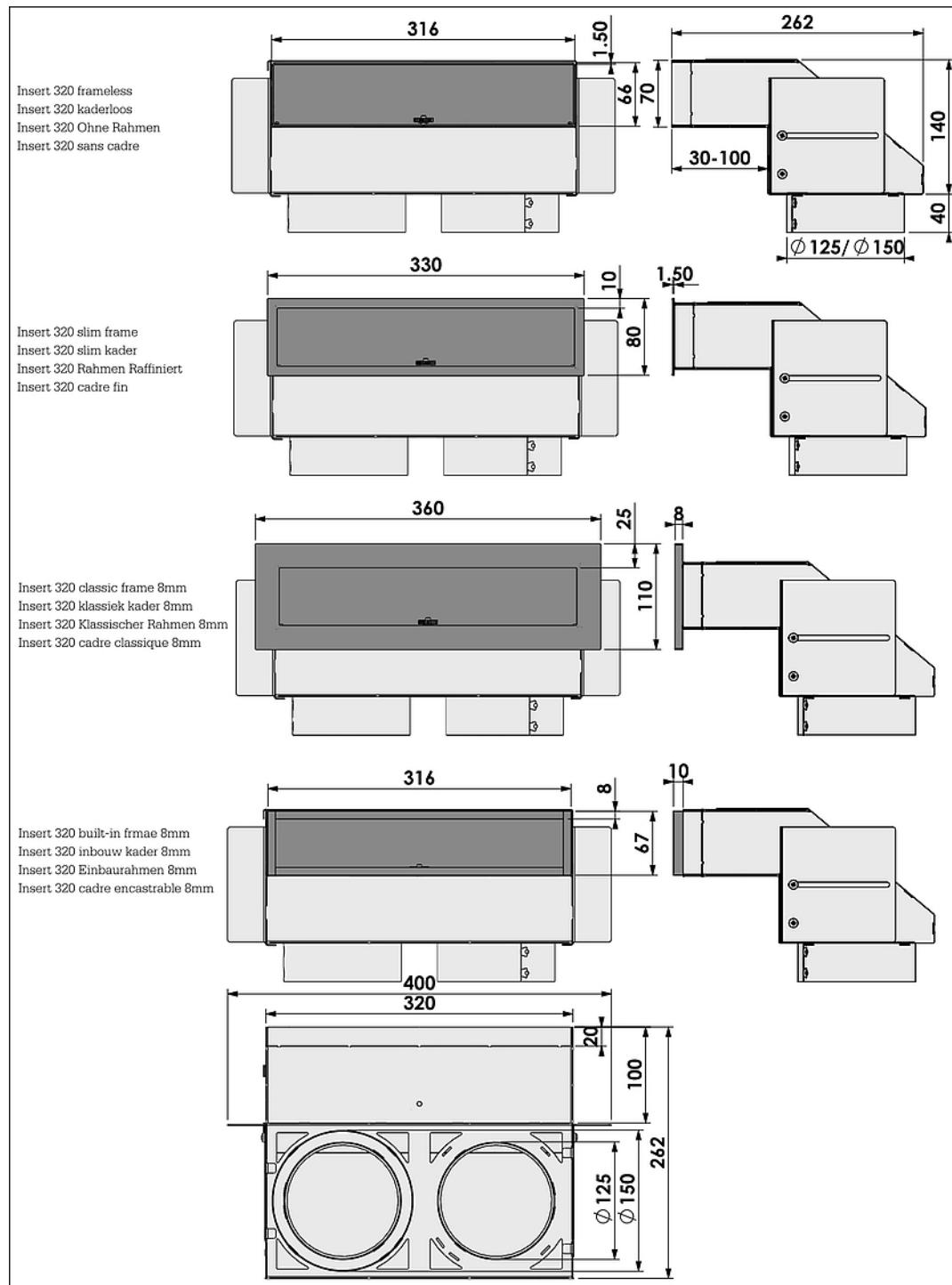
9.11

BARBAS Airbox 160 with 4 insert models



9.12

BARBAS Airbox 320 with 4 insert models



10 **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 bellfires.**EU-Declaration of Conformity**

We

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

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

Product: Independent gas-fired convection heater
Type: C₁₁/C₁₂*/C₃₁/C₃₂*/C₉₁/C₉₂*
Product name: Barbas

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

Description of the product:

Gas Fire Panorama 90-70 PF2	Gas Fire Panorama 110-70 PF2	Gas Fire Panorama 70-70 PF2
Gas Fire Panorama 110-55 PF2	Gas Fire Panorama 90-55 PF2	Gas Fire Panorama 70-55 PF2
Gas Fire Panorama 80-50 PF2	Gas Fire Panorama 100-50 PF2	Gas Fire Panorama 120-50 PF2
Gas Fire Panorama 110-40 MF	Gas Fire Panorama 140-40 MF	
Gas Fire Front 70-60 PF2	Gas Fire Front 110-60 PF2	Gas Fire Front 90-75 PF2
Gas Fire Front 90-60 PF2	Gas Fire Front 70-75 PF2	Gas Fire Front 110-75 PF2
Gas Fire Front 80-55 PF2	Gas Fire Front 100-55 PF2	Gas Fire Front 120-55 PF2
Gas Fire Front 110-45 MF	Gas Fire Front 130-45 MF	

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

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

Used relevant harmonised standards or other technical specifications in relation to which conformity is declared:
EN 613:2021

The notified body:

Kiwa Nederland BV
P.O. Box 137
NL-7300 AC Apeldoorn

performed a product verification and issued on **October 1, 2024** certificate no: **20GR0534/03**

Signed for and on behalf of:

Danny Baijens, managing director
(name and function)

Bladel; October 1, 2024
(place and date of issue)



(signature)

barbas .

Your Barbas dealer

18.02.2025 - 352257 - 245-004