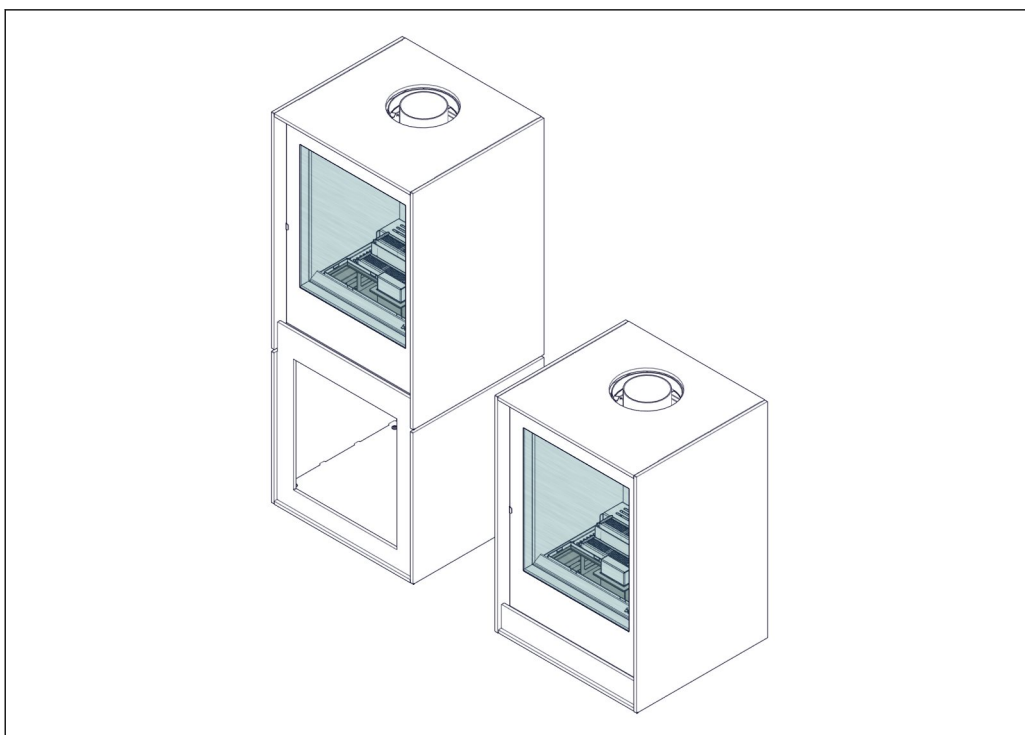


# bellfires. gas fires

## Installation and maintenance manual

Box Gas 80 MF



Serial number:

Production date:

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# 1 About this document

This document shows the necessary information to do these tasks on the Box Gas 80 MF

- Installation
- Maintenance

This document refers to the Box Gas 80 MF as 'the appliance'. This document is an essential part of your appliance. Read it carefully before you do work on the appliance. Keep it in a safe place.

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

## 1.1 How to work with this document

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

## 1.2 Warnings and cautions used in this document

### Warning

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

### Caution

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

### Note

A note shows more information.

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

## 1.3 Related documentation

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

## 2 Description

### 2.1 Intended use

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

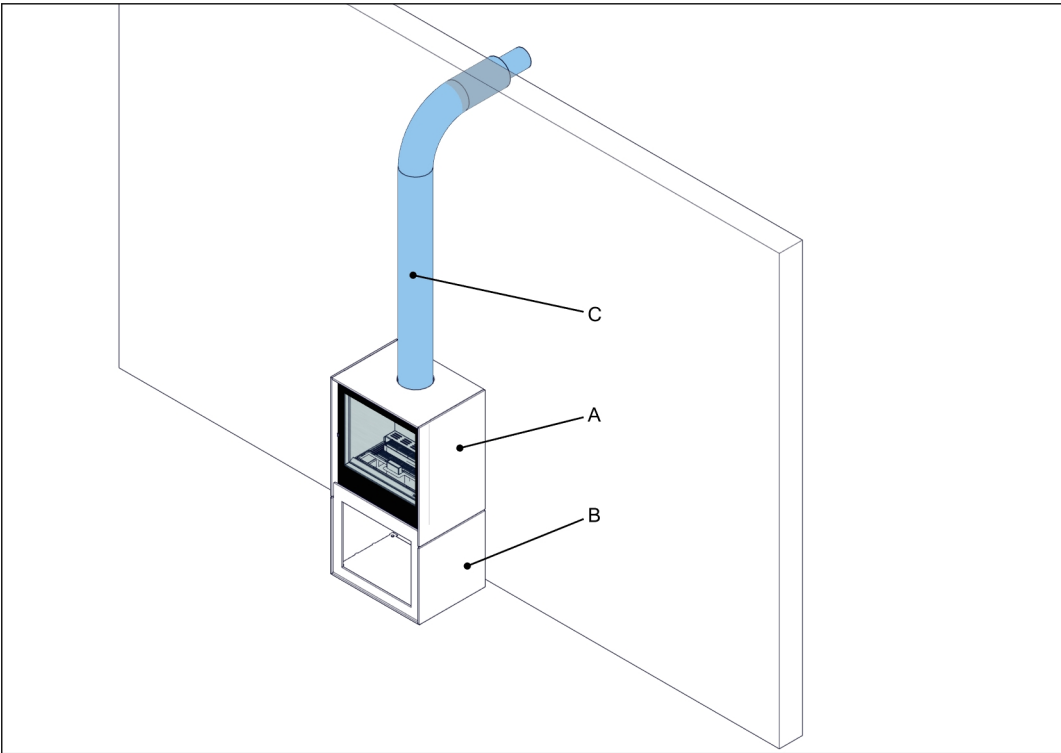
The appliance may only be used at a location that meets the requirements for the installation of the appliance. Refer to the preparation manual.

### 2.2 Installation options

The appliance is supplied with a MF (MagniFire) double burner.

- The appliance can be installed with a storage module, which will be assembled on the appliance from the factory.

### 2.3 Overview of a typical installation

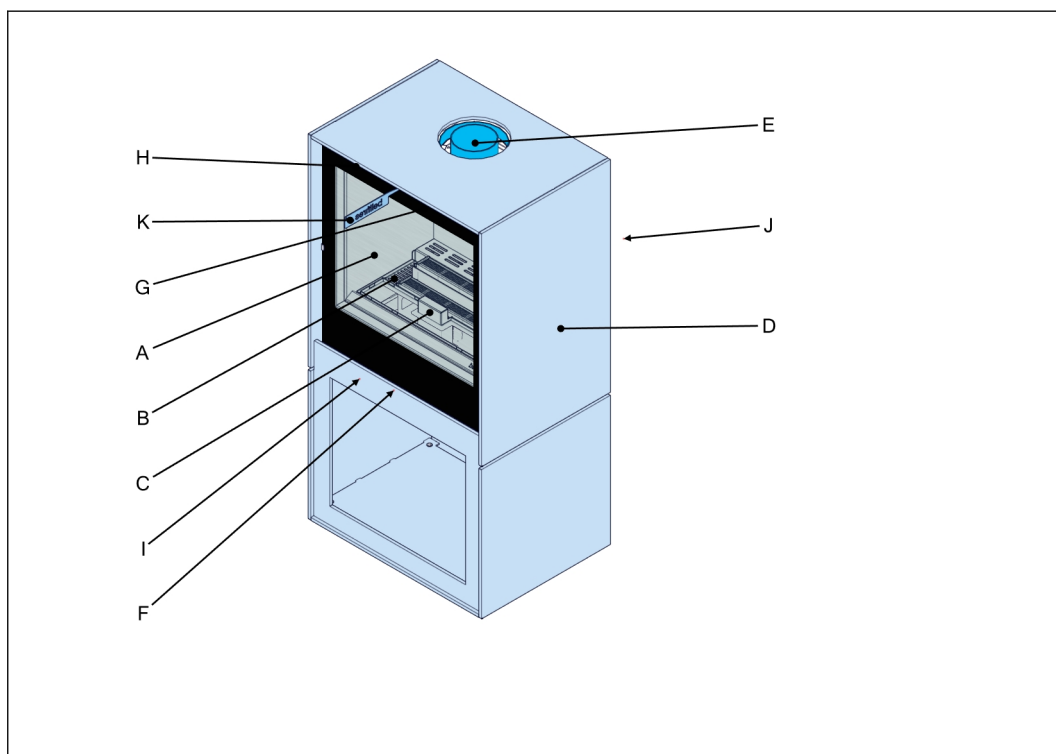


**Note:**

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

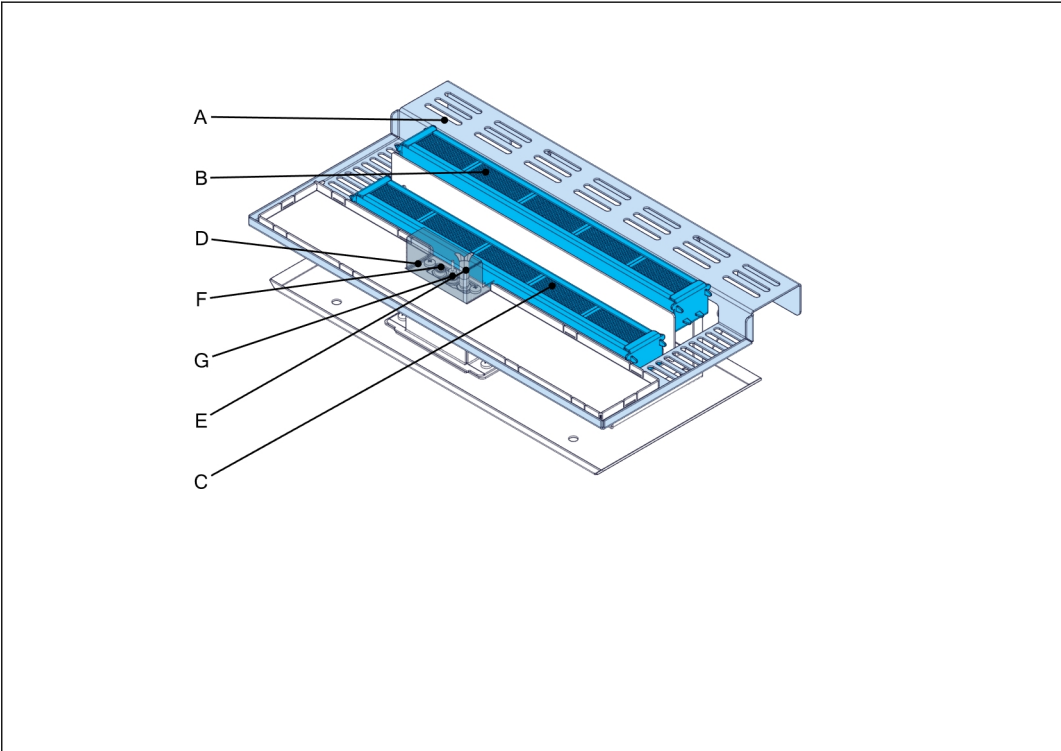
|   | Item                                         | Description                                                                                                        |
|---|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| A | Appliance                                    | Decorative gas fire that heats the room                                                                            |
| B | Storage module (option)                      | Decorative module for under the appliance                                                                          |
| C | Concentric flue system (wall outlet variant) | The concentric flue system provides combustion air to the appliance and extracts the flue gases from the appliance |

## 2.4 Overview of the appliance



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

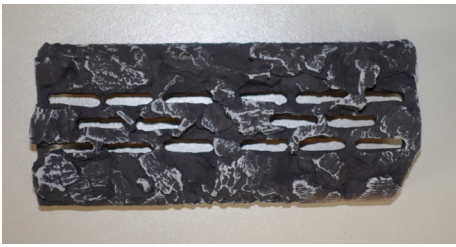
2.5 Overview of the burner bed and the pilot light



|   | Item                     | Description                                                                            |
|---|--------------------------|----------------------------------------------------------------------------------------|
| A | Grate                    | Combustion air gets in the combustion chamber through the grate around the main burner |
| B | Main burner (upper part) | Supplies the gas for the main upper fire                                               |
| C | Main burner (lower part) | Supplies the gas for the main lower fire                                               |
| D | Pilot light outer casing | Protective cover for the pilot light                                                   |
| E | Pilot light burner       | Supplies the gas for the pilot light                                                   |
| F | Thermocouple             | Detects if the pilot light is on                                                       |
| G | Ignition electrode       | Supplies a spark to ignite the pilot light                                             |

2.6 Overview of the ceramic log set

| No. | Ember grate                                                                         | No. | Ember grate                                                                          |
|-----|-------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------------|
| 4T  |  | 4T  |  |
| 2T  |  | 2T  |  |

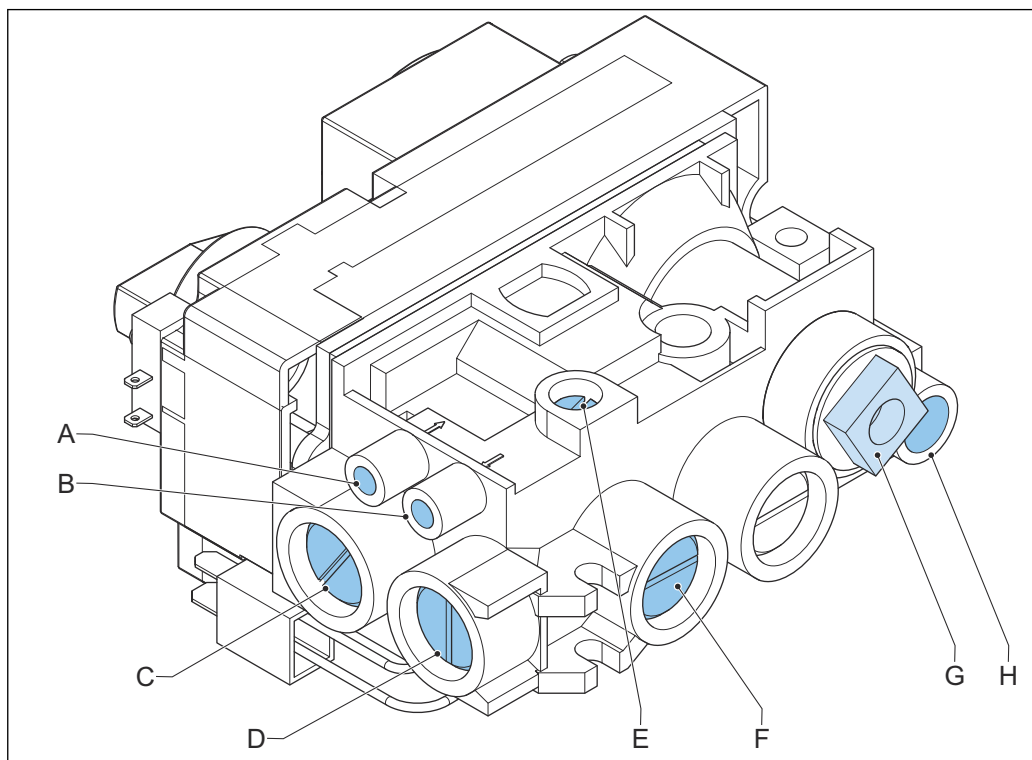
|     |                                                                                     |     |                                                                                      |
|-----|-------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------------|
| No. | Ember grate with pilot opening                                                      | No. | Ember grate                                                                          |
| 2TV |    | 2T  |    |
| No. | 'Fire glass' Dark Amber                                                             | No. | 'Fire glass' Black                                                                   |
|     |    |     |    |
| No. | Embers                                                                              | No. | Charcoal                                                                             |
|     |  | 22  |  |
| No. | Charcoal                                                                            | No. | Charcoal                                                                             |
| 25  |  | 25  |  |

| No. | Log                                                                                 | No. | Log                                                                                |
|-----|-------------------------------------------------------------------------------------|-----|------------------------------------------------------------------------------------|
| 1   |    | 2   |  |
| 4   |    | 6   |  |
| 8   |  |     |                                                                                    |

| No. | Wood chip                                                                           | No. | Wood chip                                                                             |
|-----|-------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------|
| 705 |  | 706 |  |
| 707 |  |     |                                                                                       |

## 2.7 Overview of the control elements

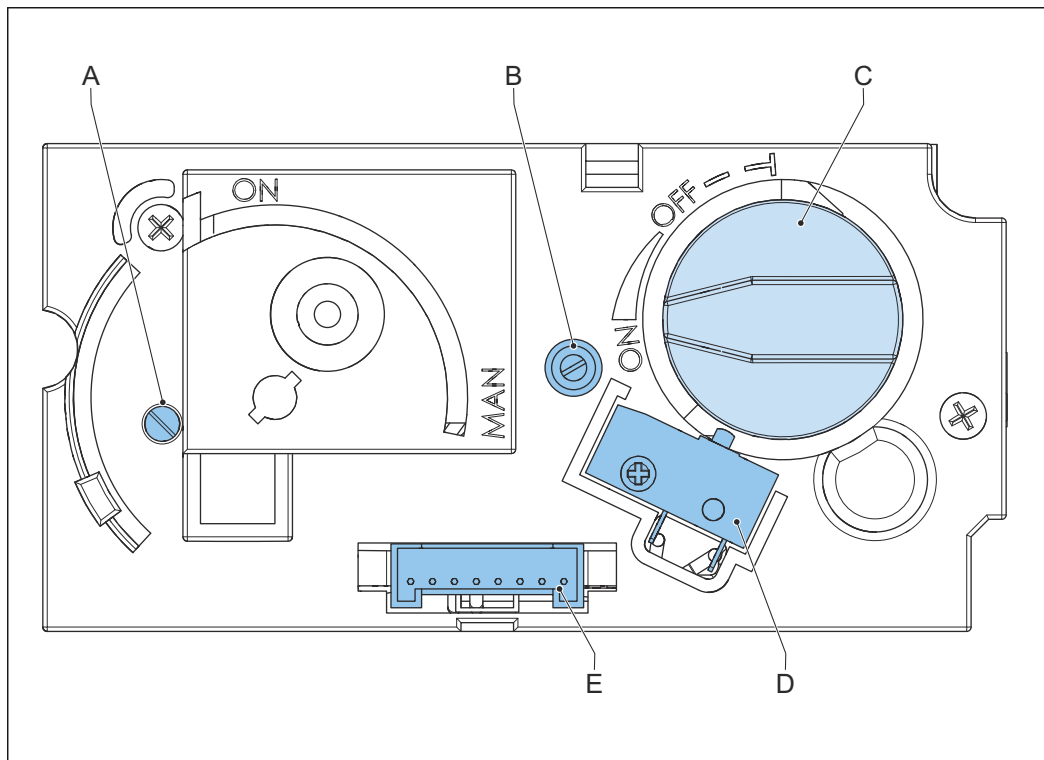
### 2.7.1 Overview of the rear of the gas regulator block



- |   |                             |   |                                              |
|---|-----------------------------|---|----------------------------------------------|
| A | Inlet pressure tap          | E | Adjustment screw for minimum burner pressure |
| B | Outlet pressure tap         | F | 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 1. Gas regulator block (rear)*

## 2.7.2 Overview of the front of the gas regulator block

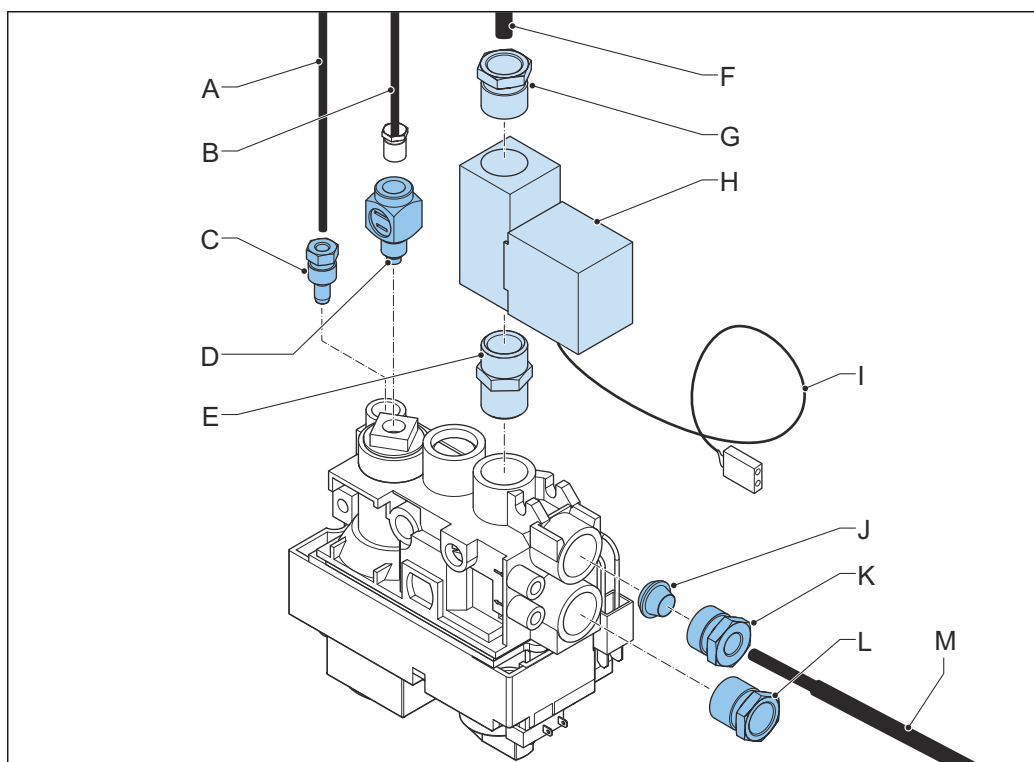


- |   |                                                   |   |                                                    |
|---|---------------------------------------------------|---|----------------------------------------------------|
| A | Adjustment screw for the pilot light gas pressure | D | Micro switch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

*Figure 2. Gas regulator block (front)*

### 2.7.3

### Overview of the connections on the gas regulator block



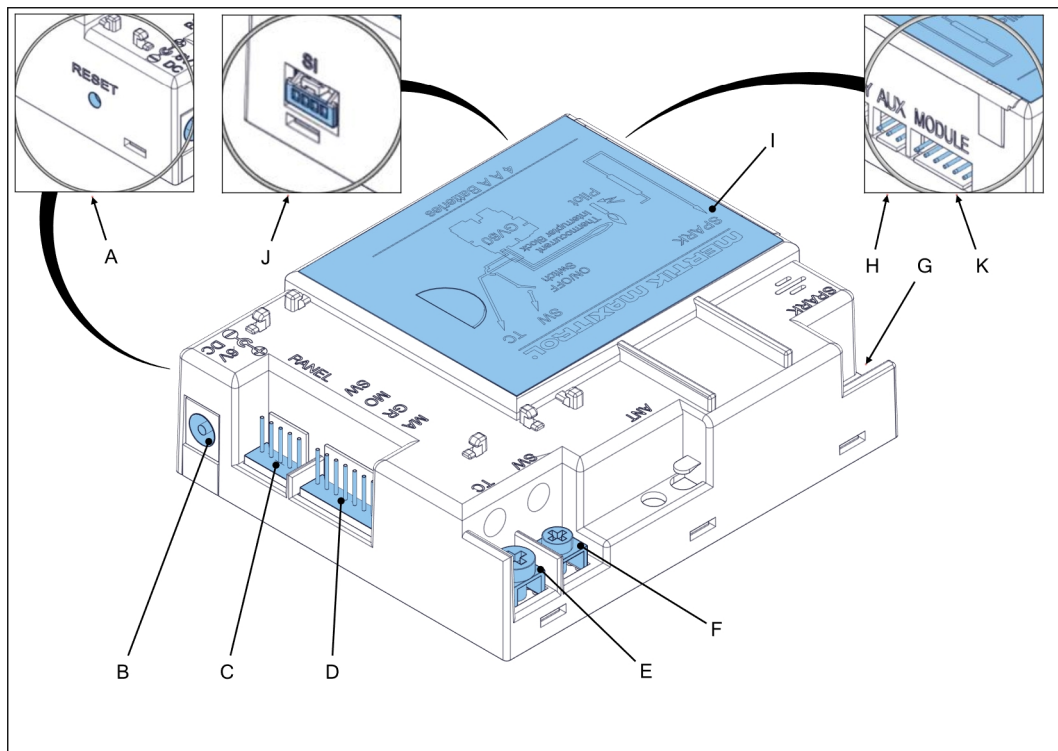
- |   |                                           |   |                                                                |
|---|-------------------------------------------|---|----------------------------------------------------------------|
| A | Pilot light pipe                          | H | Gas valve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

*Figure 3. Connections on the gas regulator block*

<sup>1</sup> 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

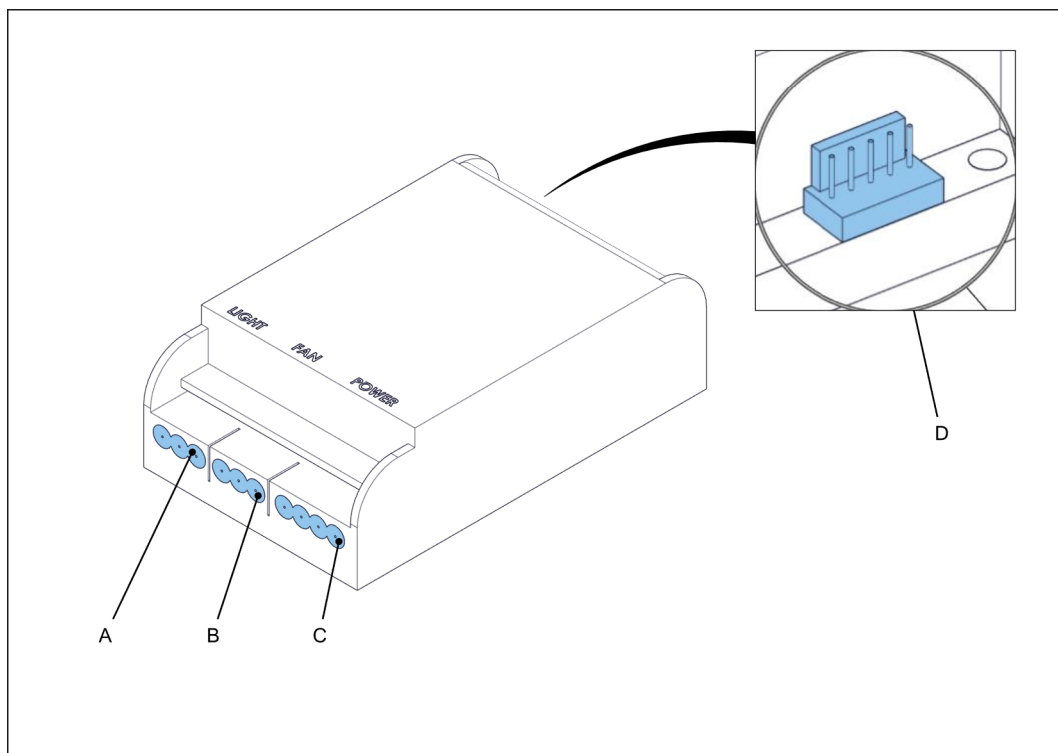
<sup>2</sup> Connects the valve to the receiver

## 2.7.4 Overview of the receiver



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

## 2.7.5 Overview of the fan/light module



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

*Figure 4. Fan/light module*

## 3 Safety

### 3.1 Safety devices on the appliance

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

### 3.2 Safety instructions for installation

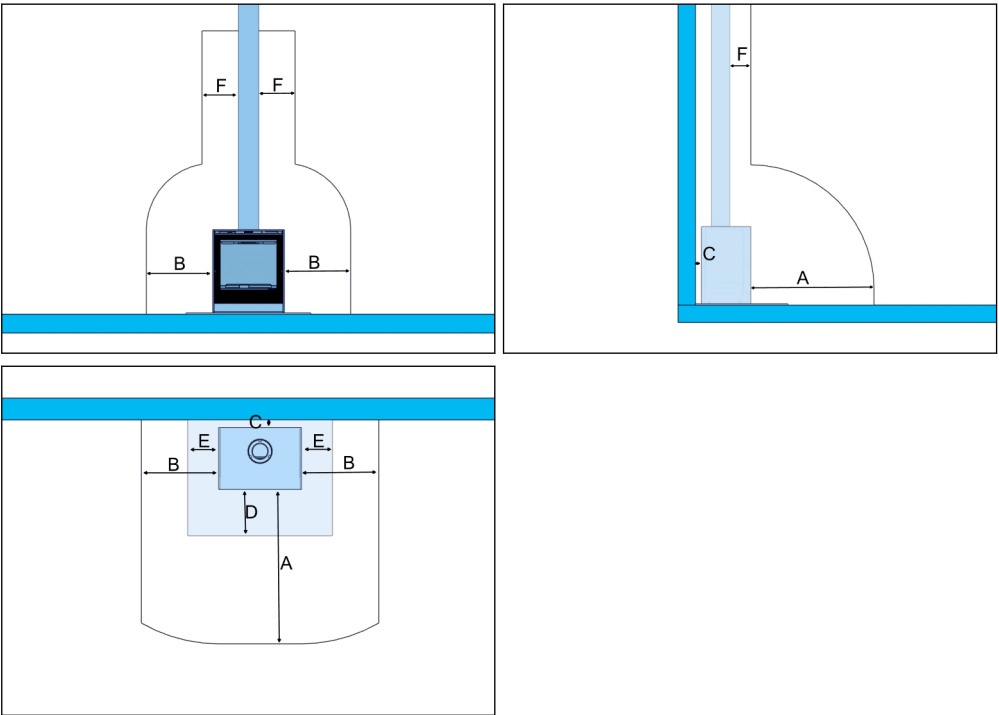
**Warning:**

- The appliance must be positioned and connected as a 'room sealed system' appliance by a certified and registered gas installation engineer
- Before beginning the installation, check that the details on the rating plate correspond to the gas type and supply pressure to which the appliance will be connected.
- Install the appliance in accordance with the following installation instructions, and the national and the local applicable regulations.
- Because of its weight, the appliance needs to be installed on a sufficiently strong and stable floor. Refer to chapter 7 for the weight of the appliance.
- Do not put flammable materials in the fireplace.
- Make sure that the area around the fireplace is free of flammable materials at all times. Refer to chapter 3.3 for the minimum safe distances.
- Do not install the appliance against a flammable rear wall. Refer to chapter 3.3 for minimum clearances between the appliance and the wall.
- 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.
- After installation, Make sure that the pipes and compression fittings are gas tight.

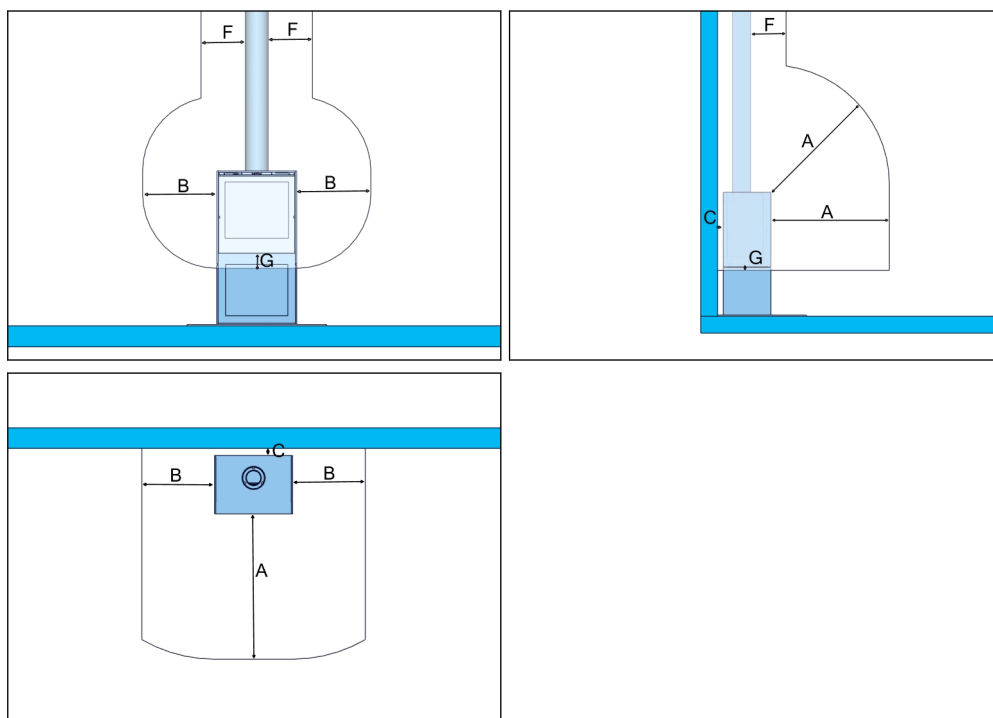
**Caution:**

- 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.

3.3 Safety distances to flammable and nonflammable materials



| BOX   |                                               |                                                                                                                                                                                                                                                                 | BOX                                              |        |
|-------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------|
| Label | Minimum distance to flammable materials in cm | Remark                                                                                                                                                                                                                                                          | Minimum distance to nonflammable materials in cm | Remark |
| A     | 115                                           |                                                                                                                                                                                                                                                                 | 80                                               |        |
| B     | 50                                            |                                                                                                                                                                                                                                                                 | 5                                                |        |
| C     | 30                                            | Minimum distance to a flammable wall may be reduced till 5 cm when a nonflammable insulation plate (12 mm thick) is placed between the appliance and rear wall. The insulation plate is free standing, and has the same size as the full back of the appliance. | 5                                                |        |
| D     | 30                                            | Install a nonflammable hearth (floor stone) when the appliance is placed on a flammable floor. The height of the hearth must be minimal 20 mm.                                                                                                                  | 0                                                |        |
| E     | 10                                            |                                                                                                                                                                                                                                                                 | 0                                                |        |
| F     | 10                                            |                                                                                                                                                                                                                                                                 | 5                                                |        |



|       | BOX with Storage Module                       |                                                                                                                                                                                                                                                                 | BOX with Storage Module                          |        |
|-------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------|
| Label | Minimum distance to flammable materials in cm | Remark                                                                                                                                                                                                                                                          | Minimum distance to nonflammable materials in cm | Remark |
| A     | 115                                           |                                                                                                                                                                                                                                                                 | 80                                               |        |
| B     | 50                                            |                                                                                                                                                                                                                                                                 | 5                                                |        |
| C     | 30                                            | Minimum distance to a flammable wall may be reduced till 5 cm when a nonflammable insulation plate (12 mm thick) is placed between the appliance and rear wall. The insulation plate is free standing, and has the same size as the full back of the appliance. | 5                                                |        |
| D     | Not applicable                                |                                                                                                                                                                                                                                                                 | Not applicable                                   |        |
| E     | Not applicable                                |                                                                                                                                                                                                                                                                 | Not applicable                                   |        |
| F     | 10                                            |                                                                                                                                                                                                                                                                 | 5                                                |        |
| G     | 10                                            |                                                                                                                                                                                                                                                                 | 10                                               |        |

**Note:**

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

### 3.4

#### Safety instructions with regard to the environment

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

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

## 4 Installation

### 4.1 Installation prerequisites

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

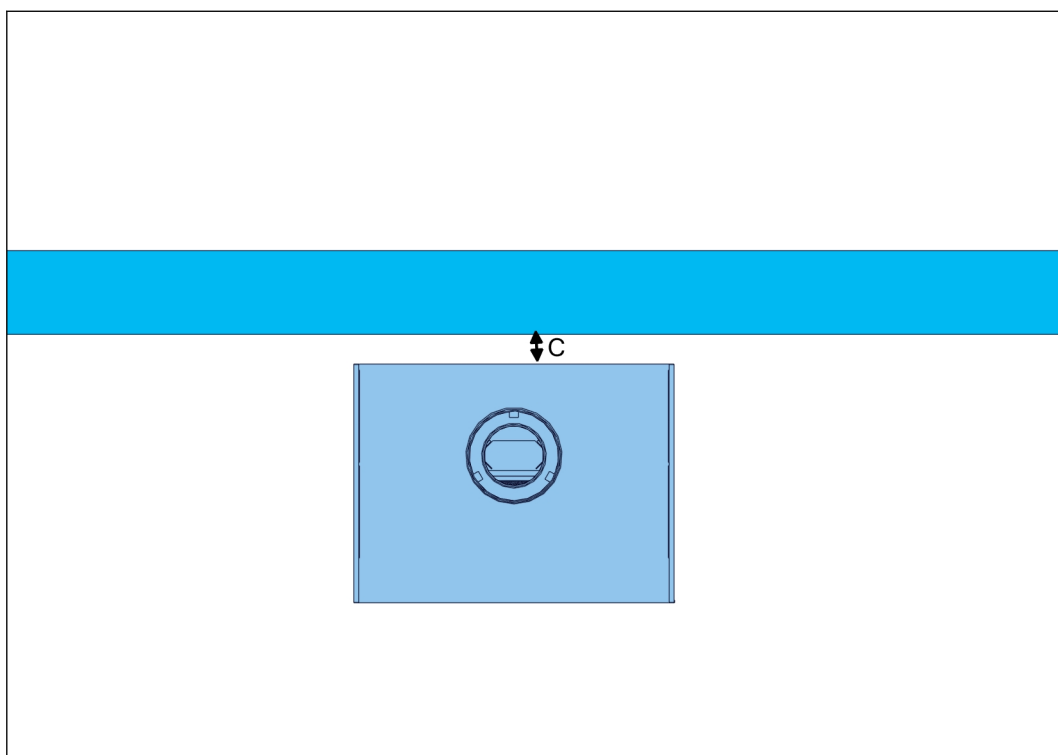
### 4.2 Installation procedure

**Note:**

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

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

#### 4.2.1 Install the appliance



1. Install the appliance. Make sure that the distance C is alright. Refer to [3.3](#).
2. Place a nonflammable hearth (floor stone) under the appliance when necessary. Refer to [3.3](#).
3. Situate the appliance in such a way that the concentric flue outlet connection is precisely in line with the concentric flue pipe to the ceiling or wall.
4. Put a nonflammable insulation plate between the appliance and the rear wall when necessary. Refer to [3.3](#).

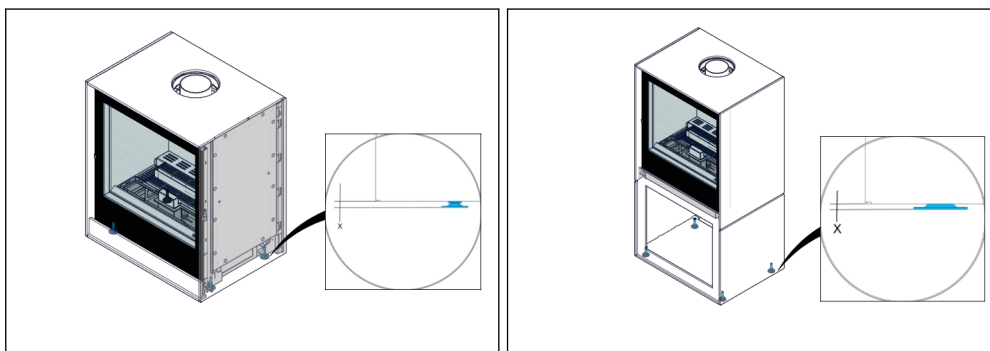
## 4.2.2 Natural stone platform



If the appliance is placed on a natural stone platform, do the items that follow:

- Place the appliance approximately 3 mm above the platform by means of the adjustable feet.
- 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.

## 4.2.3 Horizontally align the appliance



- Box: Adjust the adjustable feet (A). Use a fork spanner of size 13.
- Box with Storage module: Adjust the adjustable feet (B). Use a hexagonal key of size 4.
- a) Make sure that distance x is at least 3 mm.
- b) Make sure that the appliance is installed horizontally.

## 4.2.4 Make the gas connection



**Caution:**

- Do not twist the gas supply pipe to the gas regulator block. Make sure that there is no stress on the gas supply pipe and the gas regulator block.
  - Make sure that you do not damage the gas supply pipe.
1. Connect the gas to the appliance. Use a compression fitting.
  2. Make sure that the gas is correctly connected.

## 4.2.5 Do a check on the gas connections

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

#### 4.2.6 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.

#### 4.2.7 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'.

#### 4.2.8 Install the flue gas restriction plate

Safety conditions

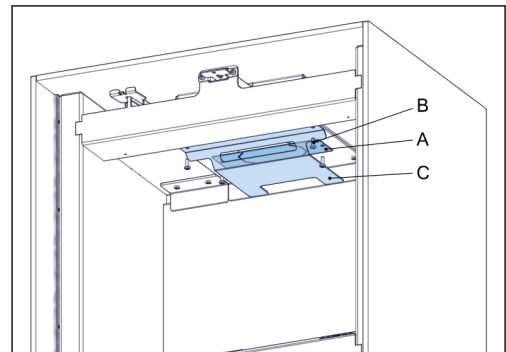


**Caution:**

Install the correct restriction plate. An incorrect restriction plate can cause damage to the appliance.

Procedure

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



#### 4.2.9 Remove the baffle plate

The appliance is factory supplied with a baffle plate. This baffle plate is located at the top of the combustion chamber, just before the connection with the concentric flue. The baffle plate only remains on location, if a restriction plate needs to be mounted. Refer [4.2.8](#).

Safety conditions



**Warning:**

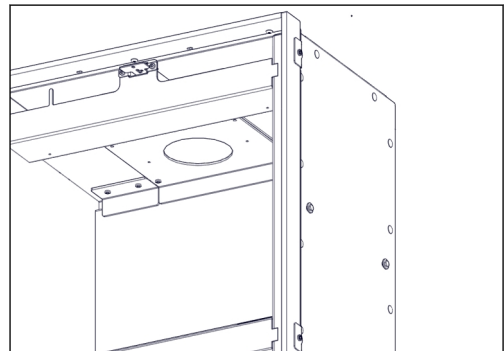
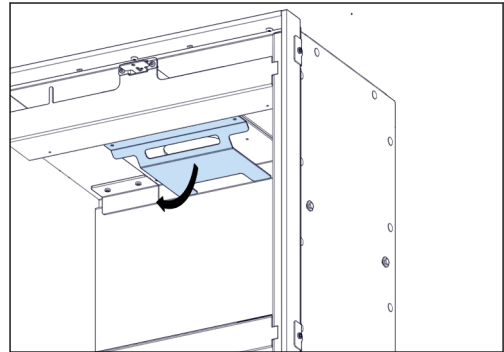
Always remove the baffle plate if there is no need to mount a restriction plate!!!

No restriction plate → No baffle plate !!!!!

Failure to remove the baffle plate, if there is no need to mount a restriction plate, can lead to dangerous situations!

Procedure

1. Remove the baffle plate, by unscrewing two bolts.
2. Screw the bolts back into the ceiling of the combustion chamber, after the baffle plate has been removed.
3. Baffle plate has been removed. (The use of a restriction plate, without a baffle plate, is not allowed.)



## 4.3 Prepare the appliance for use

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

### 4.3.1 Do a check on the operation of the lighting

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

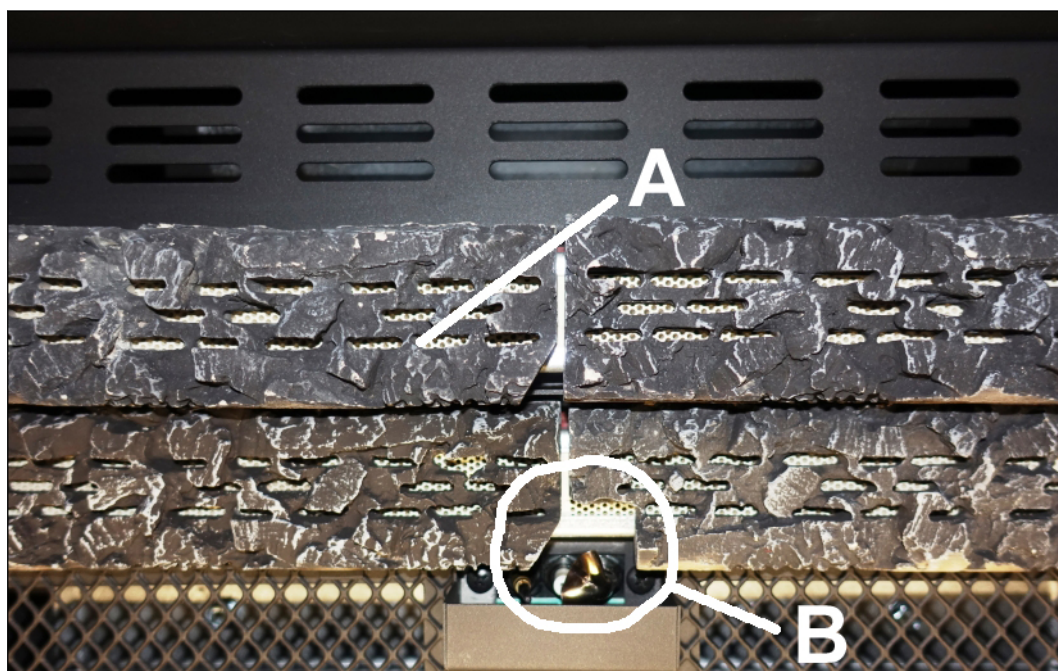
### 4.3.2 Put the ceramic log set on the burner bed

Safety conditions

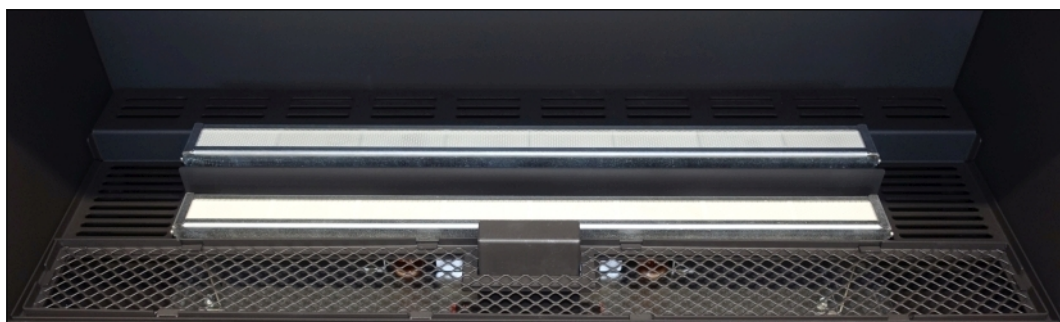


**Warning:**

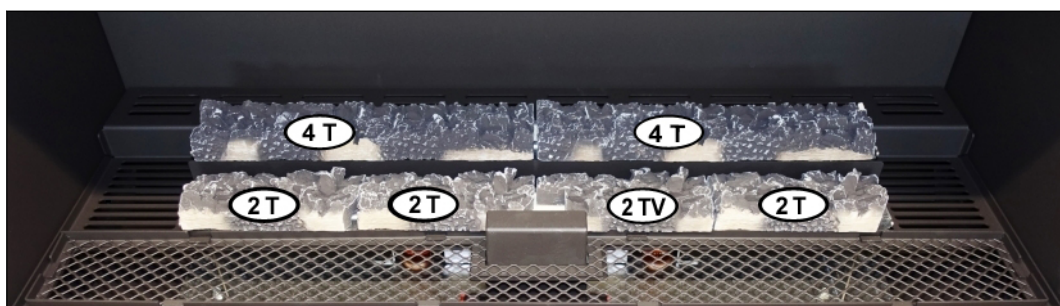
- Make sure that none of the openings of the ember grates (A) are blocked. Blockage of the openings of the ember grates can lead to a dangerous situation.
- Put the items of the log set in the correct configuration for the type of gas burner. If you put the items of the log set in another configuration, a dangerous situation can occur.
- Do not put anything against the pilot burner or in the protective pilot light cowl (B).
- Only use the items that are supplied.



### Preparation



1. Make sure that all items of the log set are there. See [2.6](#).
2. Put the ceramic ember grates on the lower and upper main burner, as shown below. Refer to [2.6](#) for the numbers of the items.



3. Spread the fire glass -dark amber- evenly on the metal grate in front of the burner bed.

Spread the fire glass -black- evenly on the metal grate on the left (L) and right (R) of the burner bed.



### Note:

Set the light intensity of the ambient lighting to maximum on the remote control. Refer to the user manual. Make sure that the light intensity is the same everywhere. Adjust the distribution of the fire glass if necessary.



4. Spread the embers evenly behind and beside the burner bed.

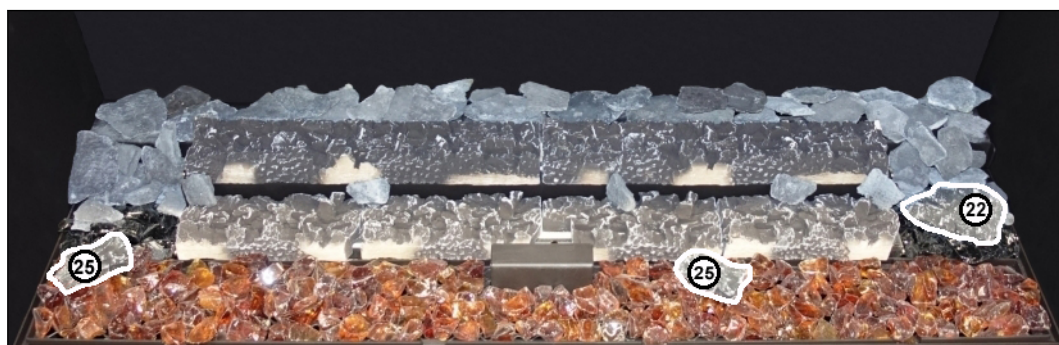


**Caution:**

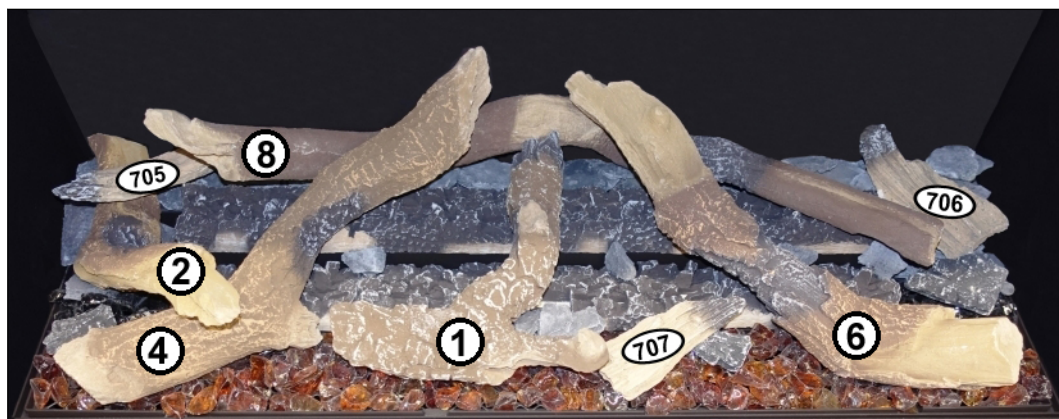
Do not apply embers on the openings of the ember grates. Embers in the openings of the ember grates can cause a blockage of the openings.



5. Put the charcoal pieces at the designated places around the burner bed. Refer to [2.6](#) for the numbers of the items.



6. Put the logs and chips of wood on the burner bed. Refer to [2.6](#) for the numbers of the items.



7. Install the door (including glass.) Refer to [5.2.2](#).

### 4.3.3 Do a final check on the appliance

#### Safety conditions

**Caution:**

A final check on the appliance can be done directly after the installation.

#### Procedure

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

## 5 Maintenance

### 5.1 Annual maintenance

- Do all procedures in this section every year.



**Caution:**

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

#### 5.1.1 Clean the appliance

Safety conditions

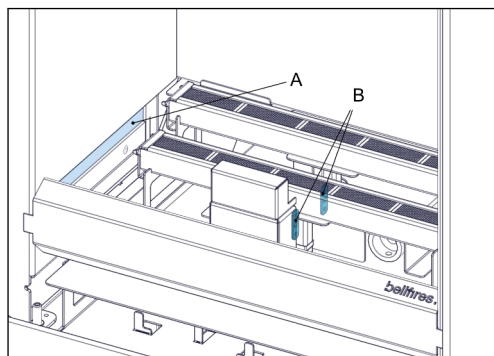


**Caution:**

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

Procedure

- Remove the glass. Refer to [5.2.1](#).
- Remove the content from the burner bed.
- Clean the removed content carefully with a soft brush.
- Clean the inside of the appliance, including the main burner, the pilot light burner and the flue system.
- Remove the grate.
- Clean the combustion air intake
  - Clean the combustion air intake (A) at the bottom sides of the appliance.
  - Clean the primary combustion air inlet openings (B) of the main burner (front and rear).
- Clean the ambient light bulbs. Refer to [5.2.4](#).
- Clean the convection air route.
- Do a check for damage on the inside of the appliance, including these parts:
  - Main burner.
  - Pilot burner.
  - Combustion air intake.
  - Flue system. Use a flashlight if necessary.
- Clean the glass. Refer to [5.2.3](#).
- If the black mirror rear wall is installed in the appliance, clean the black mirror. Use glass spray or ceramic hob cleaner.
- Prepare the appliance for use. Refer to [4.3](#).



#### 5.1.2 Do a check on the appliance

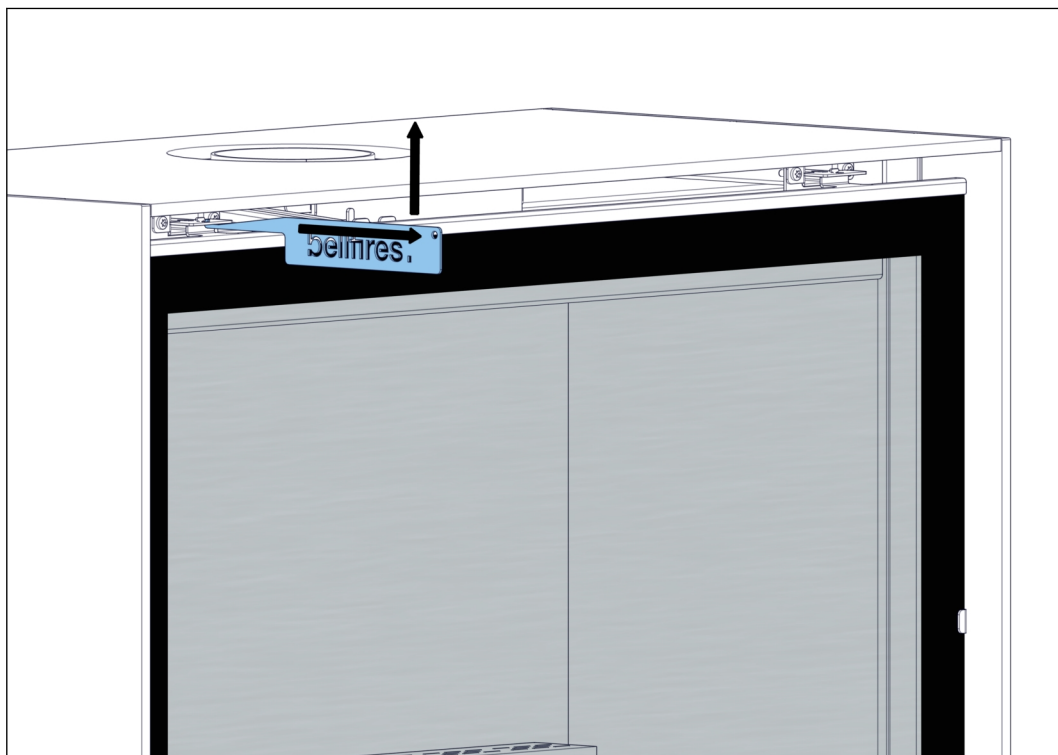
- Do a check for leaks on the gas pipes and the gas pipe connections. Refer to [4.2.5](#).
- Make sure that the pilot light operates correctly. The pilot light must not show any anomalies.

3. Make sure that the main burner operates correctly. The fire must not show any anomalies.
4. Do a check of the gas supply pressure and the burner pressure.
  - a) Use the inlet pressure tap and outlet pressure tap on the gas regulator block to measure the supply pressure and the burner pressure.
  - b) Measure the pressure when the appliance is off and when the appliance burns on maximum. Refer to 7 for the required supply pressure and burner pressure.
5. Make sure that the ambient lighting operates correctly. Refer to 4.3.1.
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.

## 5.2 Maintenance procedures

### 5.2.1 Remove the door (including glass)

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

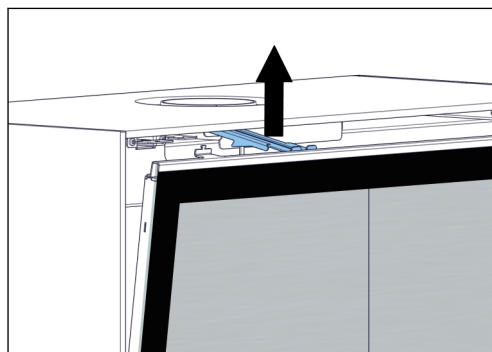


2. With the hook, pull the thin, metal spring strips on the top left and right from the studs on the door.
3. Dismantle the safety strip from the door.

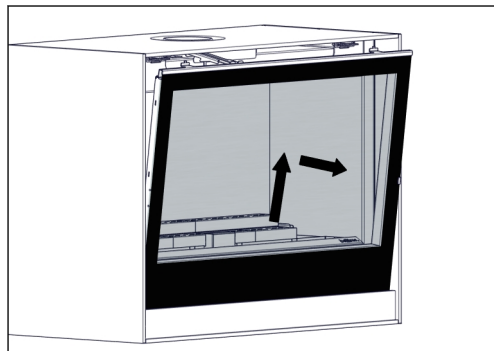


**Caution:**

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



4. Carefully tilt the door and the glass forwards at the top. Prevent damage. Pull the door upwards and remove it from the appliance.



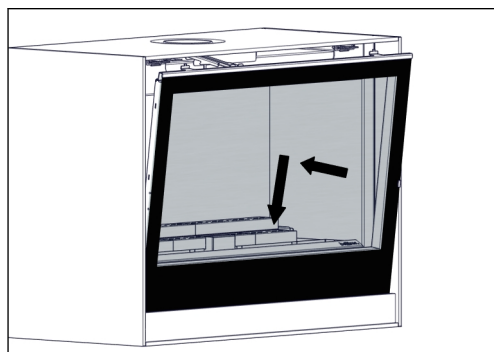
## 5.2.2 Install the door (including glass)



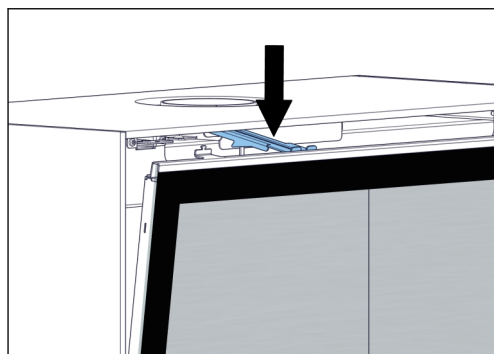
### Caution:

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

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



4. Attach the safety strip on the door.



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



**Caution:**

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

**5.2.3****Clean the glass**

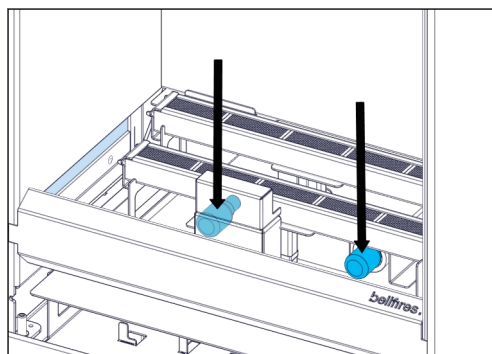
1. Clean the glass with a soft cloth, a sponge or paper. Use glass cleaner or ceramic hob cleaner.
2. Make sure that the glass is dry. Water droplets can leave a mark on the glass.

**5.2.4****Replace the ambient light bulb when broken**

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

**Caution:**

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



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

## 6 Troubleshooting

| Problem                                            | possible cause                                                                               | solution                                                                                    |
|----------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| The main fire stops to burn                        | The concentric flue system is not installed according to the specified instructions.         | Install the concentric flue system correctly. Refer to the preparation manual.              |
|                                                    | An incorrect flue gas restriction plate is fitted.                                           | Install the correct gas restriction plate. Refer to <a href="#">4.2.8</a> .                 |
|                                                    | 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                                                                      |
| A loud noise occurs in the appliance               | The overpressure door is activated.                                                          | Do a check on the appliance for problems.                                                   |
| The lacquer of the appliance is damaged            |                                                                                              | Use an aerosol can with heat resistant lacquer to repair any damage in the laquer.          |

## 7 Technical specification

### 7.1 Box Gas 80 MF (MagniFire) - GB, IE, ES, IT

|                                                                                   | Natural gas                                         | Butane/ Propane                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| Name                                                                              | Bellfires                                           | Bellfires                                               |
| Model                                                                             | Box Gas 80 MF                                       | Box Gas 80 MF                                           |
| Country                                                                           | GB, IE, ES, IT                                      | GB, IE, ES, IT                                          |
| Product Identification Number (PIN)                                               | 0063 CM 3684                                        | 0063 CM 3684                                            |
| Indirect heating functionality                                                    | No                                                  | No                                                      |
| Type of appliance under CE-norm                                                   | C <sub>11</sub> / C <sub>31</sub> / C <sub>91</sub> | C <sub>11</sub> / C <sub>31</sub> / C <sub>91</sub>     |
| Category of appliance                                                             | I <sub>2H</sub> natural gas G20                     | I <sub>3B/P</sub> butane/propane G30/G31                |
| Energy efficiency class                                                           | B                                                   | C                                                       |
| Energy efficiency index (EEI)                                                     | 83                                                  | 78                                                      |
| Nominal heat input<br>(Gross calorific value)                                     | 8.5 kW                                              | Butane (G30) : 7.5 kW<br>Propane (G31) : 6.1 kW         |
| Nominal heat output                                                               | 6.5 kW                                              | Butane (G30) : 5.4 kW<br>Propane (G31) : 4.4 kW         |
| Minimum heat output (indicative)                                                  | 2.9 kW                                              | Butane (G30) : 3.1 kW<br>Propane (G31) : 2.5 kW         |
| Useful efficiency (Net Calorific Value (NCV)) at nominal heat output              | 85.0 %                                              | 80.0 %                                                  |
| Useful efficiency (Net Calorific Value (NCV)) at minimum heat output (indicative) | 76.6 %                                              | 74.7 %                                                  |
| NO <sub>x</sub> (max.) (Gross Calorific Value (GCV))                              | <130 mg/kWh <sub>input</sub>                        | <130 mg/kWh <sub>input</sub>                            |
| NO <sub>x</sub> class                                                             | 4                                                   | 4                                                       |
| Gas rate (max.)                                                                   | 0.80 m <sup>3</sup> /hr.                            | Butane (G30) : 570 gr/hr.<br>Propane (G31) : 450 gr/hr. |
| Supply pressure                                                                   | 20.0 mbar                                           | Butane (G30) : 37.0 mbar<br>Propane (G31) : 37.0 mbar   |
| Burner pressure (max.) Hot                                                        | 12.2 mbar (*)                                       | 29.0 mbar (*)                                           |
| Burner pressure (max.) Cold                                                       | 11.5 mbar (**)                                      | 29.0 mbar (**)                                          |
| Burner pressure (min.)                                                            | 3.5 mbar (***)                                      | 11.0 mbar (***)                                         |
| Primary air inlet burner rear                                                     | 1x Ø6.0 mm                                          | 1x Ø8x15 mm + 2x Ø3.5 mm                                |
| Primary air inlet burner front                                                    | 1x Ø6.0 mm                                          | 1x Ø8x15 mm + 2x Ø3.5 mm                                |
| Gas regulator block (remote control)                                              | Mertik GV 60                                        | Mertik GV 60                                            |
| Main burner                                                                       | MagniFire 530x40 mm (2x)                            | MagniFire 530x40 mm (2x)                                |
| Main burner injector Rear                                                         | no 170 (= 1x Ø1.70 mm)                              | no 95 (= 1x Ø0.95 mm)                                   |
| Main burner injector Front                                                        | no 170 (= 1x Ø1.70 mm)                              | no 100 (= 1x Ø1.00 mm)                                  |

|                                                                                                                                                       | Natural gas                                                                                                                                                                                              | Butane/ Propane                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pilot light burner                                                                                                                                    | SIT 0.145.019                                                                                                                                                                                            | SIT 0.145.019                                                                                                                                                                                            |
| Pilot light burner injector                                                                                                                           | no 36 (SIT 0.977.091)                                                                                                                                                                                    | no 23 (SIT 0.977.150)                                                                                                                                                                                    |
| Gas connection                                                                                                                                        | 3/8" G / Ø12 mm                                                                                                                                                                                          | 3/8" G / Ø12 mm                                                                                                                                                                                          |
| Concentric flue system connection                                                                                                                     | Ø100 mm - Ø150 mm                                                                                                                                                                                        | Ø100 mm - Ø150 mm                                                                                                                                                                                        |
| Batteries remote control receiver                                                                                                                     | None                                                                                                                                                                                                     | None                                                                                                                                                                                                     |
| batteries remote control hand transmitter                                                                                                             | 2x 1.5V AAA                                                                                                                                                                                              | 2x 1.5V AAA                                                                                                                                                                                              |
| Electrical connection                                                                                                                                 | 230 VAC / 50 Hz                                                                                                                                                                                          | 230 VAC / 50 Hz                                                                                                                                                                                          |
| Auxiliary electricity consumption at nominal heat output                                                                                              | 0.05 kW                                                                                                                                                                                                  | 0.05 kW                                                                                                                                                                                                  |
| Auxiliary electricity consumption at minimum heat output                                                                                              | 0 kW                                                                                                                                                                                                     | 0 kW                                                                                                                                                                                                     |
| Auxiliary electricity consumption in standby mode                                                                                                     | 0 kW                                                                                                                                                                                                     | 0 kW                                                                                                                                                                                                     |
| Weight:                                                                                                                                               |                                                                                                                                                                                                          |                                                                                                                                                                                                          |
| • Basic model                                                                                                                                         | 133 kg                                                                                                                                                                                                   | 133 kg                                                                                                                                                                                                   |
| • Including all options                                                                                                                               | 180 kg                                                                                                                                                                                                   | 180 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"> <li>• Preparation manual</li> <li>• Installation and maintenance manual</li> <li>• User manual</li> <li>• Assembly instructions for concentric flue system</li> </ul> | <ul style="list-style-type: none"> <li>• Preparation manual</li> <li>• Installation and maintenance manual</li> <li>• User manual</li> <li>• Assembly instructions for concentric flue system</li> </ul> |

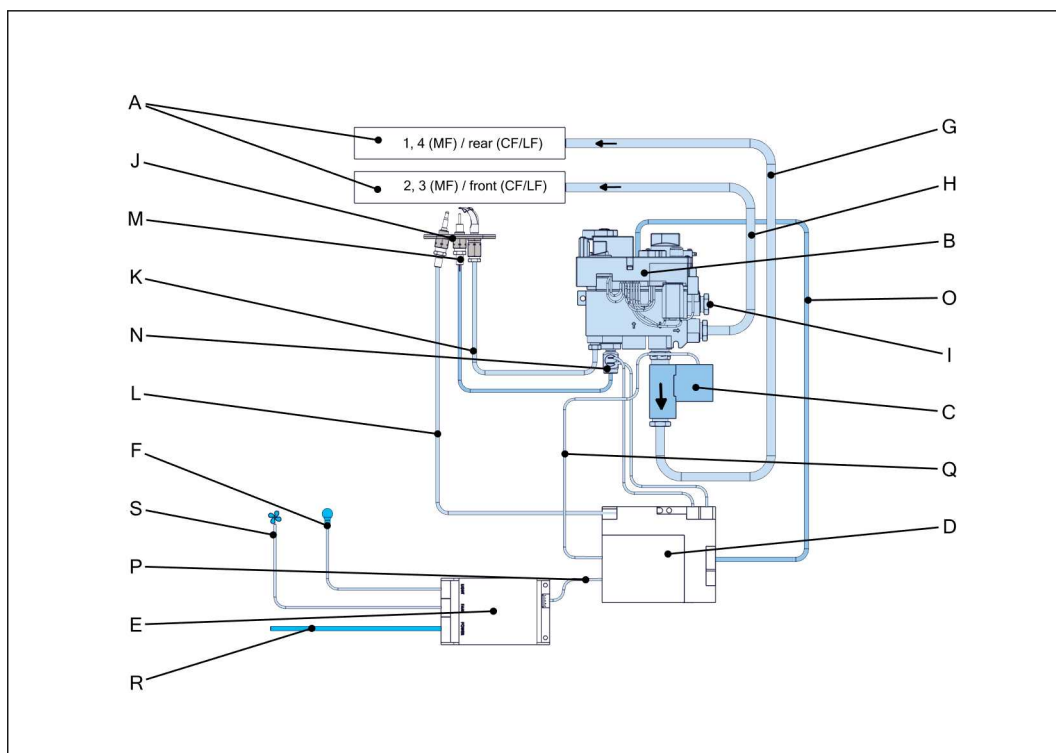
(\*) Both burners at maximum. Appliance is on temperature.

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

(\*\*\*) Both burners at minimum.

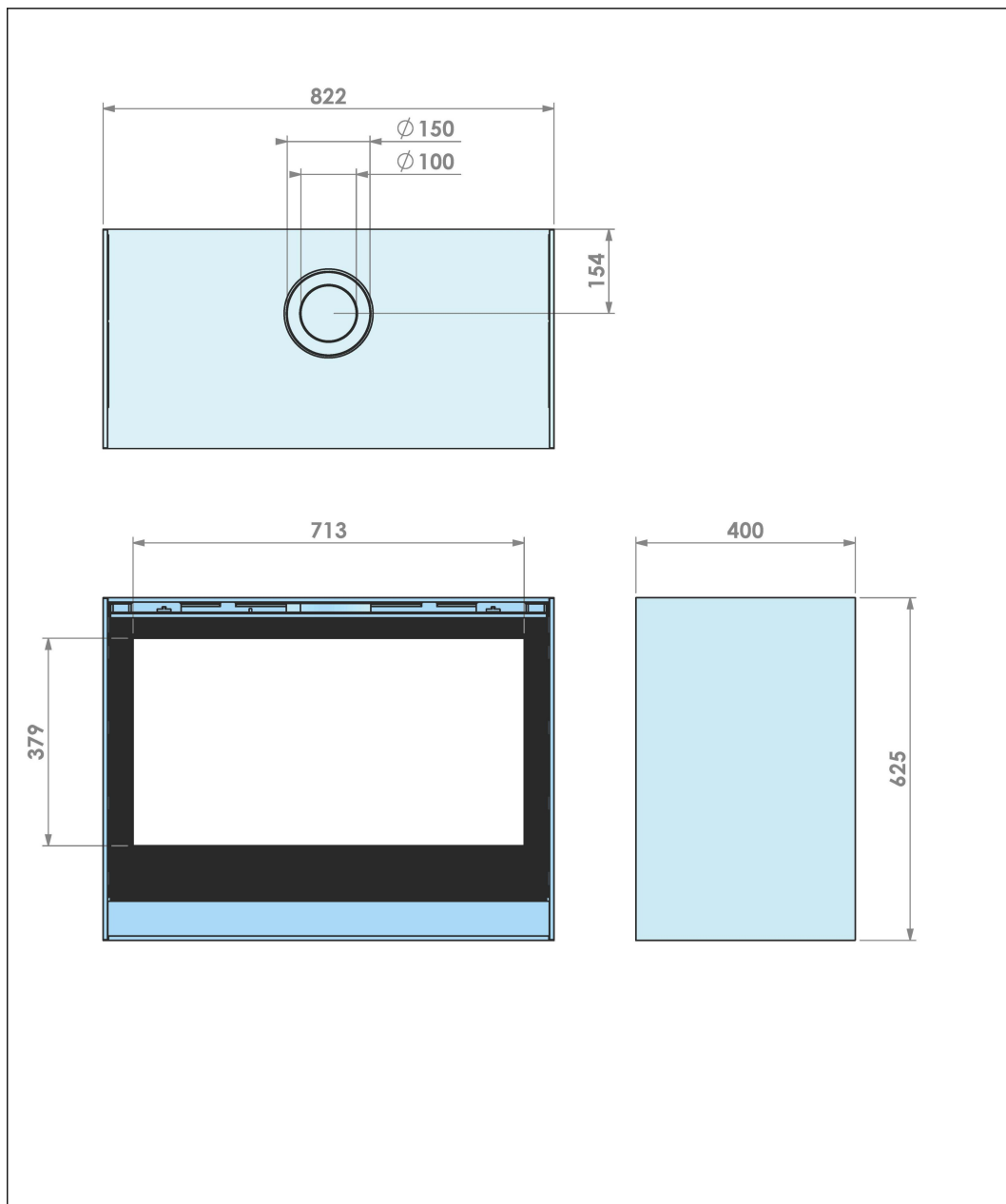
Heat changing surface: Entire appliance.

## 7.2 Diagram electricity and gas

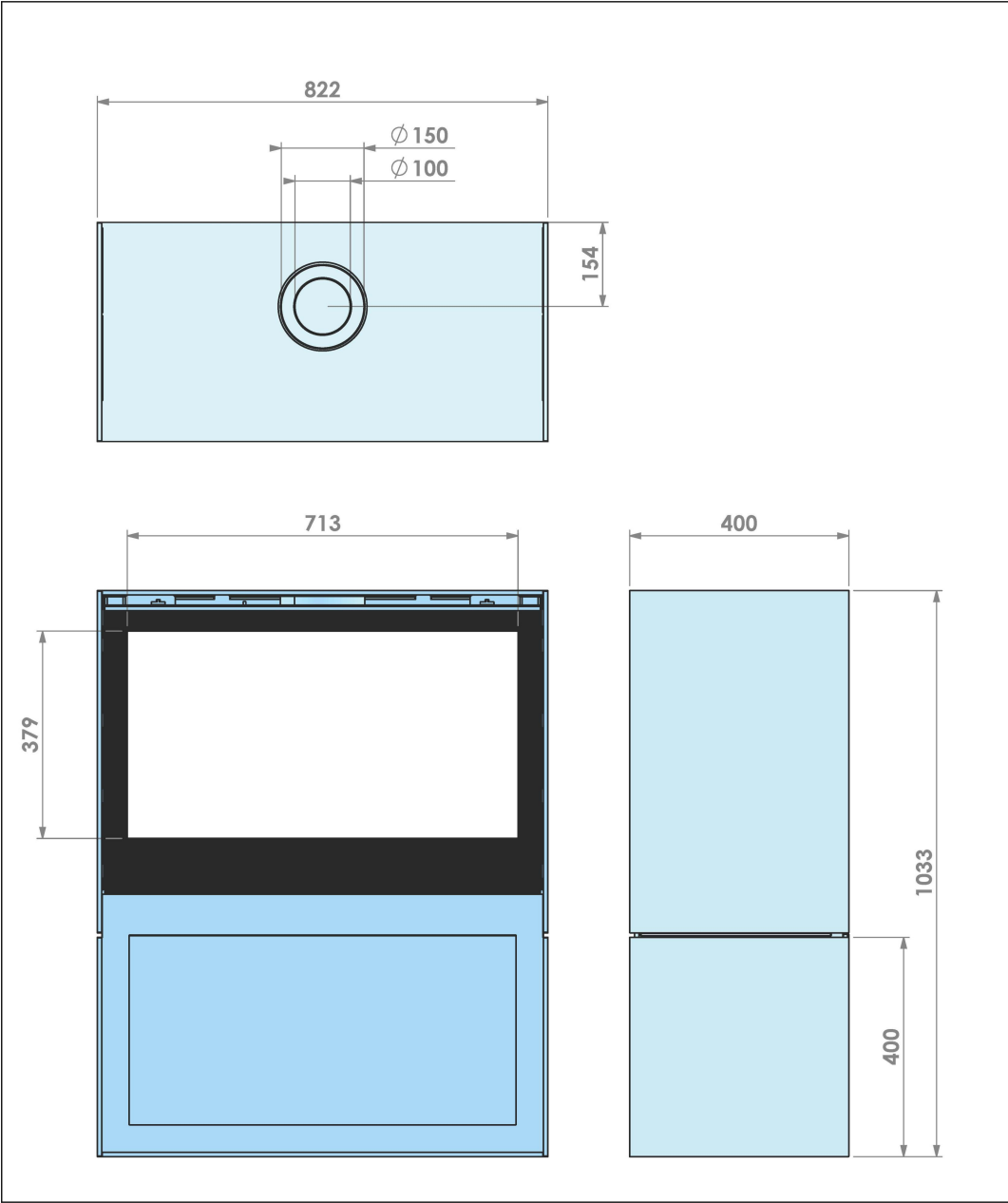


|   | Item                                                           |
|---|----------------------------------------------------------------|
| A | Main burners 1 to 4 (MF) / Main burners front and rear (CF/LF) |
| B | Gas regulator block                                            |
| C | Gas valve of the rear burner                                   |
| D | Receiver                                                       |
| E | Fan/Light module                                               |
| F | Ambient lighting                                               |
| G | Gas pipe rear burner                                           |
| H | Gas pipe front burner                                          |
| I | Gas supply connection                                          |
| J | Pilot light burner                                             |
| K | Pilot light pipe                                               |
| L | Piezo cable                                                    |
| M | Thermocouple                                                   |
| N | Thermocouple interrupter                                       |
| O | 8 wire cable                                                   |
| P | 5 wire cable                                                   |
| Q | 2 wire cable                                                   |
| R | Connecting cable 230VAC with earthed plug                      |
| S | Not available for the                                          |

### 7.3 Dimensions Box Gas 80



7.4 Dimensions Box Gas 80 with Storage module



7.5 Dimensions of the restriction plate

| Width of the delivered flue restriction plates in mm             |    |
|------------------------------------------------------------------|----|
| Concentric flue connection $\varnothing 100$ - $\varnothing 150$ |    |
| Roof-mounted outlet                                              |    |
|                                                                  | 30 |
|                                                                  | 40 |
|                                                                  | 50 |
|                                                                  | 65 |

## 8 Warranty Terms

### Barbas Bellfires Warranty Terms

Barbas Bellfires B.V. guarantees the quality of the supplied Bellfires appliance and the quality of the materials used. All Bellfires appliances are developed and manufactured according to the highest possible quality standards. If, despite all this, something should prove amiss with the Bellfires 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 Bellfires 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 labour or spare parts.
2. Repair or replacement of the Bellfires appliance will be undertaken by Barbas Bellfires B.V. or by a Bellfires dealer as designated by Barbas Bellfires B.V.
3. This warranty is supplementary to the existing legal national warranty of Bellfires 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 Bellfires 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 Bellfires dealer, together with the serial number of the Bellfires appliance which is stated on the front of the user manual.
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 Bellfires 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 Bellfires appliance ceases to be in effect if:
  - a. it is not installed according to the supplied installation instructions, and to national and/or local regulations;
  - b. it has been installed, connected or repaired by a non-Bellfires 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 hearth 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 Bellfires 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 Bellfires 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 Bellfires appliance, a similar warranty applies from the moment of purchase for a period of two years.
4. For user parts such as glass, glass (cord), thermocouple 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@Bellfires.com](mailto:info@Bellfires.com)

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





### 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:** C<sub>11</sub>/C<sub>21</sub>/C<sub>31</sub>  
**Product name:** Bellfires

**Description of the product:**

|                                     |                                    |                              |
|-------------------------------------|------------------------------------|------------------------------|
| Horizon Bell XXL 3 CF/LF            | Corner Bell XXL 3 L/R CF/LF        | Smart Bell 90/70 PF          |
| Horizon Bell XL 3 CF/LF             | Corner Bell XL 3 L/R CF/LF         | Smart Bell 75/70 PF          |
| Horizon Bell Large 3 CF/LF          | Corner Bell Large 3 L/R CF/LF      | Smart Bell 80/60 MF          |
| Horizon Bell Medium 3 CF/LF         | Corner Bell Medium 3 L/R CF/LF     | Smart Bell 75/60 MF          |
| Horizon Bell Small 3 CF/LF          | Corner Bell Small 3 L/R CF/LF      | Smart Bell 75/55 MF          |
| Horizon Bell XS 3 CF/LF             | View Bell Derby 3 CF/LF/PF         | Smart Bell 65/60 MF          |
| Horizon Bell Large Tunnel 3 CF/LF   | View Bell Topsham 3 CF/LF/PF       | Smart Bell 65/55 MF          |
| Horizon Bell Small Tunnel 3 CF/LF   | View Bell York 3 CF/LF/PF          | Smart Bell 55/60 MF          |
| Vertical Bell Medium 3 CF/LF        | View Bell XXL 3 CF/LF              | Smart Bell 55/55 MF          |
| Vertical Bell Small 3 CF/LF         | View Bell XL 3 CF/LF               | Smart Bell 45/60 MF          |
| Vertical Bell Medium Tunnel 3 CF/LF | View Bell Large 3 CF/LF            | Smart Bell Panorama 45/45 MF |
| Vertical Bell Small Tunnel 3 CF/LF  | View Bell Medium 3 CF/LF           | Smart Bell Panorama 45/59 MF |
| Derby Large 3 CF/LF/PF              | View Bell Small 3 CF/LF            | Smart Bell Panorama 73/52 MF |
| Derby Small 3 CF/LF/PF              | View Bell Vertical 3 CF/LF         | Box Gas 80 MF                |
| Topsham Large 3 CF/LF/PF            | Room Divider Large 3 L/R CF/LF/MF  | Box Gas 75 MF                |
| Topsham Small 3 CF/LF               | Room Divider Medium 3 L/R CF/LF/MF | Box Gas 65 MF                |
| York Large 3 CF/LF/PF               | Classic Bell Small                 | Box Gas 55 MF                |
| York Small 3 CF/LF/PF               | Classic Bell Medium                | Box Gas 45 MF                |
| Derby Large Tunnel 3 CF/LF          | Smart Bell 80/80 PF                | Box Gas Panorama 45/45 MF    |
| Corner Bell Derby 3 L/R CF/LF/PF    | Smart Bell 90/80 PF                | Box Gas Panorama 45/59 MF    |
| Corner Bell Topsham 3 L/R CF/LF/PF  | Smart Bell 75/80 PF                | Box Gas Panorama 73/52 MF    |
| Corner Bell York 3 L/R CF/LF/PF     | Smart Bell 80/70 PF                |                              |

*The object of this declaration is in conformity with the relevant Union harmonisation legislation:*  
 Regulation (EU) 2016/426

*Used relevant harmonised standards or other technical specifications in relation to which conformity is declared:*  
 EN 613:2000

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

*performed a product verification and issued on* March 29, 2019 *certificate no:* 17GR0140/01

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

Bladel, April 1, 2019



Barbas Bellfires B.V.  
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 5531 AB Bladel  
 The Netherlands  
  
 T +31 (0)497 339 200  
 www.barbasbellfires.com

# bellfires.

Your Bellfires dealer