

ELEMENT 4



Installation, Operation and Owner's Manual

Bio 50i

Bioethanol Fireplace



DANGER

**HOT GLASS WILL
CAUSE BURNS.
DO NOT TOUCH GLASS
UNTIL COOLED.
NEVER ALLOW CHILDREN
TO TOUCH GLASS.**



Une surface vitrée chaude
peut causer des brûlures.
Laisser refroidir la surface
vitrée avant d'y toucher.
Ne permettez jamais à un enfant
de toucher la surface vitrée.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

Une barrière conçu pour réduire le risque de brûlure par le verre de visualisation chaude est fournie avec cet appareil et doit être installé pour la protection des enfants et autres personnes à risque.

WARNING:

FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

AVERTISSEMENT:

INCENDIE OU D'EXPLOSION

Le non-respect des avertissements de sécurité à la lettre pourrait entraîner de graves blessures, la mort ou des dommages matériels.

- Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.
- Installation et l'entretien doivent être effectués par un installateur qualifié, une agence de service ou le fournisseur de gaz.

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

INSTALLATEUR: Laissez cette notice avec l'appareil.
CONSOMMATEUR: Conservez cette notice pour consultation ultérieure.



DO NOT USE THIS PRODUCT AS A PRIMARY HEAT SOURCE

ALWAYS USE BIOETHANOL OF 85% TO 96,6% ALCOHOL



DO NOT POUR OVER
LIVE FLAMES



DO NOT FILL WHILE
HOT

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1 DECLARATION OF PERFORMANCE

We hereby declare that the design and construction of the Element4 appliances are complying to the essential demands and regulations.

Product:

Local spaceheater on bioethanol

Model:

Bio 50i

This declaration loses its validity when changes to the device are made without the written permission by Element4.



J. Kempers

CEO

2 IMPORTANT INFORMATION

Installer

Leave the following for the customer and explain when necessary

- Installation manual
- Remote control

Owner

Keep this manual for future reference

The fireplace may only be installed by a qualified installer/dealer, following these installation instructions. We advise you to read these instructions properly, before commencing the installation of your device. Make yourself fully aware of all the following instructions and the many features of your Element4 fireplace appliance.

Before installation check the decive for transport damage and inform your supplier immediately if damage is found.

This appliance is a bioethanol fireplace. It must not be used for any other purposes such as drying clothes, etc

2.1 FUEL TYPE

This appliance is designed for use with Bioethanol of up to 96.6%.

Never use bioethanol of 100% purity! It can cause serious damage to the appliance!

2.2 INSTALLATION

This system appliance must be installed as an OEM installation in manufactured homes (USA only) or an aftermarket permanently located, or a mobile home, where not prohibited by local codes and must be installed in accordance with Manufacturer’s instructions and the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, in the United States, or the Standard for Installation in Mobile Homes, CAN/CSA Z240 MH Series, in Canada.

These appliances must be electrically grounded in accordance with the local codes or, in the absence of local codes, with National Electric code, ANSI/NFPA 70, or the Canadian Electric Code, CSA C22.1.

If your installation is at an elevation greater than 2000’ in the US or 4500’ in Canada, consult with the local authority having jurisdiction for gas product installations to determine their specific requirements for high altitude installations.

2.3 OTHER INFORMATION

The heat that is coming from the device may effect the materials in its surroundings. Always install the fire taking into account the correct safety distances. For more information see **CHAPTER 5**.

The settings and construction of the device must not be changed! For maintenance and further handling of the fire see **CHAPTER 7**

The device is provided with a special set of decorative media. Do not place any extra imitation logs or decoration media on the burner or in the combustion chamber. See **CHAPTER 8** for an instruction on how to arrange the decoration media properly.

2.4 PACKAGING INFORMATION

The packaging of the device is recyclable. Packaging can contain:

- Cardboard
- CFC-free foam (soft)
- Wood
- Plastic
- Paper

These materials must be disposed of responsibly and in accordance with government regulations.

Batteries count as chemical waste. Batteries must be disposed of responsibly and in accordance with government regulations. Remove the batteries first before disposing of the remote control.

The government can also provide you with information on the responsible disposal of discarded devices.

3 SAFETY INFORMATION AND WARNINGS

If the information in these instructions is not followed exactly a fire or explosion may result causing property damage, personal injury or death.

Note: This device may not be used a primary heat source!

Do not use this appliance as a temporary source of heat during construction.

3.4.1 REPLACEMENT OR SPARE PARTS

Parts are only to be changed with original parts by the original manufacturer.

If parts need to be replaced, use only original parts from the manufacturer. The warranty (**APPENDIX E**) will be void if non-standard parts are used.

Dimensions will appear as Inches / metric throughout this manual. For convenience, the inches are rounded to the nearest 1/16" when converted. If greater accuracy is required, use the metric dimensions.

3.4.2 CHILDREN AND PETS

Radiant heat can heat surfaces such as the surround and trims of the fireplace to temperatures that, although approved safe, can be quite uncomfortable to touch - particularly for children and pets.

Children and pets should always be supervised when in the room where the appliance is located. Remote control handset should be kept out of reach of children.

In the presence of children, we strongly recommend that you install in front of the fireplace: a fire screen or, to protect young toddlers, a "hearth gate".

Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.

3.4.3 FLAMMABLE MATERIALS AND LIQUIDS

Do not store bioethanol, gasoline or other flammable vapors and liquids in the vicinity of this appliance.

Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the unit and to replace any part of the control system and any gas control that has been under water.

3.4.4 WHAT DO YOU DO IF YOU SPOT A BIOETHANOL LEAK

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.

The settings and construction of the device must not be changed!

Parts are only to be changed with original parts by the original manufacturer.

Do not place additional imitation wood or glow material on the burner or in the combustion area.

This appliance is designed as a heating device and therefore all parts become very hot during use (more than 100 degrees). Never touch the appliance during use.

Heat emitted from this appliance may affect nearby materials. Hang curtains at least 2 feet away.

Floors, walls and covers (ceilings) must be non-combustible in places where there is a fire risk due to heat radiating from the appliance and/or drainage device.

WARNING

Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.

This appliance must be installed as an OEM installation in manufactured homes (USA only) or an aftermarket permanently located, or a mobile home, **where not prohibited by local codes** and must be installed in accordance with Manufacturer's instructions and the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, in the United States, or the Standard for Installation in Mobile Homes, CAN/CSA Z240 MH Series, in Canada.

If the information in these instructions is not followed exactly a fire or explosion may result causing property damage, personal injury or death.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this appliance.

NEVER OBSTRUCT the flow of ventilation air. Keep the front of the appliance CLEAR of all obstacles and materials for servicing and proper operation.

DO NOT USE this appliance if any part has been under water. Immediately call a qualified service technician to inspect the unit and to replace any part of the control system that has been under water.

Dimensions will appear as INCHES"/metric throughout this manual. For convenience, the inches are rounded to the nearest 1/16" when converted. If greater accuracy is required, use the metric dimensions.

TURN OFF the power before servicing the appliance. It is recommended that a qualified service technician perform an appliance check-up/service once a year.

Any safety screen or guard removed for servicing **MUST BE REPLACED** before operating this appliance.

WARNING: Installation and Service

Installation and service must be performed by an authorized qualified installer or service agency.

Any alteration to the product that causes soot or carbon to form and results in damage is not the responsibility of the manufacturer.

Do not modify or substitute any part of this appliance.

Never attempt to refill the appliance manually. Always use the automatic filling feature.

WARNING: Electrical Grounding

These appliances must be electrically grounded in accordance with the local codes or, in the absence of local codes, with National Electric code, ANSI/NFPA 70, or the Canadian Electric Code, CSA C22.1

Avoid skin and eye contact with bioethanol, and store fuel away from children and pets.

Never attempt to pour Bioethanol over live flames.

Never refill the appliance while it is still hot.

4 REMOTE CONTROL AND IGNITION

4.1 REMOTE CONTROL

The device is operated by remote control (Figure 4.1) The remote control requires 4 type AAA batteries.

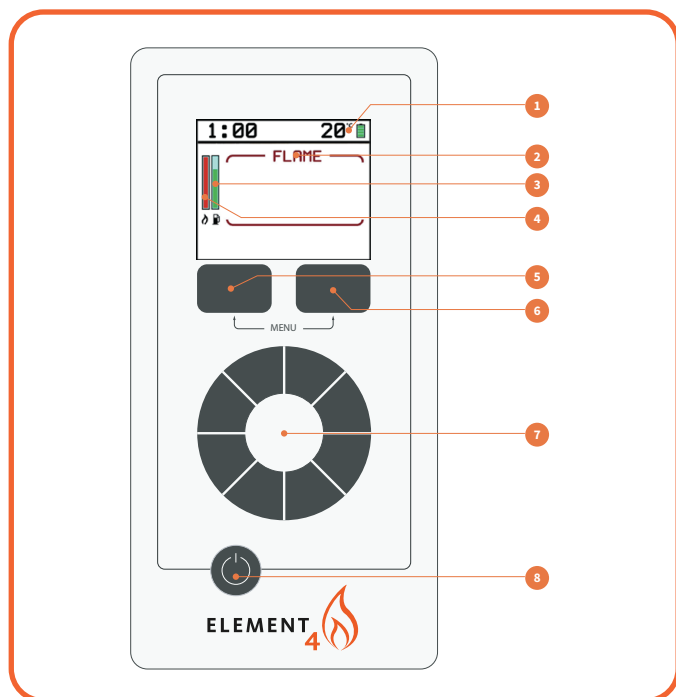


Figure 4.1 Remote control

1. Room temperature and battery level of remote control
2. Mode
3. Tank level
4. Flame height
5. Left menu button
6. Right menu button
7. Touch dial
8. ON-button

4.1.1 PAIRING THE REMOTE CONTROL

To pair an (existing or new) handset with the device, the current paired device must be removed. Do this by selecting DEVICE in the MENU and then holding down the DELETE button. The display now shows NO PAIRED DEVICES.

1. Ensure appliance is switched OFF and isolated from mains power.
2. Touch power button on the remote panel.
3. Select PAIR option on remote.
4. Switch ON appliance by connecting to the power outlet.
5. The remote screen will show STANDBY when successful.

4.2 FILLING THE TANK

CAUTION: Use bioethanol of 96.6% - 85% purity.

Under no circumstances should 100% bioethanol be used, this may cause serious damage to the fireplace.

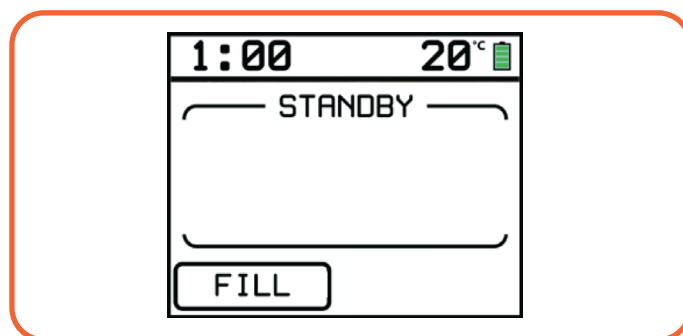


Figure 4.2 STANDBY mode

Before the fireplace can be lit, the tank must first be filled with bioethanol. Filling can only be done when the stove is in STANDBY mode. See Figure 4.2

CAUTION: If the fire has burned or burned shortly before and has not yet cooled down sufficiently, the tank cannot be filled.



Figure 4.3 Quick coupling of filling hose extender

1. Make sure that the fireplace is connected to 230V mains voltage.
2. Open the service hatch and take out the filling hose.
3. Connect the filling hose extender to the filling hose by connecting the quick couplings. See Figure 4.3
4. Insert the extended filling hose to the bottom of an opened bottle or jerry can of bioethanol. Make sure that the bottle or jerry can cannot fall over during the filling process.
5. Press the **ON-button** on the remote control to activate it.
6. Press **-FILL-** (left menu button) to start the filling process. The pump is programmed to run for 2 minutes (safety system due to building regulations for filling liquid fuels indoors). However, the pump can be stopped by pressing the **-FILL-** again. It is recommended to stop the pump when using 1L bottles so that the filling hose can be safely inserted into another bottle.
7. The pump stops after 3 minutes or as soon as the tank is full. To check if the tank is full, press **-FILL-** again, a beep will sound and the pump will stop when full.

8. The tank hose can be emptied by pressing the -FILL- button several times while holding the hose upright to prevent spillage. Make sure the hose is completely free of fuel before disconnecting it.
9. The hose can be detached with the quick release button.

4.3 IGNITING THE BURNER

When the tank is filled, the burner can be ignited. Do this by pressing the ON button until the red bar on the display fills and the fire goes into PRIMING mode. See Figure 4.4 and Figure 4.5. This will take about 30 -45 seconds.

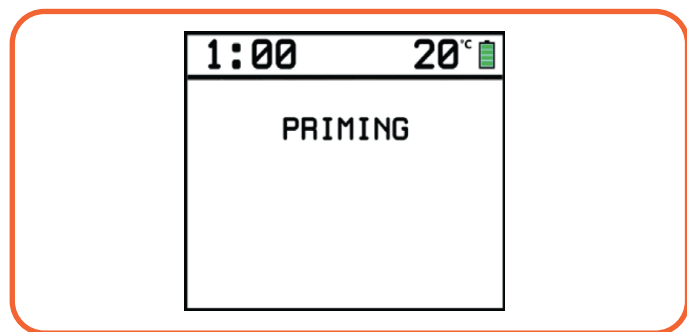


Figure. 4.4 Burner in PRIMING mode



Figure. 4.5 PRIMING: Fuel is going to be ignited

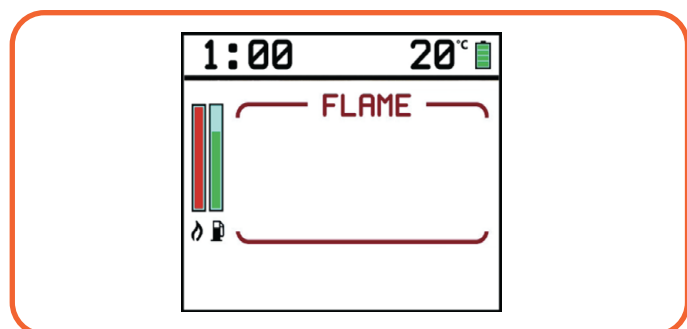


Figure. 4.6 FLAME-mode, burner is turned on

When the fire is burning, a beep will be heard and the fire will go into FLAME mode. See Figure 4.6

To increase the flame height, touch the ON button to activate the remote control and turn the touch dial clockwise.

To decrease the flame height, touch the ON button to activate the remote control and turn the touch dial counterclockwise.

4.4 TURNING THE FIRE PLACE OFF

To turn off the fire, touch the ON button to activate the remote control and then hold the ON button until the red bar is filled. The flames will not extinguish immediately, the fuel present will have to be burned up first.

5 INSTALLATION PREPARATION AND INSTRUCTION

The device has been developed, tested and approved to conform with applicable standards for the usage, performance and safety of the product. The installation of your fire must be made to conform with local building regulation requirements. We strongly advise that a suitably qualified installer is used in the installation of this appliance. The installer can provide you with all the necessary information regarding the safety regulations of the installation.

5.1 REQUIREMENTS INSTALLATION LOCATION

This appliance can be installed as a flueless fire. With a flueless installation no flue is required. Extra ventilation into the room may be required to maintain the supply of fresh air – local regulations may apply depending on the country of installation.

It is permitted to place the device in a niche. It is essential that it is constructed from absolutely fireproof material.

Determine the installation location for the device. The appliance must be fixed firmly and level to the floor. Do not make any adjustments to the device.

#	description	cm	inch
A	Minimal safety margin front	100cm	40"
B	Minimal safety margin sides	100 cm	40"
C	Height installation	0 - 50cm	0 - 20"
D	Minimal height niche	75cm	30"
E	Minimal width niche	70cm	27,5"
F	Minimal depth niche	30cm	12"
G	Minimal safety margin vertical	200cm	

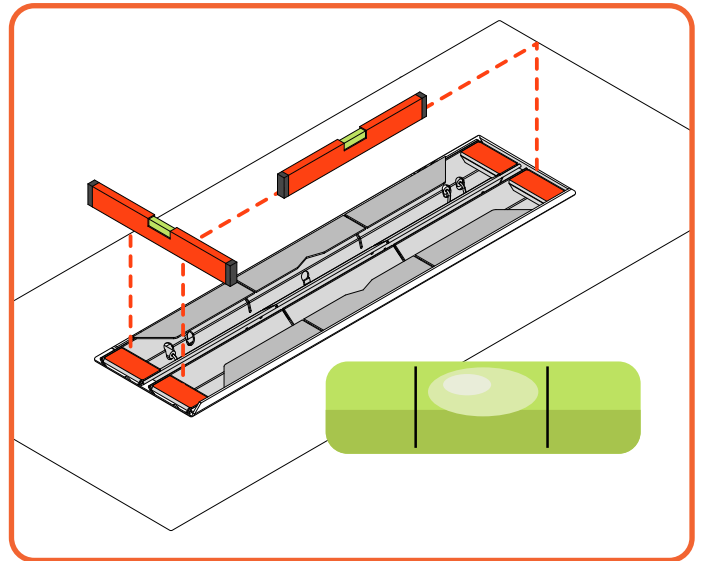


Figure 5.7 | Make sure the burner is level

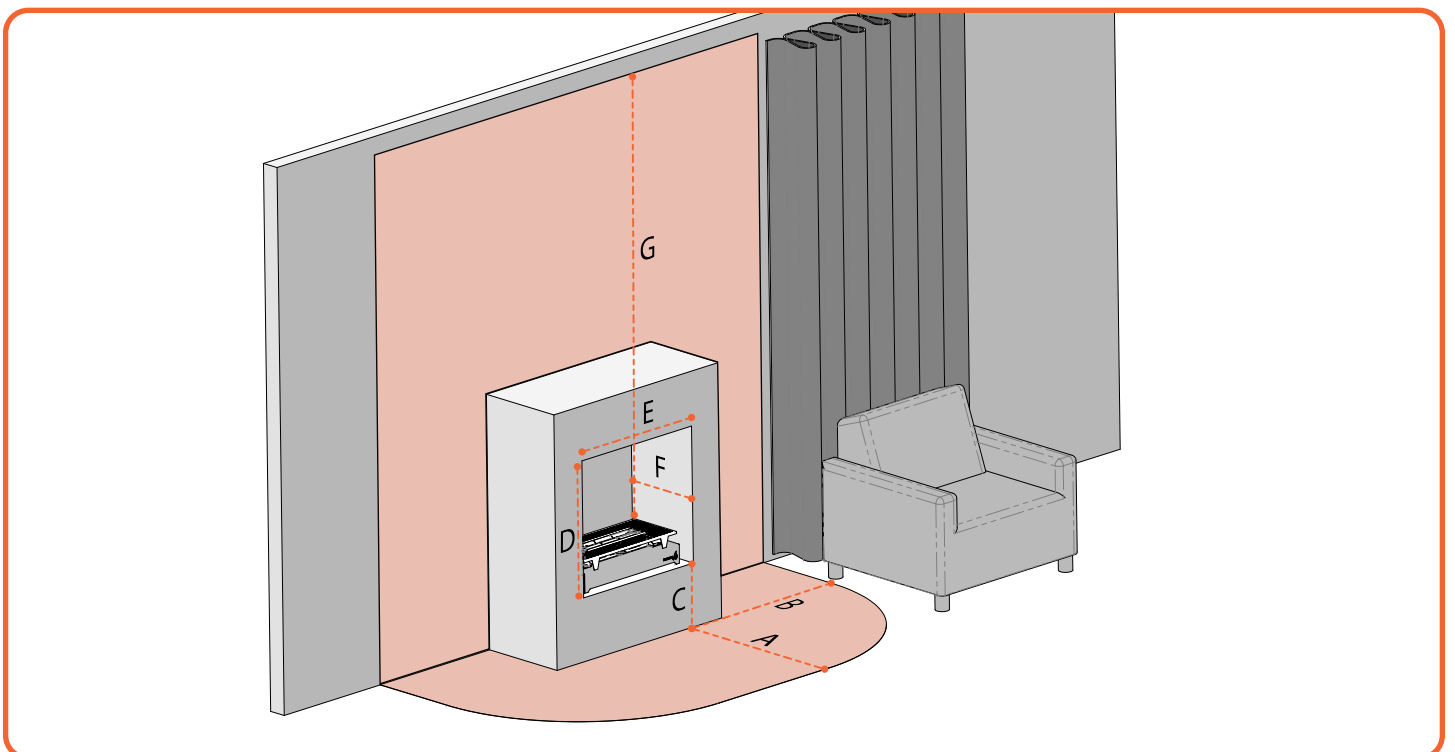


Figure 5.8 | Requirements installation location

6 SAFETY

The Element4 bioethanol fireplace has several safety systems to ensure that it can be used in the safest way. Nevertheless, a few things must be taken into account:

- Never cover your fireplace;
- Keep flammable materials away from flames and sources of ignition;
- Keep children and animals away from the fireplace;
- In case of bioethanol spillage, wipe it up with a dry soft paper or cloth and avoid open flames nearby.
- Please note: the fireplace gets hot during use, so do not touch it for 15 minutes after the flame has completely extinguished.
- Do not fill the fuel tank while the burner is still hot, wait for it to cool down;
- Never pour bioethanol over active fire;
- After extinguishing the flames, wait at least 3 minutes before re-igniting;
- In case of uncontrolled flames, use a fire blanket or extinguisher.
- Do not use water to extinguish the fire;
- After extinguishing the fire, it takes a few minutes for the flames to be completely extinguished;
- In the event that bioethanol is spilled while filling the tank, all parts must be absorbed and dried before an ignition attempt is made;
- The construction elements above the appliance must be made of non-combustible material.
- Do not fill the device before installing it.

6.1 LEAK DETECTION SENSORS

There are leak detection sensors under the burner on the lowest part of the sump and also on the bottom pan below the pumps as shown in [Figure 8.1](#) and [Figure 8.2](#). If there is a leak, the fire will go out by itself. A strong beep sounds through the safety system on the device..

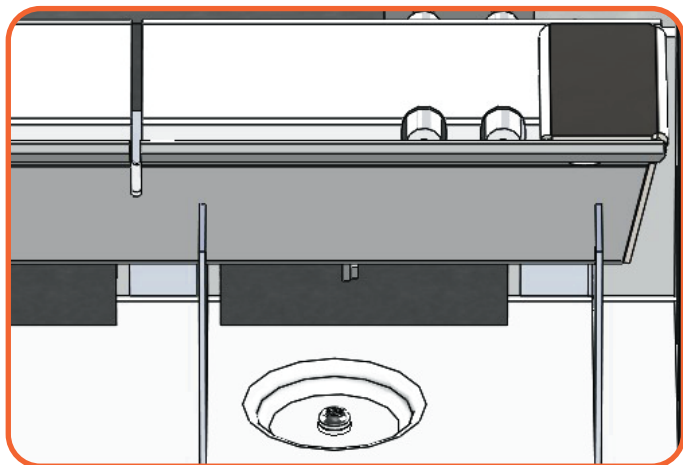


Figure 6.1 | Leak detection sensor underneath burner

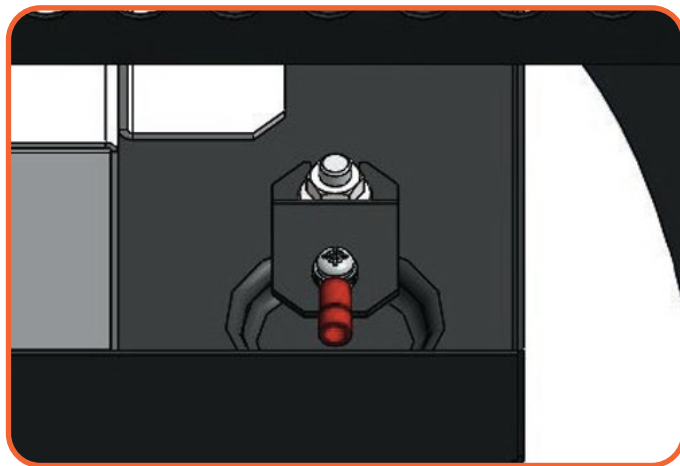


Figure 6.2 | Leak detection sensor on lowest point

6.2 OVERFLOW DETECTION SENSORS

The Bioethanol Fireplace is also equipped with overflow sensors designed to ensure user safety in the event of accidental damage to the pump or electronics. In the event that excess fuel is pumped into the burner, the sensor is activated to turn off the fire. The device will not light up until it is reset again by turning the main power source OFF and ON.

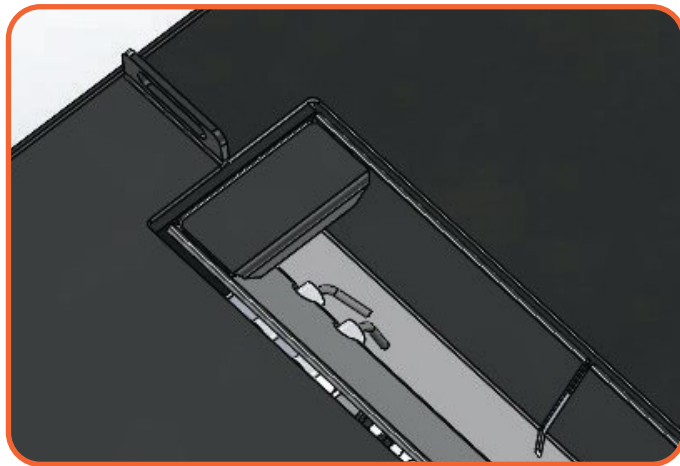


Figure 6.3 | Overflow detection sensor

7 BURNER MAINTENANCE

APPENDIX A has an overview for burner malfunctions. The burner can be reached via the maintenance access.

The starter and thermocouple can be reached through the combustion chamber.

#	Part
1	Starter
2	Thermocouple
3	Fill pump
4	Fuel pump

Table 7.5 |

7.2.1 BURNERS

The flames of the burners must be checked visually. The flames must be equal in both burner trays. If this is not the case, check whether decorative material has entered the burner..

7.2.2 STARTER

For the proper functioning of the fireplace, the starter must be checked. The starter must start both burner trays and the glowing part must be evenly distributed over the burners. The area around the starter must be kept clean. Decoration materials and dirt can impede ignition. When inspecting the starter, you should also check for damage to the components.

7.2.3 THERMOCOUPLE

The Element4 bioethanol fireplace has a thermocouple that checks whether a fire is burning. It is important that it is clean so that the flame properly heats up the thermocouple. Make sure there is no decorative material between the flame and thermocouple.

7.2.4 FUEL PUMP

The fuel pump pumps bioethanol from the tank to both burner trays. It must be checked whether this is done equally over both gutters. It must also be checked that there is no bio-ethanol leakage in the fuel lines.

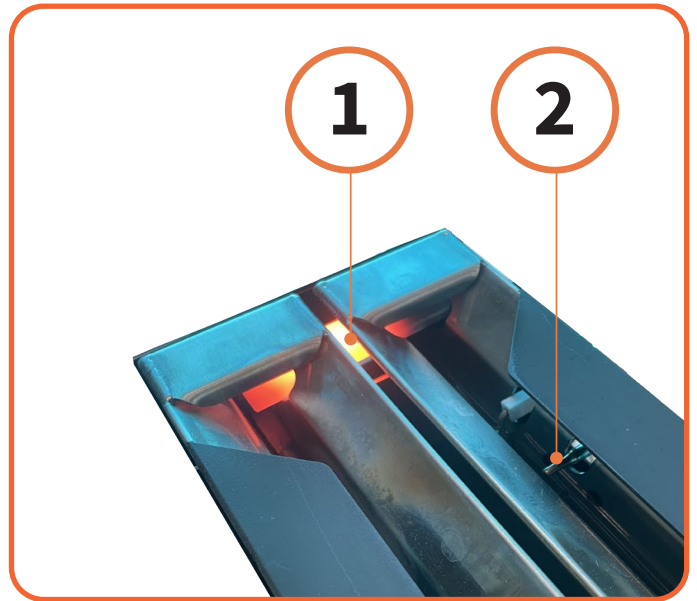


Figure 7.1 | Location of starter and thermocouple

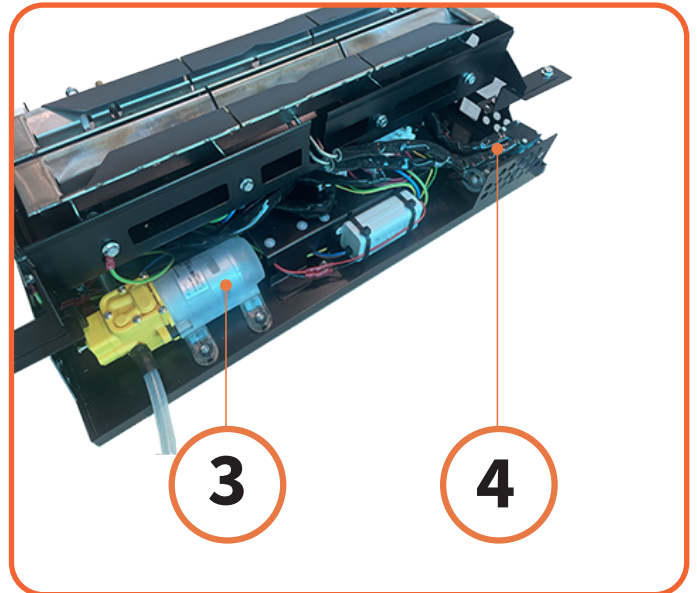


Figure 7.2 | Location of fill pump en fuel pump

8 DECORATIVE (CERAMIC) PARTS

This appliance is equipped with a ceramic fire bed with heat-resistant ceramic fibers, or artificial glassy silicate fibres. Excessive exposure to this material may cause irritation to the eyes, skin and respiratory tract. We therefore recommend that the dust emission is reduced as much as possible when handling these materials.

8.1 DECORATION ARRANGEMENT

Only the decoration ceramics supplied with this appliance are to be used. The ceramics must be laid only as shown on this page. Replacement parts are available from your dealer, but should only be installed by a qualified installation engineer.

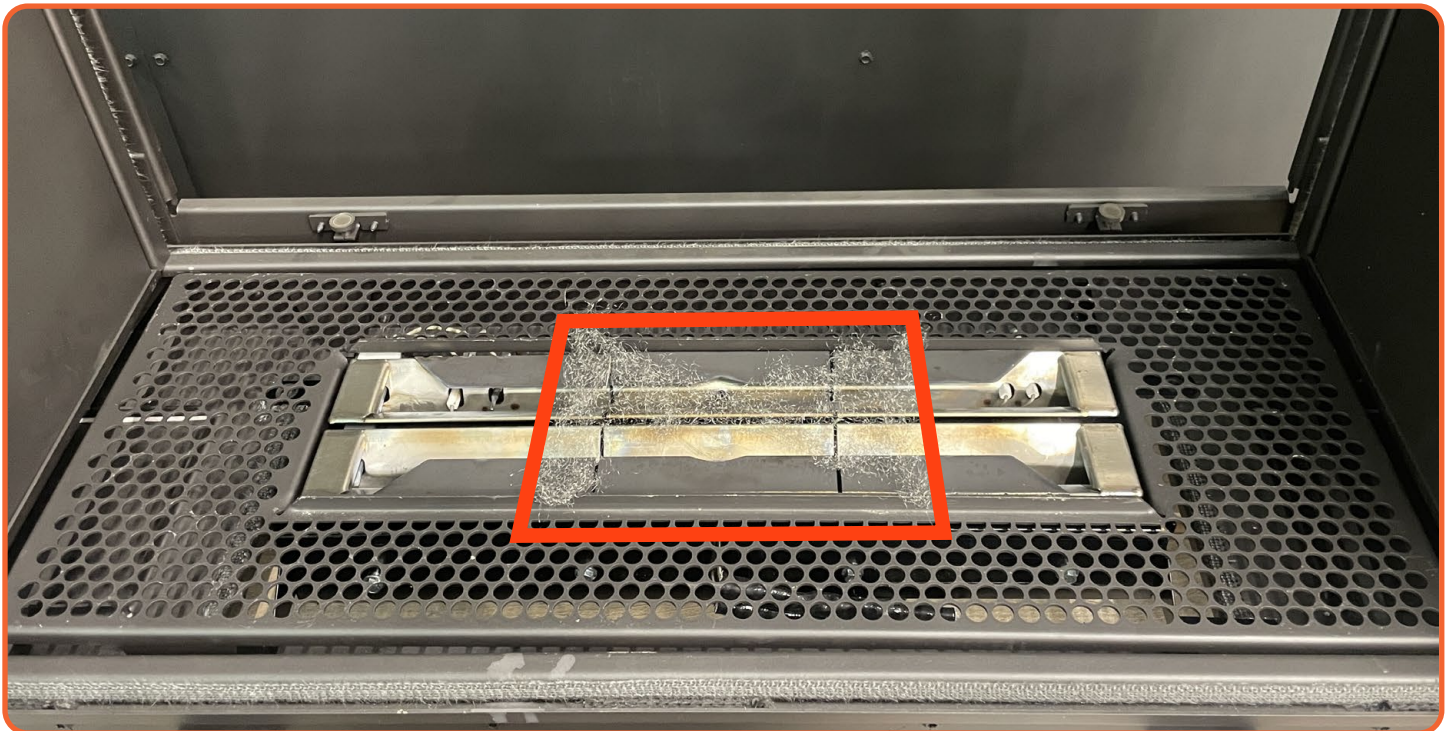
Position the decoration logs as shown on the following steps.

Make sure there is no decoration material directly in the flame when the fire is turned in.

Make sure the burner grate is still open enough to supply the combustion chamber with fresh air.

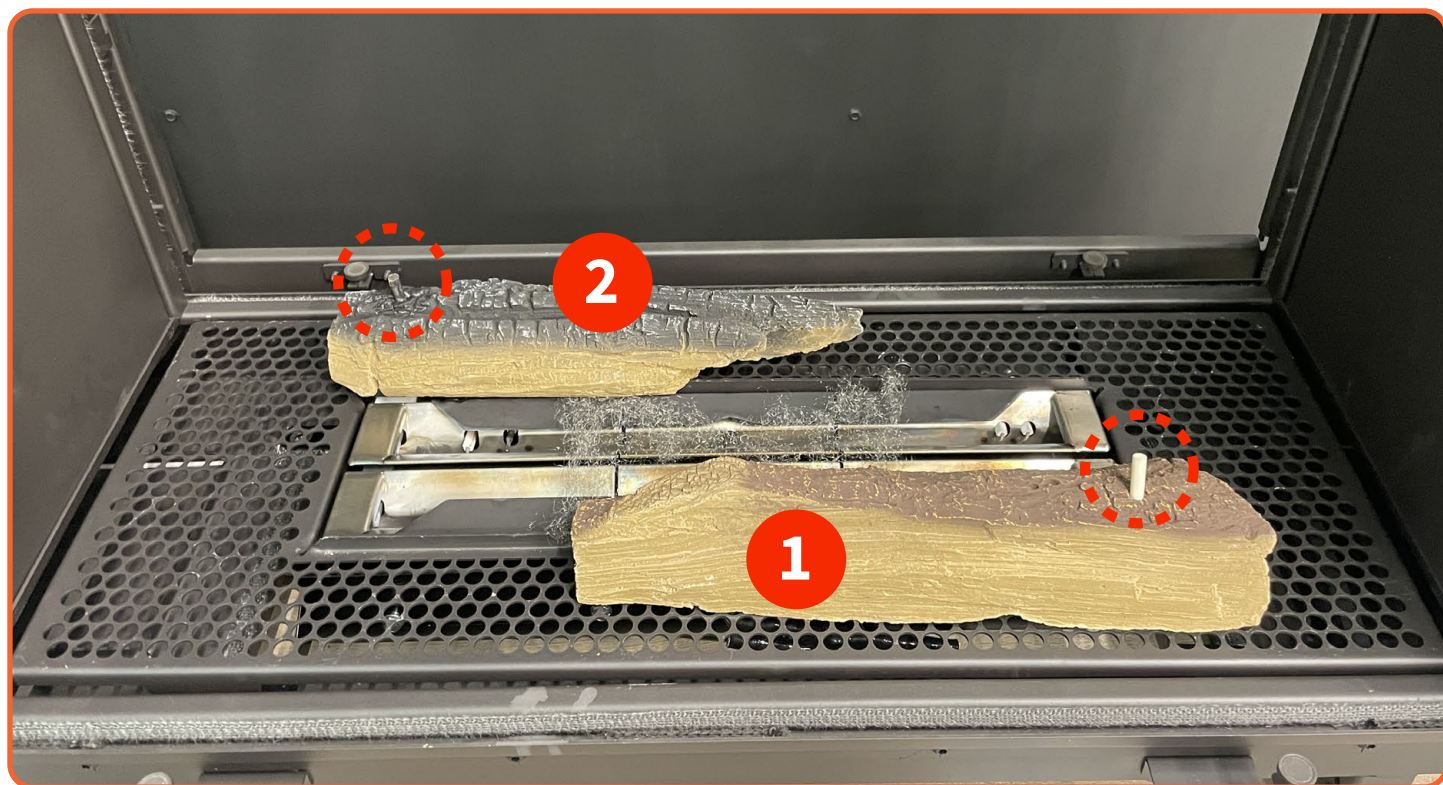


Figure 8.1 | Logset Bioethanol series



Divide the initially supplied amount of filament in half and lay one half over the burner making sure it is within the orange box remains. Please note that the filament must not come into contact with the sensors in the burner. Using too much or insufficiently spread filament blocks the flame.

Figure 8.2 | Step 1



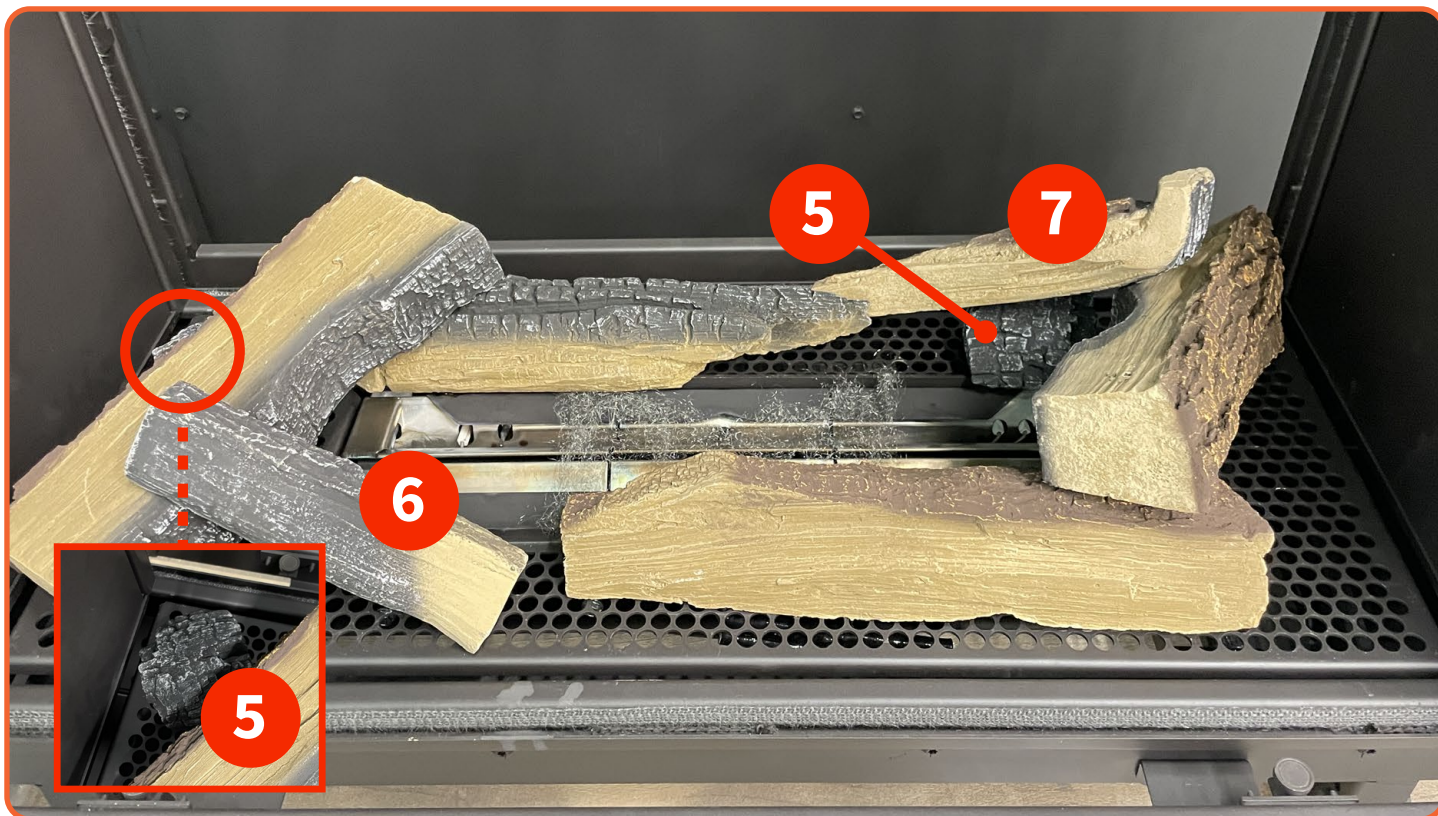
Lay log 1 and 2 with the slit at the bottom over the upright edge. Make sure that the (circled) pins on the logs are on the correct side.

Figure 8.3 | Step 2



Place logs 3 and 4 with the hole at the bottom on the pin of the underlying log.

Figure 8.4 | Step 3



Place the coals (5) in the designated places and then place the logs 6 and 7

Figure 8.5 | Step 4



Fill the rest with black and gray chips. Make sure that the burner grate remains open enough so that air can be sucked in through it.

Figure 8.6 | Step 5

9 OPERATING THE FIREPLACE

9.1 BEFORE THE FIRST FIRE

1. Make certain that all construction materials have been removed from inside and around the fireplace and the fireplace has been cleaned of any construction dust.
2. Clean the glass BEFORE and AFTER the first fire on both sides of the glass.
3. Properly place, clamp and seal the glass panels.
4. Place the four (4) AAA batteries into the remote control and confirm that it will communicate with the receiver by pressing the ON/OFF button.
5. Check the starter and thermocouple for obstructions
6. Check the air tightness of the system.

9.2 THE FIRST FIRE

See **CHAPTER 4** for more information about the remote control and ignition. When the fireplace is fired for the first time, one should check the behaviour of the fireplace to see if all is functioning well.

Should any problems occur during first firing a troubleshooter can be found in **APPENDIX A** for the gas parts and **APPENDIX B** provides an overview of possible error codes in the remote control.

9.3 SENSORY CHECKS

9.3.1 VISUAL CHECKS

Flames and soot

Examine the logs for sooting. Too yellow (near orange) flames indicate a problem with the combustion air. Clear black soot may then settle on the decoration material. When this is the case, you may contact your dealer.

This fireplace has a thermocouple safety system, which senses the burner flame. The system will turn itself off if the system does not sense the thermocouple output.

Coating

When firing up the device for the first time, make sure the device burns for several hours on the highest level, to ensure the lacker to harden. If an enclosure has not yet been constructed, these fumes may also be visible around the fireplace.

Caution: Because a fireplace is a heat source, natural convection will occur around it. Solid particles in the circulating air may burn and settle down on cold surfaces, causing discoloration. Discoloration is an annoying problem and it is difficult to solve once happened.

These particles can come from construction moisture or cigarette smoke, but also they might be volatile components in paint, construction materials or carpeting. For newly constructed chimneys or after a big reconstruction, it is advised to wait a minimum of six weeks before firing a fireplace. After this burn-off period, turn off the fireplace and let it cool completely to room temperature and once again clean both sides of the glass as well as the interior panels.

9.3.2 SMELL CHECK

When the fireplace is first heated, an odour may be given off by the hot metal. Make sure the device and enclosure are ventilated enough, so the possible released fumes are being abducted. The fumes are the result of the 'burn off' of the lubricants and sealants used when manufacturing the fireplace.

We advice to be as little in the room as possible during this process. It is recommended that you open the nearby windows for extra ventilation and then operate the fireplace for at least four hours.

9.3.3 SOUND CHECK

Since the product is a metal fireplace, the heat-up and cool-down cycles may produce some (initial) noises caused by the expansion and contraction of these metals. These are normal but should not be audible at more than a meter distance from the fireplace.

A TROUBLESHOOTER

A.A FIRST AID FOR MALFUNCTION

Below you will find an overview of the possible cause and solution in the event of a failure.

Problem	Possible Cause	Solution
A There is smoke or a strange smell coming from the burner during burning	1 Waste may be burning that is not supposed to be in the burner.	Remove the waste
	2 You are using the wrong fuel (it is essential that you use ONLY prescribed bioethanol).	Check whether you have used the correct bioethanol, if in doubt contact your dealer.
	3 You have placed something around/above the flame that is not approved or recommended.	Remove the object placed in the flame
	4 If the burner is empty (the flame goes out) or you have just turned the fire OFF, this is normal. Like extinguishing candles.	-
B When I try to ignite the burner, it will not start.	5 The quality of the bioethanol you use is not good enough.	Check whether you have used the correct bioethanol, if in doubt contact your dealer.
	1 You have not put enough fuel in the burner.	Fill the tank with bioethanol
	2 You have not used the correct fuel (it is imperative that you ONLY use bioethanol).	Check whether you have used the correct bioethanol, if in doubt contact your dealer.
	3 The air opening of the burner is clogged, there must be sufficient ventilation for the flame to develop.	Check that the flue gas outlet and air supply are not blocked.
C The remote control does not respond to touch	4 The bioethanol is cold and needs time to ignite.	Repeat the starting procedure. In case of structural occurrence, please contact your dealer.
	5 One of the two burners has not ignited, causing the safety system to be activated.	Repeat the starting procedure. In case of structural occurrence, please contact your dealer.
	1 Batteries are empty	Replace the batteries
D When I turn off the fireplace, the fire does not stop immediately	2 Your finger is wet	Dry your finger and try again
	3 You touch the ON button too short.	Try touching the ON button longer.
	1 This is normal, the bioethanol already present must first burn up. The flames will extinguish on their own.	Check plug connections Repair the wiring if necessary
E When I want to fill the tank, the pump does not turn on	1 Tank is already full	-
	2 The fireplace is still in FLAME mode	The fireplace can only be filled in STANDBY mode (See figure 4.6)
	3 The sensor in the tank is defective	Contact your dealer
F When I fill the tank, the pump does not stop automatically when the tank is full	1 You have not used the correct bioethanol	DO NOT START THE FIRE! Use a cloth to clean up the overflowing Bioethanol and contact your dealer.
	2 Sensor is defective	DO NOT START THE FIRE! Use a cloth to clean up the overflowing Bioethanol and contact your dealer.

A.B NECESSARY TOOLS

To help out the installers, mechanics and others who need to do work on our fireplaces e.g. during maintenance, a list is compiled of tools Element4 expects are being carried during said services.

When all these tools are available during service, Element4 guarantees all problems, apart from part failure can be solved.

Please note

If a problem is found, that cannot be solved on site, always contact your dealer or directly contact Element4 via our credentials which can be found on the back page of this manual.



Figure A.A | Tool overview for service

B ERROR CODES

B.A MESSAGES SHOWN ON REMOTE CONTROL

The installed software will give an error/stop code if the bioethanol fire has stopped or not started for any reason. When the bioethanol fire stops, a code is generated, which can be read on the remote control.

By means of the code number you can see in which phase of the ignition process or operation the error occurred.

To view this code, the following steps must be taken:

Open the menu by pressing both buttons below the display.

Select DEVICE

The display shows the version number and stop code as follows:

Display "Rxxx.Dxxx.SCx".

R = receiver software version number.

D = version number of the device software.

SC= stop code in hexadecimal format (as shown opposite).



Figure 9.7 | Error code is displayed on remote control

Foutcode	Omschrijving	Mogelijke redenen	Mogelijke oplossing
SC2	Bioethanol does not reach tank sensor (ignition process)	<ul style="list-style-type: none"> • Too little bioethanol in tank • Sensor defective • Wrong fuel in tank 	<ul style="list-style-type: none"> • Fill tank • Replace or reconnect sensor • Extract wrong fuel from tank
SC3	Thermocouple hot - HOT TRAY (ignition process)	<ul style="list-style-type: none"> • Fire was recently put out 	<ul style="list-style-type: none"> • Wait a few minutes before trying again
SC4	Two minute safety break (ignition process)	<ul style="list-style-type: none"> • The thermocouple has not warmed up sufficiently during the ignition process 	<ul style="list-style-type: none"> • Wait two minutes before trying again
SC5	Low level sensor not reached, pump timed out	<ul style="list-style-type: none"> • Bioethanol is running out and can no longer reach the low level sensor. • Fuel line is clogged or leaking • Pump is defective 	<ul style="list-style-type: none"> • Fill tank • Check for blockages or leaks. If this is the case, please contact your dealer • Check the operation of the pump, contact your dealer if the pump appears to be defective.
SC6	High level sensor not reached, pump timed out	<ul style="list-style-type: none"> • Bioethanol is running out and can no longer reach the high level sensor. • Fuel line is clogged or leaking • Pump is defective 	<ul style="list-style-type: none"> • Fill tank • Check for blockages or leaks. If this is the case, please contact your dealer • Check the operation of the pump, contact your dealer if the pump appears to be defective.
SC7	Timeout, waiting for fuel at low level sensor (ignition process)	<ul style="list-style-type: none"> • Bioethanol is running out and can no longer reach the low level sensor. • Fuel line is clogged or leaking • Pump is defective 	<ul style="list-style-type: none"> • Fill tank • Check for blockages or leaks. If this is the case, please contact your dealer • Check the operation of the pump, contact your dealer if the pump appears to be defective.
SC8	Timeout, waiting for fuel at high level sensor (ignition process)	<ul style="list-style-type: none"> • Bioethanol is running out and can no longer reach the low level sensor. • Fuel line is clogged or leaking • Pump is defective 	<ul style="list-style-type: none"> • Fill tank • Check for blockages or leaks. If this is the case, please contact your dealer • Check the operation of the pump, contact your dealer if the pump appears to be defective.
SC9	Time out, waiting for flame	<ul style="list-style-type: none"> • Thermocouple was insufficiently heated during the ignition process because the flame could not reach the thermocouple. 	<ul style="list-style-type: none"> • Fill tank • Check for blockages or leaks. If this is the case, please contact your dealer • Check the operation of the pump, contact your dealer if the pump appears to be defective.

Erro code	Description	Possible causes	Possible solutions
SCA	Time out, waiting for high level after flame.	<ul style="list-style-type: none"> The fuel did not reach the high sensor in the burner after the flame lit during the ignition process.. 	<ul style="list-style-type: none"> Fill the tank
SCB	Flame off	<ul style="list-style-type: none"> The flame has gone out for external reasons. Thermocouple is defective 	<ul style="list-style-type: none"> Rule out any possibilities that affect the flame. Try to restart the fireplace. If this does not work, contact your dealer
SCC	Ignition program failed	<ul style="list-style-type: none"> Software problem, the program has become corrupted. 	<ul style="list-style-type: none"> Contact your dealer.
SCD	Stop-command received	<ul style="list-style-type: none"> Normal situation, the user has switched off the fire with the remote control 	<ul style="list-style-type: none"> Restart fireplace with remote control
SCE	Bioethanol does not reach tank level sensor	<ul style="list-style-type: none"> Insufficient fuel in tank to sustain flame. 	<ul style="list-style-type: none"> Fill the tank

C TECHNICAL DATA

The values below depend on the type of Bioethanol used and the way in which the fire is built in.

Note: Always use Bioethanol with 85% to 96.6% alcohol. If in doubt, contact your dealer.

Values for Bio 50i

GROSS output on HIGH*1	23885	Btu/hr
Maximum consumption on HIGH	0,52	gal/hr
GROSS output on MEDIUM	22179	Btu/hr
Maximum consumption on MEDIUM	0,50	gal/hr
GROSS output on LOW	13645	Btu/hr
Maximum consumption on LOW	0,48	gal/hr
Minimal room volume	88	yd ³
Air renewal rate	1 room vol. per hour	
Rated supply voltage	120	V
Maximum rated power consumption*2	800	W

D DIMENSIONAL DRAWINGS

On this page you will find the dimensional drawings of the Fireplace with some of the important dimensions that you have to take into account when installing and installing your fireplace.

BIO 50I

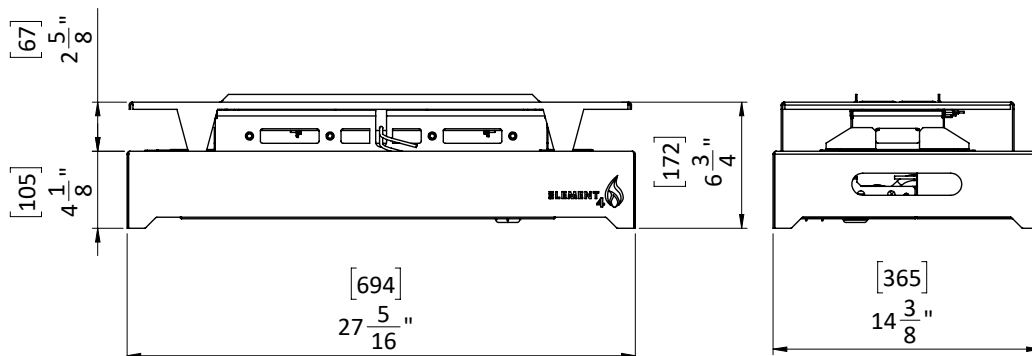
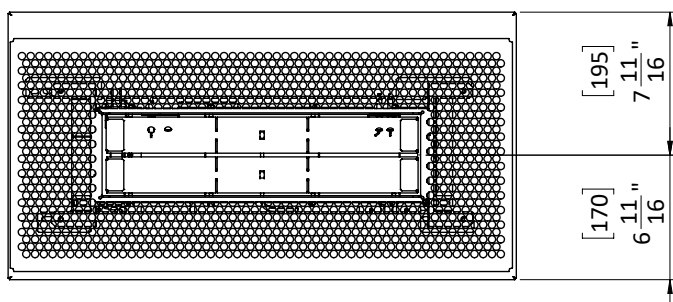
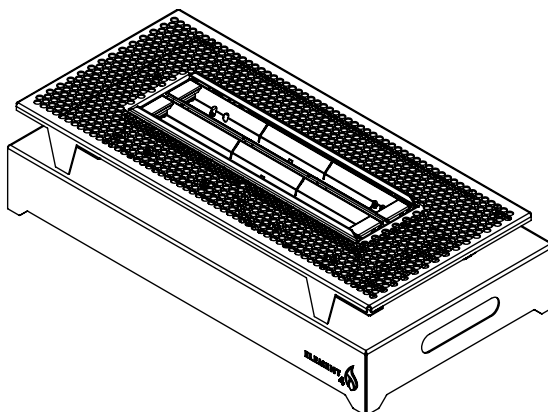


Figure D.A | Technical drawing of Sky S RD

E ELEMENT4 WARRANTY

Element4 Fireplace

Element4 warrants these gas fireplaces against defects in materials and workmanship for a period of TWO (2) YEARS from the date of original retail purchase. Glass is expressly NOT covered by this warranty.

If a defect exists, Element4 will, at its option, either (1) provide needed components using new or refurbished replacement parts or (2) exchange the product with one which is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product. A replacement product/part assumes the remaining warranty of the original product or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you.

When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes the property of Element4. All warranty claims must be submitted through the dealer from which you purchased the product. Check with your dealer in advance for any costs to you when arranging a warranty call. Shipping and/or delivery charges for parts are not covered by this warranty.

Nothing in the above shall be deemed to imply that this warranty shall apply to work which has been abused or neglected or shows evidence of changes or modifications by others with or without permit, damages caused by the acts of God, building settlement or moving, fire or vandalism. In addition, installation of this product that varies from the requirements stated in the instruction manual will void the warranty.

PRODUCT INSTALLATION RECORD

Installer: Please complete this form.
Customer: Please retain this information.

Model (Check one)	<input type="checkbox"/> Sky LF b	<input type="checkbox"/> Sky MF b	<input type="checkbox"/> Sky SF b
	<input type="checkbox"/> Sky LT b	<input type="checkbox"/> Sky MT b	<input type="checkbox"/> Sky ST b
	<input type="checkbox"/> Sky LRD b	<input type="checkbox"/> Sky MRD b	<input type="checkbox"/> Sky SRD b
	<input type="checkbox"/> Bio 50i		
Purchased from			
Installed by			
Date of installation			
Fireplace serial number			
Total horizontal section (venting)			
Total vertical section (venting)			

ELEMENT 4

Design & Assembly by:

ELEMENT 4 B.V.

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www.element4fires.com

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