REGULATING BIO CONTAINER (50)

DIY LINE OF FIRE BURNER

PRODUCT SPECIFICATION & INSTALLATION GUIDANCE

LINE OF FIRE

• burns bio ethanol
• up to 7 hours per 2L refill
• 52 cm long – you can install two containers together for an extra long line of fire
• no extra air vents necessary
• laboratory tested

NO gas      NO flue     NO smoke

Tel.: +44 (0) 207 724 1919
2 Abingdon Rd, Kensington
London W8 6AF
www.biofires.com
www.gelfireplaces.com

Please note that the information and advice contained in this brochure applies to our burners only.
KEY POINTS:

- **BURNING TIME:** 3.5–7 hours per refill
- **ONE REFILL TAKES:** 2 L of bioethanol fuel
- **EFFECTIVE RUNNING COST:** approx. £1 per hour (based on buying fuel in bulk)
- **HEAT OUTPUT:** 3–4 kW
- **FLAME REGULATION:** regulating lid and tool
- **FLUE NEEDED:** no
- **VENTILATION NEEDED:** window in the room
- **FUMES, SMOKE OR CARBON (BLACKENING EFFECT) PRODUCED:** none (if flame is not obstructed)
- **SMELL:** virtually none
- **ESTIMATED ROOM SIZE:** approx. 24 m²* with a ceiling height of 2.4 m (approx. 258 ft²* with a ceiling height of 7.9 ft)

* The recommended minimum room size is based on the full burning time of approx. 3.5–7 hours. If your room size does not meet the overall requirements, air flow can be improved by opening a door or window, regulating the flame or burning the fireplace for less than 3.5 hours (at a time) on full opening and less than 7 hours (at a time) when regulated.
KEY NOTES ON BUILDING YOUR DESIRED FIRE:

- Bio Container needs to be inserted in a completely fireproof and heatproof material like stone, slate, metal, brick, cement or Vermiculite Board. For the latter we highly recommend Vitcas store, specialists in providing refractory materials (the laboratory data sheets for Bio Container have been checked by a specialist from Vitcas). Regular fireboard is not suitable for lining your opening.

- The top and back of your fireplace opening must be also made of a completely fireproof/heatproof material as all the heat produced from the flame (approx. 3–4 kW) will be pushed there before going into the room. **Regular fireboard or MDF is not suitable!**

- Please note that Regulating Bio Container is not suitable to be installed in joinery.

- There should be approx. 500 mm clearance for the flame.

- If you are creating a long line using two Regulating Bio Containers (50) next to each other, please ensure there is a minimum 5 mm gap between them. See p. 6 for other safety distances.

- If your chimney is open, make sure to close it off with non-flammable material, such as a Vermiculite Board. This will prevent unnecessary draughts, which can cause the flame to enlarge, buckling the burner.

- No pebbles, logs or other accessories may be put across the flame. The nature of the ethanol flame is that it needs to be clear in order to burn clean, so if you are looking to use ceramic accessories, you should arrange them **around the flame opening**. From a distance this will make the right visual impression of a flame coming through driftwood or pebbles.

- A lot of people decide to use granite or other stone to line their fire with for a more luxurious look. When using natural stone, you have to ensure that the stone is thick enough to prevent cracking as this fireplace produces a heat of 3–4 kW per unit. Always consult with the manufacturer with regard to the required thickness of your stone. Please note that the stone must also be fitted with a highly elastic thermal glue to prevent the stone from cracking due to high temperatures.

- In some cases where a draught is present, i.e. a see-through fireplace or when placed in a floating shelf, an additional small toughened glass screen (approx. max. height: 10–15 cm, approx. thickness: 7 mm) must be installed at the front for a floating shelf or at the front and back if it is a see-through fireplace to ensure the flame is upright. This small glass screen(s) must be installed in completely open settings to prevent the flame from becoming volatile, leaning backwards and leaving marks on the surrounding materials.

- Please note that this fireplace cannot be fully enclosed in glass. The maximum height of toughened glass screen in hole-in-the-wall settings shouldn’t be more than 10 cm. Anything higher may cause excessive amount of heat internally, leading to metal expansion of the burner.
REGULATING BIO CONTAINER

ALL MEASUREMENTS ARE APPROXIMATE AND ARE GIVEN FOR GUIDANCE PURPOSES ONLY.

PLEASE NOTE: All information regarding building your own fireplace including measurements and material suggestions with Regulating Bio Containers is for general guidance only based on our customers’ and our own knowledge. This is not qualified building advice and we always encourage you to speak to a professional fireplace building company or an experienced builder if in doubt.
GUIDANCE for a sample use of our BIO CONTAINER

In principle, when building your bio fire with our products, you should follow all the fireproof material regulations that you would for a regular fireplace, as you will be dealing with a real flame, even though you do not need a FLUE.

MOST IMPORTANT SAFETY MEASURES:

• Treat bio fireplaces with COMMON SENSE. As odd as it may seem, there are no legal regulations and safety requirements regarding fires running on bio ethanol. In terms of fire regulations, our fires fall under the same category as CANDLES, but they obviously produce much more heat and a much bigger flame, so safety measures have to be adjusted accordingly.

• ALWAYS make sure that your fire opening is made of fully fireproof materials. MDF is not suitable!

• Make sure that you have enough space for flames and heat – we recommend 50 cm clearance above the top of the container.

• When building a fireplace for somebody else, i.e. when you are a designer working on a project, always make sure that the end user is provided with a set of USER INSTRUCTIONS. In developments, we suggest that you laminate the instructions and place them with documentation of the property AS WELL AS leave a copy next to the fireplace. Misuse by overfilling a bio fireplace may be very dangerous.

RECOMMENDED DISTANCE AND SURFACE GUIDE

A, B, C, D, E, F, G refers to recommended distance
1, 2, 3, 4 refers to recommended surfaces

A – we recommend 50 cm clearance for the flame
B – there should be 15 cm space on both sides. If you intend to place two containers one next to another, there must be a min. 5 mm gap between them.
C – we recommend 13 cm space on either side of the container
D – the depth of your fire opening should be 35 cm
E – if you wish to have a TV above your fire, you have to think of how much heat will be going up if your container is too close to the edge of the insert. Recommended minimum is 13 cm, optimal about 15–20 cm.
F – there is no requirement regarding the distance from the floor for the Regulating Bio Container. All you need to remember is to use solid non-flammable materials for the “bed” where you will be slotting the container into.
G – safety guidance: we suggest at least 40 cm clearance

1. This part has to be completely solid and fireproof. You can insert the Regulating Bio Container into brick, slate, stone, cement, ceramic or metal (stainless steel as lining of your whole opening is particularly recommended). No MDF, no plaster, no regular fireboard. You could use a Vermiculite Board, to be bought from our consulted refractory material specialist VITCAS.
2. Materials recommended: stainless steel, metal, stone, slate, cement, brick, tiles, etc. Vermiculite Board is also suitable.
3. This part is particularly affected by the heat! Make sure it is thick and solid: brick, steel, cement, stone, etc. Vermiculite Board is suitable.
4. Fireproof materials suitable: metal, stone, slate, tiles, brick, Vermiculite Board, cement, etc.
5. Use non-flammable material such as Vermiculite Board, metal, stone, slate, tiles, brick, cement, etc.
6. The TV must be either fully recessed or protected with a non-flammable shelf.
The Bio Container can hang on the steel rim with space around its sides and bottom to allow for extra venting (Option 1). Make sure the fit on top is loose to allow for the expansion of the metal when the container is hot.

If you cut a hole to drop the Bio Container in solid fireproof material (MDF or regular fireboard is not suitable!), you always need to leave about 2 mm extra space around all sides of the container to allow for metal expansion. You should also leave at least 50 mm around the burner inside the built-in hole and at least 50 mm below it to allow for enough air flow (Option 2 – see drawing). FAILING TO DO THAT MAY CAUSE YOUR LINING TO CRACK.

The RECOMMENDED DISTANCE AND SURFACE GUIDE (2 containers) is as follows:

A – we recommend 55 cm clearance for the flame
B – there should be 15 cm space on both sides
C – we recommend 14 cm space on either side of the container
D – the depth of your fire opening should be 40 cm
E – if you wish to have a TV above your fire, you have to think of how much heat will be going up if your container is too close to the edge of the insert. Recommended minimum is 14 cm, optimal about 15-20 cm.
F – there is no requirement regarding the distance from the floor for the Regulating Bio Container. All you need to remember is to use solid materials for the “bed” where you will be slotting the container into.
G – safety guidance: we suggest at least 40 cm clearance.
H – there must be a min. 5 mm gap between the containers

1. This part has to be completely solid and fireproof. You can insert the Regulating Bio Container into brick, slate, stone, cement, ceramic or metal (stainless steel as lining of your whole opening is particularly recommended). No MDF, no plaster, no regular fireboard. You could use a Vermiculite Board, to be bought from our consulted refractory material specialist VITCAS.
2. Materials recommended: stainless steel, metal, stone, slate, cement, brick, tiles, etc. Vermiculite Board is also suitable.
3. This part is particularly affected by the heat! Make sure it is thick and solid: brick, steel, cement, stone, etc. Vermiculite Board is suitable.
4. Fireproof materials suitable: metal, stone, slate, tiles, brick, Vermiculite Board, cement, etc.
5. Use non-flammable material such as Vermiculite Board, metal, stone, slate, tiles, brick, cement, etc.
6. The TV must be either fully recessed or protected with a non-flammable shelf.
This case study presents a hole-in-the-wall project with the original model of our Bio Containers.

The opening has to be made of or lined with a **completely fireproof material**, like brick, stone, slate, metal or a special Vermiculite Board, available to buy online.

Here a slot for the container has been made in solid-brick old chimney breast.

After measuring and testing, the Bio Container slot was lined with wire netting. Make sure the fit is not too tight, as metal expands when heated. Always leave 2–3 mm gap between the body of the container and your cut slot.

**The whole opening was lined with cement and painted black with fireproof paint.** Note that the stone surround opening (window) is smaller than at the back, which gives extra space for the hot air to flow.

The finished fireplace looks stunning and because it was properly insulated, **it is safe to have a flat TV screen above.** Limestone surround was made to measure.

The final opening is in a **stylish 'letter box' shape**, but the opening at the back is much higher.

By using ceramic Driftwood branches, the fireplace makes **a perfect impression of a gas fire** – the viewer will not be able to see a difference!
Our Aura Oil is specially formulated to be in close proximity to the flame and only evaporate with heat, unlike other fragrance oils which will catch fire and burn out instantly. Use the eye-dropper to place 1–3 drops of desired oil into a Fragrance Diffuser fitted on the lip of the Container.

**NOTE:** Aura Oil may leave stains on your lid, if you have no accessories and wish to keep your container clean, please make sure you wash/wipe the diffuser area often.

**WE HAVE 9 AMAZING FRAGRANCES:**

<table>
<thead>
<tr>
<th>AURA Fragrance Oil</th>
<th>No 1 Blazing Wood Fire</th>
<th>No 2 Forest Log Cabin</th>
<th>No 3 Winter Cinnamon Spice</th>
<th>No 4 Amber &amp; Vanilla</th>
</tr>
</thead>
<tbody>
<tr>
<td>No 5 Tuscan Frosted Fig</td>
<td>No 6 Woodlands Blackberry &amp; Rose</td>
<td>No 7 Oriental Green Tea &amp; Citrus</td>
<td>No 8 Roasted Coffee &amp; Cuban Tobacco Leaves</td>
<td>No 9 Seville Orange &amp; Antique Leather</td>
</tr>
</tbody>
</table>

**NOTE:** REGULAR ESSENTIAL OILS ARE NOT SUITABLE
Large Bio Container (original model) inserted into a brick wall with a lowered front limestone surround. On the right – a close up of the container and accessories around the flame, not across (see Case Study on page 7 of this brochure)

"Please find attached some photographs of my DIY fireplace in which I used one of your Bio Container fuel burners (large). I have been absolutely delighted with the container and it’s been a real talking point whenever we’ve had guests around. (...) Google search led me to a few websites that sold bio ethanol burners, with the Gel Fireplaces site being the most appealing and having the most reasonably priced products. I was a bit apprehensive as I was about to light the fire for the first time, wondering if it would really look as good as in the website pictures, but I wasn’t disappointed. In less than five minutes time there was a beautiful, dancing line of orange flames that put the predictable flame of a gas fire to shame. I was also really impressed with the amount of heat that it kicked out, despite what I’d read when researching bio-ethanol burners that they shouldn’t be relied on as a source of heat.

I’m no builder or DIY expert by any means, but I found building the fireplace I wanted – a hole in the wall type with an opening below it for real logs – fairly easy to do. There was a floor level opening there before where a typical gas inset fire was used. I had a certified gas fitter remove the gas pipes then I knocked out all the bricks at the front of the chimney breast up to approximately 120cm high then built up the shape I wanted using breeze blocks, 90cm concrete lintels and mortar. The breeze blocks are soft enough to easily chip out the slot shape to home the Bio container that I bought. I blocked up the flue, which is not required for bio ethanol fuel fires, and this means all the heat comes into the room and not lost up the chimney. A plasterer gave the job a nice smooth finish and I have to say it’s very rewarding sitting in front of a fireplace that you’ve built mostly yourself! Craig Gardner."
REVIEW:
Sally Hanson
"As the flue was not large enough in my flat, I was so disappointed not being able to have my dream ultra modern fire. Your bio container was an ideal solution to create a long line of fire. I bought 2 of them and lined them up. I used black granite which reflects the flame beautifully. I really use it for entertaining only and all my friends assume it's a gas fire!! It looks fantastic and it's also amazing how much heat you get from it! Thanks again for your great service."

Luke Stevens
"From my initial phone call for advice on a bio fire, to the ongoing communication keeping me informed of my order, through to delivery the service I have received has been excellent. Once unpackaged the product is excellent quality and produces the effect we wanted. Great service, great product, I would highly recommend Bio Fires to anyone thinking of getting a bio fire!"

SEE MORE CASE STUDIES ON WWW.BIOFIRES.COM
QUESTIONS? CALL US 020 7724 1919
NO gas     NO flue     NO smoke

Tel.: +44 (0) 207 724 1919
2 Abingdon Rd, Kensington
London W8 6AF
www.biofires.com
www.gelfireplaces.com

Please note that the information and advice contained in this brochure applies to our burners only.