

LivingFlame

LIVINGFLAME.CO.NZ



HELLO from all of us at Living Flame

THE BROOKLYN BIOFUEL FIRE Designed to give you the beauty of an open fire, without the smoke and hassle of a traditional fireplace

(with some efficient heat output of course!)

We go to great lengths to create, manufacture and distribute the finest range of fires, with innovative design form and function, and unique benefits to complement any surroundings.

To get the best out of your new Living Flame Brooklyn Fireplace, it really must be installed in accordance with these guidelines. For trouble-free, safe installation and operation, please read the following information carefully. Failure to follow these instructions can cause ongoing problems, and may void your warranties. Technical details and specifications are subject to change, so please ensure you have the latest specifications.

> We've tried to make the whole thing easy for you. So have a read, light your new fire, sit back and enjoy.





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THE REALLY IMPORTANT BITS

WARNING: Please read all the instructions carefully before operating your new fireplace

Ethanol Fuel and fireplace should ONLY be handled BY ADULTS. Keep children at a safe distance and never let them operate the fireplace and fuel.

DO NOT allow children or pets near fireplace when burning.

To ensure safe usage, you must carefully read and adhere to ALL of the manufacturer's instructions. These instructions should be kept for reference for as long as you own the fireplace and should be provided to anyone planning to use this ethanol fireplace.

NEVER OPEN FUEL BOTTLE NEAR OPEN FLAME. A DANGEROUS FIRE FLASH COULD RESULT.

NEVER overfill your fuel reservoir. NEVER fill fuel reservoir more than 3/4 full.

NEVER REFILL THE FUEL RESERVOIR WHILE THE FLAME IS BURNING OR UNIT IS HOT. Be sure fuel reservoir has cooled down for 15 minutes before attempting to add more fuel.

After filling your fireplace, be sure to replace bottle top and remove bottle from area of the fireplace before lighting the fireplace. D0 NOT touch while burning or immediately after burning.

CLEAN UP ANY FUEL THAT MAY HAVE SPILLED and make sure any surface moisture from spillage is gone or has evaporated before lighting.

Only use an extended lighter or long match to ignite. Never attempt to ignite with any other device.

Never store Ethanol fuel in direct sunlight, or allow fuel to become heated. Always keep it in a dry cool area and store fuel a safe distance from fireplace, away from children. Keep fuel container closed.

When first lit, the flame may be nearly invisible. The same happens just before fuel runs out. At all times, be certain that fire is out before refuelling. To be safe, always double check that no flame is present before refilling by closing lid or placing snuffer lid on top of fuel reservoir for at least one minute.





THE REALLY IMPORTANT BITS

the things you need to read

NEVER LEAVE A BURNING FIREPLACE UNATTENDED.

Never attempt to move the fireplace while it is lit (burning) or is still hot.

Never place any objects in the fireplace or near the flame (flammable or non flammable).

KEEP FLAMMABLE OBJECTS AT LEAST 4 FT AWAY FROM FIREPLACE WHILE LIT OR HOT.

Use only ethanol fuel made specifically for fireplaces. Burning common alcohol found in hardware stores is EXTREMELY DANGEROUS. Their emissions are toxic and not safe to inhale indoors or even outdoors.

ALWAYS READ FUEL SAFETY INSTRUCTIONS provided by fuel manufacturer.





BROOKLYN 800 IMAGE REFERENCE







OPERATING INSTRUCTIONS

for the Brooklyn 800

Keep this user manual carefully for the life of this product. The product is only to be used in combination with this manual.

Please read the instructions carefully before putting your Living Flame Brooklyn fire to use.

The burner used in this product is meant for indoor/outdoor use. The recommended temperature radius is 10°c until 25°c

IMPORTANT BROOKLYN INFORMATION

Never remove the isolation layer or disassemble the internal layer on the backside of the burner.

Make sure that the burner is levelled when the Brooklyn box is installed.

Keep a safety distance of at least 1 metre on (left/right and frontside) for objects. Keep flammable objects (eg. Curtains, furniture or bookshelves) away from the burner.

Keep pets and small children away from the burner when operating.

FILLING THE BURNER

It is of great importance that the liquid never runs outside the flame channel. Make sure to fill the burner carefully and slowly, so it cannot be overfilled.

- 1. Pour the Living Flame biofuel from the larger 20lt container into the 5lt no-spill container supplied with the Brooklyn fire. Do this in a place where it is safe if some fuel should spill and away from any flame.
- 2. Carefully secure the no-spill container cap and take to the Brooklyn fire location.
- 3. Open the burner channel lid and position the no-spill container in a pouring position, over the flame channel, inside the Brooklyn fire.
- 4. Push the green button on the top of the no-spill container, fuel should dispense from the no-spill into the flame channel. Stop when the fuel channel is full or the no-spill container is empty.
- 5. When the burner is filled, remove the no-spill container.
- 6. Warning. Make sure that the liquid does not flow outside of the burner channel. If so, it must be dried before lighting the fire. If lit, the biofuel can cause the burner to change shape or damage the surrounding paint.
- 7. Once safety checks are complete, the fire is ready to ignite.



С

OPERATING INSTRUCTIONS (CONTINUED)

for the Brooklyn 800

LIGHTING & EXTINGUISHING THE BROOKLYN

To light your Living Flame Brooklyn fire, open the channel lid to expose the flame channel. Dip the closing tong into the Living Flame Biofuel in the flame channel, and light the closing tong with the lighter. Light the burner by touching the lit tong on the fuel in the flame channel. To extinguish the Living Flame Brooklyn, simply hook the end of the closing tong through the eyelet on the channel lid and close the lid.

Fuel can be stored in the unit with the channel lid closed, though it will evaporate slowly over time.

PURCHASING BIOFUEL REFILLS

Simply call Living Flame on +64 9 622 1148 and speak to customer services, to take your order for more Biofuel. Living Flame has extensively tested several Biofuel products and developed a high grade Biofuel which is suitable for the Living Flame Brooklyn range. Delivery generally takes 2-3 days working days.

Living Flame Biofuel Costs

\$3.45 per lt inc GST Minimum order 20lt (\$69 inc GST)

Shipping Costs

Local Auckland Delivery (Orewa to Bombay) \$5.75 inc GST per bottle delivered (\$4.60 per bottle delivered on 4 or more purchased)

Greater North Island Delivery \$11.50 inc GST per bottle delivered

South Island Delivery \$23.00 inc GST per bottle delivered





#2 LIVING FLAME

BROOKLYN FIREBOX OPTIONS



Brushed stainless finish

Bronze finish



Black finish







BUILDING & INSTALLATION DIMENSIONS

Brooklyn 800 dimensions









BUILDING & INSTALLATION FRAMING

Brooklyn 800 dimensions









ELECTRICAL INSTRUCTIONS







getting smart about bioethanol fuel

WHAT IS BIOFUEL?

Biofuel is the collective term used for a wide range of natural fuels that are in some way derived from bio-mass (plant matter). The most common of these is Bioethanol.

These fuel alternatives are gaining increased public and scientific attention – especially due to the concerns over greenhouse gas emissions from fossil fuels, its effect on the environment and the need for energy security.

Bioethanol (ethyl-alcohol) fuel is the most common bio-fuel used worldwide. Bioethanol is a renewable, green energy source – energy generated by sunlight – a resource that cannot be depleted. Organic alcohol fuels are produced by fermentation of plants (like sugars derived from wheat, corn, sugar beets, sugar cane, milk, potatoes, fruit waste, etc.)

From an ecological point of view, bioethanol is safe for the natural environment. Carbon dioxide is a neutral greenhouse gas emitted during the fermentation process, as well as during the combustion (burning) of ethanol. However, this is cancelled out by the greater uptake of carbon dioxide by the plants as they grow to produce the biomass from which ethanol is derived. (The CO2 emitted by burning is thus the same quantity of CO2 absorbed by the plants while growing.)

No harmful substances are thus released – making bioethanol the environmentally friendly alternative.

The quantity of CO2 produced by the average fireplace burning for three hours is equivalent to burning two average candles. The amount of steam created is less than from a room humidifier. It is thus not required to install a chimney or any venting system when burning biofuel indoors.







getting smart about bioethanol fuel

BENEFITS OF A BIOETHANOL FIREPLACE

NO HEAT LOSS

With a traditional wood burning fireplace that has a chimney, you will lose 70 percent of the heat, and will only get to warm your home with 30 percent. With a Brooklyn bioethanol fuel fireplace, however, your home will get 100 percent of the heat. There is no chimney, so all the heat stays in the home.



RENEWABLE RESOURCES

Ethanol fuel that is used in the Brooklyn fireplace is made from sustainable resources. The ethanol fuel is made from fermenting sugars, including the use of cane sugar, beets, potatoes, milk and corn. Our oxygen-producing trees never get cut down, just to be burned up.

NO AIR POLLUTION

Traditional fireplaces put a lot of pollutants into the air, including chemicals, smoke, and toxins. The Brooklyn ethanol fireplace burns clean, so you never have to worry about any air pollution from it, nor about any ash, soot, or smoke. It is very important not to operate Bioethanol fireplaces in an area with a lot of draught. The draught causes the flame to swirl and twist quite erratically and does not burn the fuel completely creating excessive amounts of soot and blackening which will damage surrounding materials.

ALL NATURAL

The ethanol fuel that is used in the Brooklyn environmentally friendly fireplace is all natural. Made from plant based materials, it is harmless, and free of toxins.

SUPER EASY

Not only is the ethanol fireplace simple to use, but the ethanol fuel takes only seconds to refill. Setting up the ethanol fireplace for the first time is also a breeze, with most people having it ready to use within 30 minutes.







getting smart about bioethanol fuel

FIREPLACE QUESTIONS

BIOFUEL FIREPLACES - ARE THEY SAFE?

Undoubtedly, an important advantage of the bioethanol fires is friendly and safe combustion. These devices are completely safe. They are supplied with the liquid fuel based on ethanol. The product of combustion is water vapour and carbon dioxide. CO2 is emitted in the amount similar to that exhaled by humans. Maintaining the normal oxygen circulation carbon monoxide poisoning is not possible. Moreover, during the combustion there is neither smoke nor any smell. Thus, there are no chimneys needed and their operation is much simpler and safer than of traditional fireplaces.

The very structure of Brooklyn Biofuel fire is also equipped with solutions increasing their safety. First of all, they are made of high quality materials including: stainless steel and glass. Brooklyn fires are equipped with a burner constructed in a manner preventing fuel backflow, i.e. fire reaching the tank. Bioethanol flows through the intermediate ducts. Thus, we do not have to worry about the uncontrolled spread of fire.

IS A CHIMNEY NEEDED TO HAVE A BIOETHANOL FIREPLACE?

The process of fuel combustion in the bioethanol fireplace is completely safe. Thanks to the formula used in the ethanol-based biofuel, during combustion there is no smoke, hazardous substances or unpleasant odours. The products of combustion are water vapour and small amounts of carbon dioxide. A chimney is completely unnecessary. Traditional ventilation systems are enough to exhaust the small amount of carbon dioxide. Of course any rooms completely airtight (without ventilation) are excluded, as over time, the amount of CO2 may achieve an undesirable level. If the normal oxygen circulation is maintained carbon monoxide poisoning is not possible. Because the chimneys are not required when bioethanol fireplaces are installed, no servicing or permit is required.

DOES USING A BIOETHANOL FIREPLACE REQUIRE VENTILATING THE APARTMENT?

In the areas where ethanol fireplaces are installed, there is no need or requirement concerning specific time for ventilating the rooms. Exhausting small amounts of water vapour and carbon dioxide, which is generated during combustion, should be done through the traditional ventilation system. Completely airtight rooms, where there is not a single vent, simply are not suitable for placing the bioethanol fireplace. They are excluded. This is due to a possible, undesired accumulation of CO2 in the course of combustion. However, if your natural ventilation installations functions properly, you do not have to worry about the possibility of carbon dioxide poisoning.

Of course we cannot forget about the heating function of the bioethanol fireplace, which is its primary task. An average sized bioethanol fireplace replaces the heater with the capacity of 3000W. 100% of heat generated in the fuel combustion process is used in the room in which the bio ethanol fireplace is installed. Comparitively, in a traditional wood burning fireplace, only 30% of the heat remains in the heated rooms. The rest is exhausted through the chimney. Thus, the heat balance and efficiency of bio ethanol fireplace is much higher. In this case ventilating the rooms (only as a matter of principle) would not make much sense, especially if we have properly operating ventilation system.





getting smart about bioethanol fuel

CAN I USE A BIOETHANOL FIREPLACE IN MY BEDROOM OR BATHROOM?

If the unvented decorative appliance is used in a small room where less than 5.7m3 of air space is provided for each 1000 Btu per hour of unvented decorative appliance rating (considering the maximum burner adjustment), the door(s) to adjacent room(s) should be kept open or a window to the outside should be opened at least 25mm to guard against potential build-up of indoor air pollution.

DO NOT use the unvented decorative appliance in a bathroom, a room where sleeping accommodation is provided or any other small room. When installing a biofuel product into a bedroom, fixed additional make up air **MUST** be provided.

WHAT IS A BIOETHANOL FIREPLACE BURNING?

A bioethanol fireplace differs from a traditional fireplace primarily by the wood being replaced by special, ecological liquid biofuel. The composition of a biofuel, also called bioliquid, is usually based on the type of alcohol (e.g. ethanol). Bioliquid composition is appropriately selected, so that its combustion product is water vapour and carbon dioxide. Generally, the composition and amount of the combustion products is similar to the composition of the air exhaled by humans. Biofuel has one more advantage: during the combustion no smoke is created, which usually accompanies the combustion of traditional fuels. Despite its "ecological" nature, it does have better thermal parameters than other conventional fuels. Sample energy value during combustion is as follows:

- Biofuel approx. 30 MJ/kg
- Wood 12 MJ/kg
- Petrol 45 MJ/kg
- Coal 24 MJ/kg

HOW TO EXTINGUISH A POSSIBLE FIRE CAUSED BY A BIOFUEL FIREPLACE?

We know that all the fuel for bioethanol fireplaces is made using a base of ethanol. In case of fire resulting from a leaky bio ethanol fireplace, **DO NOT USE WATER TO EXTINGUSH AN UNCONTROLLED BIOFUEL FIRE.** What should we use to use to quickly put out the fire?

In restaurants, hotels or other public buildings, where bioethanol fireplaces are mounted there is access to fire extinguishers, whose extinguishing agent has the chemical composition that allows rapid extinguishing of uncontrolled biofuel fire. However, in a residential building or in apartments fire extinguishers are not readily available. The best way would be to extinguish the fire from its start point i.e. the place where the fuel spilled, using a blanket, quilt or other thick fabric. Covering the source of fire with a thick layer of fabric will restrict the access of oxygen and will extinguish the fire. Quick action as soon as possible after noticing the fire spreading can save the situation. If the fire becomes established, you must leave the home immediately and call the fire department on 111. So, the best methods to extinguish the fire would be:

- Fire extinguisher
- Covering the source of fire with a thick fabric to restrict oxyen





getting smart about bioethanol fuel

DOES PRICE MAKE A DIFFERENCE WHEN PURCHASING A BIOFUEL FIRE?

Many users who like the idea of a bioethanol fireplace, may look for a solution which they can afford. Obviously this is a rational approach, but it is important to avoid a really low-cost solution because it can be dangerous. Warnings of low-cost versions of the ethanol fireplaces should be taken very seriously. In France, where bioethanol fireplaces are probably the most popular in Europe, there have been a couple of serious accidents resulting from using low-quality burners. These products, (often made in China), were not sufficiently sealed and heated fuel was leaking. Unfortunately these ended with an unwanted fire. These burners were constructed of low quality materials like thin metal sheets, which expanded due to the heat. These changes to the metal altered the dimensions minimally and leaked biofuel, as it did not withstand the stress.

Similarly, thin metal sheet lids controlling the access to the open fuel, were also altered by the temperature, changing its dimensions. These lids then curved, could not be securely closed, thus resulting in the inability to extinguish the fire. We must remember that biofuel, like gas, lights up very rapidly and extinguishes rapidly. The fire spreads in hundredths of a second. Unlike wood-burning fireplaces, ethanol fireplaces light up in an instant. Therefore, the quality of the burner is more important here than a traditional fireplace, where starting the fire is just as easy, but slower. We should not save on quality. After all, we are dealing with fire.





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LIVING FLAME EXPRESSED GUARANTEE

september 2016

Inbuilt Fireplace bodies are constructed for a minimum working life of 15 years when installed in compliance with ASNZS5601, C1 Outbreak of Fire and manufacturer's installation, operating and maintenance instructions.

FIRE SURE LIFETIME BODY GUARANTEE

This is a Fire Sure Lifetime Replacement Guarantee that covers the fireplace body manufactured by Living Flame Fires and only covers the replacement of the fire body where an irreparable defect, due to material or manufacturing failure, occurs within the lifetime of the fire. The Fire Sure Lifetime Body Guarantee does not cover faults caused by incorrect installation, incorrect commissioning or misuse, and the fire should be installed and maintained in compliance with the guarantee and all conditions of the guarantee fulfilled.

ONE YEAR BURNER COVER GUARANTEE

This is a One Year Replacement Guarantee that covers the Biofuel burner parts used in the manufacturing of a Living Flame Fire. The manufacturer only covers the replacement of a burner part where an irreparable defect, due to material or manufacturing failure, occurs within the first year from date of supply by Living Flame Fires.

THREE MONTH PAINT COVER GUARANTEE

This is a Three Month Guarantee covering the painted surface of the firebox. It is a warranty against paint peeling and flaking off during normal use of the fire. It excludes discolouration as this is a normal property of the painted surface when heated by the flames. It also excludes any scratching of the painted surface that may occur at the time of installation. It is the responsibility of the installer to touch up any paint surfaces if necessary as it is part of a normal installation service. This does not affect the running of the fire but is aesthetically pleasing to have done. Please check with your annual service provider.

EXCLUSION FROM GUARANTEE

This Fireplace Replacement Guarantee excludes any costs associated with the removal or replacement on site of the fireplace at the owners request, required for finishing work or refurbishment work to the fireplace. This guarantee is only valid when the fire has been installed in New Zealand.

INSTALLATION

Living Flame Fireplaces must be installed to comply with:

- New Zealand Standards and Building Codes where relevant;
- Living Flame Installation Instructions;
- Living Flame Operating Instructions;
- Living Flame Maintenance Instructions.

Living Flame Fireplaces must be installed free from dampness and free from corrosive elements.



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LIVING FLAME EXPRESSED GUARANTEE (CONTINUED)

september 2016

INSTALLATION

Living Flame Fireplaces must be installed to comply with:

- New Zealand Standards and Building Codes where relevant;
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- Living Flame Operating Instructions;
- Living Flame Maintenance Instructions.

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GUARANTEE AND WARRANTEE VALIDITY

Guarantee claims will only be considered when completed by a Living Flame approved serviceperson in accordance with Living Flame procedures.

OPERATING

Living Flame Fireplaces must be operated in accordance with Living Flame Operating Instructions.

Living Flame Fireplaces should be used only for the burning of gas fuels: Bioethanol. The type of gas to be used should be specified at the time of ordering the unit.

Living Flame Fireplaces must only be operated with a Bio Flame Burner Insert that has been installed to Living Flame's installation instructions.

MAINTENANCE

Living Flame Fireplaces must be maintained, cleaned and re-commissioned annually as should all gas appliances.

DOMESTIC USERS

Living Flame Fireplaces should be inspected, cleaned, serviced and re-commissioned at least once yearly throughout the lifetime of the fire to maintain the guarantee.

COMMERCIAL USERS

Living Flame Fireplaces should be inspected, cleaned, serviced and re-commissioned at least twice yearly throughout the lifetime of the fire to maintain the guarantee.

This Guarantee should be kept in a safe place along with the Operating Instructions.







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