

# Gas Firepit Burner



## Installation and Instruction Manual



Please read the 'getting started' section of this manual,  
**BEFORE** you unpack the burner

# Contents

Getting Started	3
Safety Instructions	4
What's Included	5
Installation	6
Operating Instructions	11
Maintenance	13
Troubleshooting	13
Parts List	14
Warranty Information	15
Contact Information	16

# Specification

The Gas Firepit Burner is designed to work with the following Gas Types

Gas Type	Natural Gas G20 Methane	LPG G31 Propane	LPG G30 Butane
Appliance Category	I 2H	I 3+	I 3+
Supply Pressure	20 mbar	37 mbar	28-30 mbar
Heat Input	11.5 kW - 18 kW	9 kW - 18 kW	9 kW - 18 kW
Maximum Flow Rate	1.7 m3/hr	1.3 kg/hr	1.3 kg/hr

# Getting Started

## Unpacking the Box

Care should be taken when removing the Firepit burner from its packaging. The main burner and mounting plate are connected to the control box with two flexible gas pipes, a copper thermocouple lead, and a thin wire Piezo lead.

If the copper thermocouple lead becomes kinked or damaged this will render the burner inoperative.

**Extreme care** should be taken when handling the assembly, to ensure the main gas and pilot connections are not loosened, or become kinked. If these are damaged before or during installation, it could render the burner inoperative or dangerous. This 'flexibility' allows for easier installation in different sized pits. It also allows the burner and mounting plate to be lifted clear of the pit during maintenance, whilst still being connected to the control box.

## Factory Burn Test

Please note: ALL Firepit Burners have been burn tested prior to leaving the factory. Although each unit is cleaned, there may be the odd scorch mark around the pilot and main burner gas jets.

# Safety Instructions

**Please read before installing and operating your new Gas Firepit Burner.**

**This appliance must only be used outdoors.**

**WARNING Accessible parts may be very hot, Keep children away.**

**Any modification to this appliance may be dangerous and is not permitted.**

**The gas valve has been set by the manufacturer. Valve adjustment screws must not be altered by the user.**

**DO NOT** connect the Gas Firepit Burner to any form of gas supply, until it has been fully installed.

**DO NOT** attempt to light the burner, if you can smell gas. Immediately shut off the gas supply either at the bottle, or at the isolating valve inside your house. Contact your installer.

**DO NOT** use the Gas Firepit for cooking.

**DO NOT** throw anything into the Firepit.

**DO NOT** use the Firepit in windy conditions.

**DO NOT** leave the Firepit unattended when in use.

**DO NOT** allow small children near the Firepit.

**DO** isolate the gas supply either at the bottle, or inside your house, when not in use.

**DO** follow all instruction regarding the care and use of LPG gas bottles. (Contact your local LPG supplier for advice)

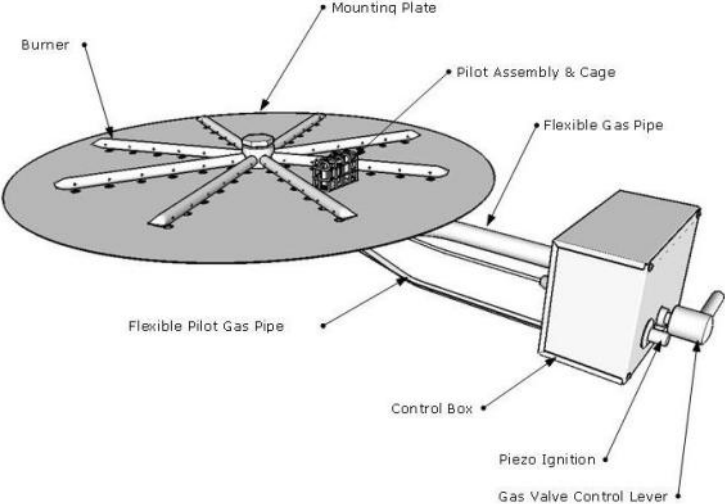


For LPG version, **DO** ensure the bottle is located a safe distance from the firepit.

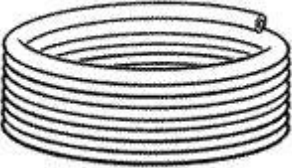

For LPG version, **DO** ensure the gas control lever is in the OFF position, when changing the bottle.

**Warning.** Flames from the firepit burner are almost invisible in direct sunlight.

**For further safety advice refer to the Operating Instructions within this manual.**

# What's Included

<p>Gas Firepit Burner Assembly</p>	 <p>The diagram illustrates the components of the gas firepit burner assembly. It features a circular mounting plate with eight burner tubes extending from its center. A pilot assembly and cage are positioned at the center of the burner tubes. A flexible gas pipe connects the burner assembly to a control box. The control box includes a piezo ignition and a gas valve control lever. Labels with arrows point to the following parts: Burner, Mounting Plate, Pilot Assembly &amp; Cage, Flexible Gas Pipe, Flexible Pilot Gas Pipe, Control Box, Piezo Ignition, and Gas Valve Control Lever.</p>
<p>Volcanic Lava Rocks</p>	 <p>A photograph showing a pile of approximately 15-20 volcanic lava rocks. The rocks are dark grey and black, with some reddish-brown spots, and are irregular in shape.</p>
<p>Allen Key</p>	 <p>A photograph of a single black Allen key, which is a hexagonal-headed screwdriver.</p>

LPG Version Only	
<p>4mtrs of LPG Gas Hose</p>	 <p>A photograph of a coiled LPG gas hose, which is a flexible, braided metal tube.</p>
<p>2 off Hose Clips</p>	 <p>A photograph of two metal hose clips, which are used to secure the ends of a gas hose.</p>

# Installation

For the Natural version, a **registered gas safety engineer** should be used to connect the gas supply.

For the LPG version, this can be connected by whoever is installing the Firepit burner. (Just like connecting your barbeque) Unless you are running the pipe work underground, in which case a gas safety engineer should be used.

There are five stages to complete before you can use your Firepit Burner:

<b>Design</b>	Design your garden layout, Firepit location, Gas pipe runs etc.
<b>Build</b>	Build the 'pit' that will house the Firepit Burner. Run gas pipes.
<b>Install</b>	Install the Firepit Burner. Connect to gas supply. Test for leaks
<b>Test</b>	Test the burner before completing any permanent work.
<b>Finish</b>	Finish building/Installing. Cover burner with lava rock, Test again.

# Design

## Select a Suitable Location

Gas Firepits must be located at a safe distance from your house, or any combustible structure, such as a shed, or wooden fence etc. Never install a gas fire pit close to a power source, or overhanging power cables. Also, before you decide on the installation spot, make sure that there are no electric cables or other services under the ground. Generally, a distance of at least 3 meters from nearby structures is recommended. Do not install under any form of roof covering, or near overhanging trees etc. Never use a gas Firepit inside your home. Fire pits are meant for outdoor use only.

Apart from the safety aspect, you also have to consider the aesthetics and functional use of your Firepit. It needs to 'blend in' and 'stand out', as it will quickly become the main focal point of your garden. Gas Firepits are usually installed in some form of concrete or brick structure, to match the surrounding patio area. You will also need some form of seating surrounding your Firepit. This can either be a permanent structure as part of your landscaping, or simply use your existing outdoor patio furniture. If using permanent seating you must consider the ideal distance from seat to Firepit, so you keep safe, as well as keep warm. A typical distance from the centre of the firepit, to the edge of the seating would be around 1.3 metres.

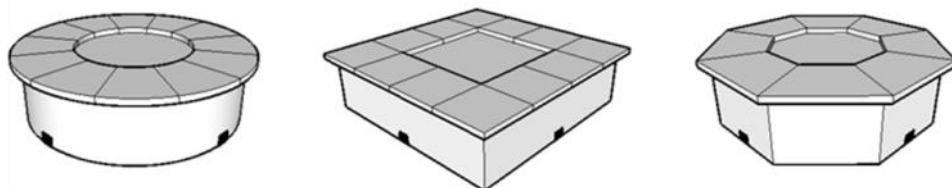
## Build

What you build will depend on the type, size and shape of your Firepit and the design of your garden. We cannot cover all conceivable designs and options, but have included some 'generic' installation ideas, and tips.

**WARNING...** All Firepits will need ventilation holes at the base of the Firepit. We recommend either some form of airbrick, or a minimum of 100cms<sup>2</sup> area. These air vents should be positioned at ground level. There are FOUR very good reasons to provide these.

- They allow rainwater to escape from inside the pit, to the surrounding patio area. Without them, you pit would quickly fill with water, which could cause damage to your Firepit Burner and invalidate the warranty.
- They allow air to be drawn in, under the Firepit burner. This aids combustion, and produce larger flames.
- The area under the burner can become extremely hot. Air vents will allow this excess heat to dissipate.
- LPG Gas is heavier than air, and any un-burnt gas will collect inside the base of your Firepit. Without ventilation holes to allow this gas to escape, gas will gradually build up, until it reaches an ignition source, where it will explode with great force. **This could cause serious injury.**

The Firepit Burner assembly will become a permanent feature built into some form of permanent structure. However, it would be best to design the 'pit' so that the Burner can be removed without too much effort at a later date. Your Gas Firepit Burner should last for many years, but like all gas appliances it may need servicing at some point in time, it would be annoying to have to demolish half the pit, or take up the patio, in order to fix the problem.



# LPG Installation

A screw on Propane regulator having a capacity of 4kg/h at a supply pressure of 37 mbar must be used. Clip on regulators cannot provide adequate gas flow.

You will also require a minimum 19kg sized propane bottle, as the smaller capacity bottles cannot provide adequate gas flow.

LPG gas hose should be checked annually to ensure it is in good condition. It is recommended that it is replaced in accordance with standard practices

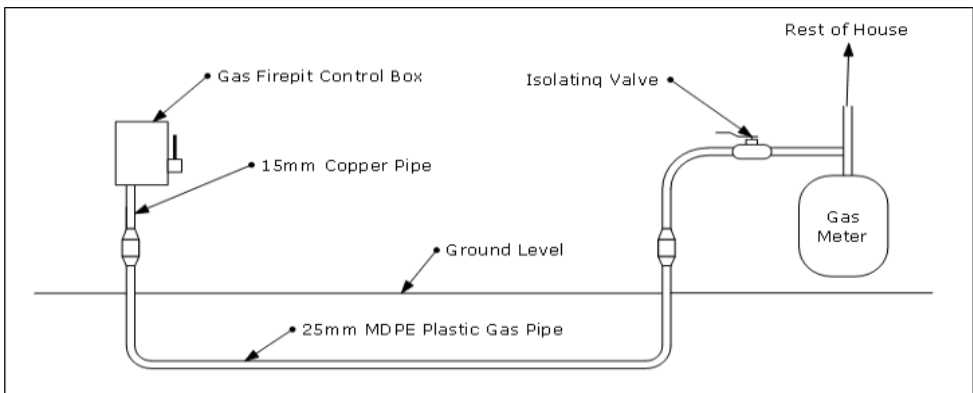
When the appliance is not being used for prolonged periods the hose should be disconnected from the appliance and the regulator disconnected from the cylinder. The assembly should then be stored to avoid adverse effects that may result from weathering. The cylinder should be stored in accordance with recommended practices.

The hose should be located so that it is not a trip hazard, it is not subjected to undue strain or placed where it could be damaged. The hose must not be buried underground and there should be a good flow of air around the hose.

# Natural Gas Installation

Your local Gas Safety Engineer will know how to run underground gas pipes. We recommend taking the feed from as near to the meter as practical. There will need to be a main isolating valve close to this feed, which should be easily accessible. This will be used to cut off the gas supply to the Firepit when it's not being used **OR in an EMERGENCY**.

**WARNING... Failure to install this correctly could cause serious injury. If the installation does not conform to local gas regulations, it may invalidate your home insurance, and could also be illegal.**

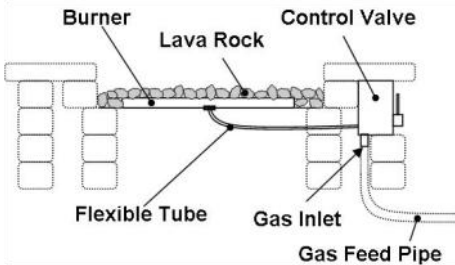




# Install

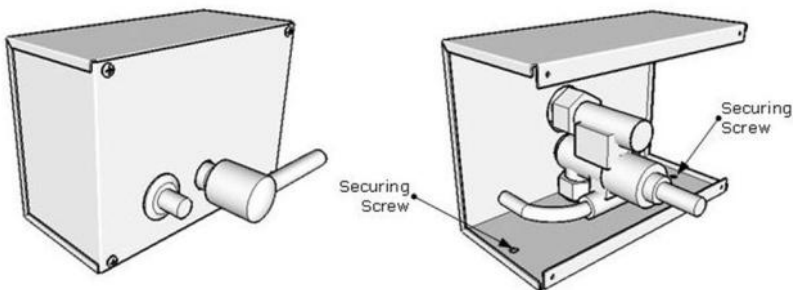
Our Firepit Burner has been manufactured, very accurately. However, building a brick or concrete 'pit' to house the burner assembly may not be so accurate. Therefore building the pit and installing the burner, should be carried out at the same time. The installation should also allow room for connecting up the gas supply.

The main valve housed inside its stainless steel control box, has to be pushed in quite hard when lighting the pilot light. Therefore the box must be secured quite rigidly in the surrounding pit. The Burner assembly complete with backing plate, should be supported in some way, but not fixed permanently. This will allow for easy removal to connect the gas supply and for maintenance at a later date.



**NOTE:** The metal tray that the burner is mounted onto will warp and bend due to the heat. This does not affect the safe operation of the burner and is purely cosmetic. We recommend setting the burner down around 75mm below the top surface of your pit, so any warping won't show

To secure the control box to the surrounding structure, there are two mounting holes **inside** the base of the control box. You will need to disassemble the control box in order to access the securing holes.



Set the valve lever to the off position. Loosen the grub screws and remove the lever. Remove the four retaining screws and carefully slide out the front of the control box. Note, ensure the piezo lead does not become disconnected or damaged. There are two holes in the base of the control box, which can be used to secure the box into the surrounding brickwork. Once the box is secure, slide the front cover back into place, ensuring the piezo lead is still attached and undamaged. Replace the retaining screws. Replace the valve lever in the off position and tighten the grub screws.

## Test

Once the gas feed pipe is connected and tested for leaks, the Firepit burner can be lit for the first time. This may take several attempts before the pipes are purged of air.

Note, the burner is designed to operate with Lava Rock covering the burner. This helps to dissipate the gas whilst adding air to the mixture. DO NOT operate your firepit burner for too long without the lava rock.

Note, with the LPG version without the lava rocks, you might notice black smoke coming from the flames. This is quite normal. Once the lava rocks are in place, this smoke will disappear. You will also notice a build up of soot on the burner arms. Again, this is due to the lack of air due to running without lava rock. After you've finished testing and the burner has cooled, simply clean the burner with a damp cloth.

WARNING.. The flames coming from your Firepit burner are almost INVISIBLE during the day, so don't assume it's not working just because you can't see anything. Once you are happy everything is working safely, then it's time to finish the details.

## Finish

There may be some building work that needs finishing off, but by now the Firepit should be in and working.

The final part is to cover the burner with lava rock. DO NOT simply tip the bags of lava rock onto the Burner, as the bags usually contain some fine dust which could clog the burner jets. It's best to empty the bags into a suitable container and then place the rocks by hand around the burner.

**Place the rocks only one layer deep, and do not cover the pilot cage. Too much lava rock can cause the burner to overheat**

Once you've arranged the lava rock, test again. Warning, Lava Rocks become very hot, but don't glow red so they look cold when the flames are out. Let them cool down before you touch them again.

As placement of the lava rock is pretty random, this can effect the 'look' of the flame pattern. Sometimes moving the rocks around can produce a more desirable affect.

# Operating Instructions

Although the operation of the Firepit is relatively simple, this section mainly relates to the safety aspect.

## Before use

- Ensure there are no gas leaks. If you smell gas, DO NOT USE. See Safety Instructions.
- Check the burner area for any combustible material that may have fallen into the pit, such as leaves, twigs, paper, or anything that does not belong. Remove and dispose of.
- Check and sweep the immediate surrounding area for anything combustible, which might get blown into the pit.
- WARNING - Ensure all pit air vents are clear. (See Installation Manual)
- Consider the Wind factor. A strong wind can quickly lead to huge flames, which could be difficult to control. It is best to wait till the wind has subsided, before you light the Firepit.

## How to operate

- Turn the gas supply on. (At the bottle, or at the isolator valve)
- Ensure there are no gas leaks. If you smell gas, turn the gas off immediately. DO NOT USE.
- Turn lever to pilot position.
- Push lever hard, and hold. Press ignition, Repeat until pilot light is lit. Note, this can initially take some considerable time to purge the air in the pipes, particularly after disconnecting and reconnecting the gas bottle.
- Keep lever pressed in for a further 10 seconds, then release. If pilot goes out, try again.
- Once pilot is lit turn lever to full on position. Main burner will light.
- Adjust lever between high and low position as required.

## During Use

- Adjust lever between high and low position as required
- A supervising adult must always be present around a gas Firepit.
- Children must never be left alone or unsupervised around the Firepit.
- Do not throw anything into the Firepit
- Do not run when approaching the Firepit, in case you trip and fall in.
- Do not attempt to jump across the Firepit.

# Operating Instructions

## After Use

- Turn lever to 'Pilot' position. The main burner will go out.
- Turn lever to 'Off' position. The pilot light will go out.
- Do not leave the area before the flames are completely out.
- Even after you turn it off, the Firepit will be considerably hot for some time. If there is a chance anything flammable could get blown onto the Firepit, DO NOT leave it unattended until it has cooled sufficiently.
- Children must never be left alone or unsupervised while the Firepit is still hot.
- Turn gas supply off, at the bottle, or inside your house.

## Special Note: Using your Firepit after it's been raining.

Rain will not damage the Firepit Burner, but will make the Lava Rock wet. The burner will still work, but as the lava rocks heat up, they can give out some steam. The wet conditions can also render the piezo spark igniter inoperative until it dries out. In extremely wet conditions, the pilot burner jets can become temporarily blocked. We recommend you allow your Firepit burner to dry before using again.

## Maintenance

- Ensure the Burner area is kept clean and clear of dirt and especially anything combustible.
- Ensure the Air Vents at the base of your pit are clear at all times.
- Its recommended the Firepit is covered when not being used, to stop leaves etc falling in.
- The lava rocks might eventually show signs of soot, which will not harm the rocks, but could build up and block the Burner jets. Simply remove the rocks and wash and scrub with a stiff brush to remove the soot.
- If you haven't used the Firepit for some time, it might attract spiders and other insects. It's recommended you remove the lava rocks. Clear the burner area of anything that doesn't belong and then replace the lava rocks.
- The control box and valve lever can be cleaned with a suitable stainless steel cleaning product.

## Troubleshooting

### **Pilot fails to light.**

- Make sure the main gas supply is turned on. (Check bottle is not empty)
- Try pressing the ignition button several times. Make sure you are keeping the main gas lever pressed in for at least 10 seconds. It's quite a strong spring.
- If the ignition button stays in, lubricate with WD40 with the burner not lit.
- Keep trying as it can take quite some time to purge all the air from the pipes.
- Move the lava rocks from above the pilot cage, and ensure cage area is clear. Try relighting.
- Try lighting the pilot with a match or lighter, as the spark electrode might be wet and inoperative.

### **Main Burner fails to Light**

- If the pilot is lit, there is no reason the main burner would not light.
- If the pilot is not lit, the flame failure device has cut off the gas supply. Wait 2 minutes, then try relighting the pilot.

### **Main Burner suddenly goes out.**

- If the pilot is extinguished for any reason, ie a sudden gust of wind, or it started raining, then the main gas supply is automatically cut. Turn the control lever to the off position, and leave for 2 minutes before relighting the pilot. Once the pilot is lit, the main burner will work.
- For bottled gas, your bottle is empty. Replace the bottle for a full one.

# Parts List

<b>Part No</b>	<b>Part Description</b>
FP01-01	Control Box
FP01-01C	Control Box Screws x 4
FP01-02	Burner & Round Base
FP02-03	Burner & Square Base
FP03-03	Burner & Octagonal Base
FP01-06	Pilot Cage
FP01-A02/1	Pilot Support Bracket + 2 Screw
FP01-A02/2	Pilot Thermocouple
FP01-A02/3	Piezo Electrode
FP01-A02/4	Piezo HT Lead
FP01-A02/5	Pilot Mounting Bracket
FP01-A02/7	Pilot Flexible Gas Pipe
FP01-A03/1	Gas Control Valve
FP01-A03/2	Gas Control Valve Lever
FP01-A03/3	Gas Control Valve Lever Grub Screw
FP01-A03/4	Piezo Unit
FP01-A03/5	Main Flexible Gas Pipe
FP01-A03/6	Fulham Hose Nozzle (LPG Version)
FP01-A04/1	Lava Rock (5kg bag)
FP01-A04/2	LPG Hose 4mtr (LPG Version)
FP01-A04/3	Hose Clips x 2 (LPG Version)
FP01-AK	Allen Key

# Return to Base Manufacturers' Warranty

All Gas Firepit Burner delivered to a UK mainland address are covered by our 12 month return to base limited warranty. Should you have any problems, please use the contact details at the back of this manual. Please quote your invoice number and serial number, (which can be found on the label on the control box). Also, if purchased through a dealer or installer, his name and contact details.

Firepits UK Ltd make every effort to ensure all firepit burners leaving our factory are in perfect working order. Each burner is 'burn tested', to ensure it functions safely and correctly. Due to the nature of the product, problems can be caused during the installation process, which are not covered by the manufacturers' warranty.

To return your firepit burner, you must first contact us explaining the reason for the return

1. Return to Base warranty warrants the firepit burner to the end user, against defects in materials and workmanship for the period of one year, which begins on the date of purchase by the customer.
2. Under a return to base warranty the end user is responsible for the cost of packaging and shipping the unit to us. We are not liable if the burner is improperly packed resulting in damage during transit. Please retain all original packaging together with manuals, as this will assist in returning the product in the correct packaging.
3. We will rectify the fault within a reasonable amount of time from the point or receipt at our factory.
4. The Return to Base warranty covers only those defects which arise as a result of normal use of product, and do not apply to any: Improper & inadequate maintenance or modification. Repairs carried out by non-authorized persons. Damage caused by improper handling or installation. Operation outside the product specifications. Physical damage, accidental damage, neglect, or user abuse. Normal wear and tear.
5. If there is no fault found or the problem has been caused by third party installer, user error or physical damage and any of the reasons stated in section 4, a no fault found charge may be applied, you will be emailed and phoned to confirm this charge within 7 days of the item being tested, you will also be charged return carriage for return of your goods.
6. The warranty applies to the original owner of the firepit burner and is non transferable.
7. We reserve the right to repair or replace any faulty components. Faulty goods may be replaced with factory-refurbished products.
8. The warranty is void if, there is any attempt made to repair the system by a non-authorized third party, or if the system is inadequately or improperly maintained or modified All repairs and replacements will carry a 90 days warranty or the original warranty balance, whichever is greater.
9. We reserve the right to replace discontinued products that are still under warranty with the nearest equivalent specification product.
10. This document is not proof of purchase or proof of warranty,

## Non-Faulty Returns Conditions

For non-faulty returns purchased directly from Firepits UK Ltd, please contact us before returning the burner. All non-faulty returns must be returned within one month of purchase. They must be returned undamaged in their original undamaged packaging, along with all accessories and manuals etc. If any returned item is damaged or parts missing, including the original packaging and manuals etc, we reserve the right to charge a 15% restocking fee. Goods returned after one month of purchase will be liable for a 15% restocking fee. Any goods found to be damaged upon receipt at our factory, may be subject to a repair fee of up to 50%.

### Goods Damaged in Transit:

If goods are visibly damaged on receipt, it's very important to sign for the goods as damaged on arrival with the courier and then contact us immediately.

## Contact Details

Gas Firepit Burner Assembly	
Name	Firepits UK Ltd
Phone	01425 626171
email	sales@gasfirepits.co.uk
Address	10 Shirley Road Southampton Hampshire SO15 3EU
Installer	
Name	
Phone	
email	
Address	
Gas Safety Engineer	
Name	
Phone	
email	
Address	
Serial Number: S/N _____	

Make a note of the person/company that built and installed your new Firepit. For natural gas installations, make a note of the Gas Safety Engineer that connected your Firepit. Also, record your serial no. here. (See front of control box)