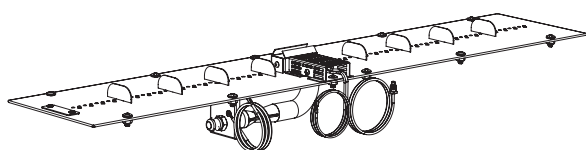
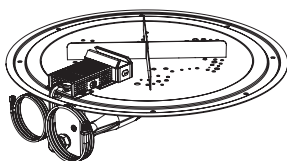


INSTALLATION, OPERATION AND MAINTENANCE MANUAL



LINEAR GAS BURNER: **G37T**
ESF.2.B.G37 7.5lbs/3.4kg



ROUND GAS BURNER: **G16T**
ESF.2.B.G16 5.5lbs/2.5kg

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

CAUTION

DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand, and follow these instructions for safe installation and operation.

! DANGER !

If you smell gas:

- Shut off gas to the appliance.
- Extinguish any open flame.
- If odor continues, keep away from the appliance and immediately call your gas supplier or fire department.
- After leaving the area, call your gas supplier or fire department.
- Failure to follow these instructions could result in fire, or explosion, which could cause property damage, personal injury or death.

! WARNING !

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

An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.

! WARNING !

Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Read the installation and maintenance instructions thoroughly before installing or servicing this equipment.

! DANGER !



CARBON MONOXIDE HAZARD

This appliance can produce carbon monoxide which has no odor.

Using it in an enclosed space can kill you.

Never use this appliance in an enclosed space such as a camper, tent, car or home.

! WARNING !



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

! WARNING !

For outdoor use only. Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

⚠ DANGER: FLAMMABLE GAS UNDER PRESSURE.
LEAKING LP-GAS MAY CAUSE A FIRE OR EXPLOSION IF IGNITED
CAUSING SERIOUS BODILY INJURY OR DEATH.
CONTACT LP GAS SUPPLIER FOR REPAIRS, OR DISPOSAL OF A
CYLINDER OR UNUSED LP-GAS.

⚠ WARNING: FOR OUTDOOR USE ONLY.*

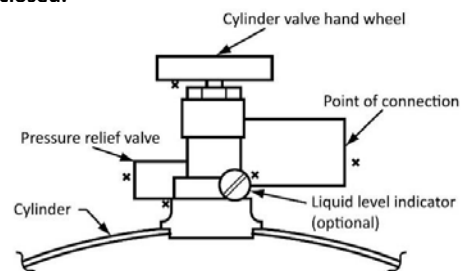
DO NOT USE OR STORE CYLINDER IN A BUILDING,
GARAGE, OR ENCLOSED AREA.

⚠ WARNING:

- Know the odor of LP-gas. If you hear, see, or smell leaking LP-gas, immediately get everyone away from the cylinder and call the Fire Department. Do not attempt repairs.
- Caution your LP-gas supplier to:
 - Be certain cylinder is purged of trapped air prior to first filling.
 - Be certain not to over fill the cylinder.
 - Be certain cylinder requalification date is checked.
- LP-gas is heavier than air and may settle in low places while dissipating.
- Contact with the liquid contents of cylinder will cause freeze burns to the skin.
- Do not allow children to tamper or play with cylinder.
- When not connected for use, keep cylinder valve turned off. Self-contained appliances shall be limited to a cylinder of 30 lb. capacity or less.
- Do not use, store or transport cylinder where it would be exposed to high temperatures. Relief valve may open allowing a large amount of flammable gas to escape.
- When transporting, keep cylinder secured in an upright position with cylinder valve turned off.

WHEN CONNECTING FOR USE:

- Use only in compliance with applicable codes.
- Read and follow manufacturer's instructions.
- Consult manufacturer's instructions concerning the cylinder connection provided with your appliance.
- Be sure the regulator vent is not pointing up.
- Turn off all valves on the appliance.
- Do not check for gas leaks with a match or open flame. Apply soapy water at areas marked "X". Open cylinder valve. If bubbles appear, close valve and have LP-gas service person make needed repairs. Also, check appliance valves and connections to make sure they do not leak before lighting appliance.
- Light appliance(s) following manufacturer's instructions.
- When appliance is not in use, keep the cylinder valve closed.



DO NOT REMOVE, DEFACE, OR OBLITERATE THIS LABEL
***EXCEPT AS AUTHORIZED BY ANSI/NFPA 58**

⚠ DANGER: Do not store a spare LP cylinder under or near a barbecue grill, or other heat sources. NEVER fill an LP cylinder beyond 80% full: a fire causing death or serious injury may occur.



LISTING AND CODE APPROVALS

A. Appliance Certification

MODEL: ESF.2.B.G37, ESF.2.B.G16
LABORATORY: Underwriters Laboratories, Inc. (UL)
TYPE: Decorative Gas-Fired Outdoor Fireplace
STANDARD: Outdoor Decorative Gas Appliances
 ANSI Z21.97-2017
 CSA 2.41-2017

This appliance has been tested in accordance with ANSI Z21.97-2017 and CSA 2.41-2017 for Canada and has been listed by Underwriters Laboratory (UL) for installation and operation as described in these installation and operating instructions.

The installation must conform with local codes or, in the absence of local codes, ANSI Z223.1 * NFPA 54 National fuel gas code – Natural gas and propane installation code, CSA B149.1 – or propane storage and handling code, CSA B149.2

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70; or the Canadian Electrical Code, CSA C22.1, if applicable.

B. BTU Specifications

Model	Orifice Size		Max Input BTU	
	LP	NG	LP	NG
G16T ESF.2.B.G16	#40 (Burner) #52 (Valve)	#29 (Burner) #43 (Valve)	Low: 25,000 BTU/h High: 65,000 BTU/h	
G37T ESF.1.B.G37				
	PROPANE		NATURAL GAS	
IDEAL INLET PRESSURE	11 in. WC (2.74 kPa)		7 in. WC (1.74 kPa)	
MAXIMUM INLET PRESSURE	14 in. WC (3.48 kPa)		10.5 in. WC (2.61 kPa)	
MINIMUM INLET PRESSURE	8 in. WC (2.00 kPa)		3.5 in. WC (0.87 kPa)	

EDUCATE ALL USERS

Manuals can be found on our website or by contacting your local distributor.

WHY REGISTER YOUR WARRANTY?

Registering your warranty achieves more than simply activating your warranty - it provides our head office with the information that we require in order to communicate important safety and regulatory information to you should the need arise.

This could include things like:

- Prompt notification in the unlikely event of a potential hazard,
- Reminders about regular safety steps and maintenance procedures,
- New model announcements or accessories that suit or enhance your purchase.

It is important that we are able to communicate effectively with our customers as part of our commitment to continual improvement, consumer safety and property protection.

If you purchased your product through an external distributor, retailer or agent. MAD Design USA does not have these details on file and may have trouble sourcing them as systems and best practices vary from business to business.

Please register your warranty today. You can do this online at www.ecosmartfire.com or by sending through your details as itemized on page 24 via email to info@mad-usa.com.

MAD Design USA

5875 Green Valley Circle, Suite 100
 Culver City CA 90230
 T + 1 (888) 590.3335
 E info@mad-usa.com

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Markings

Listing Label Information/Location

The model information regarding your specific appliance can be found on the rating plate attached to your burner via a metal chain. See the sample rating plate below for locations of specifications.

DECORATIVE OUTDOOR GAS-FIRED BURNER



MH60943
Outdoor Fireplace

This burner is for installation within approved models ONLY and is not to be installed into custom designs.

Model: EcoSmart Fire GB Series
ANSI Z21.97-2017 and CSA 2.41-2017 for Canada. Installation must conform with local codes or in the absence of local codes, ANSI Z223.1 * NFPA 54 National Fuel Gas Code – Natural gas and propane installation code, CSA B149.1 – or propane storage and handling code CSA B149.2

Type of Gas: Natural Gas, Propane Gas

WARNING: Must Not Be Used For Cooking.

WARNING: For Outdoor Use Only. If stored indoors, detach and leave cylinder outdoors. To be installed by an authorized person in accordance to appliance installation instructions.

MINIMUM CLEARANCES: Top: 6 Ft. [72"] (1829mm)
Sides: 2 Ft. [24"] (610mm) Bottom: 8" (203mm)

Minimum clearance from sides and back of unit to adjacent combustible construction below top of unit is 8" (203mm) from sides and 8" (203mm) from back.

Minimum horizontal clearance from sides and back of unit to adjacent vertical combustible construction extending above top of unit is 24" (610mm) from sides and 24" (610mm) from back.

MFG. DATE XX/XX

SERIAL # XXXX DATE DE FAB. XX/XX

Model	Orifice Size		Max Input BTU	
	LP	NG	LP	NG
G16T ESF2.B.G.16	#40 (Burner) #52 (Valve)	#29 (Burner) #43 (Valve)	Low: 25,000 BTU/h High: 65,000 BTU/h	
G37T ESF1.B.G.37				

	PROPANE	NATURAL GAS
IDEAL INLET PRESSURE	11 in. WC (2.74 kPa)	7 in. WC (1.74 kPa)
MAXIMUM INLET PRESSURE	14 in. WC (3.48 kPa)	10.5 in. WC (2.61 kPa)
MINIMUM INLET PRESSURE	8 in. WC (2.00 kPa)	3.5 in. WC (0.87 kPa)

 **WARNING** 

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

EcoSmart Inc
5875 Green Valley Circle
Suite 100, Culver City
CA 90230

FOR YOUR SAFETY, READ BEFORE LIGHTING BURNER

EcoSmart Inc
5875 Green Valley Circle
Suite 100, Culver City
CA 90230

WARNING! If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury, and/or loss of life.

A. This appliance is equipped with a safety ignition and shutdown device, but must be lit manually. When lighting, follow these instructions exactly.

B. BEFORE LIGHTING, smell around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electric switch. Do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

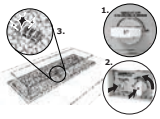
C. Use only your hand to operate the control valve. Never use tools. If the control valve will not operate by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in unwanted operation.

D. Do not use the appliance if any part has been underwater. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and any gas control which has been underwater.

CAUTION: The supplied propane regulator hose must be used for all 20lb (9kg), self-contained propane cylinder installations. The regulator is set for an outlet pressure of 10/5 in WC (2.61 kPa).

OPERATING INSTRUCTIONS

- STOP! Read the safety information above on this label.
- This appliance is equipped with a safety ignition and shutdown device, but must be lit manually. When lighting, follow these instructions exactly.
- Ensure that the control valve is in the "OFF" position
- For self-contained propane cylinder installations, slowly open the valve on the cylinder by rotating counter clockwise. For hard-piped installation, ensure that all manual shut-off valves on the supply line are open.
- Press and hold sparker button. Verify that an audible and visible spark is present inside the ignition wind guard.
- Gently press and turn the control knob counter-clockwise to the "LOW/IGNITION" position. Fully depress the knob and hold for 3-5 seconds until ignition is proven and the burner remains lit when the knob released.
- If burner does not light after 10 seconds of attempting ignition, turn the valve clockwise to the "OFF" position and wait 5 minutes to allow gas to dissipate before attempting ignition again. NO NOT attempt to light burner if the smell of gas is present.
- With proven ignition, the burner can be adjusted between "LOW" and "HIGH" by rotating the control knob.



TO TURN OFF GAS TO APPLIANCE

- Turn the control knob clockwise to the "LOW/IGNITION" position, if not already there. Then gently depress the knob and turn clockwise to the "OFF" position.
- For self-contained propane cylinder installations, turn the cylinder valve clockwise to close it completely and disconnect the propane regulator hose from the cylinder.

 **WARNING** 

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other gas appliance. An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other gas appliance.

Important Safety Information

PROP 65 WARNING

Cancer and Reproductive Harm

The use of this product, as well as by-products of the combustion of propane, natural gas and/or ethanol, contain chemicals known to the State of California to cause cancer and/or other reproductive harm.

The Safe Drinking Water and Toxic Enforcement Act of 1986 referred to as Proposition 65, requires the State of California to publish a list of chemicals known to cause cancer, birth defects or reproductive harm. It also requires California business to warn the public of potential exposures to these chemicals which result from the products they use, make or distribute. This list, which must be updated at least once a year, has grown to include approximately 900 chemicals since it was first published in 1987.

The use of this product and/or the combustion of fuels, such as propane, natural gas, and/or ethanol in this product can expose you to harmful chemicals including formaldehyde, which are known to the State of California to cause cancer, and harmful chemicals including acetaldehyde, which are known to the State of California to cause birth defects and/or other reproductive harm. For more information go to www.P65Warnings.ca.gov/.

The Company encourages you to use its products and propane, natural gas and/or ethanol safely. You must read and follow all use, care and manufacturer instructions for all products

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Important Safety Information

Congratulations on your purchase of this decorative gas appliance. The appliance you have selected is designed to provide safe operation, reliability and efficiency.

This manual contains instructions for the safe installation and use of your new gas appliance. Before installing and using this appliance, read the entire manual and follow the instructions and warnings carefully.

This owner's manual should be retained for future reference. If you are the installer (and not the owner) please ensure that this manual is given to the owner for them to learn about safe operation of the appliance and for future reference.

This appliance is a Decorative Gas Appliance for **OUTDOOR USE ONLY** and **MUST NOT** be used for cooking. Do not burn solid fuels in this appliance.

This gas burner is for installation within approved models **ONLY** and is not to be installed into custom designs.

The information contained in this owner's manual, unless noted otherwise, applies to all models and gas control systems.

Keep children away from the appliance. Never leave children unsupervised when the fire is operating.

In case of emergency, have on hand a multi purpose dry chemical type fire extinguisher (ABC in USA).



WARNING

Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Read the installation and maintenance instructions thoroughly before installing or servicing this equipment.



WARNING

It is imperative the burner be kept clean



WARNING

Do **NOT** use this appliance if any part of it has been underwater. Immediately call a qualified service technician inspect the appliance and replace any part of the control system and any gas control which has been underwater.



Installation and service of this appliance should be performed by qualified personnel. We recommend NFI certified, factory-professionals, or technicians supervised by an NFI certified professional.

1. EXPLOSION/FIRE HAZARD

- i. Do not operate in an area with oxygen tanks in use or if flammable vapors are present.
- ii. Never smoke while lighting the appliance.

2. LOCATING THE FIRE

- i. Ensure there is enough ventilation for safe operation.
- ii. Locate the appliance away from combustible materials by observing the minimum clearance distances depicted in this manual especially for items susceptible to movement.
- iii. Locate the gas hose out of pathways where people may trip over it or in areas where the hose may be subject to accidental damage.
- vi. Place the appliance on solid, flat, level surface and where it will not get excessively wet or submerged in water.

3. OPERATING THE FIRE

- i. Do not use if damaged or malfunctioning.
- ii. For decorative purposes only. Not suitable for continuous operation. Do not use the appliance to heat or boil water or as a cooking appliance. Do not put wood, charcoal, paper or other combustible objects in the Fire.
- iii. MAD Design USA is not liable for any damage caused by using the incorrect type of fuel.
- vi. **NEVER** leave a fire unattended.

4. HOT SURFACE HAZARD

- i. Due to high surface temperatures, keep children, pets, clothing and furniture away from the unit for up to 1 hour of use, as the unit is hot while in operation, contact with the appliance may cause skin burns.

5. USING ACCESSORIES

- i. Use only *authorised* accessories with your appliance.
- ii. To reduce the risk of fire or injury, do not modify the appliance in any way.
- iii. The Burner has not been tested with an unvented gas log set. To reduce the risk of fire or injury, do not install an unvented gas log set into this appliance.

For decorative media you must:

- Ensure the decorative media does not interfere with the burner parts.
- Confirm quality and suitability to ensure the media will not explode, emit carbon monoxide or fumes when exposed to extreme temperature variations.
- Fire accessories must not be smaller than 1/2in (12.7mm) diameter so that the accessories cannot impede the burner parts.

- iv. Do not use fittings or spare parts, other than those available from or recommended by the manufacturer of this appliance.

If you have any questions regarding any of the above important safety information please contact your retailer or MAD Design USA.

Please store these warnings in a safe place for future reference.

Clearances

When planning an appliance installation, it's necessary to determine the following information first:

Environmental Conditions

WARNING: Ensure that your fire is positioned away from flammable materials and other sources of ignition (combustible materials, gasoline and other flammable vapors and liquids) at all times. Pay very close attention to positioning the fire away from items that may move as a result of wind and drafts. For example trees/branches/curtains/paper and the like.

The base of the burner within the model must never come into direct contact with flammable materials.

Locating your appliance

Adequate and constant ventilation is important to keep the appliance functioning properly and safely, including ventilation of the appliance undersides. Setting the appliance without air circulation underneath can cause heat build up and improper combustion. Do not remove the feet or operate the appliance with missing feet.

1. Locate the appliance and the LP tank cover on hard, flat surface that extends the full length and width of the appliance. The appliance and the LP tank cover can be placed on combustible surface (such as wood deck) or on non-combustible material (such as concrete). Ensure all clearances to the sides and clearances above the appliance are observed at all times (see figures 1 and 2).
2. Maintain a minimum air space of ½" (12.5mm) between the ground surface and the underside of the appliance sidewalls by adjusting the articulating feet up or down as necessary.
3. Do not place the appliance over grass, artificial turf, carpet or any uneven surface, as this will block the airflow underneath the appliance. See figure 1.
4. Follow the same instructions above for the LP tank cover (if purchased). See figure 1.

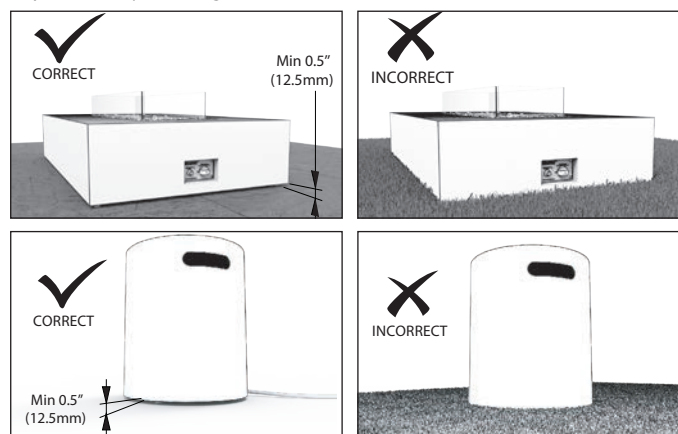


Figure 1

Position the appliance adjacent to the gas supply line or LP gas supply cylinder.

DO NOT locate the appliance where it will get excessively wet or submerged in water.

Minimum Clearances

Note: Measurements are distances closest to the flame

Side clearances to fixed and stable furniture items that are not susceptible to movement such as lounges or patio furniture must remain a minimum of 24in (610mm) away from the flame at all times.

Overhead clearances to items that are susceptible to movement (e.g. Curtains/Trees) must remain a minimum of:
- 78.7in (2000mm) away from the flame at all times.

Ceiling clearances must remain a minimum of:
- 72in (1,829mm) to overhang from top of burner.

Please note that:

Any furniture items or fittings directly above or beside the Burner installation must be deemed suitable for heat tolerances by their manufacturer e.g. electronic items including screens and entertainment equipment, wallpaper, laminates, veneers, glues and reconstituted materials.

MAD Design USA is not liable for any injuries or damages sustained through any installation not in compliance with this manual.

A fire extinguisher is strongly recommended.

 WARNING 	
	MAD Design USA disclaims any responsibility for, and the warranty will be voided by, the following actions: • Installation and use of any damaged components. • Modification of the burner assembly or burner orifice. • Installation other than as instructed in this manual.
Any such action may cause a fire hazard	

 WARNING 	
	Fire Risk Provide adequate clearance: • Around air openings • For service access Locate appliance away from traffic areas

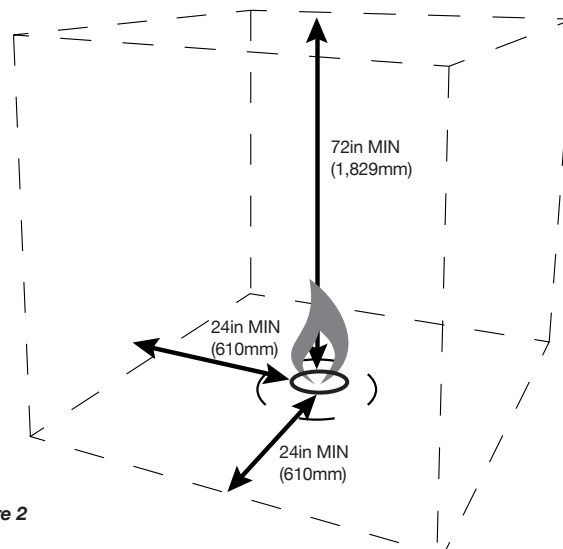


Figure 2

Clearance measurements are distances from the edge of the flame, not from the centre.

Before You Start

Tools and Supplies

Before beginning the installation, be sure that the following tools and supplies are at hand:

- Gloves
- Safety Glasses
- Phillips screwdriver
- Non-corrosive leak-check solution
- Adjustable wrenches (2X)
- 1 AAA battery
- 10mm Wrench
- 11mm Wrench (for NG conversion only)
- Flat screwdriver

Initial Safety Inspections

Before assembling the appliance it is important to inspect the following and determine if it is safe to proceed:

- Carefully remove all burner components from packaging.
- Check for damage. Do not use damaged components.
- The hose assembly must be replaced prior to the appliance being put into operation if there is evidence of excessive abrasion or wear, or if the hose is damaged. Do not use parts other than those specified by the manufacturer.
- The burner must be replaced prior to the appliance being put into operation if it is evident that the burner is damaged. Do not use parts other than those specified by the manufacturer.
- Position the assembly in the desired location. This location must be adjacent to the gas supply line. You must have easy access to the gas valve control knob after it is installed and connected to the gas supply because the ON/OFF gas valve is used to turn the burner on and off.

The location for the installation must be out of the pathways where people may trip over it or in areas where the hose may be subject to accidental damage.

In addition, for LP Gas Models:

- Be certain to mount or set the LP gas cylinder on a flat stable surface and restrain it to prevent it from tipping.
- Make sure the tank valve is turned completely off (clockwise).
- Ensure the tank valve has the proper external mating threads (tank valve marked “USE WITH TYPE 1”).
- Inspect the hose shipped with the appliance for any damage. Do not use if there is evidence of damage.
- **Once assembled, position the hose** out of pathways where people might trip over it or in areas where the hose might be subject to accidental damage.

**WARNING**

Asphyxiation Risk

- This gas appliance is for outdoor use in a well-ventilated space.
- This unit must not be installed inside an enclosed structure or unvented appliance

CAUTION

Sharp Edges

Wear protective gloves and safety glasses during installation.

**WARNING**

Inspect appliance and components for damage. Damaged parts may impair safe operation.

- Do NOT install damaged, incomplete, or substitute components.

Report damaged parts to your dealer.

Gas Hookup

Fuel

Before making gas connections, ensure the appliance being installed is compatible with the available gas type.

Gas Pressure

Proper input pressures are required for optimum performance. Gas line sizing requirements need to be made following NFPA54.

WARNING

Fire Risk

Explosion Risk

Verify inlet pressures.

- High pressure may cause overfire condition.
- Low pressure may cause explosion.
- Verify minimum pressures when other household gas appliances are operating

Install regulator upstream of valve if line pressure is greater than ½ PSI.

Pressure requirements for appliance are shown in table below. Minimum pressures must be met when other household gas appliances are operating.

Manifold Pressure	Natural Gas	Propane
Minimum Inlet Pressure	7 in w.c	11 in w.c
Maximum Inlet Pressure	10.5 in w.c	14 in w.c

The appliance must be disconnected from the gas supply piping system during any pressures in excess of ½ psi (3.5 kPa).

The appliance must be isolated from the gas supply piping system during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psi (3.5 kPa).

Gas Connection

Note: Have the gas supply installed in accordance with local building codes, if any. If not, follow ANSI 223.1. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.

Note: A listed (and Commonwealth of Massachusetts approved) ¾ in (9.5mm). T-handle manual shut-off valve and flexible gas connector are connected to the ¾ in (9.5mm) control valve inlet.

If substituting for these components, please consult local codes for compliance.

Incoming gas line should be piped to the ¾ in (9.5mm) connection on the manual shutoff valve.

WARNING

Fire Risk

Explosion Risk

- Gas build-up during line purge may ignite.
- Purge should be performed by qualified technician.
- Ensure adequate ventilation.
- Ensure there are no ignition sources such as sparks or open flames.

CAUTION: A small amount of air will be in the gas supply lines. When first lighting appliance it will take a short time for air to purge from lines. Subsequent lighting of the unit will not require such purging. Never allow the ON/OFF valve to remain in the open position without pressing and continuing to hold Ignitor button FIRST.

WARNING

Fire Risk

Explosion Risk

Asphyxiation Risk

CHECK FOR GAS LEAKS

- Check all fittings and connections.
- Do not use open flame.
- After the gas line installation is complete, all connections must be tightened and checked for leaks with a commercially available leak-check solution. Be sure to rinse off all leak-check solution.

Fittings and connections may have loosened during shipping and handling

Gas Hookup

LP Gas Supply

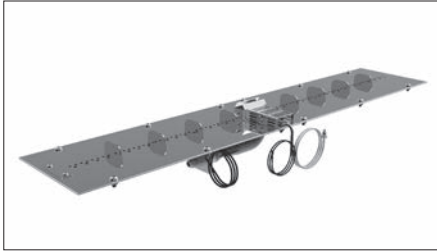
- The pressure regulator and hose assembly supplied with LP models must be used. Replacement pressure regulators and hose assemblies must be those specified in this manual.
- The LP gas supply cylinder used with LP models must be constructed and marked in accordance with the specifications for LP gas cylinders of the U.S. Department of Transportation (DOT). Specifications for LP-Gas Cylinders, or the Standard for Cylinders, Spheres and Tubes for Transportation of Dangerous Goods and Commission, CAN/CSA-B339, as applicable
- Cylinders must be stored outdoors in a well ventilated area out of the reach of children. Disconnected cylinders must have threaded valve plugs tightly installed and must not be stored in a building, garage or any other enclosed area.
- Storage of this appliance indoors is permissible only if it has been disconnected from its fuel supply (natural gas line or LP gas cylinder).
- The LP gas cylinder supply system must be arranged for vapor withdrawal.
- The LP gas cylinder used must include a collar to protect the cylinder valve.
- When an LP model is not in use, the LP gas must be turned off at the supply cylinder.
- The specific size and capacity of the cylinder(s) to be used: 20 lb. or hard plumbed to propane tank.

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION SERVICES, OR MAINTENANCE CAN CAUSE INJURY OR PROPERTY DAMAGE. REFER TO AND UNDERSTAND THIS MANUAL. FOR ASSISTANCE OR ADDITIONAL INFORMATION CONSULT A QUALIFIED INSTALLER, LICENSED TECHNICIAN OR THE GAS SUPPLIER.

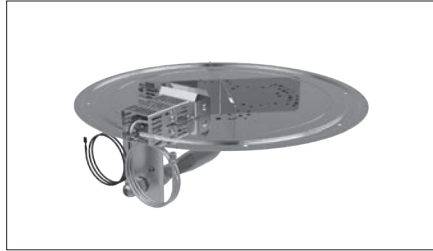
Standard Equipment Received

Please ensure that all items have been received. The burners include the minimum equipment required to operate the burner safely.

Burners



Linear Gas Burner - ESF.2.B.G37



Round Gas Burner - ESF.2.B.G16

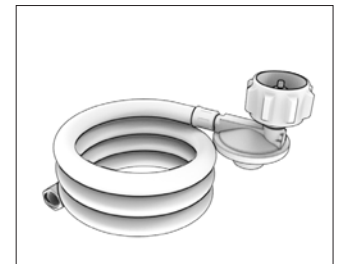
Included items



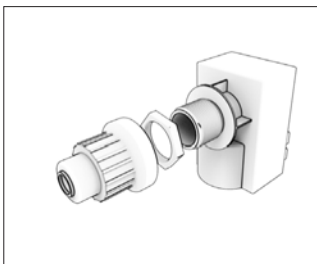
Operations Manual



G16: LP - Orifice #40 (burner), #52 (valve), NG - #29 (burner), #43 (valve)
G37: LP - Orifice #40 (burner), #52 (valve), NG - #29 (burner), #43 (valve)



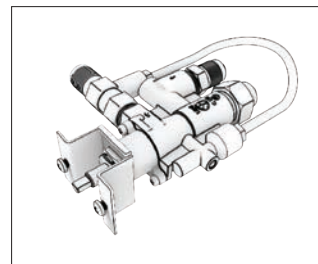
LP Hose & Regulator (10')



Sparker Box



Grounding Wire 36"
 (ships connected to burner)



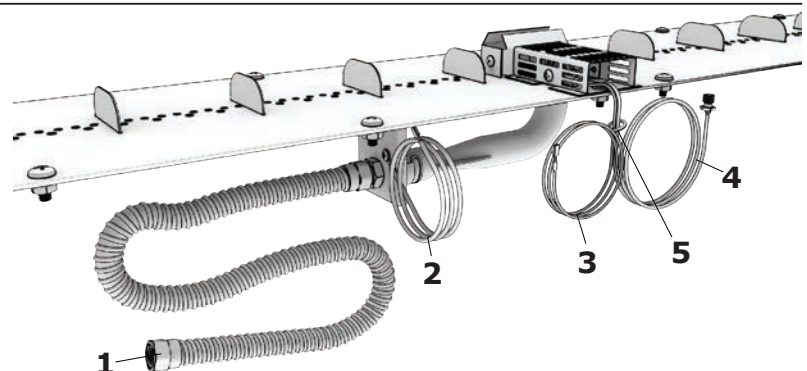
Valve and Screws
 (to connect to the control panel plate)



Key and Control Knob

Locating supplied parts

1. Flex hose
2. Grounding Wire
3. Ignition Wire
4. Thermocouple Wire
5. Silicone Grommet

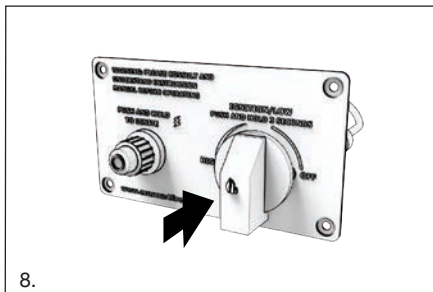
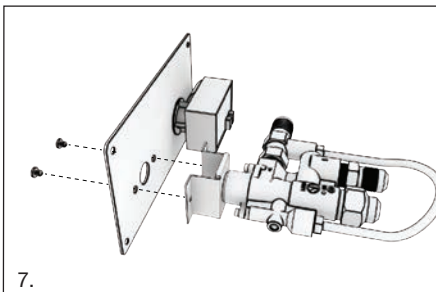
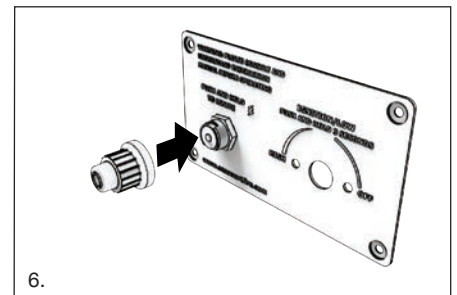
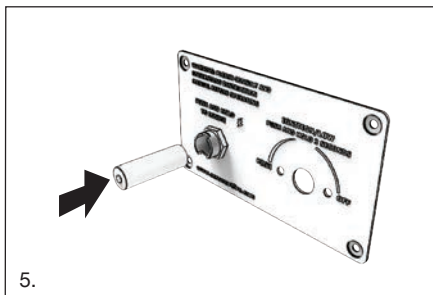
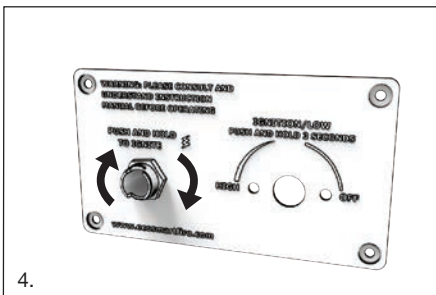
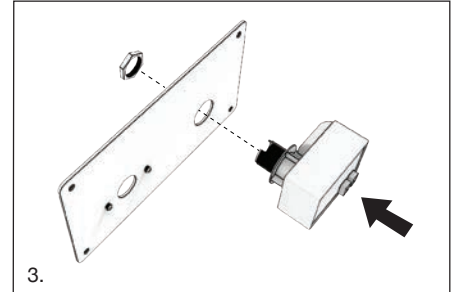
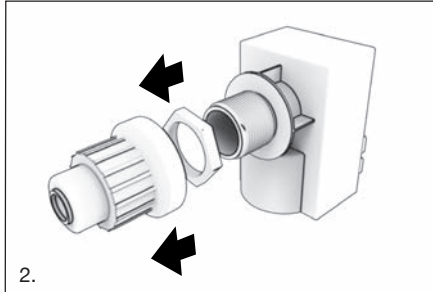
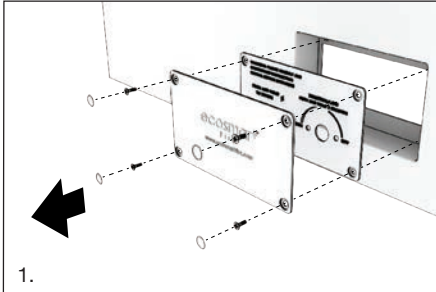


Standard Equipment Received

Assembling the control panel

Confirm you have received all necessary parts as illustrated on page 9.

1. Locate the EcoSmart cover plate on the unit, remove the four(4) plastic screw caps and unscrew the cover plate from the unit.
Keep the four screws and screw caps. The gas control panel plate should be directly behind the EcoSmart cover plate. The EcoSmart cover plate is no longer needed.
2. Remove the sparker cover and plastic nut from the sparker box.
3. Place the sparker box behind the control panel plate and insert the sparker box into the control panel plate.
4. From the front of the control panel plate, secure the sparker box by attaching the plastic nut.
5. Insert AAA battery, ensuring the + direction of the battery is facing outward when installed.
6. Screw on the sparker cover to hold the battery in place.
7. Attach the control valve to the back of the control panel plate using the provided screws. The valve must be installed with orientation as shown.
8. Install the turn Knob.

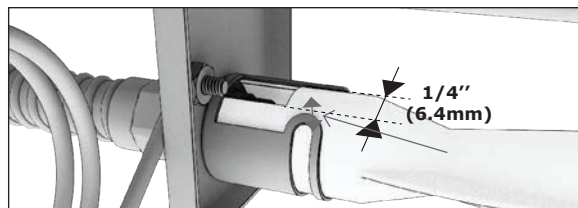


Burner Assembly - Propane

PROPANE

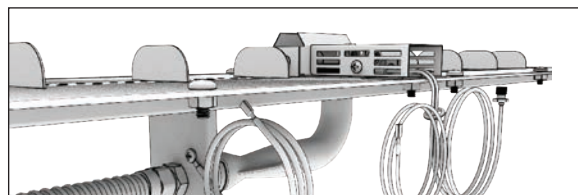
1. Unpack burner box. Remove all items and check against the items listed on page 9 of the manual to ensure all parts needed are ready.

2. **THE BURNER IS SHIPPED FOR PROPANE FUEL SOURCE.** Verify that you have the correct orifice installed by checking it against the fuel orifice chart on page 1. The orifice has the number stamped on the side. Once confirmed, check that the attached flexible gas line is tightly attached. Ensure that the air shutter is open $\frac{1}{4}$ " (6.4mm) on each side of the air shutter.

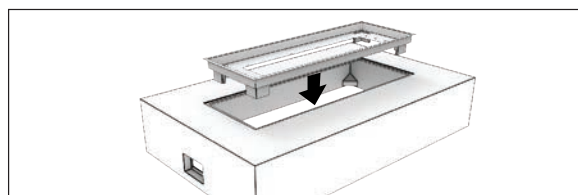


3. Ensure ignitor wire is secured to bottom of Ignitor.

4. Ensure grounding wire is secured to bottom of burner.

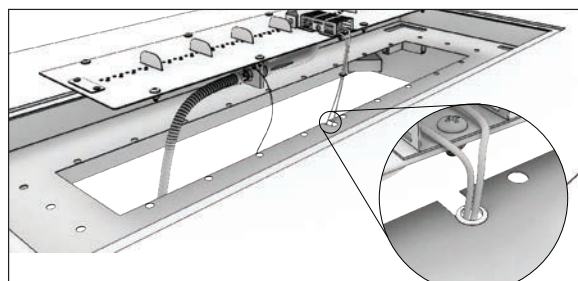


5. **Linear burners only:** (this step is not required for round burners) Carefully place the Metal tray into the unit opening.

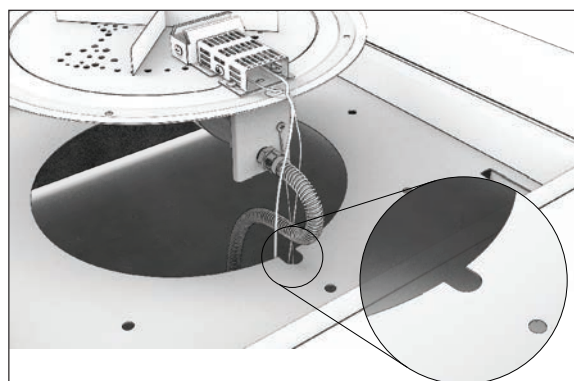
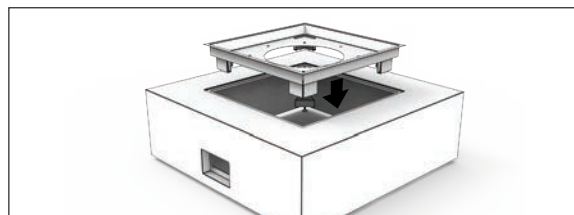


6. Position the burner assembly so that the gas input flexible line (where the orifice is located) is pointing towards the control plate cutout location of the surround. Carefully uncoil the thermocouple tube. Feed the flexible gas line, thermocouple tube, grounding wire and the ignitor wire through the burner location opening first then place lower the burner into its final location. Install the grommet by sliding it into the slot, place the burner into its final position.

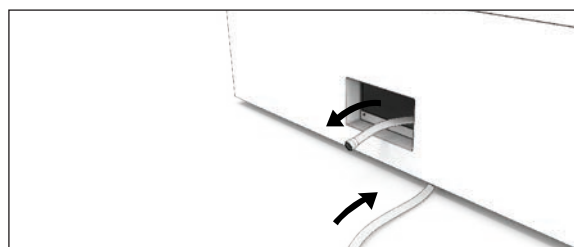
NOTE: The tray holes are not designed to align with the burner screws. Simply sit the burner on top of the tray, it will be held in place by the black glass charcoal media. Do not remove the screws on the sides, they assist in elevating the burner to allow for water drainage.



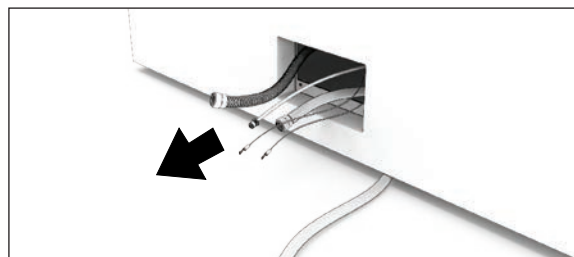
7. **Round burners only:** (this step does not apply to linear burners) insert the metal tray to the Surround Unit. Carefully place the burner on the Surround Unit near the tray opening – without inserting the burner into the final location. Rotate the burner to make sure the thermocouple tube is aligned with the slot on the tray/surround. The gas input flexible line should be pointing 90 degrees from the gas control valve location of the surround. Carefully uncoil the thermocouple tube. Feed the flexible line, thermocouple tube, grounding wire and the ignitor wires through the burner location opening first then lower the burner into its final location.



8. Slide the black propane tank hose under the surround unit and out through the control panel opening. The other end of the black propane hose with the regulator will attach to the propane tank.

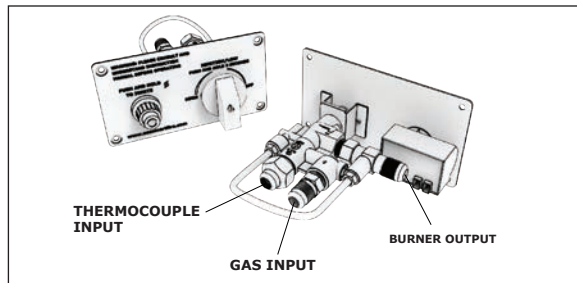


9. Pull all hoses and wires from inside the unit out through the control plate cutout.

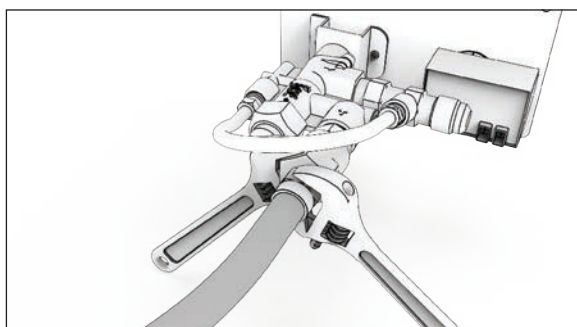


Burner Assembly - Propane

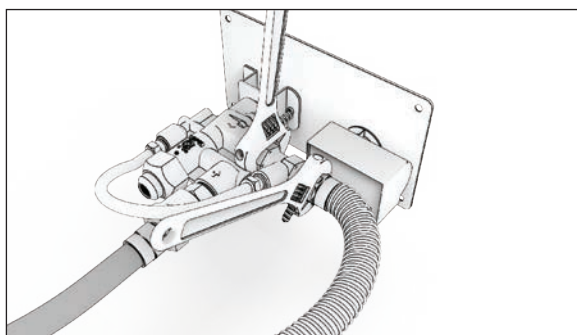
10. Ensure you have assembled the control panel, as outlined on page 10.



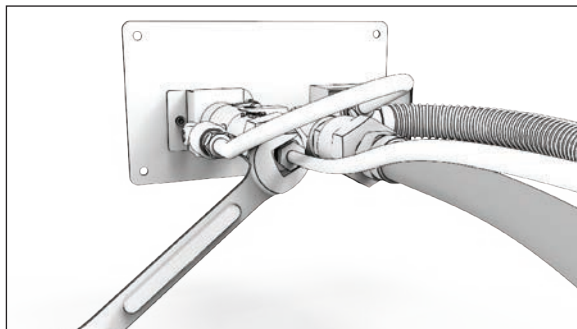
11. Using two adjustable wrenches, attach the flexible propane gas line to the inlet valve fitting (arrow pointing in). Do not overtighten.



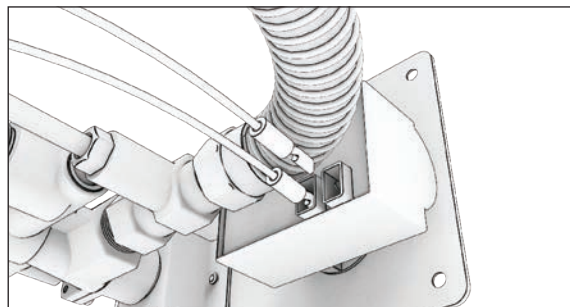
12. Using two adjustable wrenches, attach the flexible gas line from the burner to the outlet valve fitting (arrow pointing out). Do not overtighten.



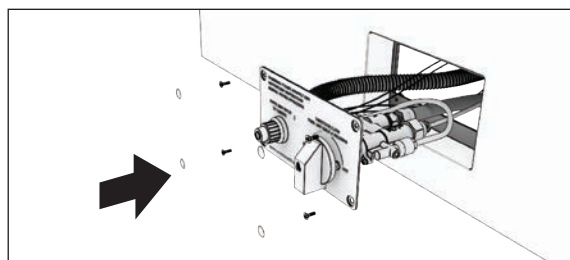
13. Connect the thermocouple to the control valve. Hand-tighten first then securely tighten (1/2 turn) with a 10mm wrench. Damage to the thermocouple and/or loose connections will cause operation issues.



14. Plug the Ignitor wire and grounding wire into the back side of the sparkers. These wires can be plugged into either port on the back side of the sparkers box.

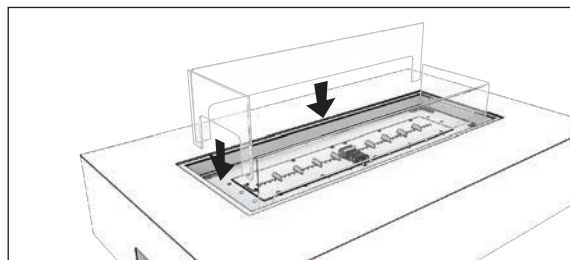


15. Insert the fully assembled Control Panel into the side of the Surround Unit, feeding the cables and wires back into the unit as needed until the Control Panel is properly positioned in place.

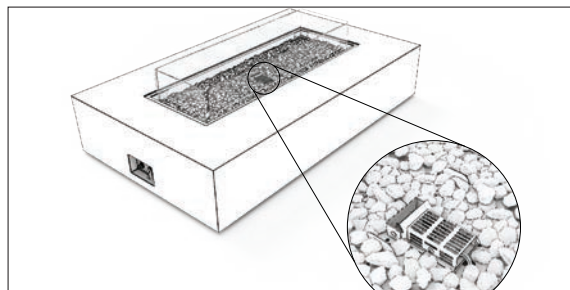


16. Secure the control panel assembly with the 4 screws. (Install the four black plastic screw caps on the screw heads)

17. Install the glass screens.

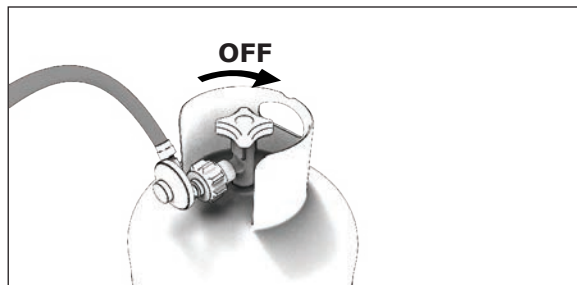


18. Spread the glass media evenly over the burner surface. Use all black glass media provided for best effect. Glass media CANNOT be present inside the igniter wind guard. Remove the cardboard cover from inside ignition wind guard.

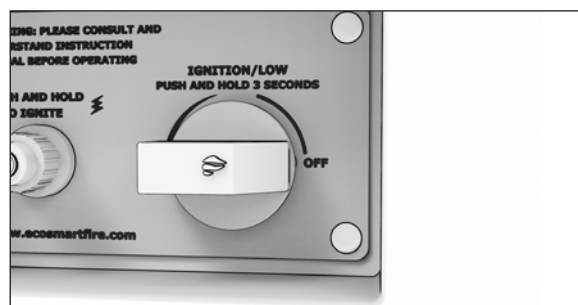


Burner Assembly - Propane

19. Ensure propane tank is in the OFF position. Attach propane hose and included regulator to propane tank.



20. Ensure the control knob (or “key”) is in the OFF position.



21. Use a leak detecting solution to check all connections before operation.

22. Slowly open main gas supply shut-off valve and check for any bubbles on inlet side of gas system. If bubbles are present, close main gas supply shut-off valve immediately and tighten all fittings again using adjustable wrenches.

23. If no leaks are present, a first lighting and final leak check can be performed.

24. With main gas supply shut-off valve open, turn control valve to LOW/IGNITION position. Press and hold sparker button, slowly depress control knob and hold in for 3-5 seconds. Burner should be ignited. Verify no bubbles are present on outlet side of gas system.

25. If no leaks are present on outlet side of gas system, the burner is ready for normal operation. If leaks are present, turn control valve to the OFF position and close main gas supply shut-off valve. Re-tighten all fittings and repeat 24.

Adequate and constant ventilation is important to keep the appliance functioning properly and safely, including ventilation of the appliance undersides. Setting the appliance without air circulation underneath can cause heat build up and improper combustion. Do not remove the feet or operate the appliance with missing feet.

1. Locate the appliance and the LP tank cover on hard, flat surface that extends the full length and width of the appliance. The appliance and the LP tank cover can be placed on combustible surface (such as wood deck) or on non-combustible material (such as concrete). Ensure all clearances to the sides and clearances above the appliance are observed at all times (see figures 1 and 2).
2. Maintain a minimum air space of ½” (12.5mm) between the ground surface and the underside of the appliance sidewalls by adjusting the articulating feet up or down as necessary.
3. Do not place the appliance over grass, artificial turf, carpet or any uneven surface, as this will block the airflow underneath the appliance. See figure 1.
4. Follow the same instructions above for the LP tank cover (if purchased). See figure 1.

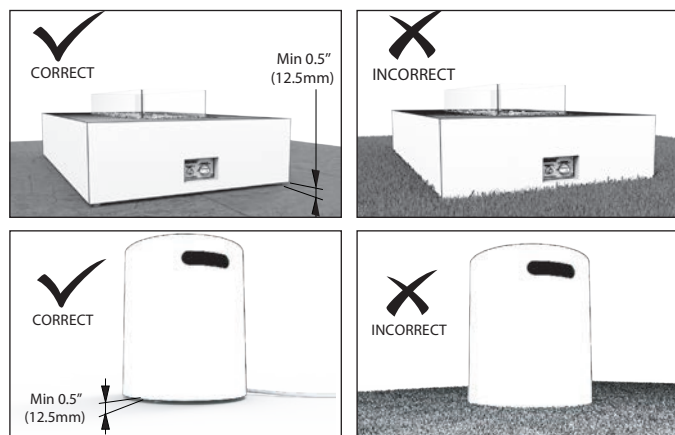


Figure 1



Burner Assembly - Natural Gas

NATURAL GAS

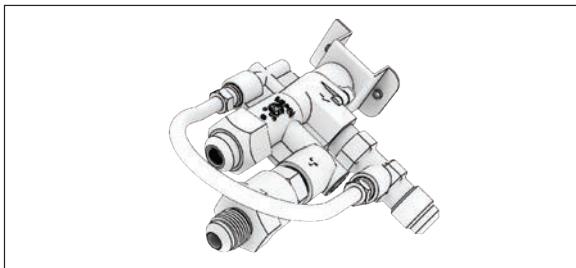
VERY IMPORTANT: Connection of this product to Natural Gas must be completed by a licensed gas plumber / installer only. Do not attempt to install this product with Natural Gas without a licensed installer present.

1. Unpack burner box. Remove all items and check against the items listed on page 9 of the manual to ensure all parts needed are ready.

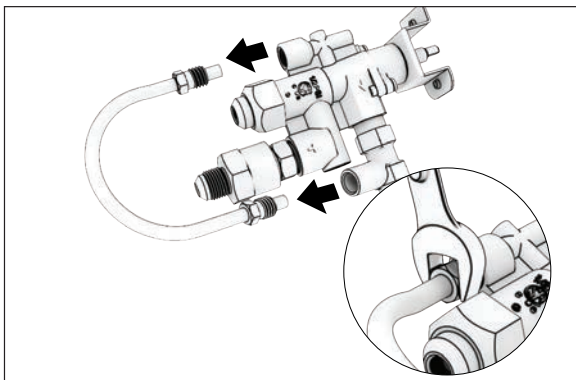
2. THIS BURNER IS SHIPPED FOR PROPANE FUEL SOURCE. TO CONVERT IT FOR NATURAL GAS, THERE ARE 2 ORIFICES THAT NEED TO BE REPLACED WITH THE INCLUDED MARKED ORIFICES. FOLLOW THE INSTRUCTION BELOW:

Conversion from Propane to Natural Gas

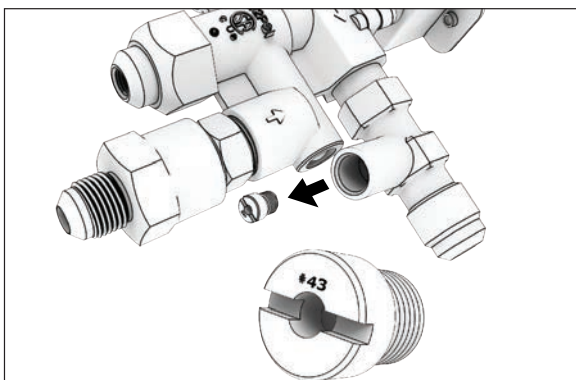
3. Locate the control valve.



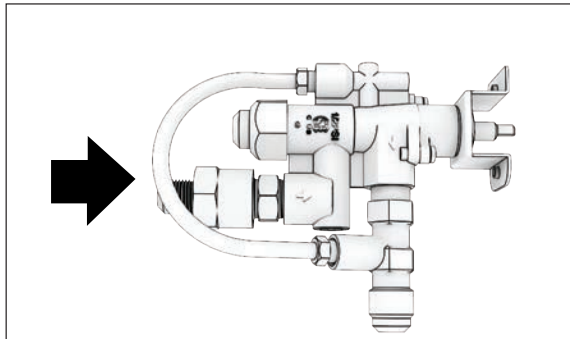
4. Using an 11mm wrench, remove low-rate bypass tube from the control valve.



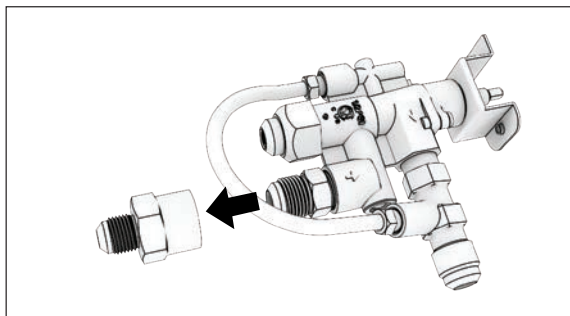
5. With a flat blade screwdriver, remove the valve orifice (#52) and replace with the natural gas orifice (#43).



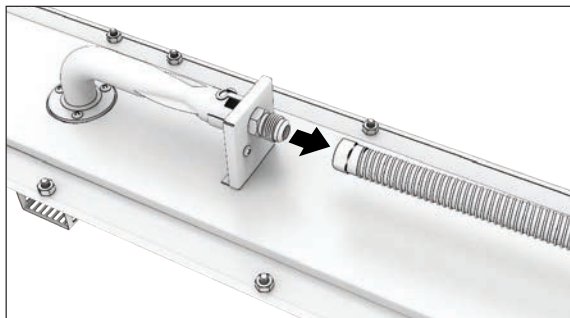
6. Re-install the low-rate bypass tube.



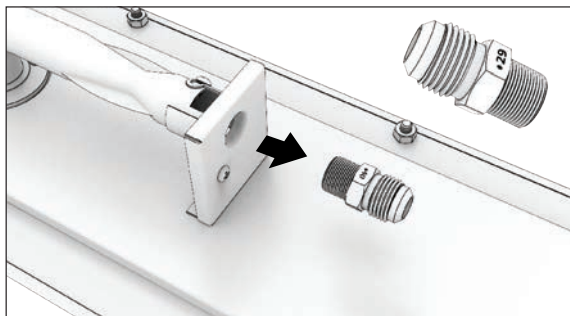
7. Remove the flare fitting adaptor from the valve gas input valve.



8. Turn the burner over so that the flexible hose is easily accessible.

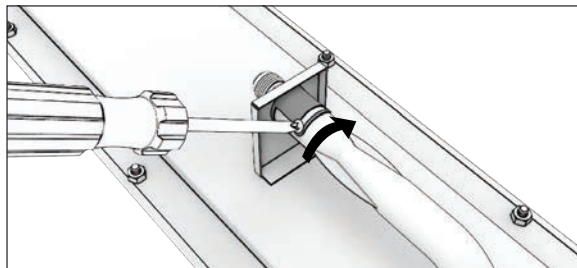


9. Using adjustable wrenches, remove the burner flex line from the burner orifice. Remove the propane burner orifice installed in the burner (#40) and replace with the included natural gas orifice (#29).

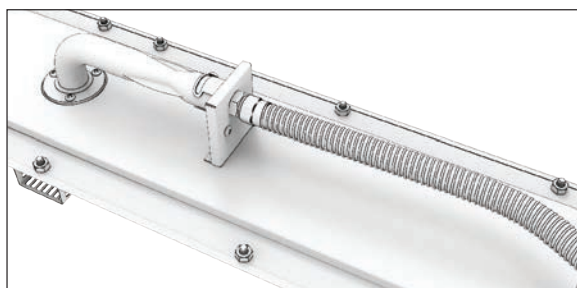


Burner Assembly - Natural Gas

10. Loosen the air-shutter with a Phillips head screwdriver and fully close the air shutter. Retighten the air shutter screw.

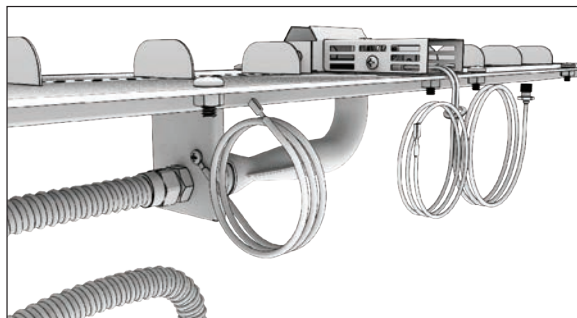


11. Using adjustable wrenches, connect the burner flex-line to the natural gas burner orifice and tighten securely. THE BURNER AND CONTROL VALVE ARE NOW CONVERTED FOR NATURAL GAS.



12. Ensure ignitor wire is secured to the bottom of the ignitor.

13. Ensure grounding wire is secured to bottom of burner.

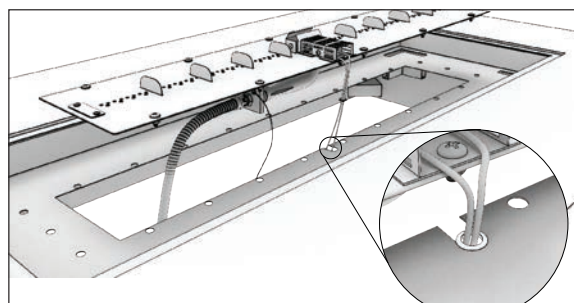
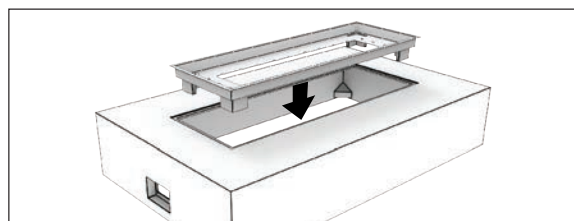


14. Install a flexible gas hose to your natural gas line (supplied by the licensed plumber).

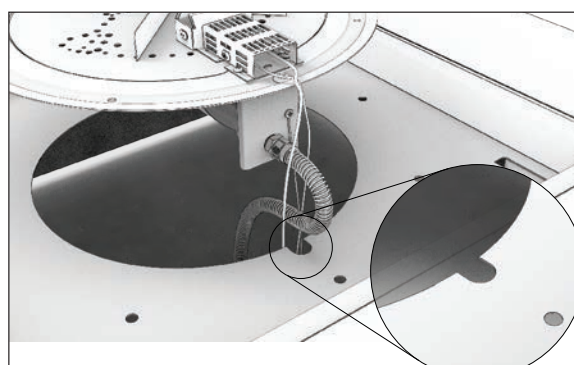
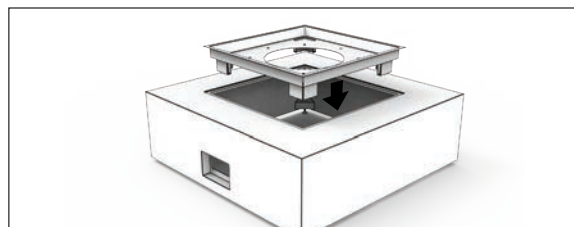
15. **Linear burners only:** (this step is not required for round burners) Carefully place the Metal tray into the unit opening.

Position the burner assembly so that the gas input flexible line (where the orifice is located) is pointing towards the control plate cutout location of the surround. Carefully uncoil the thermocouple tube. Feed the flexible gas line, thermocouple tube, grounding wire and the ignitor wire through the burner location opening first then place lower the burner into its final location. Install the grommet by sliding it into the slot, place the burner into its final position.

NOTE: The tray holes are not designed to align with the burner screws. Simply sit the burner on top of the tray, it will be held in place by the black glass charcoal media. Do not remove the screws on the sides, they assist in elevating the burner to allow for water drainage.

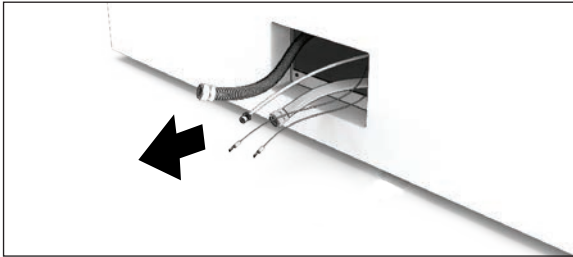


16. **Round burners only:** (this step does not apply to linear burners) Insert the metal tray to the Surround Unit. Carefully place the burner on the Surround Unit near the tray opening – without inserting the burner into the final location. Rotate the burner to make sure the thermocouple tube is aligned with the slot on the tray/surround. The gas input flexible line should be pointing 90 degrees from the gas control valve location of the surround. Carefully uncoil the thermocouple tube. Feed the flexible line, thermocouple tube, grounding wire and the ignitor wires through the burner location opening first then lower the burner into its final location.



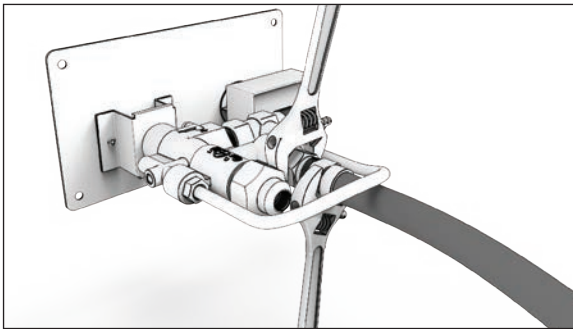
17. Pull all hoses and wires from inside the unit out through the control plate cutout.

Burner Assembly - Natural Gas

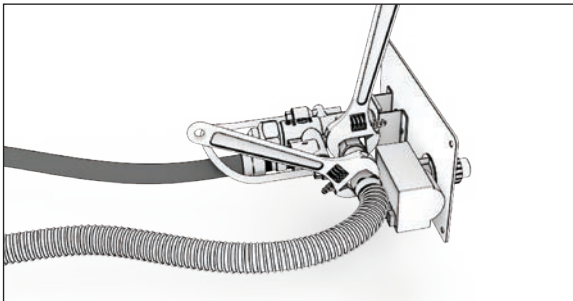


18. Ensure you have assembled the control panel, as outlined on page 10.

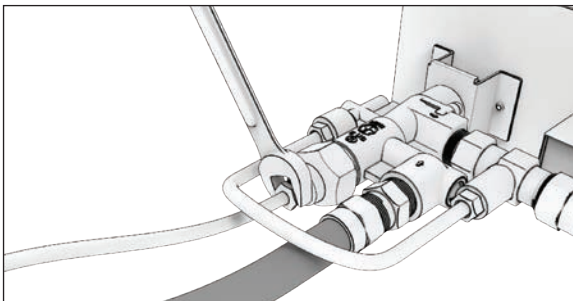
19. Using two adjustable wrenches, attach the flexible natural gas line to the inlet valve fitting (arrow pointing in). Do not overtighten.



20. Using two adjustable wrenches, attach the flexible burner gas line to the outlet valve fitting (arrow pointing out). Do not overtighten.

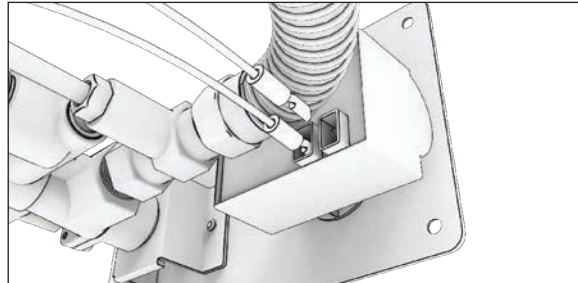


21. Connect the thermocouple to the control valve. Hand-tighten first then securely tighten (1/2 turn) with a 10mm wrench. Damage to the thermocouple and/or loose connections will cause operation issues.



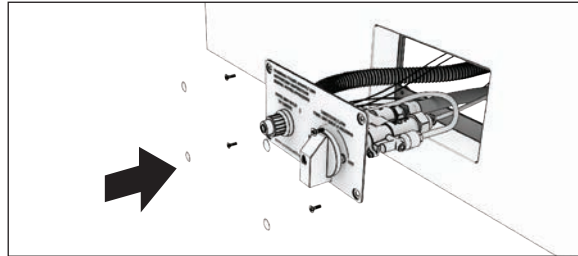
22. Plug the ignitor wire and grounding wire into the back side of the sparker. These wires can be plugged into either port on the back side

of the sparker box.

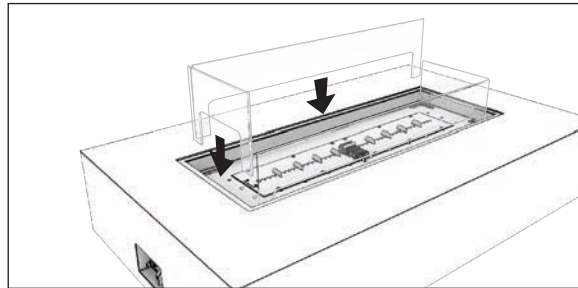


23. Insert the fully assembled Control Panel plate into the side of the Surround Unit, feeding the cables and wires back into the unit as needed until the Control Panel is properly positioned in place.

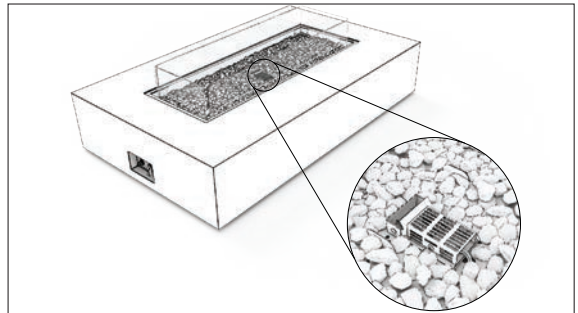
24. Secure the control panel assembly with the 4 screws.



25. Install the glass screens.

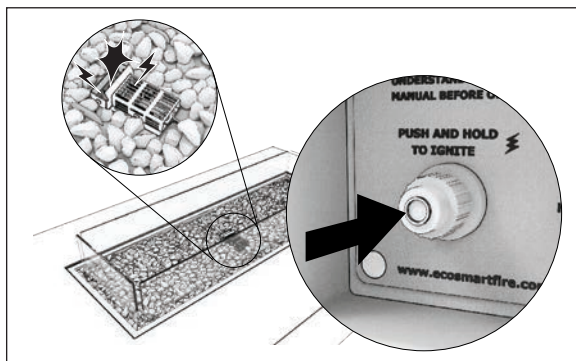


26. Spread the glass media evenly over the burner surface. Use all black glass media provided for best effect. Glass media CANNOT be present inside the igniter wind guard. Remove the cardboard cover from inside ignition wind guard.

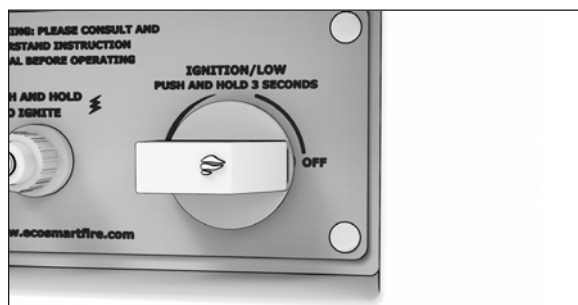


27. Press and hold sparker button to verify presence of spark. Look inside ignition wind guard for visible spark.

Burner Assembly - Natural Gas



28. Ensure the control knob (or “key”) is in the OFF position.



29. Use a leak detecting solution to check all connections before operation.

30. Slowly open main gas supply shut-off valve and check for any bubbles in inlet side of gas system. If bubbles are present, close main gas supply shut-off valve immediately and tighten all fittings again using adjustable wrenches.

31. If no leaks are present, a first lighting and final leak check can be performed.

32. With main gas supply shut-off valve open, turn control valve to LOW/IGNITION position. Press and hold sparker button, slowly depress control knob and hold in for 3-5 seconds. Burner should be ignited. Verify no bubbles are present on outlet side of gas system.

33. If no leaks are present on outlet side of gas system, the burner is ready for normal operation. If leaks are present, turn control valve to the OFF position and close main gas supply shut-off valve. Re-tighten all fittings and repeat 32.

Adequate and constant ventilation is important to keep the appliance functioning properly and safely, including ventilation of the appliance

undersides. Setting the appliance without air circulation underneath can cause heat build up and improper combustion. Do not remove the feet or operate the appliance with missing feet.

1. Locate the appliance and the LP tank cover on hard, flat surface that extends the full length and width of the appliance. The appliance and the LP tank cover can be placed on combustible surface (such as wood deck) or on non-combustible material (such as concrete). Ensure all clearances to the sides and clearances above the appliance are observed at all times (see figures 1 and 2).
2. Maintain a minimum air space of ½” (12.5mm) between the ground surface and the underside of the appliance sidewalls by adjusting the articulating feet up or down as necessary.
3. Do not place the appliance over grass, artificial turf, carpet or any uneven surface, as this will block the airflow underneath the appliance. See figure 1.
4. Follow the same instructions above for the LP tank cover (if purchased). See figure 1.

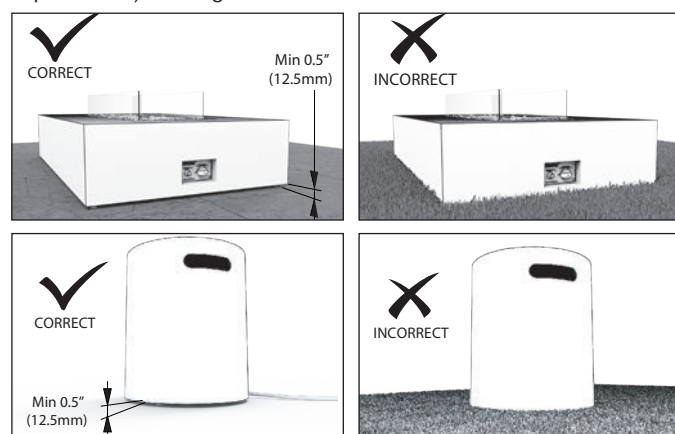


Figure 1



Installation - Natural Gas

Natural Gas Supply Installation Guidelines

1. The gas supply line must have enough capacity to supply the burner with its rated gas output.
2. The flame output may be too low if the gas line is too small.
3. Smooth walled pipe should be used as a supply line. Excessive corrugated line will cause unwanted restriction and potential noise due to gas flow.
4. Gas pressure at the unit should be within 5-7 in. WC to keep restriction to a minimum.
5. Ensure that the length of the gas line and pipe diameter is properly sized for the burner output (see Pipe Sizing Chart below). Add 1' to 5' to the line length for every elbow or additional fitting. If you have another natural gas appliance sharing the same line, add the BTU output to provide to provide the proper pipe size.

Natural Gas Pipe Sizing Chart*

Length of Pipe in Feet	Size of Pipe in Inches (inside diameter)		
	1/2"	3/4"	1"
10	108,000	230,000	387,000
20	75,000	160,000	280,000
30	61,000	129,000	224,000
40	52,000	110,000	196,000
50	46,000	98,000	177,000
60	42,000	89,000	159,000
70	38,000	82,000	149,000
80	36,000	46,000	140,000
90	33,000	71,000	133,000
100	32,000	68,000	125,000
125	28,000	60,000	117,000
150	25,000	54,000	105,000
175	23,000	50,000	93,000

*Maximum delivery capacity of pipes in BTU/hour at different diameters and lengths for an initial pressure of 7-inch water column. **Note: 1 cubic feet per hour = 1000 BTU**

As an example, to install a Brown Jordan Fires FLO with a G37 burner (65,000 BTU) and located about 90 feet from the natural gas supply line with 2 elbow fittings, you would need at least a 3/4" pipe minimum.

Lighting and Operating

FOR YOUR SAFETY, READ BEFORE LIGHTING

WARNING! If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury, and/or loss of life.

A. This appliance can be lit electronically or with a match. When lighting, follow these instructions exactly.

B. Before lighting, smell all around the appliance area for gas. Be sure to smell next to the base of the appliance because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electric switch, do not use any phone nearby.
- Immediately call your gas supplier from a neighbors phone. Follow gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

C. Use only your hand to turn the gas control knob on propane tank (if equipped), never use tools. If the valve won't turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D. Do not use the appliance if any part has been underwater. Immediately call a qualified service technician to inspect the appliance and replace any part which has been underwater.

E. The gas pressure regulator provided with this appliance must be used. This regulator is set for an outlet pressure of 10.5in (267mm) water column.

To Extinguish

1. Turn control knob to LOW/IGNITION position. Then gently depress control knob and turn to OFF position.
2. If using propane cylinder, close valve.



WARNING



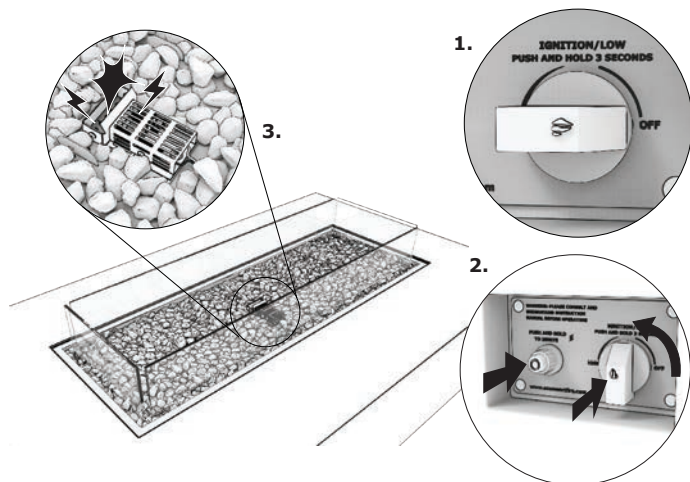
FIRE RISK – HIGH TEMPERATURES

Keep combustible household items away from appliance.

- Do NOT obstruct combustion and ventilation air.
- Do NOT place combustible items on top of or near appliance.
- Keep furniture, draperies away from appliance.
- Do NOT use, lantern fuel, kerosene, charcoal lighter fluid, bioethanol or similar liquids in this appliance.
- Combustible materials, flammable liquids, or vapors may ignite.

Lighting Instructions

1. Verify control valve is in OFF position.
2. Ensure the gas supply valve is in ON position.
3. Press and hold sparker button. Verify an audible and visible spark is present within the ignition windguard.
4. Gently press and turn control knob to LOW/IGNITION position. Fully depress control knob and hold for 3-5 seconds. Burner should ignite and continue to operate when control knob is released.
5. If burner does not light or remain lit after 20 seconds of attempting ignition, turn control valve to off position and wait 5 minutes to allow gas to dissipate before attempting to ignition again. **DO NOT ATTEMPT TO LIGHT BURNER IF YOU SMELL GAS.**
6. With burner lit and operating, the flame height can be adjusted between low and high at any time.



Troubleshooting - General

Symptom		Possible Causes		Corrective Actions
1.	Appliance won't light	A.	No LP in tank, or NG main not turned on.	Check the LP (propane) tank. You may be out of gas. Or check Natural Gas valve at main.
		B.	Plugged burner orifice.	Check the burner orifice for stoppage. Remove stoppage.
		C.	No spark igniting burner.	Refer to ignitor in section 6.
		D.	Excessive media build up around igniter.	Ensure that media installation instructions are followed, and media or debris is not present inside the ignition wind guard.
2.	Low flames or won't stay lit	A.	Manual shutoff valve (on/off control knob) open or not installed between LP tank and appliance.	Close LP tank and manual shutoff valves. Open LP tank valve first, THEN follow instructions for lighting up.
		B.	Improper air shutter adjustment.	The air shutter is adjusted from the factory for optimal performance. For NG, air shutter should be closed. For LP, air shutter should be 1/4" open.
		C.	Improper gas supply pressure.	Ensure that the appliance is operating at the ideal inlet gas pressure detailed on Page 1. This should be done by a licensed plumber.
		D.	Burner was not converted for natural gas.	Both valve orifice and burner orifice must be changed, and the air shutter must be closed. Follow conversion instructions on Page 14.
		E.	Thermocouple not properly secured to valve.	Ensure the thermocouple is tightened to control valve using 10mm wrench.
3.	Blue Flames	A.	This is a result of normal operation and flames will begin to yellow as unit is allowed to burn for 15-20 minutes.	No action required.
		B.	Improper air/fuel mixture related to air shutter position.	The air shutter is adjusted from the factory for optimal performance. For NG, air shutter should be closed. For LP, air shutter should be 1/4" open.
		C.	Burner was not converted for natural gas.	Both valve orifice and burner orifice must be changed, and the air shutter must be closed. Follow conversion instructions on Page 14.
4.	Metallic noise	A.	Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the appliance.	No action required.
5.	Ignitor makes clicking sound but no visible spark is produced	A.	Ignitor is improperly grounded.	Check all wire connections at back of sparker box.
		B.	Ignition or ground wire not plugged in.	Ensure ignitor wire and grounding wire are securely attached to burner.
		C.	Ignition electrode set too far from grounding probe.	Check that ignition electrode and ignition wind guard wall is within 1/8" to 3/16".
		D.	Excessive media build up around igniter.	Ensure that the media installation instructions are followed, and media is not present inside the ignition wind guard.

Troubleshooting - General

6.	Ignitor does not spark or make a ticking sound	A.	Battery is dead or not installed, installed incorrectly.	Ensure that a new AAA battery is installed in the push-button sparker switch.
		B.	Corrosion on battery contacts.	Check contact at the bottom of the battery cavity for corrosion. Clean with a small piece of sandpaper or a file.
		C.	Battery cap not screwed down completely.	If the cap cannot be screwed down tight enough, the battery will not make a proper connection with the sparker and it will not work. Be sure to use a thin surface such as 20-22 gauge sheet metal to mount sparker in.
		D.	Ignition electrode or ground wire not connected to sparker.	Ensure that ignition electrode and ground wire leads are properly connected to sparker.

Troubleshooting - Loud Gas Flow

Excessive Rushing and Whistling noise

There are multiple causes for excess noise coming from the gas appliance. The more gas (maximum control valve setting) the more likely you are to hear excess noise. This is due to the larger volume of gas flowing at a higher velocity through the plumbing of the appliance. Gas flowing noise is inevitable so this is intended for excessively loud rushing or whistling.

1. Do you hear a whistling or rushing noise in the appliance flex-line?

The internal structure of the flex-line and the path the gas follows inside of the flex-line can be the cause. When installing a flex-line, do your best to avoid sharp bends and angles.

You may be able to remedy a noisy flex-line that is already installed by carefully repositioning the line to remove sharp bends and angles.

Using commercially available appliance gas connectors (yellow corrugated flex-lines from hardware stores) are not recommended for gas fire pits or fireplaces. These hoses are not intended for the higher gas input rates of these appliances and produce large amounts of noise. There are various sizes and lengths of whistle-free flex lines available. The licensed plumber doing the installation can help recommend one.

2. Is the whistling coming from the orifice?

The orifice is what controls the amount of gas that your appliance is using. Sometimes the shape of an orifice can produce a whistling depending on the gas flow rate and gas pressure.

If repositioning the flex-lines in your appliance did not fix the whistling noise, disconnect the gas supply to the burner and remove the orifice. Blow through the orifice to check for a whistle. If your orifice whistles, call our customer service at 1-888-590-3335 so we can ensure you have the specific orifice installed.

3. Ensure your air shutter is properly adjusted according to the EcoSmart Gas Installation Manual.

A properly adjusted air shutter will give the brightest flame and quietest performance.

For **natural gas** the air shutter should be completely closed.

For **liquid propane**, the air shutter should be open between 3/16" and 1/4".

Service and maintenance

Although the frequency of appliance servicing and maintenance will depend on use and the type of installation, a qualified service technician should perform an appliance check-up annually.

Storage of an appliance indoors is permissible only if the cylinder is disconnected and removed from the appliance.

Stainless steel will rust or corrode over time if contamination or debris is not cleaned or removed immediately. When not in use, it is recommended that you protect your fireplace from water damage or corrosion with a protective cover.

**WARNING**

Risk of injury or property damage.
Before servicing:

- Turn off utilities to appliance
- Ensure appliance is completely cooled

**WARNING**



Annual inspection by qualified technician recommended.

Check:

- Obstructions of combustion and ventilation air.
- Condition of burner assembly
- Burner ignition and operation
- Burner air shutter adjustment
- Gas connections and fittings

Risk of:

- Fire
- Delayed ignition or explosion
- Exposure to combustion fumes
- Odors



Maintenance and Service Tasks

Like all fire and fireplace systems, it's important to run through regular safety checks. Please take the time to familiarise yourself (and any other users) with the safety procedures associated with using your fire pit.

Inspect	Maintenance Tasks	
Burner Assembly	1	Remove decorative black glass charcoal and examine burner. Vacuum and wipe out as needed. Use caution when cleaning these areas
	2	Inspect for warping and corrosion. Repair as necessary
	3	Check the hose connecting the LP gas cylinder to ensure it is not damaged. Replace as necessary.
	4	Verify air shutter area is clean
Burner Ignition and Operation	1	Verify all gas connections are tight and leak-free
	2	Clean burner top, inspect for plugged ports, corrosion, or deterioration. Replace burner if necessary.
	3	Inspect for flame problems.
	4	Verify air shutter is clear of dust and debris and is in correct position for the gas type being used.
	5	Inspect orifice for soot, dirt, or corrosion
	6	Verify manifold and inlet pressures. Adjust regulator as required.
Gas Hose with Regulator	1	The gas hose with regulator supplied with appliance must be used for LP installations. The replacement must be those specified by the appliance manufacturer

Reference materials

Service Parts List

Replacement Parts	SKU
LP / NG BURNER	
Control Key	ESF.1.P.KEY
Control Knob	ESF.1.P.KNB
Variable Control Safety Valve	ESF.2.P.VAL
Control Panel	ESF.3.P.CPF
1/2" Female Flare x 3/8" Male Flare Adaptor	ESF.2.P.FMA
22" Whistle-free Stainless Steel Flex Line 1/2" Fittings	ESF.2.P.F22
Grounding Wire (36")	ESF.1.P.G36
Flame Sensor Assembly	ESF.2.P.FSA
LP Hose & Regulator (10')	ESF.1.P.H10
LP Low Rate Valve Orifice #52	ESF.2.P.LR.O52
LP Burner Orifice #40	ESF.2.P.O40
NG Low Rate Valve Orifice #43	ESF.2.P.LR.O43
NG Burner Orifice #29	ESF.2.P.O29
Sparker Box	ESF.1.P.GSB

Warranty

Limited One Year Warranty

MAD Design USA extends the following warranty for GB Series decorative outdoor gas fire products used in the United States of America or Canada. Dealers and employees of MAD Design USA have no authority to make any warranty or authorize any remedies in addition to or inconsistent with the terms of this warranty. This warranty gives you specific legal rights. You may also have other rights that vary from state to state.

MAD Design USA warrants that this GB Series decorative gas appliance (the "product") will be free from defects in material and workmanship for a period of one year from its date of purchase. Stainless steel parts and assemblies carry a limited lifetime warranty. This warranty is subject to the conditions, exclusions and limitations described below.

This warranty applies only to the original owner of the Product and is non-transferable. MAD Design USA obligation under this warranty does not extend to damages resulting from (1) assembly, operation or maintenance of the Product not in accordance with the Installation/ Assembly Instructions, Operating Instructions and the Listing Agency Identification Label furnished with the Product; (2) installation or use which does not comply with local building codes and ordinances; (3) shipping, improper handling, improper operation, abuse, misuse, accident or unworkmanlike repairs; (4) use of fuels other than those specified in the Operating Instructions; (5) Installation or use of components not supplied with the Product or any other components not expressly authorized and approved in writing by MAD Design USA; and/ or (6) modification of the Product not expressly authorized and approved in writing by MAD Design USA. Any of the circumstances described in the previous sentence voids this warranty. This warranty is void if the Product or any component has been removed, repaired, or replaced before MAD Design USA has been afforded a reasonable opportunity to inspect the Product.

This warranty is limited to the replacement or repair of defective components or workmanship and MAD Design USA may fully discharge its obligations under this warranty by repairing or replacing, at its discretion, the defective components. MAD Design USA will provide replacement parts at no charge and will pay reasonable freight costs related to replacing or repairing defective components under this warranty. The maximum amount recoverable under this warranty is limited to the purchase price of the Product and, if MAD Design USA is unable to provide replacement or repair in an expedient and cost-effective manner, MAD Design USA may discharge all obligations under this warranty by refunding the purchase price of the Product.

EXCEPT TO THE EXTENT PROVIDED BY LAW, MAD DESIGN USA MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY EXPRESSED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO THE DURATION OF THE WARRANTY SPECIFIED ABOVE. IN NO EVENT SHALL MAD DESIGN USA BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY DEFECTS IN THE PRODUCT. Some states do not allow limitations on how long an implied warranty lasts, or do not allow exclusion or limitation of incidental or consequential damages, so these limitations may not apply to you.

To obtain service under this warranty, you must:

1. Send written notice of the claimed condition to:
5875 Green Valley Circle, Suite 100, Culver City CA 90230
2. Affirm that you are the original owner of the Product.
3. Photos or video of issue will be required in order to assess the warranty claim.
4. Provide MAD Design USA reasonable opportunity to investigate the claim, including reasonable opportunity to inspect the Product prior to any repair or replacement work and before the Product or any component of the Product has been removed.

The Warranties set out above are express Warranties given by MAD Design USA and are in addition to the rights and remedies which are conferred upon consumers by Trade Practices Act 1974 of the Commonwealth and other Commonwealth, State or Territory legislation.

Service under the warranties set out above must be provided by MAD Design USA Authorised Customer Service Centre which shall provide service during their normal working hours.

This warranty certificate along with proof of date of purchase must be produced when making any claim.

FIRST NAME _____

LAST NAME _____

EMAIL _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

COUNTRY _____

DATE OF PURCHASE _____

PURCHASED FROM _____

PRIMARY USE _____

MODEL NAME _____

SERIAL NUMBER _____

You will find this on the data plate on the side of the burner.

For warranty claims please contact your local distributor. If there is not a local distributor in your country please visit **www.ecosmartfire.com** to source the details of the country closest to you.

*Do not return this form to MAD Design USA, please retain for your own reference.



MAD Design USA

5875 Green Valley Circle, Suite 100

Culver City CA 90230

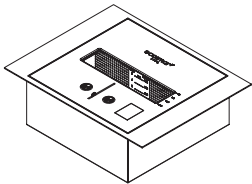
T + 1 (888) 590.3335 E info@mad-usa.com

V0721

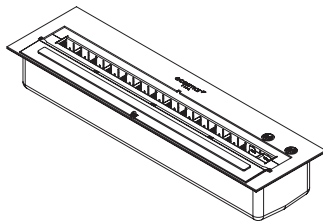
This product is distributed by EcoSmart Inc
DBA MAD Design USA.

INSTALLATION, OPERATION AND MAINTENANCE MANUAL

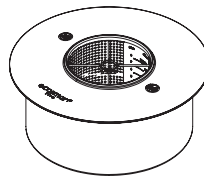
PLEASE READ THESE INSTRUCTIONS COMPLETELY
BEFORE OPERATING THE ECOSMART™ FIRE.



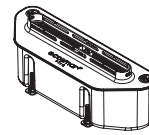
BK Series



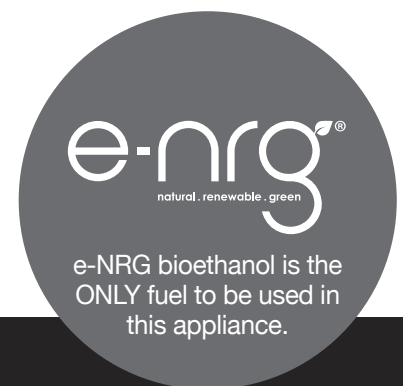
XL Series



AB Series



VB Series



! WARNINGS:

IF THE INFORMATION IN THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION
MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.



Do not fill
while hot



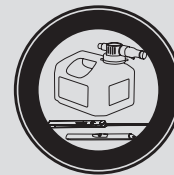
Do not fill while
operating



Do not overfill



Flammable



Use with supplied
accessories



Keep away
from children



ENGLISH	INSTALLATION, OPERATION AND MAINTENANCE MANUAL	1 – 22
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Please read these instructions completely before
operating the EcoSmart™ Fire.

DEUTSCH	INSTALLATIONS-, BEDIENUNGS- UND WARTUNGSHANDBUCH	23 – 44
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Bitte lesen Sie diese Anweisungen vor der
Inbetriebnahme des EcoSmart™ Fire vollständig durch.

FRANÇAIS	MANUEL D'INSTALLATION, D'UTILISATION ET D'ENTRETIEN	45 – 66
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Veuillez lire ces instructions dans leur intégralité avant de
faire fonctionner le système EcoSmart™ Fire.

中文	安装，操作 和维修指南	67 – 88
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请在使用EcoSmart Fire®产品前仔细阅读指南说明。

ITALIANO	MANUALE DI INSTALLAZIONE, USO E MANUTENZIONE	89 – 110
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Leggere il manuale di istruzioni per l'uso prima di operare
un prodotto EcoSmart™ Fire.

ESPAÑOL	MANUAL DE INSTALACIÓN, USO Y MANTENIMIENTO	111 – 132
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Por favor, lea las instrucciones completamente
antes de utilizar el EcoSmart™ Fire.



0577AF001S
0577AF002S

All burners (excluding VB2) are OMNI-Test Laboratories Inc. listed in accordance with UL 1370-16 "Standard for Unvented Alcohol Fuel Burning Decorative Appliances" in the USA, are certified by BSI in accordance with EN16647 (excluding VB2), and comply with the ACCC Safety Mandate for Australia.

Bioethanol fireplaces are classified by regulations and standards as decorative fireplace appliances intended for occasional use only (not for heating).

EDUCATE ALL USERS

We recommend that owners diligently induct any potential user of their Fire to ensure everyone is aware of the safety procedures associated when using e-NRG Bioethanol as a fuel source.

Operational Videos and Manuals can be found on our website or by contacting your local distributor.

WHY REGISTER YOUR WARRANTY?

Registering your warranty achieves more than simply activating your warranty - it provides our head office with the information that we require in order to communicate important safety and regulatory information to you should the need arise.

This could include things like:

- Prompt notification in the unlikely event of a potential hazard,
- Changes to fuel storage regulations, supply channels or special offers,
- Reminders about regular safety steps and maintenance procedures,
- New model announcements or accessories that suit or enhance your purchase.

It is important that we are able to communicate effectively with our customers as part of our commitment to continual improvement, consumer safety and property protection.

If you purchased your product through an external distributor, retailer or agent MAD Design Group does not have these details on file and may have trouble sourcing them as systems and best practices vary from business to business.

Please register your warranty today. You can do this online at the following web address: www.ecosmartfire.com/contact or by sending through your details via email using the details below.

EcoSmart Fire is designed and manufactured by MAD Design Group

1583 Peats Ridge Road
Peats Ridge NSW 2250
Tel: +61 2 9997 3050
Email: info@ecosmartfire.com



e-NRG Bioethanol is the ONLY fuel to be used in this appliance.

FLAMMABLE

You must familiarise yourself and comply with local regulations in order to safely and legally store, handle, decant and use e-NRG Bioethanol.

Refer to the e-NRG Safety Data Sheet (SDS) for important Health and Safety information.



Ethanol, the primary ingredient of e-NRG fuel, presents a significant flammability risk if appropriate steps to reduce the likelihood of ignition are not followed.

These include:

- Permitting for volumes of e-NRG (e.g. for USA, greater than 5 gallons stored inside, or greater than 10 gallons stored outside).
- Removal of all potential sources of ignition including sparks and open flames.
- Maintenance of good ventilation of enclosures where e-NRG is stored.
- Storage of e-NRG (e.g. for USA, greater than 10 gallons in an approved storage cabinet).
- Storage in such a way as to reduce the likelihood of spillage or container rupture.
- Responsible handling to include:
 - Use of the Jerry Can in an approved manner and with attention to the possible presence of flames or other ignition sources in or near the appliance,
 - Limiting access to qualified users,
 - Proper transfer techniques to limit spillage and generation of static electric discharge (i.e bonding and grounding),
 - Proper labeling and signage in accordance with applicable fire codes.

These precautions are necessary to reduce risk of damage to property, injury and death resulting from accidental ignition of e-NRG.

To order your e-NRG Fuel contact:

Australia

Visit - www.e-NRG.com.au
Call - **1300 003 NRG**

USA

Visit - www.e-NRG.com
Call - **(888) 670 ENRG**

UK

Visit - www.e-NRG.co.uk

Or contact your local EcoSmart Fire distributor.

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Important Safety Information

Congratulations on your purchase of an EcoSmart™ Fire.

MAD Design Group is very safety conscious. We have taken every care in designing, manufacturing and assembling your Fire to ensure it operates effectively, efficiently and safely. In return, we ask that you exercise care when using this appliance and follow the instructions below:

This manual contains instructions for the safe installation and use of your new EcoSmart Fire. Before installing and using your appliance, read the entire manual and follow the instructions and warnings carefully.

The appliance must be installed in a fixed and secure position.

WARNING! Failure to follow these instructions and warnings could result in death, serious injury, or property damage.

1. EXPLOSION/FIRE HAZARD



- i. Never use any fuel other than e-NRG Bioethanol in the appliance. Never use gasoline.
- ii. Shut appliance off and allow to cool 60 minutes before refueling. Flame may be difficult to see—do not assume appliance is off. Always follow shut-off procedure before refueling.
- iii. Wipe up spills immediately with a dry cloth followed by a cloth dampened with water. Allow to dry completely before lighting Burner.
- iv. Do not operate in a room with oxygen tanks in use or if flammable vapors are present.
- v. Store fuel only in original container or provided Jerry Can. Store away from area where the appliance is located. Transport and/or store fuel only in a plastic or metal container that is acceptable for use with the fuel and non red in color.
- vi. Never smoke while refueling or lighting the appliance.

2. LOCATING THE FIRE

- i. Keep children away from the appliance. Never leave children unsupervised when the fire is operating.
- ii. Install a smoke alarm and test it monthly to make sure it is in working order. Have a multi purpose dry chemical type fire extinguisher (AB:E in Australia / ABC in USA). These can be purchased from your distributor or independently.
- iii. For decorative purposes only. Not suitable for continuous operation. Do not use the appliance to heat or boil water or as a cooking appliance. Do not put wood, charcoal, paper or other combustible objects in the Fire.
- iv. Do not move or relocate the appliance while in use.

3. VENTILATION

- i. Open fires consume oxygen and contain the risk of indoor air pollution. Use only in well-ventilated areas and those that are protected from the draft effects of cross ventilation. Improper ventilation can cause serious injury or death. People with breathing problems should consult a physician before using the appliance. Refer to ventilation information on page 11.

4. FUELING THE FIRE



DO NOT FILL WHILE
OPERATING



DO NOT FILL
WHILE HOT

- i. This appliance **ONLY** uses e-NRG Bioethanol fuel. e-NRG Bioethanol is a flammable liquid. Store in original container or supplied Jerry Can away from heat and sources of ignition. Refer to page 1 for more information.
- ii. e-NRG Bioethanol is classified as a Dangerous Goods Flammable Liquid Class 3, PGII and is regulated by specific standards and rules. You must familiarise yourself with the appropriate regulations of your country in order to safely and legally store, handle, decant and use this fuel.
- iii. The customer warrants to MAD Design Group that after delivery of their Fire and whilst MAD Design Group retains any interest in the goods or consigned goods (as the case may be) the customer shall comply with all applicable acts, regulations and laws dealing with the transport, unloading and storage of dangerous goods.
- iv. MAD Design Group is not liable for any damage caused by using the incorrect type of fuel.

5. OPERATING THE FIRE

- i. Make sure the shut-off mechanism operates freely.
- ii. Do not use if damaged or malfunctioning.
- iii. Risk of explosion or burn. Use only the lighting rod and lighter provided with your appliance to ignite the fireplace. Using matches or other lighters could result in serious injury.
- iv. Do not use the lighter without the lighting rod.
- v. Remove the Burner frequently to check for any residual fuel underneath the Burner. Accumulation of fuel underneath could cause an explosion.
- vi. **NEVER** leave a fire unguarded.

Important Safety Information

vii. For those models that come with a Glass Fire Screen:

WARNING: DO NOT OPERATE WITHOUT THE GLASS FIRE SCREEN

The appliance must be fully assembled before being operated. Failure to install (or removal of) glass panels will void the warranty and render the product unapproved for use with the included burner.

6. HOT SURFACE HAZARD

- i. Due to high surface temperatures, keep children, pets, clothing and furniture away from the unit, as the unit is hot while in operation, contact with the appliance may cause skin burns.
- ii. The shut-off mechanism on the Burners will become very hot during operation and will stay hot for up to 60 minutes after use. To avoid injury, do not touch with any parts of your body nor with any combustible materials such as matches or flammable liquids. Always use the lighting rod provided with your appliance to open or close the shut-off mechanism.

7. USING ACCESSORIES

- i. Use only *authorised* accessories and tools with your appliance. Accessories and tools *supplied* by EcoSmart Fire are strongly recommended. Light only with the lighting rod and lighter provided. Visit www.ecosmartfire.com for a full line of accessories for your appliance.
- ii. Doors must not be added to modify any EcoSmart Fire model. To reduce the risk of fire or injury, do not modify the appliance in any way. Models that are fitted with a door by the manufacturer must not be modified in any way.
- iii. EcoSmart Fires have not been tested with an unvented gas log set. To reduce the risk of fire or injury, do not install an unvented gas log set into this appliance.
- iv. Pebbles or other refractory decorative fire accessories should not be placed directly over the Burner mouth or interfere with the flame.

For decorative fire accessories you must:

- Ensure the decorative fire accessories do not interfere with the shut-off mechanism.
 - Confirm quality and suitability of fire accessories to ensure the accessories will not explode, emit carbon monoxide or fumes when exposed to extreme temperature variations.
 - Fire accessories must not be smaller than the largest opening of the burner used so that the accessories cannot fall into the burner at any time.
- v. Do not use fittings or spare parts, other than those available from or recommended by MAD Design Group for the fire casings, fireboxes, grates or burners.
 - vi. Certified EcoSmart Fire screens are recommended to prevent injuries to children and pets. The fire should never be left unattended.

8. CUSTOM DESIGNED FIREPLACES, AUSTRALIA:

The 2017 Safety Standard introduced by the ACCC stipulates that all ethanol fireplaces must meet the following minimum criteria.

In regards to Design, a decorative alcohol fuelled device must:

- (a) require installation in a fixed position; or
- (b) have both:
 - (i) a dry weight of at least 8 kg; and
 - (ii) a footprint of at least 900 cm²

In regards to Stability, a decorative alcohol fuelled device must comply with the clause 4.5 of the European Standard.

If you are creating a custom designed fireplace with an EcoSmart Burner it is imperative that the criteria is applied.

IF YOU HAVE ANY QUESTIONS REGARDING ANY OF THE IMPORTANT SAFETY INFORMATION PLEASE CONTACT YOUR DISTRIBUTOR OR MAD DESIGN GROUP.

PLEASE STORE THESE WARNINGS IN A SAFE PLACE FOR FUTURE REFERENCE.

Standard Equipment Received

Please ensure that all items have been received. The Burner Range includes the minimum equipment required to operate the Burner safely.

Burner		Standard Equipment Received						
Series	Model	Manual	Jerry Can	Lighting Rod	Lighter	Extension Spout	Top Tray*	Baffles
BK Series	BK5	1	1	1	1	-	1	-
XL Series	XL1200, XL900, XL700, XL500	1	1	1	1	-	1	2 - 5
	XS340	1	1	1	1	-	1	-
AB Series	AB8/AB8 (EN)	1	1	1	1	-	1	1
	AB3	1	1	1	1	1	1	-
VB Series	VB2	1	1	1	1	-	1	-

*Top Trays are an Included Accessory when required by local standards, refer to page 11.

Burner

The Burner is the core product of the EcoSmart Fire as it is the chamber that houses the fuel.

BK SERIES (Including Top Tray)



BK5

l 400mm x w 317mm x h 123mm
l [15.7in] x w [12.5in] x h [4.4in]
7.6kg [16.6lbs]

VB SERIES



VB2

l 330mm x w 110mm x h 122mm
l [13.0in] x w [4.3in] x h [4.8in]
1.8kg [4lbs]

XL SERIES



XL1200

l 1200mm x w 195mm x h 112mm
l [47.2in] x w [7.7in] x h [4.4in]
15.7kg [34.5lbs]

XL900

l 908mm x w 195mm x h 112mm
l [35.7in] x w [7.7in] x h [4.4in]
11.9kg [26.3lbs]

XL700

l 700mm x w 195mm x h 112mm
l [27.6in] x w [7.7in] x h [4.4in]
9.2kg [20.2lbs]

XL500

l 500mm x w 195mm x h 112mm
l [19.7in] x w [7.7in] x h [4.4in]
6.5kg [14.3lbs]

XS340

l 340mm x w 190mm x h 76mm
l [13.4in] x w [7.5in] x h [3.4in]
3.7kg [8lbs]

XL SERIES (Including Top Tray)



XL1200

l 1253mm x w 248mm x h 124mm
l [49.3in] x w [9.8in] x h [4.9in]
20.8kg [45.8lbs]

XL900

l 961mm x w 248mm x h 124mm
l [37.8in] x w [9.8in] x h [4.9in]
16.2kg [35.6lbs]

XL700

l 753mm x w 248mm x h 124mm
l [29.6in] x w [9.8in] x h [4.9in]
12.5kg [27.6lbs]

XL500

l 553mm x w 248mm x h 124mm
l [21.8in] x w [9.8in] x h [4.9in]
9.1kg [20lbs]

XS340

l 382mm x w 232mm x h 107mm
l [15in] x w [9.1in] x h [4.2in]
5.4kg [11.9lbs]

AB SERIES



AB8

Ø 360mm x h 156mm
Ø [14.2in] x h [6.1in]
5.9kg [13lbs]

AB3

Ø 260mm x h 94mm
Ø [10.2in] x h [3.7in]
2.4kg [5.4lbs]

AB8 (EN)

Ø 420mm x h 159mm
Ø [15.8in] x h [6.3in]
8.2kg [18.1lbs]

AB3

Ø 291mm x h 101mm
Ø [11.5in] x h [4in]
3.7kg [8.1lbs]

AB SERIES (Including Top Tray)

Standard Equipment Received



Installation, Operation and Maintenance Manual

In order to obtain optimal and safe results from your appliance, we recommend carefully reading the entire instruction manual.

h 297mm [11.7in] x l 210mm [8.3in] x d 8mm [0.3in]



Jerry Can with Safety Spout (CARB Regulation compliant)

This 5 Litres [1.25Gal] Jerry Can has been chosen for its unique safety features. It includes an automatic stop flow, a fast flow rate, a locking thumb button control, and a self-venting system. The Jerry Can will allow safe storing/decanting of the e-NRG Bioethanol used in the Burner.

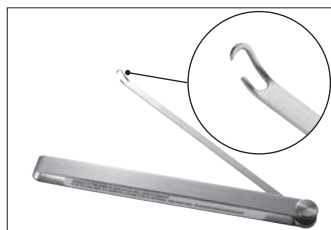
Due to safety regulations the Jerry Can provided with this package comes without fuel.

h 320mm [12.6in] x l 310mm [12.2in] x d 195mm [7.7in]



e-NRG Fuel Adaptor

Adaptors are used to connect the No Spill Spout to the e-NRG bottle. Depending on the thread of the bottles used in each country the adapter may look different (if available in your country).



Lighting Rod

This long slender piece of stainless steel with a small hook return at the end enables you to safely adjust the slider position on the Burner at any time. It is also used for the ignition procedure.

h 657mm [25.9in] x l 28mm [1.1in] x d 23mm [0.9in]



Lighter*

This refillable butane lighter supports the safe ignition of the lighting rod. The length of the lighter further enhances the management of the lighting process.

* Due to safety regulations the butane lighter provided with this package comes without fuel. Small re-charge cans of butane gas with the necessary connections can be purchased from your hardware store. Lighter image is indicative only, the model included may vary from time to time.

h 185mm [7.3in] x l 15mm [0.6in] x d 15mm [0.6in]



Jerry Can Extension Spout

An extension spout is included with the AB3 Burner (& Stix). This is for use with models that have more restricted access to the filling point so that filling can be done in a safe manner according to the procedures outlined in the Operations Manual. The Extension Spout is attached tightly and securely to the Jerry Can Safety Spout to provide more ergonomic filling where required.

l 500mm [19.7in] x ø 25mm [1in]



Baffles (XL Series) / Efficiency Ring (AB8 Burner)

These efficiency devices are a standard inclusion with the XL Series and AB8 Burners. Baffles (or Rings) are placed over the internal burner vents when cold and not operating and serve to increase the efficiency of the burner as well as further stabilise the flame of the burner.

XL Series

h 10mm [0.4in] x l 80mm [3.1in] x d 10mm [0.4in]

Efficiency Ring

h 5mm [0.2in] x ø 158mm [6.2in]

Markings

The following safety markings are included on the Burner. It is important that you take the time to understand what they mean as failure to follow instructions related to these markings could result in property damage, bodily injury or even death.

Burner markings

These pictograms are used to bring to your attention the following important safety messages:



**DO NOT FILL WHILE
OPERATING**



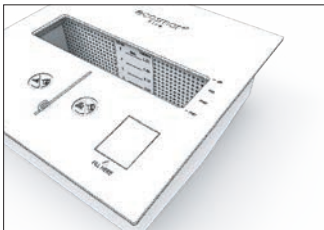
**DO NOT FILL
WHILE HOT**

This warning message is also on all burners to bring to your attention important safety messages:

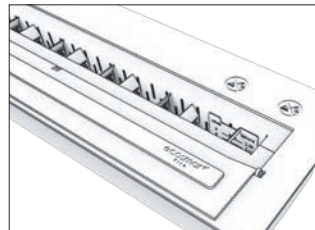
WARNING Filling an alcohol fuelled device while lit has caused severe burns and deaths. When refilling only use containers with a flame arrestor. When refilling first check the flame is extinguished and that the device is cool. Hot Surfaces. Keep children away. Refer to the Operations Manual for instructions before use.

Volume markings

Inside the burner you will see the following fuel level markings. **WARNING!** Never fill above the MAX volume mark.



BK SERIES

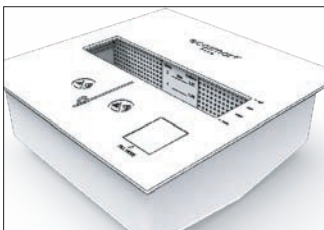


XL SERIES

Slider position markings

These markings on the top of the burner illustrate the various settings the burner can be operated at using the sliding mechanism.

Feature not available for models in the XL Series.



BK5

Lighting rod labels

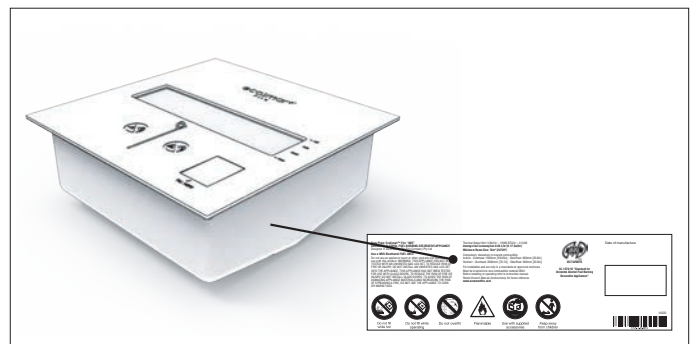
The Caution and Warning labels that are applied to the lighting rod are included to reinforce important safety messages. This is what they say:

WARNING: Improper use can cause uncontrolled fire. To reduce fire risk: Never use any fuel other than e-NRG bioethanol (www.e-nrg.com). Never re-use original packaged fuel container. Always store fuel at room temperature in another location separate from the appliance and away from other fuel containers. Never fuel the appliance while it is operating or hot. Always let the combustion chamber cool in accordance with the manufacturer's instructions. If fire occurs: Exit quickly and warn others, call the Fire Department. Do not: Try to move appliance, try to smother fire, or put water on the fire. Hot Surfaces – Keep Children Away – Do not remove the protective guard.

CAUTION: Improper use can cause pollution and health problems. To reduce fire risk: Never use any fuel other than e-NRG bioethanol in the appliance (www.e-nrg.com). Operate according to manufacturers instructions. Keep the appliance clean - refer to Operating Manual for instructions. Do not operate at lower than minimum setting. Always operate with the doors of the room open. Follow all applicable code requirements when using this appliance. Keep Instruction Manual.

Burner data plate location

Every EcoSmart Fire Burner includes a data plate which provides minimum clearances and safety information. It also includes a unique bar code, serial number and key manufacturing information.



Package Insert

A warning sheet has been included with the burner to alert you to reading the operations manual in full.



Clearances & Installation

Ensure that the mouth of the flame is positioned a minimum of 1500mm [59.1in] away from curtains, flammable materials, and other sources of ignition. Be aware of drafts. The floor must be level and the Burner positioned on a flat surface. The Burner must only be placed into non-combustible materials and must be installed in accordance with the outlined safety requirements and clearances. Please send drawings to your local representative to confirm the setting complies with the manufacturer's requirements prior to installation.

Burner Clearances

EcoSmart Fire Burners can be installed into two (2) types of settings:

A. Those that are encased by non-combustible materials similar to that which you would find in a traditional masonry set-up. We refer to this installation type as "WITHIN A FIREBOX"

B. Those that are not encased by non-combustible materials and set up in a more modern setting without sides or a top. We refer to this installation type as "WITHOUT A FIREBOX"

A. FIREBOX MEASUREMENTS FOR "WITHIN A FIREBOX" INSTALLATION (Fig.1)

BURNERS	Minimum Firebox Width (X)	Minimum Firebox Depth (Z)	Minimum Firebox Height (Y)
BK5	650mm [25.6in]	365mm [14.4in]	650mm [25.6in]
XL1200	1500mm [59.1in]	350mm [13.8in]	500mm [19.7in]
XL900	1200mm [47.2in]	350mm [13.8in]	500mm [19.7in]
XL700	1000mm [39.4in]	350mm [13.8in]	500mm [19.7in]
XL500	800mm [31.5in]	350mm [13.8in]	500mm [19.7in]
XS340	450mm [17.7in]	300mm [11.8in]	450mm [17.7in]
AB8/AB8 (EN)	650mm [25.6in]	450mm [17.7in]	800mm [31.5in]
AB3	400mm [15.7in]	350mm [13.8in]	500mm [19.7in]

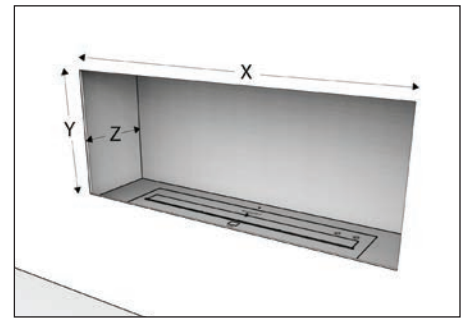


Fig.1

***We recommend centering the burner within the firebox (front and back, left and right). If you choose to offset the burner placement, please follow the minimum distances shown on Table AA. Distances are measured from the outer edge of the burner flange.**

AA. BURNER PLACEMENT "WITHIN A FIREBOX" (Fig.2)

BURNERS	Minimum Distance to Front (A)	Minimum Distance to Rear (B)	Minimum Distance to Left (C)	Minimum Distance to Right (D)
BK5	45mm [1.8in]	30mm [1.2in]	125mm [4.9in]	125mm [4.9in]
XL SERIES	50mm [2.0in]	40mm [1.6in]	150mm [5.9in]	150mm [5.9in]
XS340	45mm [1.8in]	65mm [2.6in]	55mm [2.2in]	55mm [2.2in]
AB8/AB8 (EN)	45mm [1.8in]	30mm [1.2in]	145mm [5.7in]	145mm [5.7in]
AB3	45mm [1.8in]	30mm [1.2in]	70mm [2.8in]	70mm [2.8in]

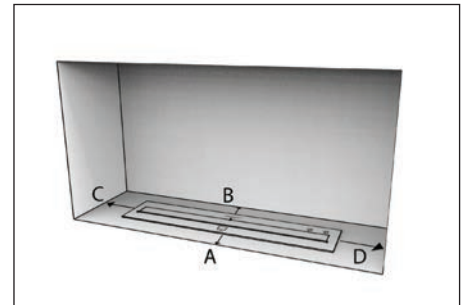


Fig.2

Custom made fireboxes must:

- Be made out of a non-combustible material such as stainless steel
- Be constructed to accommodate a Top Tray
- have built-in spacers of 20mm (0.8 in.) on all sides to ensure that it does not sit directly against any combustible material and an air gap is incorporated for insulation around the box construction. (Fig. 3)
- Must include a static windscreen that is 180-225mm [7"-9"] high (and the full width of the firebox) to control airflow and prevent flames from coming out of the firebox.

MAD Design Group recommends using the Burner in a firebox manufactured by MAD Design Group only. MAD Design Group is not liable for any injuries or damages sustained through the use of custom made or privately commissioned fireboxes.

VB BURNER

The VB2 burner is specially designed as a 'drop-in' burner system to a purpose-built, existing or new, fireplace setting. You should seek confirmation from the insert manufacturer and install the fireplace according to the manufacturers instructions before inserting the burner.

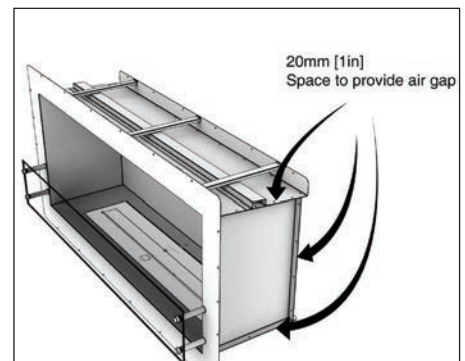


Fig. 3

Clearances & Installation

B. BURNER PLACEMENT “WITHOUT A FIREBOX” (Fig.4)

BURNERS	Minimum Indoor Overhead Clearance (E)	Minimum Outdoor Overhead Clearance (F)	Minimum Distance to Combustible Materials (G)
BK5	1500mm [59.1in]	2000mm [78.7in]	600mm [23.6in]
XL SERIES	1500mm [59.1in]	2000mm [78.7in]	600mm [23.6in]
AB SERIES	1500mm [59.1in]	2000mm [78.7in]	600mm [23.6in]

*WARNING! Fire hazard. The rear wall should be non-combustible. If it is combustible, you must allow at least 600mm [23.6in] clearance between the wall and the rear of the EcoSmart Fire.

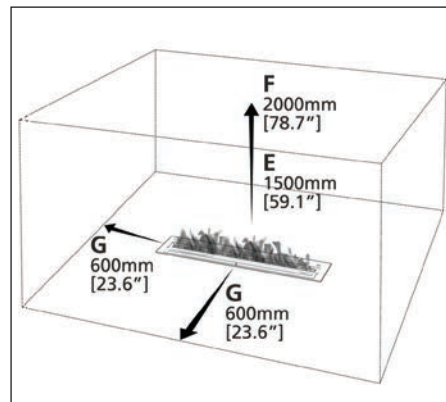


Fig. 4

Installation

There are many different variations available for installing the Burner. In all cases, the Burner must be:

- Installed into non-combustible material ONLY, such as stainless steel, concrete, brick and natural stone.
- Installed after all gas connections or pipelines in the area are disconnected and made safe by an appropriately qualified and licensed professional.
- Installed and operated in a fixed and secure position before filling, lighting and operating. Burners are not meant to be moved because movement creates the risk of accidental fuel spillages. If you move the Burner, make sure no fuel was spilled before you ignite the Burner.
- Models from each range (Grate/Fireplace Inserts/Designer/Outdoor) have varied installation requirements. Refer to the specific section of the manual for the detailed requirements of the model purchased.
- Mounted into a level surface made of non-combustible materials.

The best location for your EcoSmart Fire is:

- In a large, open space at least 1500mm [59.1in] away from any combustible materials, such as curtains, wallpaper, veneer, etc.
- On a level floor – the floor can be made of any material.
- In a firebox made of non-combustible materials, such as steel, concrete, brick, or natural stone.
- Positioned so that any accumulation of weather debris/pooling of water is eliminated.
- NOT INSTALLED DIRECTLY BESIDE OR NEAR WALLPAPER, LAMINATE, VENEER OR ANY SURFACE THAT HAS NOT BEEN FIRE RATED (THE HEAT WILL IMPACT THE MATERIAL). REFER TO PRODUCT SPECIFICATION OF WALLPAPER, LAMINATE, VENEER OR GLUE FOR HEAT TOLERANCES.
- Installed into a setting that has a straight back – the incorporation of angled backs alters the aerodynamics of the flame environment and could lead to an unstable flame behaviour.
- Fitted within a Top Tray that is not more than 200% the size of the total Burner size. (Not applicable in USA/Canada)

Please note that:

- Any furniture items or fittings directly above or beside the Burner installation must be deemed suitable for heat tolerances by their manufacturer e.g. electronic items including screens and entertainment equipment, wallpaper, laminates, veneers, glues and reconstituted materials.
- A heat reflective panel made of non-combustible material (ideally stainless steel) must be installed as the surround and top of the fireplace setting to assist in heat distribution. MAD Design Group is not liable for any injuries or damages sustained through the use of panels not manufactured by MAD Design Group.
- Glass or mirrored surfaces near the Burner installation must be toughened.
- If inserting a Burner into an existing masonry fireplace, adjust the damper within the existing fireplace in order to keep the heat from escaping through the flue.
- **In some countries, national or rural restrictions may apply and/or approvals from building authorities may be required. Please ensure you contact the appropriate parties before installing your EcoSmart Fire.**

WARNING! FIRE HAZARD. DO NOT PACK REQUIRED AIR SPACES, (THE AREA BETWEEN THE FIREBOX AND THE SPACER) WITH INSULATION OR OTHER MATERIALS. THE AIR SPACES ARE NEEDED TO MAINTAIN PROPER TEMPERATURE AROUND THE FIREBOX.

A fire extinguisher is strongly recommended (AB:E in Australia / ABC in USA).

FIRE SCREENS

If installing a fire screen into your setting there must be a 40mm [1.6in] gap between the burner platform and the under side of the glass edge to enable air circulation around the burner. This assists with fuel efficiency, burner temperature and flame quality.

Clearances & Installation

Top Tray

The incorporation of a Top Tray into your setting protects against heat transference and aids in the collection of accidental spillage. Some models come with Top Trays, others do not. Top Trays are available as an accessory through MAD Design Group or your local distributor.

MAD Design Group is not liable for any injuries or damages sustained through the use of Top Trays not manufactured by MAD Design Group.

When installing multiple Burners a maximum of three [3] Burners may be installed into the one Top Tray (excluding the XL Series which can only have one [1] Burner per Top Tray). Special considerations should be made to multiple Burner installations in order to avoid potential accidents. Contact your local distributor about design and analysis advice to minimise adverse impacts.

Top Trays provided by MAD Design Group are fitted directly into the Burner shelf from above. The Burner is then inserted into the Top Tray setting and adjusted (using the levelling screws) to sit flush.

The size of the cut-out should not give more than 5mm [0.196in] clearance. Top Trays must not be more than 200% of the total size of the corresponding Burner.

For cut out dimensions for your model please contact your local distributor.

Physical model dimensions should be verified against cut out dimensions BEFORE installation begins to confirm tolerances align.

NOTE: Top Trays are not required in USA and Canada.
Top Trays are included as standard in UK and Europe.
Top Trays are highly recommended in Australia.

Environmental Conditions

WARNING: Ensure that your fire is positioned away from flammable materials and other sources of ignition at all times. Pay very close attention to positioning the fire away from items that may move as a result of wind and drafts. For example trees/branches/curtains/paper and the like.

The base and the sides of the burner must never come into direct contact with combustible materials.

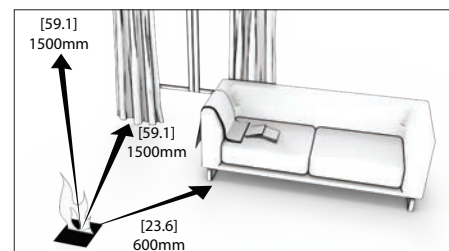
Side clearances to fixed and stable furniture items that are not susceptible to movement such as lounges or patio furniture must remain a minimum of 600mm [23.6in] away from the flame at all times.

Overhead clearances to items that are susceptible to movement (e.g. Curtains/Trees) must remain a minimum of:

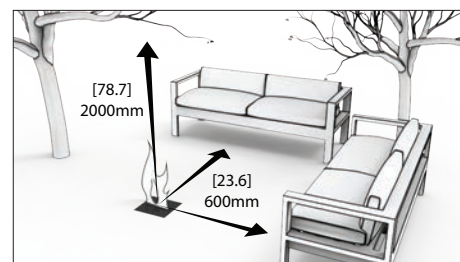
- Indoors: 1500mm [59.1in] away from the flame at all times.
- Outdoors: 2000mm [78.7in] away from the flame at all times.

Note: Stainless steel will rust or corrode over time if contamination or debris is not cleaned or removed immediately. When not in use, it is recommended that you protect your fireplace from water damage or corrosion with a protective cover and always use the Burner Lid included with your model to safeguard the burner.

A fire extinguisher is strongly recommended (AB:E in Australia / ABC in USA).



Indoor Clearances



Outdoor Clearances

Ventilation & Efficiency

Ventilation

EcoSmart Fires do not require any form of permanent fixture or fitting, such as a flue for ventilation, a permanent connection or any kind of fixed utility for fuel supply.

Do not cover any existing ventilation systems or structures that are built or installed within the chosen installation area.

To ensure adequate ventilation, make sure to follow the guidelines in the table shown.

Underwriters Laboratories calculates adequate air exchange as follows:

In a house of typical construction, that is, one that is not of unusually tight construction due to heavy insulation and tight seals against air infiltration, an adequate supply of air for combustion and ventilation is provided through infiltration. However, if the unvented decorative appliance is used in a small room where less than 5.7m³ [200 cubic feet] 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 25.4mm [1 inch] to guard against potential buildup of indoor air pollution. Do not use the appliance in a bathroom or any other small room.

Model	Minimum room size
BK5	The room cannot be less than 70m ³ [2472ft ³] per burner.
XL1200	The room cannot be less than 115m ³ [4061ft ³] per burner.
XL900	The room cannot be less than 110m ³ [3884ft ³] per burner.
XL700	The room cannot be less than 90m ³ [3178ft ³] per burner.
XL500	The room cannot be less than 80m ³ [2825ft ³] per burner.
XS340	The room cannot be less than 45m ³ [1589ft ³] per burner.
AB8	The room cannot be less than 116m ³ [4096ft ³] per burner.
AB8 (EN)	The room cannot be less than 116m ³ [4096ft ³] per burner.
AB3	The room cannot be less than 40m ³ [1413ft ³] per burner.
VB2	The room cannot be less than 45m ³ [1589ft ³] per burner.

The ventilation requirements must always be met. The burner must only be installed in areas that are protected from the draft effects of cross ventilation.

Ventilation & Efficiency

Efficiency

Burners	Fuel Capacity	Combustion Chamber Volume*	Thermal Output Net (MAX)	Heats on Average When used indoors.	Fuel Consumption	Approx burn time on MAX setting
BK5	5 Litres [1.3 Gallons]	1 Litres [0.26 Gallons]	14 MJ/h 13,000 BTU/h 3.5 kW	Over 35m ² [376.7ft ²]	0.64 L/h [0.17 Gal/h]	7 - 11 hours
XL1200	10 Litres [2.6 Gallons]	1.2 Litres [0.31 Gallons]	17 MJ/h 15,290 BTU/h 4.5 kW	Over 65m ² [700ft ²]	0.87 L/h [0.23 Gal/h]	9 - 14 hours
XL900	9 Litres [2.4 Gallons]	1.3 Litres [0.34 Gallons]	16 MJ/h 15,000 BTU/h 4.4 kW	Over 60m ² [645ft ²]	0.8 L/h [0.21 Gal/h]	8 - 13 hours
XL700	7 Litres [1.8 Gallons]	1 Litres [0.26 Gallons]	14.5 MJ/h 13,650 BTU/h 4 kW	Over 50m ² [538ft ²]	0.7 L/h [0.18 Gal/h]	9 - 12 hours
XL500	5 Litres [1.3 Gallons]	0.6 Litres [0.17 Gallons]	12 MJ/h 11,430 BTU/h 3.35 kW	Over 40m ² [430.6ft ²]	0.5 L/h [0.13 Gal/h]	10 - 13 hours
XS340	2.5 Litres [0.7 Gallons]	0.4 Litres [0.10 Gallons]	8.93 MJ/h 8,530 BTU/h 2.5 kW	Over 20m ² [215ft ²]	0.45 L/h [0.12 Gal/h]	5 hours
AB8	8 Litres [2.1 Gallons]	2 Litres [0.54 Gallons]	21.56 MJ/h 20,433 BTU/h 5.99 kW	Over 60m ² [645ft ²]	1.1 L/h [0.29 Gal/h]	7- 11 hours
AB8 (EN) [#]	8 Litres [2.1 Gallons]	1.2 Litres [0.32 Gallons]	13.9 MJ/h 12,860 BTU/h 3.77kW	Over 30m ² [322.9ft ²]	0.7 L/h [0.18 Gal/h]	9 - 11 hours
AB3	2.5 Litres [0.7 Gallons]	0.4 Litres [0.10 Gallons]	6.14 MJ/h 5,800 BTU/h 1.7 kW	Over 20m ² [215ft ²]	0.31 L/h [0.1 Gal/h]	8 - 11 hours
VB2	2 Litres [0.5 Gallons]	0.9 Litres [0.2 Gallons]	7.24 MJ/h 6,180 BTU/h 2.5 kW	Over 15m ² [161ft ²]	0.5 L/h [0.13 Gal/h]	6 hours

NOTE: These values are indicative only and may vary depending on the model purchased, installation, and the seasonal resource used to manufacture e-NRG.

*This figure relates to the area within the appliance where the fuel is intended to be combusted.

[#] To comply with EN16647 the AB8 efficiency ring must be installed before operating the burner.

How to Operate the Burner

Follow these instructions to operate your Burner safely.

Fuel Type

The EcoSmart Fire Burners are fuelled by a renewable energy source called e-NRG Bioethanol.



FLAMMABLE!: Refer to warnings on page 1.

Keep the fuel out of reach of children. Store e-NRG Bioethanol at a safe distance at all times - a minimum of 1500mm [59.1in] from the appliance.

WARNING: e-NRG Bioethanol is a flammable liquid. Store only in original container or Jerry Can. Store away from all sources of ignition, including pilot lights. Check your local laws and regulations for proper handling and storage.

Purchasing your e-NRG Bioethanol.

e-NRG Bioethanol is the ONLY fuel to be used in this appliance.

To order your e-NRG Fuel contact:

Australia
Visit - www.e-NRG.com.au
Call - 1300 003 NRG

USA
Visit - www.e-NRG.com
Call - (888) 670 ENRG

UK
Visit - www.e-NRG.co.uk

Or contact your local EcoSmart Fire distributor.

Regulatory Information for the Safe Handling and Storage of e-NRG Bioethanol

e-NRG Bioethanol is classified as a Dangerous Goods Flammable Liquid Class 3, PGII and is regulated by specific standards and rules. You must familiarise yourself with the appropriate regulations of your country in order to safely and legally store, handle, decant and use this fuel.

e-NRG Bioethanol containers are recyclable and should be disposed of accordingly.

Decanting your e-NRG Bioethanol into the Jerry Can

To view a video of fuelling your Fire, visit our website at ecosmartfire.com.

Decanting must be performed in a well-ventilated area to ensure that any spillage is easily contained and away from any ignition source.

NOTE: Never fill the burner using a vessel that does not have the Spill Proof Safety Spout attached.

The burner can **ONLY** be filled following one of the two methods outlined below.

A. USING THE JERRY CAN INCLUDED WITH THIS BURNER:

1. Remove the nozzle from your Jerry Can.
2. Carefully decant the fuel from the bottle into the Jerry Can through its opening, avoiding spillage (you may need to decant multiple bottles depending on the packaging volume purchased). If spillage occurs, clean thoroughly before proceeding. (Refer to Troubleshooting on page 20).
3. Re-screw the cap back onto the Jerry Can to contain fuel and avoid accidental spillage. Do not over tighten.
4. Test that it is closed securely before moving away from your decanting area.
5. You are ready to approach the Burner.



B. USING THE e-NRG FUEL BOTTLE:

1. Remove the cap from the fuel bottle.
2. Attach the adapter to the fuel bottle. Do not over tighten.

WARNING: Fuel containers without flame arresters, if used improperly, can result in the inflammation of the fuel within the container, which may cause personal injury or property damage. Never fill the burner directly from the e-NRG bottle, risk of explosion.

3. Attach the Spill Proof Safety Spout to the adapter. Test that it is closed securely before moving away from your decanting area.
4. You are ready to approach the Burner.



How to Operate the Burner

Decanting your e-NRG Bioethanol from the Jerry Can into the Burner

To view a video of fuelling your Fire, visit our website at ecosmartfire.com.

WARNING: Fire hazard. Be sure Burner is cool before filling. Let stand at least 60 minutes after flame is extinguished before refilling.

WARNING: Refuel only through the filling point. Never pour fuel directly onto the burner.

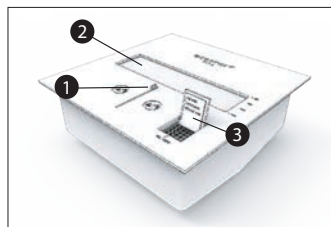
WARNING: Fire hazard. Do not overfill. Fill only to MAX mark. Never lift the Jerry Can to allow faster flow – insert the spout fully and rest it on the base of the grid. Used properly, the Jerry Can spout will help prevent over-filling and spillage.

WARNING: If the fire setting includes multiple burners, all burners must be OFF and cooled during the filling procedure. Turn all burners off and allow all burners to cool before refilling a burner. Finish re-fuelling all burners before lighting each burner.

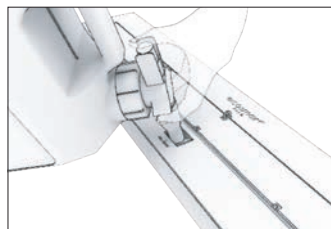
As an additional safety measure, we recommend that you remove the burner and check that there is no unexpected fuel collection in the Top Tray.

MAD Design Group recommends that the quantity of e-NRG Bioethanol poured into the burner be burnt until empty rather than extinguishing the fire early. Extinguishing the fire early can result in a larger amount of residual fumes in the Burner and a more volatile re-ignition.

When fumes are combined with excess fuel it could be a hazard to people who are unaware of the Fire operation and its condition of use (e.g smokers). Ensure only those who have read the instructions attempt to operate the burner.

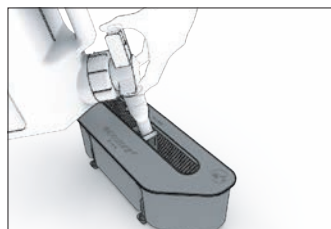


1. Remove the transport locking strip and position the slider mechanism setting so the chamber is fully open.
2. Inspect inside the burner mouth to ensure it is clean and clear of any foreign particles.
3. Access the filling point by flipping the small lid which is located in the bottom right corner of the burner.

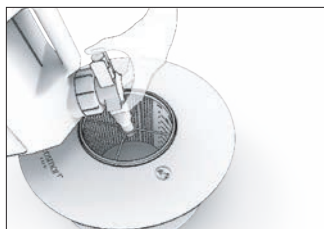


XL Series (Not applicable for XS340): The XL Series feature a spring loading cap. It is engineered so that the Jerry Can spout is fully enclosed prior to releasing the fuel supply, thus allowing filling at a high rate, whilst eliminating splashing as the fuel is being decanted.

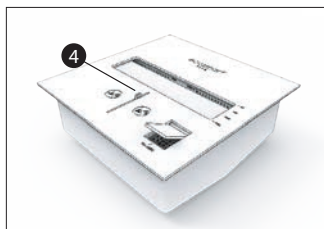
The XL flame is most visible when the burner is filled to the MAX line.



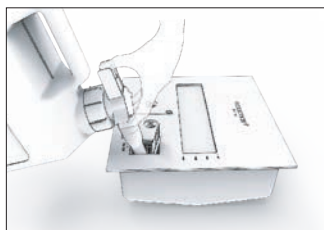
VB2 & XS340
To fill the VB Series, position the Jerry Can spout in the middle of the burner mouth.



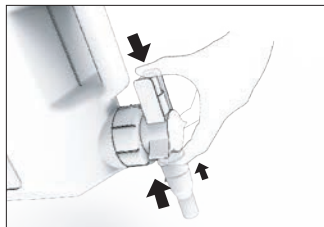
AB Series:
To fill the AB Series, position the Jerry Can spout in the middle of the burner mouth.



4. Re-position the Burner slider ensuring the grid work of the burner is visible through the filling point. This will clear the filling point for the insertion of the Jerry Can spout as well as allowing visual monitoring of the amount of fuel being added, according to the volume markings on the Burner.

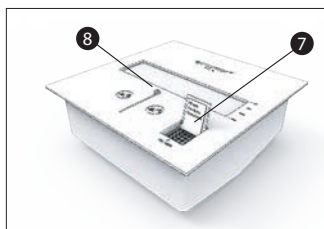


5. Once ready, carefully place the Jerry Can spout inside the filling point. **NEVER** fill over the maximum level as indicated on the burner vent inside the Burner and only fill to the level that you require for burning time.



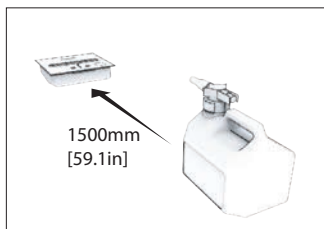
6. Use both hands to pour. Place the palm of one hand on the top of the nozzle with your thumb on the green button.

Use your other hand to tip the can vertically and hold it steady. Press down on the green button to release the fuel. To stop the flow, simply release the green button.



7. When filling is complete, flip the lid that covers the filling point so it closes the filling point.

8. Re-position the slider to the fully open position. Check surrounding area for any spillage. **WARNING: Fire hazard. Clean up any spilled fuel before lighting the burner. See Troubleshooting page 20 for clean-up procedure.**



9. Make sure that the Jerry Can is at least 1500mm [59.1in] away from the fireplace before you ignite the fire.

How to Operate the Burner

Lighting the Burner

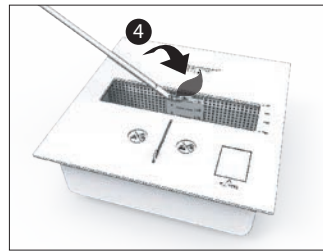
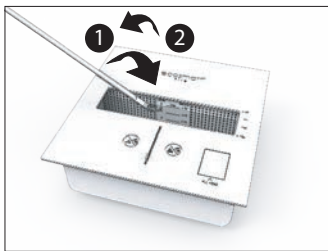
To view a video of Lighting the Burner, visit our website at ecosmartfire.com

WARNING: If the fire setting includes multiple burners, all burners must be OFF and cooled during the filling procedure. Turn all burners off and allow all burners to cool before refilling a burner. Finish re-fuelling all burners before lighting each burner.

Keep hands and face the length of the lighting rod away from the Burner at all times, particularly when igniting. Before lighting, ensure that the Burner is clear and ready for use. Open the slider fully and wait for 60 seconds for the residual fumes to dissipate before lighting.

Check the slider is free from obstruction and operating smoothly. (Refer to Troubleshooting section on page 20 if difficulties are experienced).

Do not smoke while lighting the Burner, and make sure that no one is in front of the fireplace while igniting the Burner. Only use the lighter supplied with your EcoSmart Fire.



1. Dip the lighting rod tip into the chamber opening "Burner zone" to wet the end.
2. Lift the lighting rod away from the Burner (do not drip fuel on the floor).
3. Ignite the lighter and make contact with the lighting rod as if lighting a candle.
4. Dip the ignited lighting rod back into the Burner zone to ignite the contained fuel.
5. Allow residual flame on lighting rod to burn out.

NOTE: The XL1200, XL900 & XL700 is best ignited from the right hand side of the ignition zone.

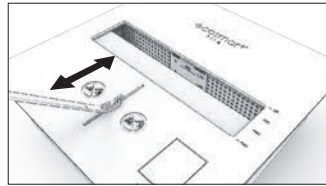
Once lit there will be a residual flame on the lighting rod that must burn out before putting the rod away. If the flame on the lighting rod dies before reaching the burner, repeat the procedure until successful.

Due to some residual oil in the fibres we use in the Burner there is a stronger smell when first operating. It will decrease substantially after the first few times you use the Burner, and even more so over time. To minimise this, wash the burner out in hot water before using. The Burner must be completely dry and cool before filling with fuel.

Regulating the Flame

Wait until the fire is established (approx 10 minutes) before regulating.

To decrease the flame intensity insert the lighting rod tip through the circular ring and push forward gently to desired setting. Only use the lighting rod supplied with your EcoSmart Fire to avoid hand burns.

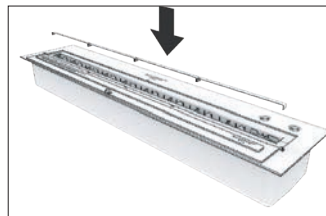


To increase the flame intensity insert the lighting rod tip through the circular ring and pull back gently to desired setting. Only use the lighting rod supplied with your EcoSmart Fire to avoid hand burns.

Baffles (XL Series) / Efficiency Ring (AB8 Burner)

These efficiency devices are a standard inclusion with the XL Series and AB8 Burners. Baffles (or Rings) are placed over the internal burner vents when cold and not operating and serve to increase the efficiency of the burner as well as further stabilise the flame of the burner. (XL1200 - 5x Baffles, XL900 - 4x Baffles, XL700 - 3x Baffles, XL500 - 2x Baffles, AB8 - 1x Efficiency Ring). To comply with EN 16647 the AB8 efficiency ring must be installed before operating the burner.

Note: Regulatory function and accessories not applicable to XS340, VB2 and AB3 – in these models, the control must be in the fully ON or fully OFF position only. The flame cannot be adjusted.



XL1200 5 x Baffles



AB8 1 x Efficiency Ring

Important: All Burner parts will age over the course of time through natural processes associated with use, heat and flame.

Please also note that new stainless steel has an oil coating that will burn off during the first few uses. You will notice an accumulation of carbon around the top opening of the Burner zone and its vents. This will appear quickly and is normal. You will need to perform your first maintenance after approximately 20 litres [5.28 Gal] of e-NRG Bioethanol burnt.

After this, the accumulation will be far slower and maintenance can then occur every 50 litres [13.20 Gal] of e-NRG Bioethanol burnt. If anything abnormal appears, do not operate the appliance. If the fire is running, turn it off immediately and contact your distributor before using again.

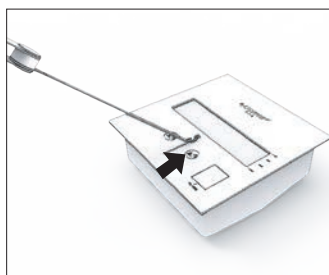
How to Operate the Burner

Turning your Burner OFF - Extinguishing the Flame

To view a video of extinguishing your Fire, visit our website at ecosmartfire.com

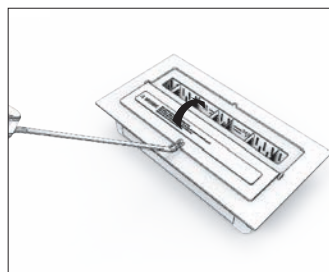
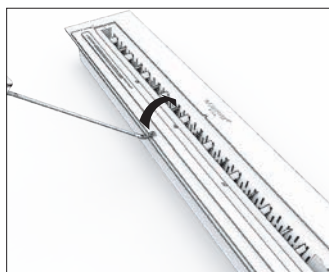
1. Let it burn until the fuel is consumed. The flame will extinguish when no fuel is left.
2. Use the lighting rod to move the circular ring to the fully OFF position.

WARNING: Fire hazard. With either method, let burner cool for at least 60 minutes before refueling.



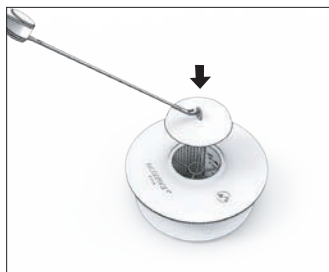
XL Series:

The XL Series have a flip lid shut-off mechanism. The lid flips across the ignition zone which extinguishes the flame.



AB Series and VB Series:

A lid is used to extinguish the flame.



Re-igniting the Burner

WARNING!

- **NEVER LEAVE A FIRE UNGUARDED.**
- **ONLY USE e-NRG BIOETHANOL IN THE BURNER.**
- **IGNITION OF THE LIGHTING ROD SHOULD ONLY BE PERFORMED ABOVE AND BESIDE THE BURNER TO AVOID DRIPPING THE FUEL AT ANY STAGE OF THE LIGHTING PROCESS OUT OF THE FIREPLACE ONTO THE FLOOR.**
- **THE BURNER MUST NOT BE FILLED AT ANY TIME WITH ADDITIONAL e-NRG BIOETHANOL WHEN THE FLAME IS GOING OR WHEN THE BURNER IS HOT.**
- **AN INHERENT DANGER WITH e-NRG BIOETHANOL IS THAT THE FLAME PRODUCED CAN BE NEARLY INVISIBLE IN NORMAL DAYLIGHT CONDITIONS OR WHEN FIRST LIT. BEING DIFFICULT TO SEE, AN INEXPERIENCED PERSON CAN EASILY ASSUME THE BURNER IS EMPTY AND NEEDS FILLING.**

ASSUME BURNER IS LIT, EVEN IF YOU DON'T SEE FLAME. FOLLOW PROCEDURE TO EXTINGUISH FLAME AND ALLOW UNIT TO COOL BEFORE ATTEMPTING TO REFUEL. NEVER REFUEL WITH BURNER LIT OR WHILE UNIT IS HOT.

1. Move the slider/hinge so the Burner opening is fully open.
2. Wait 60 minutes before re-igniting the Burner. The Burner should be at room temperature. Please be aware that if this time is not respected the ignition could be pressurised and therefore stronger. A pressurised ignition can cause serious burns if you are close to the Burner.
3. Re-ignite as described in "Lighting the Burner".

Regular Safety Checks

Like all fire and fireplace systems, it's important to run through regular safety checks. Please take the time to familiarise yourself (and any other users) with the safety procedures associated with using your EcoSmart Fire.

- ☒ e-NRG bioethanol is the ONLY fuel suitable for use in this appliance.
- ☒ Check your burner is in good working condition, the shut off mechanism is working smoothly, the filling point is accessible and effective, nothing foreign has fallen into it and make sure there is no visual or physical damage to the burner
- ☒ Frequently inspect all around the installation – including lifting the burner out of its position to ensure that no fuel has accumulated in or around the setting at any time
- ☒ Take out your operations manual and refresh your memory on the operational procedures for using this product – it's available on our website too
- ☒ Give your burner a good clean, they can be washed out with hot soapy water and left to dry - or pop it in your dishwasher on the hot pan cycle with detergent (refer to your Operations Manual)
- ☒ Check the operation of your Jerry Can, fire extinguisher, lighter and lighting rod to ensure you have the right tools to use for safely operating your fire - replacement accessories are available from your closest distributor
- ☒ Check your fuel supply is stored according to regulations – if you are unsure contact your local distributor
- ☒ Check that all flammable items are within safe distance from the flame – that's a minimum of 1500mm [59.1in] at all times in all conditions
- ☒ And remember, never overfill your burner, never fill your burner whilst it is in operation or hot, never leave a fire unguarded and never leave children unsupervised

Caring for your EcoSmart Fire

IMPORTANT

Do not put HOT burner lids down on the concrete surfaces. It could damage the model.

Maintenance and cleaning must only be performed when the Burner is OFF, COMPLETELY EMPTY & DRY and at ROOM TEMPERATURE.

If service is required, there are two specific areas to check for cleaning. These are the Burner and the Firebox or immediate surrounds in cases where a firebox has not been installed.

General surrounds are maintained as you would a standard piece of furniture by dusting and polishing the surfaces on a regular basis during your general cleaning routine.

BURNERS

To view a video on cleaning your Fire, visit our website at ecosmartfire.com.

Black Ceramic Coated

All Black Burners (XL's and AB's) use a "Porcelain Ceramic Enamel Coating" this makes them incredibly durable, most notably it will not oxidise, corrode or discolour under heat.

Stainless Steel

The surface of the Stainless Steel Burner will change colour on very hot spots.

This discolouration can usually be removed from stainless steel with a mild abrasive washing product such as JIF® or similar. It is recommended to test a small area first to ensure the cleaning product chosen is appropriate and will not mark or damage the surface.

Regardless of the colour or finish, over time a film of black carbon residue will develop on the surface of the burner usually starting from the MAX line within the burner and around the burning zone of the burner top.

When you want to clean the burner, do so with care – the black residue is a carbon left over from the combustion. It stains.

Cleaning

1. When the fire is off and empty, use a vacuum cleaner for general cleaning on visible surface.
2. Brush/scrape the black material gently from the vents and lid towards the bottom inside of the Burner.
3. Use a vacuum cleaner to remove residue inside the Burner, and around the top opening of the burning zone.
4. To finish cleaning use a damp disposable cloth and wipe until no residue remains.

Clean your unit after you have used 50 liters [13.20 Gal.] of fuel or as soon as you notice black deposits on or near the Burner.

After extensive use, if your Burner smells unusually strong – when empty and cold, remove the Burner from its setting and wash the Burner in hot, soapy water and rinse thoroughly under running water. Let it dry before replacing in unit.

FIREBOXES AND POWDER-COATED SURFACES

The powder-coat will be damaged if you drip bioethanol on it when the burner is not completely cold. **WARNING!** Never fill the burner when it is hot. Refer to warnings on pages 3 & 4.

Take care not to scratch the powder-coat with the lighting rod. The powder-coat is fragile when the burner is hot.

Cleaning

Use a microfibre cloth and warm soapy water to clean.

Caring for your EcoSmart Fire

FLUID™ CONCRETE SURFACES

Concrete is a natural material and therefore each and every model will be unique in appearance.

Cleaning

The solid surface surrounds of your EcoSmart Fire can be cleaned using mild soap and warm water with a soft cloth.

Do not use heavy abrasives, bleach based products or ammoniated cleaners - use of such cleaners will wear down the sealer and result in scratches and decrease stain resistance. We do not recommend use of most natural cleaners (which are often citrus based), as the cleaning agent is typically highly acidic and can damage natural materials.

It is recommended to test a small, discreet area first to ensure the cleaning product will not mark or damage the surface.

Avoiding Stains

In the event that the coating is knowingly cut, scraped, or damaged, a new layer of polymer sealer should be applied. Spills should be wiped up as soon as possible. While the sealer performs well against stains from oils and acidic materials, prolonged exposure may cause a breakdown of the sealer and possible discoloration.

Do not place hot objects on the surface as they may cause discoloration. Using a trivet is recommended. Refrain from applying blue painter's tape or other adhesives directly to the product.

Although not considered a defect, non-structural hairline cracks are possible and may result from shrinkage and the natural curing process. If hairline cracks do appear, immediately apply a sealer to prevent moisture from seeping into the cracks and causing discoloration. Reseal the surrounding surfaces periodically with a polymer sealer.

General Maintenance

Concrete is a porous material and while the surface is sealed at point of manufacture, the sealer may break down over time due to environmental factors like UV rays and general use. This unit has been sealed with a polymer car wax to seal and protect it. We recommend you reseal it every 6 months for maintenance. Use the protective cover when not in use.

Removing Stains

Even with adequate sealer, liquids like red wine, oil, and other acid products could still break down the sealer and be absorbed into the material - particularly if not well maintained. To remove you could try a fine grit sand paper to remove the stains from the surface (remembering to test a small patch in a discreet area first to ensure it doesn't damage the surface). Then re-apply sealer.

TEAK SURFACES

Teak left in its natural state, is virtually maintenance-free. It can be left outside all year round, surviving even the most extreme weather conditions. Over time, untreated teak furniture which is exposed to sun and rain will turn silver grey. This process is cosmetic and does not harm the strength or quality of the wood.

Cleaning

Remove moss, dirt, and surface stains, with an occasional wash with soapy water and a soft nylon brush. For added surface resistance, we recommend applying clear natural linseed oil, Golden Care® Teak Protector, or a natural teak oil.

Teak that is not oiled on a regular basis will stain or experience natural oil surfacing that appears like a "watermark" or irregular pattern of discoloration. These areas are part of the natural maturing process and can be removed with gentle washing using readily available teak cleaners you can source from your local hardware store.

As with all teak furniture regular cleaning is essential to keep the teakwood free from pollen and dirt. We recommend you clean regularly, brush off and wipe with a damp cloth, paying extra attention to horizontal surfaces.

Troubleshooting

1. There is smoke or a foreign smell coming from the Burner when burning

- a. There may be waste burning that should not be in the Burner.
- b. You are using the wrong fuel (it is imperative that you **ONLY** use e-NRG Bioethanol).
- c. You have placed something around/above the flame that has not been approved or recommended.
- d. If the Burner is empty (the flame is dying) or you have just turned the fire OFF, this is normal. Just like when you blow out candles.

Solution

Shut the Burner to the OFF position and wait until it cools down. Clean/service the Burner and remove objects/waste.

2. When I attempt to light the Burner, it does not start

- a. You have not put enough fuel in the Burner.
- b. You have not used the right fuel (it is imperative that you **ONLY** use e-NRG Bioethanol).
- c. The Burner opening is obstructed, there needs to be adequate ventilation for the flame to start.
- d. The e-NRG Bioethanol is cold and takes time to ignite.
- e. If used outdoors, the fuel may have been diluted with rain water.

Solution

Check fuel level, it must be above the 1 litre [1 Quart] line, check type of fuel used, and open the slider/hinge. Repeat starting procedure until the Burner warms up and remains ignited. If filled with water, empty burner, clean and clear Burner and re-set up ready for re-filling.

3. The flame is not extinguishing when turned OFF

- a. It may be that the speed used to close the Burner opening was too slow.
- b. There are particles obstructing the shut-off mechanism.

Solution

Ensure that there is nothing obstructing the shut-off mechanism. Attempt to extinguish again smoothly with the shut-off mechanism. If it does not extinguish, burn the fuel until empty and the flame dies out naturally and contact your distributor. Do not use again until it has been serviced.

If you have overfilled the Burner and the flame is burning strong, prepare your extinguisher just in case, and monitor the flame till the situation goes back to normal as you will not be able to turn it OFF. Do not blow or throw a blanket on it. Do not pour water on it.

4. The slider/hinge cannot be pushed/pulled/flipped into position when hot/cold

- a. The Burner slider/hinge is dirty or filled up with debris left after combustion.
- b. There may be something stuck or obstructing the shut-off mechanism e.g. something may have fallen into the Burner.
- c. The Burner has been physically damaged internally (e.g. if it has been dropped).

Solution

Clean/service the Burner and see if you find the obstruction. If you do not find anything, contact your distributor. Do not use again until it has been serviced.

5. I have spilt some fuel, what do I do before lighting?

Remove all ignition sources. Keep people away from the area. Wipe up spilt liquid thoroughly using a dry cloth, wipe again with a cloth dampened with water. Avoid breathing vapours. Ventilate enclosed space by opening windows and doors.

ONLY ignite when the area is completely dry and you are certain that all spilt fuel has been removed. Please refer to SDS for e-NRG Bioethanol.

6. The flame is unusually volatile and high

This is likely to be caused by a strong draft blowing on the flame.

Locate and remove the source of the draft (it may be that you have a window/door open or fan operating that is directly pushing air towards the fire). If you cannot remove the source of the draft and the flame is too volatile, turn the fire OFF. You will need to rethink the positioning of your unit before operating again or install a firescreen to minimise the draft effect. Contact your distributor.

7. The Jerry Can doesn't work properly

Please contact your distributor for further instructions. Do not attempt to fill the Burner with an unapproved alternative fuel can.

Your Warranty

EcoSmart Fires are designed and manufactured by MAD Design Group.

EcoSmart Fires are covered by a transferable limited warranty and a solid service and support network should you need it. Many aspects of EcoSmart Fires are hand-produced, hand-finished and use natural materials, which makes them subject to variations in colour, finish and size. All pieces will mature and age over the course of time through natural processes associated with use, heat and flame. These changes are an essential part of the dynamic of the piece. MAD Design Group reserves the right to make minor amendments without prior notice.

LENGTH OF WARRANTY

TWO YEAR WARRANTY FROM DATE OF PURCHASE ON FLEX MODELS, STAINLESS STEEL PARTS INCLUDING RAW, FINISHED, POWDER-COATED AND BLACK CERAMIC COATED.

ONE YEAR WARRANTY FROM DATE OF PURCHASE ON MILD STEEL INCLUDING POWDER-COATED AND CHROME PLATED, CEMENT, GLASS, LEATHER, FABRIC, TEAK AND MDF (PAINTED OR CEMENT RENDERED).

Chips and scratches are not covered by warranty. Natural variation in colour, texture and porosity may occur with Fluid™ Concrete Technology products and are considered inherent and valued qualities of the material. Non-structural hairline cracks are possible and shall not be considered a manufacturing defect.

If you live in extreme weather conditions where accumulation of snow is likely, use of the Winter Bag is imperative in order to be covered by warranty.

MAD Design Group undertakes to:

Repair or, at its option, replace without cost to owner either for materials or labour, any part that is found to be defective.

The express warranties do not include:

A. Service calls to:

1. Correct the installation of the Fire.
2. Instruct you how to use the Fire.

B. Repairs when EcoSmart Fires has been used in other than normal domestic/commercial use or when not used in accordance with the Installation, Operating and Maintenance Manual.

C. Repairs when EcoSmart Fires parts or models have been modified or altered in any way that has not been approved in writing by MAD Design Group.

D. Repairs when the product has been dismantled, repaired or serviced by anyone other than an authorised representative of MAD Design Group.

E. Pick up and delivery.

F. Normal maintenance as required in the Installation, Operating and Maintenance Manual supplied with EcoSmart Fires.

G. Transportation or traveling costs involved in the repair when the appliance is installed outside MAD Design Group's AUTHORISED CUSTOMER SERVICE CENTRES's normal service area.

H. Damage to the product caused by accident, misuse or Act of God.

I. Any incidental shipping or holding costs to deliver your product or parts to an Authorized Customer Service Centre.

The Warranties set out are express Warranties given by MAD Design Group and are in addition to the rights and remedies which are conferred upon consumers by the Competition and Consumer Act 2010 of the Commonwealth and other Commonwealth, State or Territory legislation.

Service under the warranties set out must be provided by MAD Design Group Authorised Customer Service Centre which shall provide service during their normal working hours.

This warranty certificate along with proof of date of purchase must be produced when making any claim.

MODEL NAME _____

PURCHASER _____

SERIAL NO. _____

PURCHASED FROM _____

DATE OF PURCHASE _____

For warranty claims please contact your local distributor. If there is not a local distributor in your country please visit **www.ecosmartfire.com** to source the details of the country closest to you.

Approved Warranty Replacements may take 90-120 days to ship depending upon inventory availability.

*Do not return this form to MAD Design Group, please retain for your own reference.

After Sales Service

It is our aim for you to be totally satisfied with your EcoSmart Fire product. NOTICE: If you need service or assistance, we suggest you follow these steps.

After Sales Service for your EcoSmart Fire

MAD Design Group offers an international network of authorised service agents. The use of other than approved EcoSmart Fire parts and accessories may damage or reduce the performance of your Fire and may also endanger the user. The Terms and Conditions of warranty may also be affected. A full list of contacts can be found on www.ecosmartfire.com

Please note

Charges will apply for services performed outside the warranty period. If you are asked to send your Fire into a service centre please ensure that it is securely packed in materials equivalent to how you received your Fire to avoid possible damage that will not be covered by MAD Design Group. Freight must be pre-paid. Include a covering letter outlining the defect and your contact details.

1. Before calling for assistance

Check the things you can do yourself. Refer to the Installation, Operating and Maintenance Manual supplied with your Fire to ensure that it is correctly installed and that you are familiar with its normal operation.

2. If You Need Service*

MAD Design Group has a network of independent EcoSmart Fire Authorised Customer Service Centres whose fully trained technicians can carry out any service necessary on your appliance.

Contact the dealer from whom you purchased the appliance, who can advise you where to obtain service.

3. If you need assistance or have a problem*

If you need assistance or have a problem please contact your local retailer or distributor, or visit www.ecosmartfire.com for Head Office details.

Talk to one of our customer service representatives. They can instruct you in how to obtain satisfactory operation from your appliance or, if necessary, recommend an Authorised Customer Service Centre in your area.

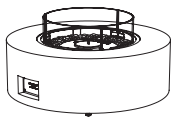
*If you must call or write, please provide: Name and Address, Model Number, Serial Number, Date of Purchase, venue and a complete description of the problem. This information is needed in order to better respond to your request for assistance.

Reproduction of this manual in any manner, in any language, in whole or in part without prior written permission is prohibited. MAD Design Group reserves the right to correct any errors or misprints. We also reserve the right to alter information without notification. The information provided herein is believed to be correct but is not guaranteed.

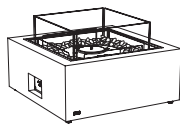
International Patent Pending – Trademarks Pending – All Designs Registered.

CLEARANCES & INSTALLATION MANUAL PROPANE & NATURAL GAS

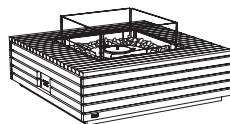
Please read these instructions and the Burner Operations Manual provided with your burner completely before operating the appliance.



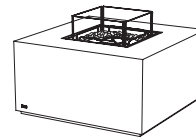
Ark 40
Concrete 63kg, 138.7lbs



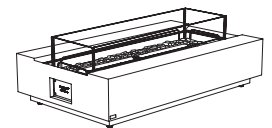
Base 30
Concrete 57.1kg, 125.7lbs
Teak 43.8kg, 96.4lbs



Base 40
Concrete 80.8kg, 177.8lbs
Teak 56.8kg, 125lbs



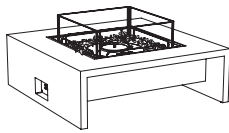
Chaser 38
Concrete 88.8kg, 195.4lbs



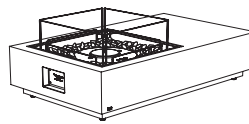
Cosmo 50
Concrete 76.3kg, 167.9lbs
Teak 58.8kg, 129.4lbs



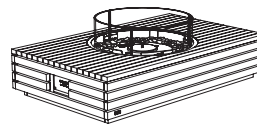
Daiquiri 70
Concrete 120.7kg, 247.4lbs



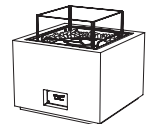
Mojito 40
Concrete 87.3kg, 199lbs



Manhattan 50
Concrete 58.4kg, 128.5lbs
Teak 52.8kg, 116.2lbs



Martini 50
Concrete 53.2kg, 117.1lbs
Teak 47.2kg, 103.9lbs



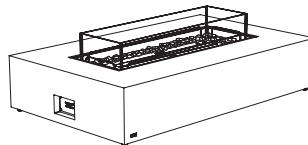
Sidecar 24
Concrete 55.3kg, 121.7lbs



Vertigo 40
Concrete 69.3kg, 152.5lbs



Vertigo 50
Concrete 94.8kg, 208.6lbs



Wharf 65
Concrete 113.3kg, 249.3lbs
Teak 87.3kg, 192.1lbs

Fireplace Clearances

When planning an appliance installation, it's necessary to determine the following information first:

Environmental Conditions

WARNING: Ensure that your fire is positioned away from flammable materials and other sources of ignition (combustible materials, gasoline and other flammable vapors and liquids) at all times. Pay very close attention to positioning the fire away from items that may move as a result of wind and drafts. For example trees/branches/curtains/paper and the like.

The base of the burner within the model must never come into direct contact with flammable materials.

If you live in extreme weather conditions where accumulation of snow is likely, use of the All Seasons Cover is imperative in order to be covered by the warranty.

Locating your appliance

Adequate and constant ventilation is important to keep the appliance functioning properly and safely, including ventilation of the appliance undersides. Setting the appliance without air circulation underneath can cause heat build up and improper combustion. Do not remove the feet or operate the appliance with missing feet.

1. Locate the appliance on hard, flat surface that extends the full length and width of the appliance. The appliance and the LP tank cover can be placed on combustible surface (such as wood deck) or on non-combustible material (such as concrete). Ensure all clearances to the sides and clearances above the appliance are observed at all times (see figures 1 and 2).
2. Maintain a minimum air space of ½" (12.5mm) between the ground surface and the underside of the appliance sidewalls by adjusting the articulating feet up or down as necessary.
3. Do not place the appliance over grass, artificial turf, carpet or any uneven surface, as this will block the airflow underneath the appliance. See figure 1.
4. Follow the same instructions above for the LP tank cover (if purchased). See figure 1.

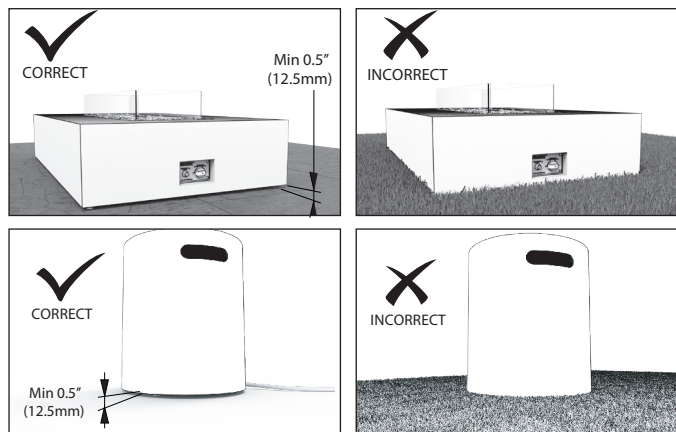


Figure 1

Position the appliance adjacent to the gas supply line or LP gas supply cylinder.

DO NOT locate the appliance where it will get excessively wet or submerged in water.

Minimum Clearances

Note: Measurements are distances closest to the flame

Side clearances to fixed and stable furniture items that are not susceptible to movement such as lounges or patio furniture must remain a minimum of 24in (610mm) away from the flame at all times.

Overhead clearances to items that are susceptible to movement (e.g. Curtains/Trees) must remain a minimum of:
- 78.7in (2000mm) away from the flame at all times.

Ceiling clearances must remain a minimum of:
- 72in (1,829mm) to overhang from top of burner.

Please note that:

Any furniture items or fittings directly above or beside the Burner installation must be deemed suitable for heat tolerances by their manufacturer e.g. electronic items including screens and entertainment equipment, wallpaper, laminates, veneers, glues and reconstituted materials.

The manufacturer and associated distributors are not liable for any injuries or damages sustained through any installation not in compliance with this manual.

A fire extinguisher is strongly recommended.

WARNING

The manufacturer and associated distributors disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged components.
- Modification of the burner assembly or burner orifice.
- Installation other than as instructed in this manual.

Any such action may cause a fire hazard

WARNING

Fire Risk
Provide adequate clearance:

- Around air openings
- For service access

Locate appliance away from traffic areas

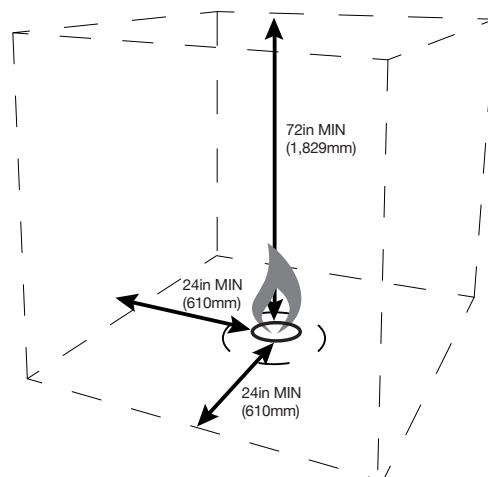
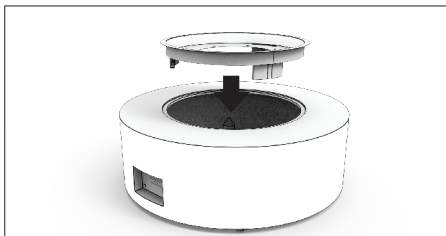
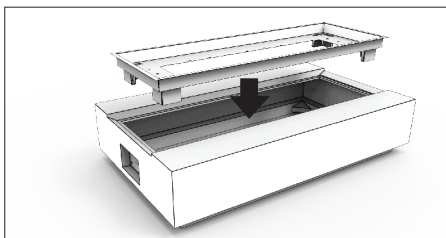


Figure 2

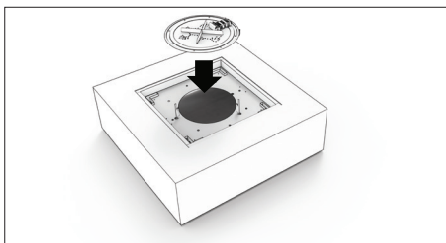
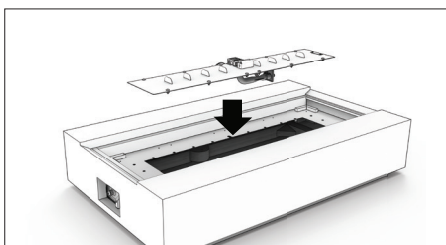
Clearance measurements are distances from the edge of the flame, not from the centre.

Fireplace Installation

1. Insert the metal tray into the base.



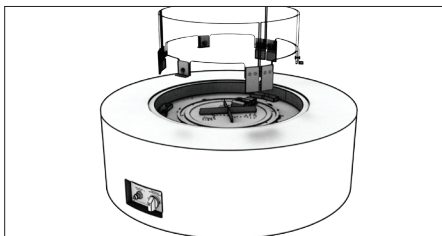
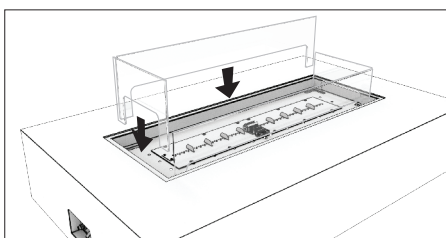
2. Insert Burner into metal tray. Please read assembly instructions in the Operations Manual provided with your burner.



3. Insert Glass Screen. (If applicable).

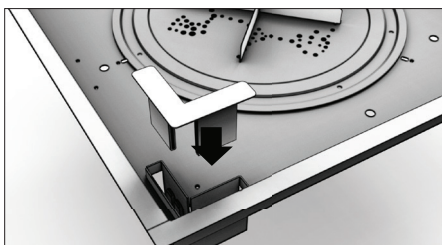
Align each glass screen tab with the designated slots in the metal tray, gently put into position. Exercise caution so as not to fracture or damage glass.

If included as a standard part (compulsory with Gas Teak models), the appliance must not be operated without the glass screen installed.

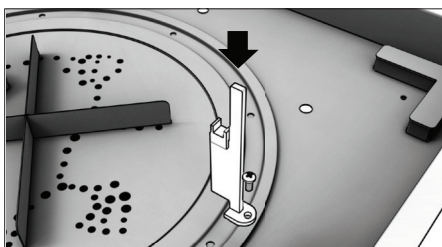


R400 Round Glass Screen Installation

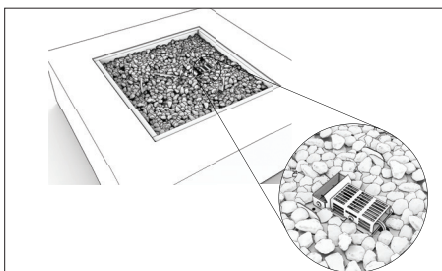
- A. Ensure all corner covers are on.



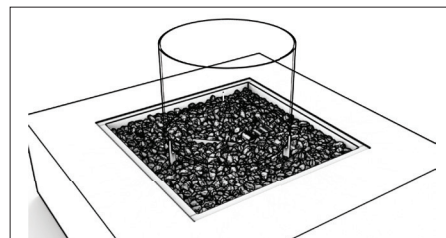
- B. Install the three (3) glass support metal brackets.



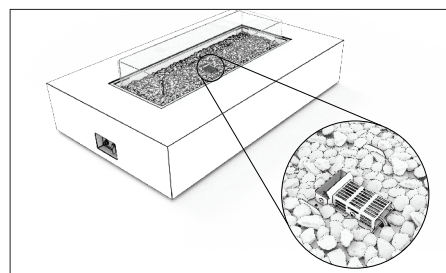
- C. Fill the burner area with the included black glass media. Use all black glass charcoal provided for best effect. Keep clear of the sparker to avoid accidental blockage. Spread the media evenly while ensuring the burner is completely covered.



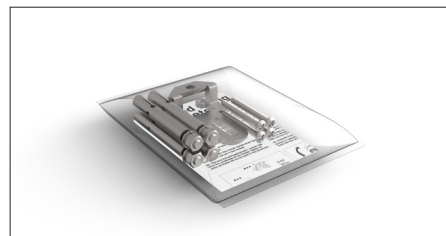
- D. Carefully place the glass fire screen onto the three (3) metal brackets. Ensure bumpers are intact on the brackets to prevent damaging the glass fire screen.



4. Fill the burner area with the included black glass media. Use all black glass charcoal provided for best effect. Keep clear of the sparker to avoid accidental blockage. Spread the media evenly while ensuring the burner is completely covered.



5. These models come with Ground Fixing Brackets so they can be installed in a fixed position. Follow the instructions supplied with the Ground Fixing Brackets to complete the installation of the product.

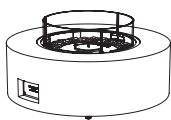


OPERATE ACCORDING TO THE BURNER OPERATIONS MANUAL INCLUDED WITH THE BURNER.

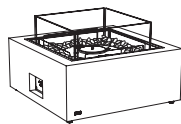
CLEARANCES & INSTALLATION MANUAL BIOETHANOL ONLY

Please read these instructions and the Burner Operations Manual provided with your burner completely before operating the appliance.

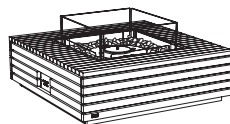
REFER TO THE OPERATIONS MANUAL IN THE BURNER PACKAGING FOR CLEARANCE AND INSTALLATION INSTRUCTIONS IF USING PROPANE OR NATURAL GAS.



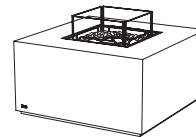
Ark 40
Concrete 63kg, 138.7lbs



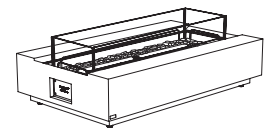
Base 30
Concrete 57.1kg, 125.7lbs
Teak 43.8kg, 96.4lbs



Base 40
Concrete 80.8kg, 177.8lbs
Teak 56.8kg, 125lbs



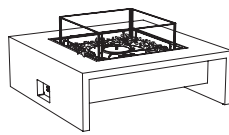
Chaser 38
Concrete 88.8kg, 195.4lbs



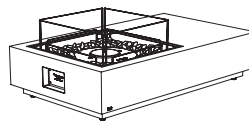
Cosmo 50
Concrete 76.3kg, 167.9lbs
Teak 58.8kg, 129.4lbs



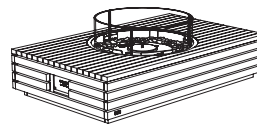
Daiquiri 70
Concrete 120.7kg, 247.4lbs



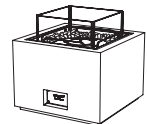
Mojito 40
Concrete 87.3kg, 199lbs



Manhattan 50
Concrete 58.4kg, 128.5lbs
Teak 52.8kg, 116.2lbs



Martini 50
Concrete 53.2kg, 117.1lbs
Teak 47.2kg, 103.9lbs



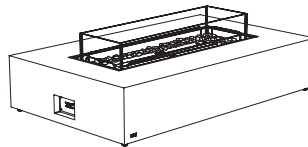
Sidecar 24
Concrete 55.3kg, 121.7lbs



Vertigo 40
Concrete 69.3kg, 152.5lbs



Vertigo 50
Concrete 94.8kg, 208.6lbs



Wharf 65
Concrete 113.3kg, 249.3lbs
Teak 87.3kg, 192.1lbs

e-nrg[®]
natural . renewable . green

e-NRG is the ONLY fuel to
be used in this appliance.

e-nrg.com
e-nrg.com.au

! WARNINGS:

IF THE INFORMATION IN THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.



Do not fill
while hot



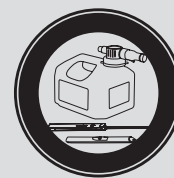
Do not fill while
operating



Do not overfill



Flammable



Use with supplied
accessories



Keep away
from children

Fireplace Clearances

When using Bioethanol as a fuel source this model is suitable for indoor and outdoor use.

Before installation ensure that the model is positioned in accordance with the compulsory minimum clearances outlined below.

If used indoors ensure that you pay attention to the Minimum Room Sizes below:

AB8/ AB8(EN)	116m ³ [4096ft ³] per burner
XL900	110m ³ [3884ft ³] per burner

WARNING: Ensure that your fire is positioned away from flammable materials and other sources of ignition at all times. Pay very close attention to positioning the fire away from items that may move as a result of wind and drafts. For example trees/ branches/paper and the like.

The base of the burner within the model must never come into direct contact with flammable materials.

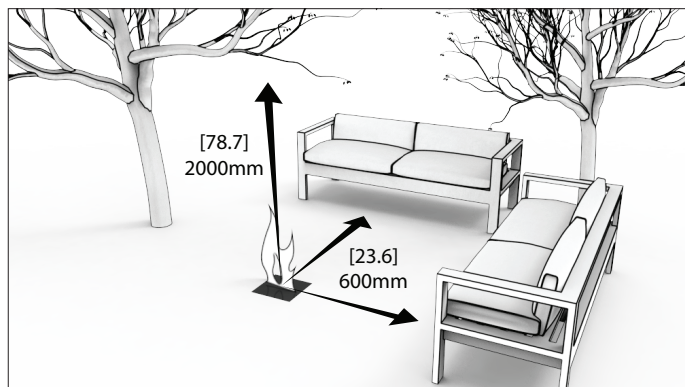
Side clearances to fixed and stable furniture items that are not susceptible to movement (e.g lounges or patio furniture) must remain a minimum of 600mm [23.6in] away from the flame at all times.

Overhead clearances to items that are susceptible to movement (e.g. Trees) must remain a minimum of 2000mm [78.7in] away from the flame at all times.

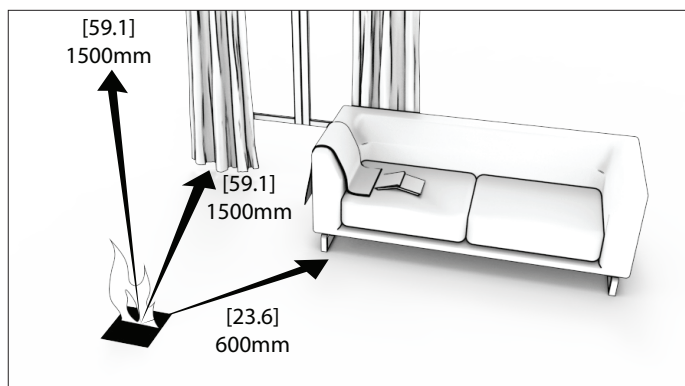
These products feature 360° height-adjustable articulating feet. Adjust the feet by turning them in either direction until you achieve a perfectly level and stable model before operating.

Stainless steel will rust or corrode over time if contamination or debris is not cleaned or removed immediately. Always use the Burner Lid included with your model to avoid dust and debris from accumulating inside the burner.

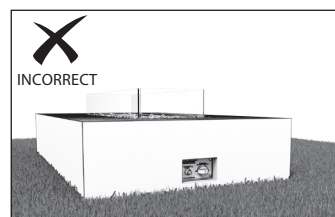
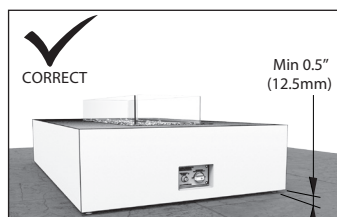
If you live in extreme weather conditions where accumulation of snow is likely, use of the All Seasons Cover is imperative in order to be covered by the warranty.



1. Outdoor Clearances



2. Indoor Clearances



Locating your appliance

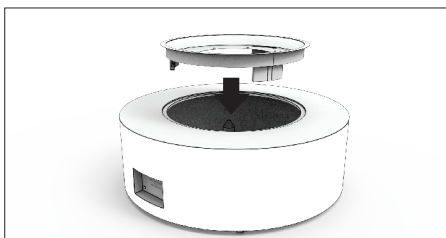
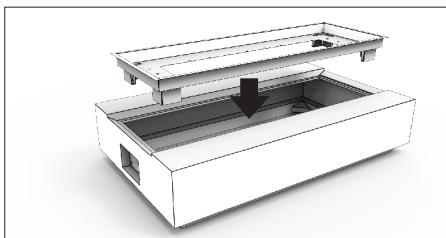
Please do not remove the feet from the appliance, as they play an important role in providing adequate airflow of the undersides.

1. Maintain a minimum air space of 12.5mm [0.5in] between the ground surface and the underside of the appliance sidewalls by adjusting the articulating feet up or down as necessary.
2. Do not place the appliance over grass, artificial turf, carpet, rock, or any uneven surface.

DO NOT locate the appliance where it will get excessively wet or submerged in water.

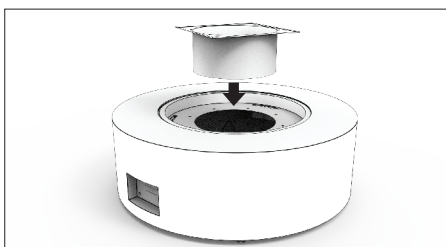
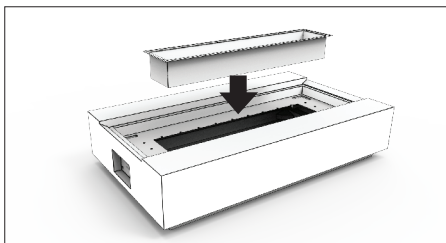
Fireplace Installation

1. Insert the metal tray into the base.

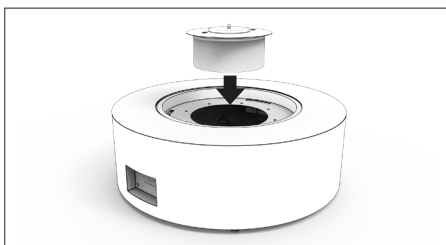
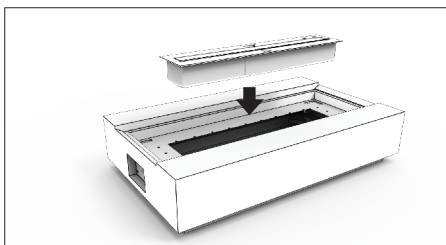


2. For Indoor Installations insert the Indoor Safety Tray. The appliance must not be operated indoors without the Safety Tray installed.

For outdoor installation go to Step 3.



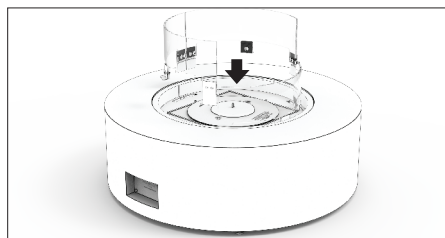
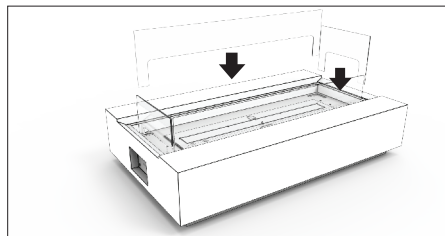
3. Insert Burner into metal tray.



4. Insert Glass Screen. (If applicable).

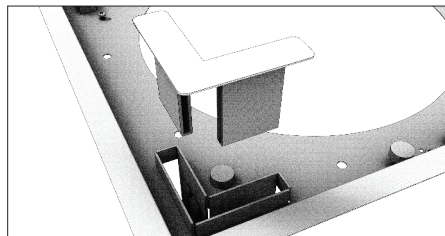
Align each glass screen tab with the designated slots in the metal tray, gently put into position. Exercise caution so as not to fracture or damage glass.

If included as a standard part, the appliance must not be operated without the glass screen installed.

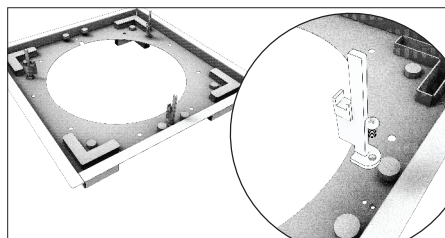


R400 Round Glass Screen Installation

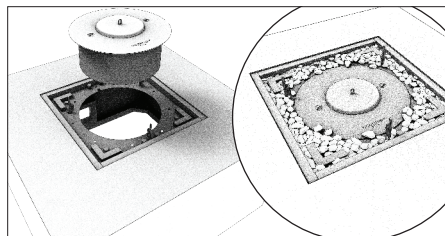
- 4a. Ensure all corner covers are on.



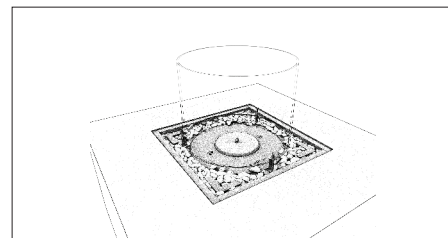
- 4b. Install the three (3) glass support metal brackets.



- 4c. Insert burner into the model. Add glass charcoal around the burner - be careful not to scratch the burner surface.

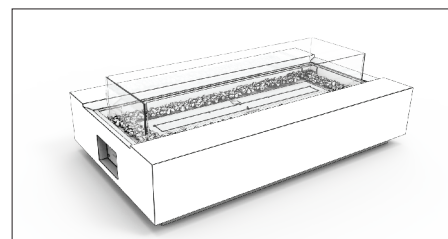


- 4d. Carefully place the glass fire screen onto the three (3) metal brackets. Ensure bumpers are intact on the brackets to prevent damaging the glass fire screen.

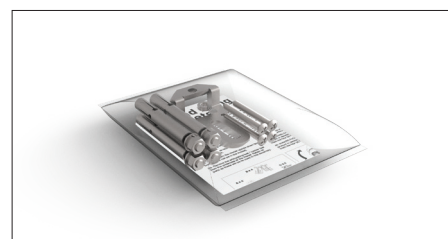


5. Add glass charcoal around the burner - be careful not to scratch the burner surface.

Do not place glass charcoal on top of the burner or where they can interfere with the operation of the burner or the flame.



6. These models come with Ground Fixing Brackets so they can be installed in a fixed position. Follow the instructions supplied with the Ground Fixing Brackets to complete the installation of the product.



OPERATE ACCORDING TO THE BURNER OPERATIONS MANUAL INCLUDED WITH THE BURNER.