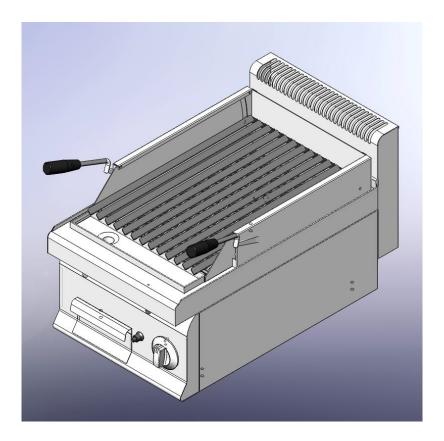
# GAS LAVA ROCK GRILL Installation and Operation Manual Model No: GLK473C





#### Important:

- 1. You are advised to read these instructions first before installation commences.
- 2. This manual must be handed to the end user after installation and commissioning.
- 3. These instructions are only valid if the country code appears on the appliance. If the code does not appear on the appliance, refer to the technical instructions for adapting the appliance to the conditions for use in that country.

# <u>Index</u>

In	troductionPage 3
Τe	echnical specificationsPage 4
1.	General informationPage 4
2.	Safety
3.	Functional description. Page 5  Application of the appliance Prohibited use Construction Construction features Cooking surfaces
4.	Installation.  General information Regulatory installation conditions Exhausting fumes Possible environmental interference Preparing for installation Storage Transporting the appliance Unpacking the appliance Disposing of packaging materials Positioning the appliance Gas supply connection Checking gas supply pressure after installation Gas technical specifications Checking operation Staff training Rating plate
5.	Adjustment instructions Page 10 Replacing main burner nozzles Replacing the nozzle of main burner pilot flames Functional check
6.	Operating instructions Page 11  Before using the appliance Preparing the appliance for use Using the appliance Operating controls Turning the burners on and off After-use care Cleaning Idle period Periodic maintenance

#### Introduction

We are confident that you will be delighted with your Lava Rock Griller, and it will become a most valued appliance in your commercial kitchen.

To ensure you receive the utmost benefit from your new Griller, there are two important things you can do.

#### Firstly:

Please read the instruction book carefully and follow the directions given. The time taken will be well spent.

#### Secondly:

If you are unsure of any aspect of the installation, instructions or performance of your appliance, contact your dealer promptly. In many cases a phone call could answer your question.

#### **CE Only:**

These instructions are only valid if the country code appears on the appliance. If the code does not appear on the appliance, refer to the supplier of this appliance to obtain the technical instructions for adapting the appliance to the conditions for use in that country.

#### **WARNING:**

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH.

READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS APPLIANCE.

#### **WARNING:**

INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE USER SMELLS GAS ARE TO BE POSTED IN A PROMINENT LOCATION. THIS INFORMATION SHALL BE OBTAINED BY CONSULTING THE LOCAL GAS SUPPLIER.

#### WARNING:

GREAT CARE MUST BE TAKEN BY THE OPERATOR TO USE THE EQUIPMENT SAFELY TO GUARD IT AGAINST RISK OF FIRE.

- THE APPLIANCE MUST NOT BE LEFT ON UNATTENDED.
- IT IS RECOMMENDED THAT A REGULAR INSPECTION IS MADE BY A COMPETENT SERVICE PERSON TO ENSURE CORRECT AND SAFE OPERATION OF YOUR APPLIANCE IS MAINTAINED.
- DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPOURS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.
- DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILE IT IS IN OPERATION.

#### **CAUTION:**

#### THIS APPLIANCE IS:

- FOR PROFESSIONAL USE AND IS TO BE USED BY QUALIFIED PERSONS ONLY.
- ONLY QUALIFIED SERVICE PERSONS ARE TO CARRY OUT INSTALLATION, SERVICING AND GAS CONVERSION OPERATIONS.
- COMPONE NTS HAVING ADJUSTMENTS PROTECTED BY THE MANUFACTURER SHOULD NOT BE ADJUSTED BY THE USER/OPERATOR.
- DO NOT OPERATE THE APPLIANCE WITHOUT THE LEGS SUPPLIED FITTED.

# **Technical specification**

**Technical Specifications Table** 

MODEL	GLK473C
DIMENSIONS	
WIDTH (mm)	400
DEPTH (mm)	700
HEIGHT (mm)	450
GAS FEED PIPE	G1/2 ″
HEAT INPUT (kW)	
LPG	7.0
NATURAL GAS	
WEIGHT NET (kg)	

#### 1. General Information

- 1) Read the instructions in this manual carefully, as they contain important information on how to install, use and service the appliance safely, properly, and effectively.
- 2) Keep this manual in a safe place so that it can be used as reference by other operators of the appliance.
- 3) This appliance should be installed following the instructions provided by the manufacturer and in compliance with all applicable local regulations. This appliance should be connected to the gas supply by qualified personnel only.
- 4) All personnel in charge of using this appliance should be specifically trained in its operation.
- 5) In the event of failure or malfunction, switch off the appliance. The periodic functional checks requested in this manual should be carried out according to the instructions. Have the appliance serviced by a technically qualified person duly authorized by the manufacturer that uses genuine spare parts.
- 6) Failure to comply with the above may jeopardize the appliance's safety.
- 7) These instructions are only valid if the country code appears on the appliance. If the code does not appear on the appliance, refer to the technical instruction for adapting the appliance to the conditions for the use in that country.

# 2. Safety

#### 2.1 Using the appliance safely

Being an appliance designed only for professional use, it should be operated by qualified personnel exclusively. Never leave the appliance unattended while it is on.

Do not move the appliance while hot.

#### 2.2 Safety instructions in case of malfunction

If the appliance will remain idle for some time or in the event of a failure, abnormal operation, etc., turn off the shutoff valve upstream of the appliance. Call the service.

#### 2.3 Additional prohibitions (hazardous procedures)

Never tamper with the seals of the adjusting screws located on the gas valves.

#### 2.4 Disposing of the appliance

This appliance has been manufactured using recyclable raw materials and does not contain any hazardous or toxic substances. To dispose of the appliance and all its packaging materials, strictly follow the local regulations in force in the place where it is installed.

Packaging materials should be divided according to the type and delivered to a specific collection site. Ensure compliance with environmental protection regulations.

# 3. Functional Description

#### 3.1 Application of the appliance

The cooking grate is designed to grill, simmer, and cook any kind of food. It is a versatile unit, which can be used in hotel kitchens, restaurants.

#### 3.1.1 Prohibited use

The manufacturer cannot be held liable for any faults caused by defective installation or inappropriate use of the appliance. In such cases, the warranty shall be null and void.

#### 3.2 Construction

#### 3.2.1 Construction features

Exterior finish and height-adjustable feet are stainless steel.

The appliance is equipped with gas burners controlled by safety valves with thermocouple and pulse electric ignition.

#### 3.2.2 Operating principle

The cooking grate is heated to the required temperature by burners located underneath.

#### 4. Installation

#### 4.1 General information

The manufacturer cannot be held liable for any damage to property or injury to persons deriving from installation errors or from inappropriate use of the appliance and is not responsible for any faults caused by defective installation. In such cases, the warranty shall be null and void.

- •It is most important that this appliance is installed correctly and that operation is correct before use. Installation shall comply with local gas, health and safety requirements.
- •This appliance shall be installed with sufficient ventilation to prevent the occurrence of unacceptable concentrations of substances harmful to health.

Our grills are designed to provide years of satisfactory service and correct installation is essential to achieve the best performance, efficiency and trouble-free operation.

This appliance must be installed in accordance with National installation codes and in addition, in accordance with relevant National / Local codes covering gas and fire safety.

Installations must be carried out by qualified persons only. Failure to install equipment to the relevant codes and manufacturer's specifications shown in this section will void the warranty.

Components having adjustments protected by the manufacturer are only to be adjusted by an authorized service agent. They are not to be adjusted by the installation person.

#### 4.1.1 Regulatory installation conditions

For your information, we remind you that all appliances installed in public assembly buildings must meet all the requirements listed below. The appliance should be both installed and serviced in accordance with all applicable regulations and standards in force, namely:

- 1) Safety regulations on fire hazard and panic in public assembly buildings.
- 2) General regulations applicable to all appliances;
- 3) Systems burning combustible gas and liquefied hydrocarbons.

Then, follow the specific regulations according to the type of gas being used.

- 1) Heating, ventilation, refrigeration, air conditioning, and generation of steam and hot water for sanitary use;
- 2) Installation of foodservice cooking appliances;
- 3) Specific regulations applicable to each type of public assembly building (hospitals, shops, etc.).

#### 4.2 Exhausting fumes

The appliance should be installed in a well-ventilated area, if possible under a vent hood, in compliance with all applicable regulations in force. This will ensure that all burnt gases produced during the combustion process are completely exhausted.

NOTE: Do not obstruct or block the appliances flue. Never directly connect a ventilation system to the appliance flue outlet.

#### 4.3 Possible environmental interference

If the appliance is installed with its sides next to flammable walls (made of wood or similar materials) or to heat-sensitive walls (made of plasterboard or similar materials), suitable protective measures should be taken to keep such walls undamaged.

NOTE: Only non-combustible materials can be used in close proximity to this appliance.

	Combustible Surface	None	Combustible	Surface
Left / Right Hand Side	150mm		0mm	
Rear	150mm		0mm	

#### 4.4 Preparing for installation

Check that the appliance is pre-set to use the gas family available at the place of use. If the available gas is different, you will need to convert the appliance to use this other type of gas. For directions, please refer to section "Adjustment instructions" below.

#### 4.5 Storage

If the appliance has been stored in a warehouse where room temperature is below 0°C (32°F), it should be warmed up to at least +10 °C (50 °F) before switching it on.

#### 4.6 Transporting the appliance

The best way to transport this appliance is inside its packing to protect it from outside damage. After the appliance has been unpacked, use wooden spacers if you should need to lift it up.

#### 4.7 Unpacking the appliance

Prior to installation, remove all packaging materials from the appliance. Certain parts are wrapped up in adhesive film, which should be carefully removed. Remove any glue traces left on the appliance thoroughly using non-flammable solvents. It is forbidden to use abrasive substances.

#### 4.8 Disposing of packaging materials

All packaging materials must be disposed of in compliance with applicable local regulations in force where the appliance is being installed. Packaging materials should be separated according to their types and delivered to specific collection sites. Ensure compliance with environmental protection regulations.

#### 4.9 Positioning the appliance

Level the appliance using a level. Height can be adjusted with the help of the adjustable feet.

#### 4.10 Gas supply connection

This appliance is designed to burn natural and liquid gas. To find out the category to which this appliance belongs in the country where it is installed, please refer to the table below.

Table 1: gas categories and pressure values

PIN: 03590Q00408
BS EN203-1:2014
BSEN 203-2-10:2007

Gas heated catering equipment(TYPE A)

Item Name:	Gas lava rock grill		Model No:	GLK473C				
Cour	try of destination	Category	Gas	SupplyPres sure (mbar)	ManifoldPr essure (mbar)	TotalHeati ngInput (KW)	Gas Consumption	Gas Type
HU, IS, I	AT, BG, CZ, DK, EE, FI, HR, E, IT, LV, LT, NO, PT, RO, SK I, ES, SE, CH, TR, GB	I2H	G20	20	20	7.0	0.74 m³/h	
	DE, LU, PL	I2E	G20	20/25	20/25	7.0	$0.74 \text{ m}^3/\text{h}$	
	BE, FR	I2E+	G20/G25	20/25	20/25	7.0	$0.74 \text{ m}^3/\text{h}$	
1	CZ, DK, EE, FI, FR, GB, GR, HR, , LV, MT, NL, NO, RO, SE, SI, SK,	I3+	G31	37	37	7.0	0.55kg/h	
	AT, CH, DE, SK	I3B/P	G31	50	50	7.0	0.55kg/h	

This appliance shall be installed in conformity with the current regulations and use only in a well-ventilated location. Consult the instructions before installing and using this appliance.

#### NOTE: ALL GAS FITTING MUST ONLY BE CARRIED OUT BY A QUALIFIED PERSON.

- 1. This appliances do not require an electrical connection, as they function totally on the gas supply only.
- 2. It is essential that the gas supply is correct for the appliance to be installed and that adequate supply pressure and volume are available. The following checks should therefore be made before installation:-
- a. Gas Type the appliance has been supplied for is shown in the rating label. Check that this is correct for the gas supply the appliance is being installed for. The gas conversion procedure is detailed in this manual.
- b. Supply Pressure required for this appliance is shown above table 1. Check the gas supply to ensure adequate supply pressure exists.
- c. The appliance should be connected to the gas supply by means of metal pipes --either rigid or flexible-- having an adequate diameter. When joining pipe fittings, never use oakum or Teflon as their residues could get to the valve and jeopardize its operation. Instead, interpose a seal gasket suitable for use in gas systems.

**NOTE:** It is important that adequately sized piping runs directly to the connection joint on the appliance with as few tees and elbows as possible to give maximum supply volume.

- 3. A Manual Isolation Valve must be fitted to the individual appliance supply line.
- 4. Connect the gas supply to the appliance. A suitable jointing compound which resists the breakdown action of LPG must be used on every gas line connection, unless compression fittings are used.
- 5. Check all gas connections for leakages.

#### WARNING:

DO NOT USE A NAKED FLAME TO CHECK FOR GAS LEAKAGES.

#### 4.11 Checking gas supply pressure after installation

Gas supply pressure may be measured using a liquid or a digital manometer.

Proceed as follows:

- 1) Remove the control panel;
- 2) Connect the manometer;
- 3) Start up the appliance by following the information in "Operating instructions";
- 4) Check supply pressure;
- 5) Remove the manometer;
- 6) Refit the screw and check for leaks.

If the measured pressure valve is within the range shown in ."Table 1: Gas categories and pressures", the appliance can be turned on; otherwise, contact your Gas Company.

#### 4.12 Gas technical specifications

The appliance should be started up at its rated output with the nozzles shown in "Table 2: burner specifications" below. All the necessary nozzles are provided in a small bag together with the appliance. The nozzles of the main burners are marked in hundredths of mm, while those of pilot flames have a reference number.

**Table 2: burner specifications** 

Table 2: burner specifications				
Nominal Heat Input (kW)		7.0		
Low Hea	t Input per Burner	3.5		
(kW)		3.5		
Liquid 9	gas consumption	0.55		
	(kg/h)	0.55		
Natural	gas consumption	0.74		
(1	m³/h) - G20	0.74		
G20				
Rated	pressure (mbar)	20		
Max	oressure(mbar)	25		
Min	ressure(mbar)	17		
Nozzles	Pilot flame	0.35		
	Injector	2.05		
G25				
Rated	pressure (mbar)	20		
Max	oressure(mbar)	25		
Min p	ressure(mbar)	17		
Nozzles	Pilot flame	0.35		
	Injector	2.20		
G30/G31/Mixture				
Rated	pressure (mbar)	30		
Max	oressure(mbar)	35		
Min p	ressure(mbar)	25		
Nozzles	Pilot flame	0.20		
	Injector	1.30		
G30/G31				
Rated pressure (mbar)		28-30/37		
Max pressure(mbar)		35/45		
Min pressure(mbar)		25		
Nozzles	Pilot flame	0.20		
	Injector	1.30		

Table 2: burner specifications (cont')

G30/G31	/Mixture	
Rated pressure (mbar)		50
Max pressure(mbar)		57.5
Min p	ressure(mbar)	42.5
Nozzles	Pilot flame	0.20
	Injector	1.15

#### 4.13 Checking operation

- 1. Start up the appliance by following the instructions given in chapter "Using the appliance";
- 2. check for gas leaks;
- 3. check for flame stability throughout the whole control range by going from high to low.

#### 4.14 Staff training

Inform all personnel assigned to operate the appliance on how to use it by referring to this user's manual and hand them out the manual.

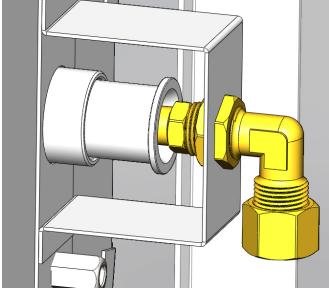
#### 4.15 Rating plate

The rating plate showing the specifications of the corresponding model is applied in the position shown in the installation and connection drawings and includes the data listed below:

Manufacturer:	
Model:	
Serial number:	
Year of manufacture:	
Category:	(see "Technical specifications table")
Heating power:	(see "Technical specifications table")
Natural gas consumption:	(see "Technical specifications table")
Liquid gas consumption:	(see "Technical specifications table")
Supply pressure:	
Natural gases: G20	(see "Table of categories and gas pressure values")
Liquid gases (butane/propane):	(see "Table of categories and gas
G30/G31	pressure values")
Gas inlet pipe size:	(see "Technical specifications table")

### 5. Adjustment Instructions

To convert (for example) from natural gas to liquid gas, you need to change the nozzles of main and pilot burners. The appropriate nozzles are shown in *"Table 2: burner specifications"*.



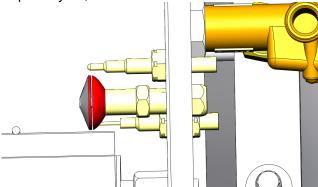
#### Pic 1: Nozzle

#### 5.1 Adjust air ratio device

- 1) Unscrew the control panel thus can see the adjust air ratio device from bottom view.
- 2) Adjust the air ratio based on burner flame.

#### 5.2 Replacing the nozzle of the pilot flame

- 1) Place a 11-mm spanner on the pilot burner body to counterbalance torsional stress;
- 2) With a 10-mm spanner, unscrew the nut fixing the thermocouple and remove the thermocouple;
- 3) Unscrew the nut fixing the gas pipe and remove the pipe;
- 4) Take the nozzle out of the pilot burner body and replace it with a suitable one (see "Table 2: burner specifications");
- 5) Refitting the spare part is a reversal of removal;
- 6) It is not necessary to adjust primary air;



#### 5.3 Functional check

- 1) Start the appliance by following the "Operating instructions";
- 2) Check for leaks;
- 3) Check for flame stability throughout the ON-OFF-ON control range;
- 4) Check the lighting process along the main burner and check that flames are even;
- 5) Check for proper operation of pilot flame;
- 6) Check that flue gases come out of the corresponding pipes regularly;
- 7) Check that there is a good inflow of fresh air.

# 6. Operating Instructions

#### 6.1 Before using the appliance

#### 6.1.1 Preparing the appliance for use

Before cooking food for the first time, we recommend cleaning the appliance thoroughly. Remove all packaging materials and adhesive films from the appliance very carefully. Before cleaning the stainless steel parts, make sure that the detergent you intend to use does not contain any abrasive substances and that it is suitable for stainless steel surfaces. Wipe the appliance dry with a clean cloth. Never use water jets to clean the appliance.

#### 6.2 Using the appliance

#### 6.2.1 Operating controls

By way of example, below are represented 2 of the most comprehensive appliances in this family.

#### 6.2.2 Turning the burners on and off







Fig 1

Fig 2

Fig 3

- Press the knob and turn it anti-clockwise to the position " . (Fig 1) 1.
- Hold down the knob and at the same time press the pulse igniter to light pilot. 2.
- 3. After lighting the pilot, hold down the knob for 15 more seconds to allow the thermocouple to heat.
- 4. If the pilot flame goes out when you release the knob, repeat the item 1 to 3 specified above.
- "Full Flame" can now be achieved by depressing and rotating the gas control knob anti-clockwise to the 5. position " . (Fig 2)
- 6. Turn the knob clockwise to the position " . The burner shall extinguish and the pilot shall remain
- To turn off the appliance completely, turn the knob fully clockwise to the position "

  "."

#### NOTICE:

An unpleasant smell the very first time it is operated can be considered as completely normal.

#### 6.3 After-use care

#### 6.3.1 Cleaning

Before cleaning, turn off the appliance, shut off gas supply upstream of it.

#### **General information**

The main causes for stainless steel wear or corrosion are:

- Using abrasive or acid detergents, especially chlorine-based products such as hydrochloric acid or sodium hypochlorite (bleach). Therefore, before buying a detergent product, make sure it does not corrode stainless steel
- 2) Stagnation of ferrous deposits (such as those created by rust dissolved in the water flowing through the piping, especially after the appliance has remained idle for some time). Therefore, avoid such stagnation; do not use wire wool pads to remove the most stubborn food residues. Use, rather, pads or spatulas made of stainless steel or softer, non-ferrous materials:
- 3) Stagnation of substances having acid components such as vinegar, lemon juice, sauces, salt, etc. Therefore, prevent prolonged contact of these substances with the stainless steel parts of the appliance. The evaporation of saline solutions over the surfaces of the appliance is particularly harmful to them.

#### Routine cleaning

Cleaning the appliance thoroughly every day will keep it in perfect condition and increase its lifetime. Clean the appliance with a damp cloth using water and soap or detergents, provided that they are not acid or abrasive as discussed further above. Such detergents should not even be used to wash the floor near the appliance, as their fumes may deposit on the steel surfaces and damage them. Rinse it off with clean water and wipe it dry with a clean cloth. Do not rub the appliance with steel wool pads as they could leave rust stains. For the same reason, avoid touching the appliance with ferrous objects.

Never use direct water jets to clean the appliance because this could result in water entering into it and damaging it.

#### Stains and abrasions on the steel surface

Scratches and dark stains may be smoothed or removed using stainless steel wool pads or synthetic abrasive sponges, which should always be rubbed in the same direction as the satin finish.

#### Rust

Should you need to eliminate rust stains, contact manufacturers of industrial detergents to find a detergent that can remove such stains. Industrial descaling products can also be used to that end. After rubbing off the stain and rinsing with clean water, an alkaline detergent may be required to neutralise any acid compounds left on the surface.

#### 6.3.2 Idle period

If the appliance will remain idle for a certain period of time, clean it and wipe it dry first, and then apply a film of a suitable product (such as vaseline oil spray or similar products) to protect it. Shut off gas and power supply upstream of the appliance.

To avoid the appearance of corrosion spots, make sure that any salt residues left on the internal and external walls are carefully removed.

#### 6.3.3 Periodic maintenance

Only qualified personnel are allowed to carry out service and maintenance operations.

The following maintenance operations should be performed at least once a year:

Checking for proper operation of all control and safety devices;

Checking burner combustion, i.e.:

- 1. ignition;
- 2. combustion safety;
- 3. checking for proper operation throughout the entire HIGH-to-LOW control range.

We recommend signing a service agreement providing for at least one check-up a year.

# 7. Trouble Shooting

This section provides an easy reference guide to the more common problems that may occur during the operation of your equipment. The fault finding guide in this section is intended to help you correct, or at least accurately diagnose problems with your equipment.

Although this section covers the most common problems reported, you may encounter a problem not covered in this section. In such instances, please contact your local authorized service agent who will make every effort to help you identify and resolve the problem. Please note that the service agent will require the following information:

# The Model Trade Name and the Serial Number of the Appliance. (Both of them can be found on the rating label located on the appliance.)

Fault	Possible Cause	Remedy
Pilot won't light	No gas supply	Ensure gas isolation valve is turned on, and that bottle is not empty.  Call service provider
	Blocked pilot injector	Call Service provider
Pilot goes out when gas control knob released	Releasing knob before the thermocouple has heated.  Pilot flame too small.	Hold knob in for at least 20 seconds following ignition of pilot.  Call service provider.
	- Gas pressure too low Partially blocked pilot injector	Call Service provider.
	Thermocouple faulty	
Main burner will not light	urner will not light Incorrect supply pressure	
	Faulty gas control	Call service provider.

**Note:** Components having adjustments protected by the manufacturer, are only allowed to be adjusted by an authorized service agent. They are not to be adjusted by an unqualified service person.