VENTED
GAS FIREPLACE HEATERS
LEO 100 & 200

MANUAL INSTRUCTIONS

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

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

— WHAT TO DO IF YOU SMELL GAS • Do not try to light any appliance.

- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Leave the building immediately.**
- **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.**

— Installation and service must be performed by a qualified installer, service agency or the gas supplier.

Tested by:

Intertek

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

DANGER

HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNITL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

WARNING!
THIS APPLIANCE IS HOT DURING THE OPERATION. DO NOT TOUCH IT!
DUE TO CONTACT WITH HOT FURNACES OF THE APPLIANCE,SERIOUS BURNS MAY OCCUR.
CHILDREN, ELDERY PEOPLE, ANIMALS, CLOTHING, FURNITURE ALL TYPES OF FUEL AND ANY OTHER FLAMMABLE FLUIDS SHALL BE AWAY FROM THE APPLIANCE.

TAKE CARE ABOUT MAINTENANCE OF YOUR APPLIANCE ACCORDING TO THE RECOMMENDATIONS ENCLOSED IN THIS MANUAL.

INFORMATION FOR MOBILE/MANUFACTURED HOMES AFTER FIRST SALE

This product has been tested and listed by Intertek Services of Middleton, Wisconsin as a Direct Vent Gas Fireplace Heater to the following standards: VENTED GAS FIREPLACE HEATERS ANSI Z21.88-2014/CSA 2.33-2014 and GAS-FIRED APPLIANCES FOR USE AT HIGH ALTITUDES CAN/CGA 2.17-M91.

This appliance may be installed in an aftermarket permanently located, manufactured home (USA only) or mobile home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

PLEASE NOTE: No matter if it is a manufactured or mobile home, your installation must comply with installation requirements in these instructions, including all clearances requirements!

This Direct Vent System Appliance must be installed in accordance with the manufacturer's installation instructions and the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, or the current Standard of Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities ANSI/NFPA 501A, and with CAN/CSA Z240-MH Mobile Home Standard in Canada.

This appliance installation must comply with the manufacturer's installation instructions and local codes, if any. In the absence of local codes follow the current National Fuel Gas Code, ANSI Z223.1/NFPA 54 and the current National Electrical Code ANSI/NFPA 70 in the U.S.A., or the current CAN/CGA B149.1 Gas Installation Code and the current Canadian Electrical Code CSA C22.1 in Canada.

This appliance may be installed in an OEM installation in a manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, in the United States, or the Standard for Installation in Mobile Homes, CAN/CSA Z240 MH Series,* in Canada.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

This owner's manual provides information to ensure safe installation and efficient, dependable operation of your fireplace insert. Please read these instructions in their entirety and make them available to anyone using or servicing this gas fireplace.

Any modifications on this appliance are strictly prohibited. Do not attempt to alter or modify the construction of this appliance or its components. Any modification or alteration will void the warranty, certification and listing of this appliance.

This heater must be installed and maintained by a Qualified service agency.

Installation Requirements for the Commonwealth of Massachusetts
THIS PRODUCT MUST BE INSTALLED BY A LICENSED MASTER OR JOURNEYMAN PLUMBER OR GAS-FITTER WHEN INSTALLED IN THE COMMONWEALTH OF MASSACHUSETTS.

1. If there is not one already present, on each floor level where there are bedroom(s), a carbon monoxide detector and alarm shall be placed in the living area outside the bedroom(s). The carbon monoxide detector shall comply with NFPA 720 (2005 Edition).
2. A carbon monoxide detector shall:
a) Be located in the room that houses the appliance or equipment;
b) Be either hard-wired or battery powered or both; and
c) Shall comply with NFPA 720 (2002 Edition).
3. A Product-approved vent terminal must be used, and if applicable, a Product-approved air intake must be used. Installation shall be in strict compliance with the manufacturer's instructions. A copy of the installation instructions must remain with the appliance or equipment at the completion of the installation.

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Thank you for your trust and purchase of the LEO 100 gas fireplace insert. This device has been designed for your safety and comfort. We would like to express our conviction that you will be satisfied with your choice because of the commitment that was involved in the design and production of the gas fireplace. Prior to installation and use, please carefully read all of the chapters in the manual. If you have any questions or concerns, please contact our technical department. Any additional information is available online at www.kratki.com

Introduction

Kratki.pl Marek Bal is a well-known manufacturer of heating equipment in both Poland and Europe. Our products are based on strict standards. Each insert manufactured by the factory is subjected to quality control during which it undergoes rigorous safety tests. The use of the highest quality materials in the manufacture ensures smooth and reliable operation of the device by end users. This manual contains all of the information necessary for proper installations, operation and maintenance of the LEO 100 gas inserts.

NOTE!!!

Installation, inspection and maintenance of the tightness of the device can be carried out only by qualified fitters/technicians with licences appropriate for the given region.

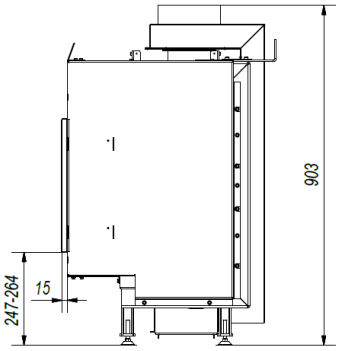
INTRODUCTION

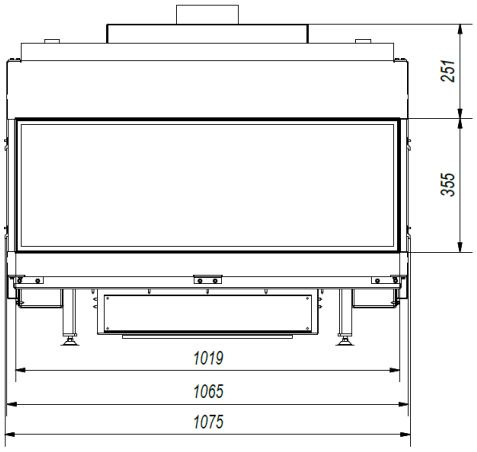
The LEO 100 gas inserts are closed heating equipment powered with flammable gas. This device is ETL marked and uses high-end automation to control gas. The inserts meet the stringent North American directives with regard to safety, the environment and energy consumption. The air supplied to the combustion chamber is drawn from outside of the housing via a coaxial chimney system. This solution provides the user with security because it prevents passage of exhaust gases directly into the room where the fireplace operates. Before fitting the appliance, please read these instructions. The information contained herein will allow you to obtain trouble-free operation of the device. This manual should be retained for the lifetime of the fireplace.

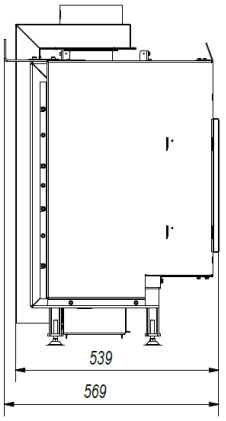
PRODUCT DESCRIPTION

The LEO 100 gas inserts are designed to be supplied with natural gas (NG) or liquefied propane gas (LPG). The units may be available in four versions, depending on the type of glazing. The LEO 100 fireplaces are equipped with automation and security of the same type. Regardless of the model, how it is connected to the gas system and the flue system is identical.

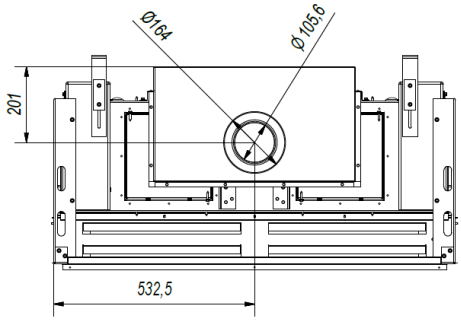
DIMENSIONS

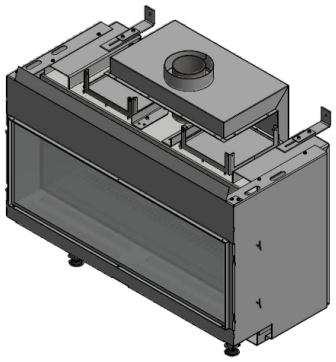


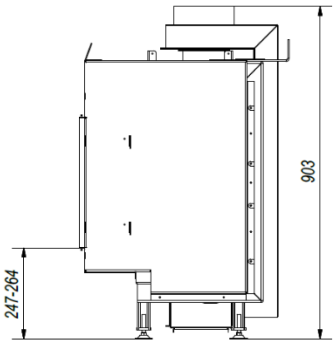


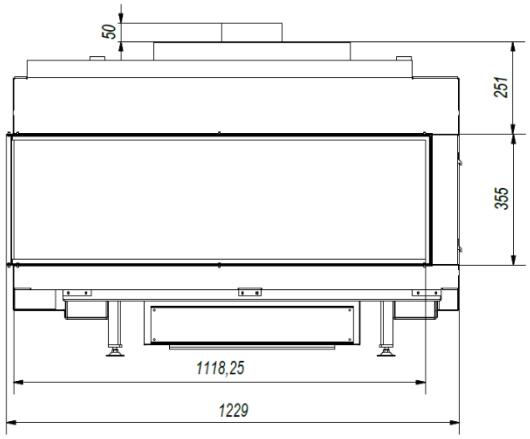


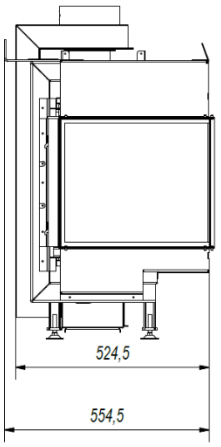
LEO/100











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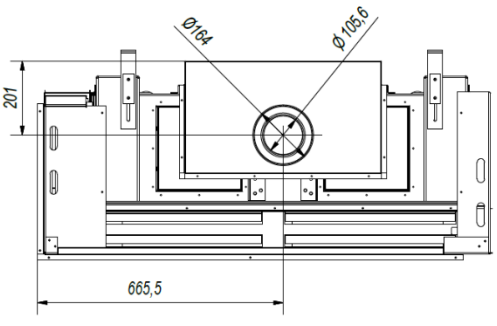

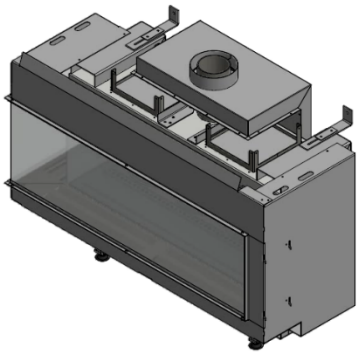

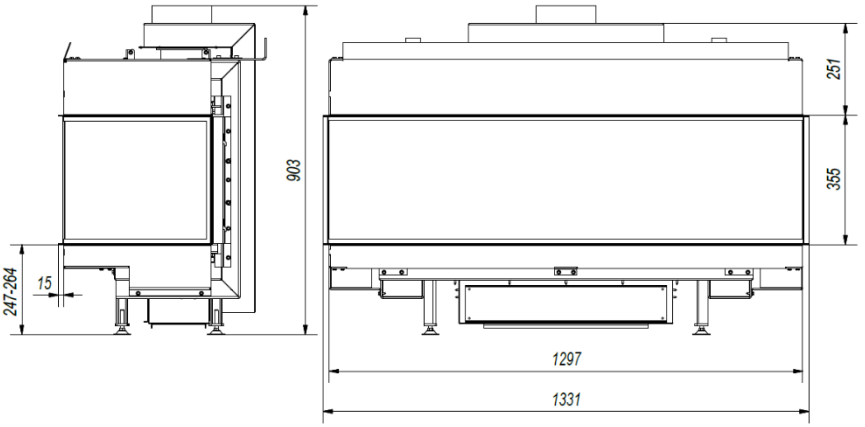

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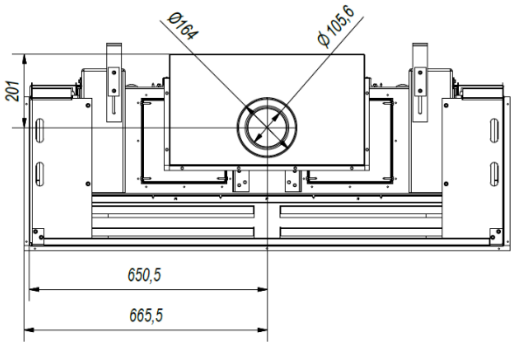
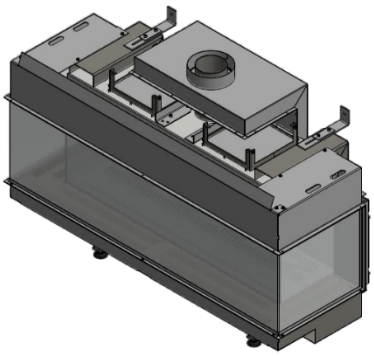
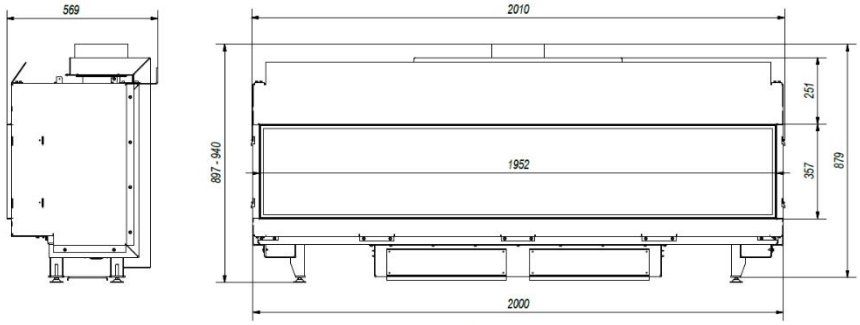
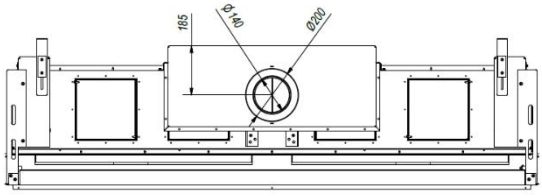
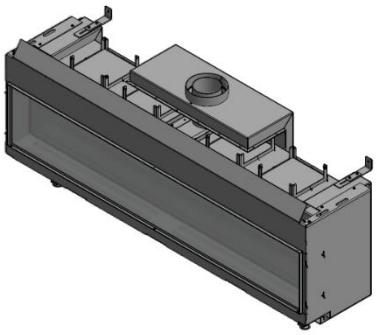






LEO/200





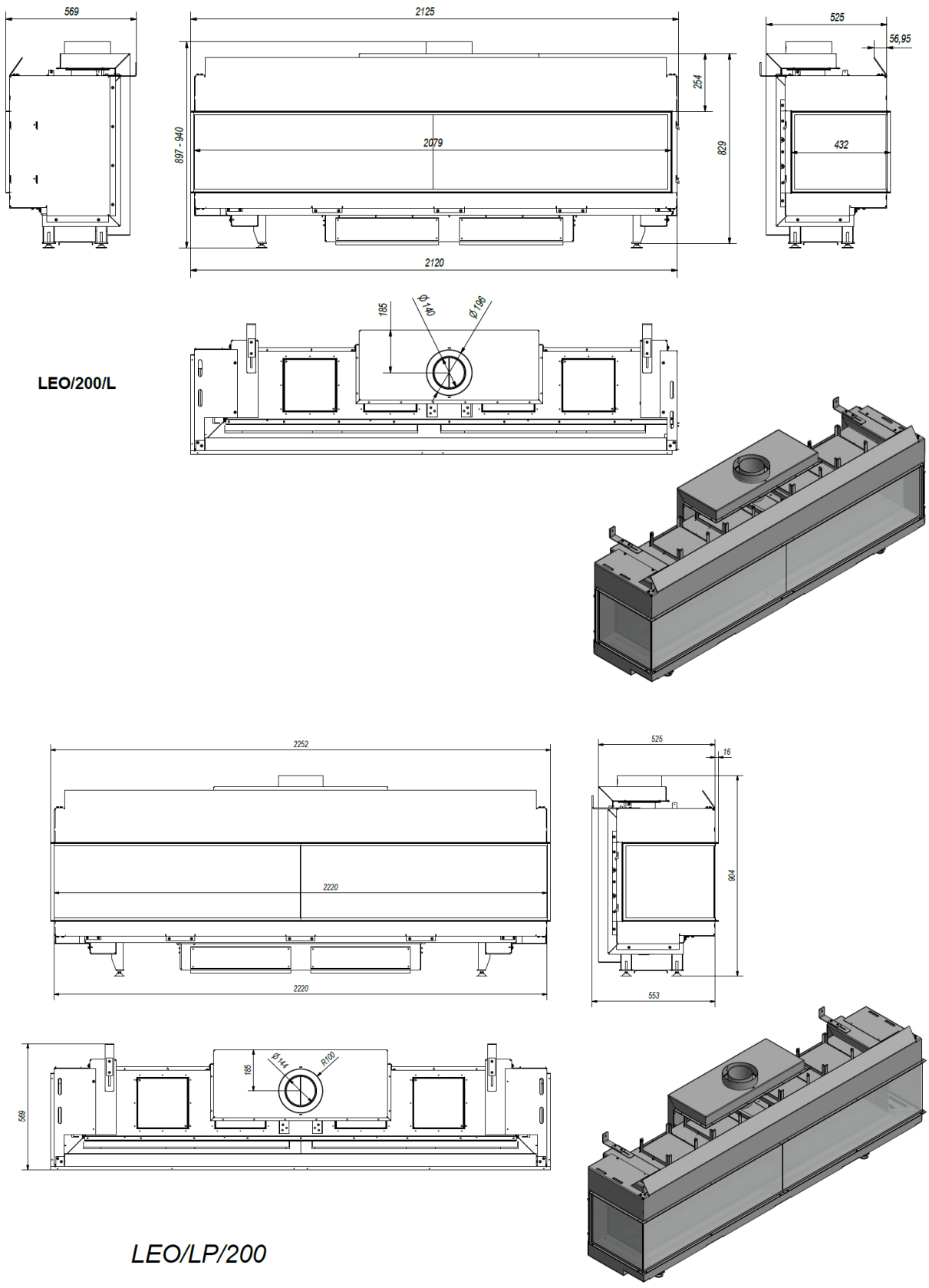


Figure 1. Leo series dimmensions.

SPECIFICATIONS

LEO parametres	Unit	LEO 100 series						LEO 200 series					
Heating power range (min - max)	**btu**	NG		LP				NG		LP			
		12289 - 22000		21281-26000				17212-45000		31219-50000			
Weight	**lbs**	253,5						540					
Venting system	**-**	Coaxial (concentric) DuraVent DirectVent PRO 4”x 6 $^{5}/_{8}$”						Coaxial (concentric) DuraVent DirectVent PRO 5”x 8”					
Screen front	**-**	Ceramic Glass						Ceramic Glass					
Control	**-**	Remote control pilot						Remote control pilot					
Efficiency	**%**	1 Glass		2 Glass		3 Glass		1 Glass		2 Glass		3 Glass	
		NG	LP	NG	LP	NG	LP	NG	LP	NG	LP	NG	LP
		77,21	78,50	77,98	78,98	78,34	82,15	73,97	75,41	75,06	75,29	73,63	74,57
CSA-P.4 Fireplace Efficiency	**%**	-						-					
Safety barrier	**-**	Ceramic glass front barrier						Ceramic glass front barrier					
	WC (kPa)	NG		LP				NG		LP			
Manifold pressure 0-2000 feet (0-610 m)		3.5 (0.87)		10.0 (2.49)				3.5 (0.87)		10.0 (2.49)			
Manifold pressure 2000-4500 feet (610-1370 m)		4.8 (1.20)		12.6 (3.14)				4.8 (1.20)		12.6 (3.14)			
Manifold pressure, Low setting		0.9 (0.22)		6.4 (1.59)				0.9 (0.22)		4.2 (1.05)			
Minimum inlet pressure		5.0 (1.25)		12.0 (3.0)				5.0 (1.25)		12.0 (3.0)			
Maximum inlet pressure		14 (3.50)		14 (3.50)				14 (3.50)		14 (3.50)			

INSTALLATION

THIS HEATER MUST BE INSTALLED AND MAINTAINED BY A QUALIFIED SERVICE AGENCY.
DO NOT ATTEMPT TO ALTER OR MODIFY THE CONSTRUCTION OF THIS APPLIANCE OR ITS COMPONENTS. ANY MODIFICATION OR ALTERATION WILL VOID THE WARRANTY, CERTIFICATION AND LISTING OF THIS APPLIANCE.
WARNING: FAILURE TO POSITION THE PARTS IN ACCORDANCE WITH THE DIAGRAMS HEREIN OR FAILURE TO USE ONLY PARTS SPECIFICALLY APPROVED WITH THIS APPLIANCE MAY RESULT IN PROPERTY DAMAGE OR PERSONAL INJURY.

THIS APPLIANCE IS COMPLIANT WITH NATIONAL SAFETY STANDARDS AND HAS BEEN TESTED AND LISTED BY INTERTEK TESTING SERVICES OF MIDDLETON, WISCONSIN AS A DIRECT VENT GAS FIREPLACE HEATER AND LISTED TO ANSI Z21/88-2016/CSA 2.33-2016 AND GAS-FIRED APPLIANCES FOR USE AT HIGH ALTITUDES CAN/CGA 2.17-M91.

GENERAL INFORMATION

IMPORTANT MESSAGE: SAVE THIS INSTRUCTIONS!

This appliance may be installed in an OEM installation in a manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280*, in the United States, or the Standard for Installation in Mobile Homes, *CAN/CSA Z240 MH Series*, in Canada.

This appliance may be installed in a recreational vehicle also and must be installed in accordance with the Standard *CAN/CSA Z240 RV, Recreational Vehicles*, in Canada, or with *ANSI A119.2/NFPA 501C, Standard for Recreation Vehicles,* in the United States.

In case of any removal, swaping or maintaining of the venitng system it is necessary to reinstall or/and reseal the vent-air intake system properly. Improper reinstallation or resealing can cause serious injury or property damage.

This appliance is approved to be installed with Direct Vent system. For specified, listed system approved to be used with this appliance, please refer to the VENT INTRODUCTION section below.

Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning might be required due to excessive lint from carpeting, bedding material, et cetera. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean.
WARNING: Failure to properly install and maintain this heater could result in an unsafe or hazardous installation, which may result in a fire, explosion, property damage, personal injury or loss of life.

This appliance should be inspected before use and at least annually. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

This appliance and main gas valve of this appliance must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its equipment shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa).

The installation must conform to local codes. Your local Kratki authorized dealer can assist you in determining what is required in your area for a safe and legal installation. Some areas require a permit to install a gas burning appliance. Always consult your local building inspector or authority having jurisdiction to determine what regulations apply in your area.
In the absence of local codes, the installation requirements must comply with the current National codes. In the U.S., these requirements are established in the National Fuel Code, ANSI Z223.1.(NFPA 54). In Canada, the codes have been established in CAN/CGA B149 Fuel Installation Code.

Do not operate the fireplace with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person. Only remove glass for routine service. Always handle glass carefully.

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

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. **Verify proper operation after servicing.**

SAFETY INFORMATION

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.

Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children, and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at-risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children, and other at-risk individuals out of the room and away from hot surfaces.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.
If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.

Any safety screen, guard, or barrier removed for servicing an appliance must be replaced prior to operating the appliance

Clothing or other flammable material should not be placed on or near the appliance.

Do not slam shut or strike the glass screen.
PLEASE NOTE: This appliance is NOT for use with aftermarket glass doors.

Under no circumstances should any solid fuels (wood, paper, cardboard, coal, etc.) be used in this appliance.
NEVER store or use gasoline or any other flammable vapors or liquids in the vicinity of this appliance.

To prevent injury, do not allow anyone who is unfamiliar with the operation to use the fireplace. Wear gloves and safety glasses for protection while doing required maintenance.

WARNING!

Shock Hazard!
Can cause severe injury or death. This appliance is powered by line voltage. Do not try to repair the components in this appliance. In no way are the component enclosures to be tampered with or opened. Disconnect from line voltage during installation or performing any maintenance.

ATTENTION!
- Shut off the main gas supply to the appliance during receiver or remote control battery replacement.
- Always shut off the main gas supply to the appliance during inspection, maintenance, or cleaning.

Electrical Hazards
- Be aware of electrical wiring locations when cutting holes in walls and ceilings for termination.
- If your appliance has electrical power supply, then this appliance power supply must be electrically grounded in accordance with local codes or, in the absence of local codes, with the current ANSI/NFPA 70, National Electrical Code or CSA C22.1-Canadian Electrical Code.
- This appliance power supply incorporates a three-prong (grounding) plug for protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle.
DO NOT CUT OR REMOVE THE GROUNDING PRONG FROM THE PLUG.
- Do not disconnect the lamp and fan power cords from the appliance power supply (Fan Control Module). Use the rocker switch to control power to these parts.
- Always disconnect (unplug) the main power supply from its outlet when performing routine service on this appliance.

CALLIFORNIA STATE ONLY!
Emissions from burning wood or gas could contain chemicals known to the State of California to cause cancer, birth defects orother reproductive harm.

MA CODE - CO DETECTOR (FOR THE STATE OF MASSACHUSETTS ONLY)

5.08: **Modifications to NFPA-54, Chapter 10**

(2) Revise 10.8.3 by adding the following additional requirements:

(a) For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1. INSTALLATION OF CARBON MONOXIDE DETECTORS. At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gasfitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gasfitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors

a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

2. APPROVED CARBON MONOXIDE DETECTORS. Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

3. SIGNAGE. A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".

4. INSPECTION. The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

(b) EXEMPTIONS: The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

1. The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and

2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

(c) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM PROVIDED. When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

1. Detailed instructions for the installation of the venting system design or the venting system components; and

2. A complete parts list for the venting system design or venting system.

(d) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED. When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

1. The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and

2. The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

INSTALATION SET COMPONENTS – REPLACEMENT PARTS

Thoroughly inspect the appliance for shipping damage and immediately contact the dealer if any is found.

Please make sure that the set components were not damaged during transport. The inspection should be carried out in the presence of the fitter. Before installing the fireplace insert, please learn all of the elements that came with the device. In the case of any damage or missing components, please contact our customer service. The user receives a set including:

- GV60M1 Metrik Maxitrol controller.
- B6R-R8U Metrik Maxitrol receiver.
- 8 - symbol B6R-H8T5B remote control.
- Clamp connector 8 mm.
- Clamp connector 6 mm.
- One-piece clamp connector 6 mm.
- Screw plus 3/8'' - 2 pcs.
- G60-ZUS09 interrupter block.
- Control burner block G30-ZP2M.
- Control burner nozzle - NG (number 27_2) LPG (designation 22)
- Seal under the control burner block.
- Thermocouple G30-ZPT1500A.
- Magneto wire.
- Cables connecting the interrupter block with the receiver.
- An 8-core cable connecting the gas controller with the receiver.
- Reducing nipple 1/2 ,' to 3/8 ,'.
- A set of decorative stones.
- Gas connection cables having a diameter of 6 and 8 mm.
- Distribution box.
- Power module G60-ZBE (Option).
- The cable connecting the power module with the receiver, 90º (Option).
- Lighting control module and a G6R-BEAV2 fan (Option).
- The cable connecting the G6R-BEAV2 module with the receiver (Option).
- 10-unit symbol B6R-H8TV14B remote control (Option).
- Steel frame holding the safety glass.
- 4mm ceramic glass safety glass screen.
- Chamber 4mm ceramic glass.
- Holding bars.
- Top flashind flaps.

- Bottom flashing doors
- Flashing doors gasket
- Air inlet

All the above parts might be replaced with if necessary. If your appliance requires any part replacement, please contact your supplier or Manufacturer.

WARNING: you cannot use any substitutes as it will affect on warranty loss and may cause some serious problems with your appliance operation.

In case of chamber glass replacement, you may use the glass certified with the appliance and reccomended by the manufacturer in this instruction and using the holding bars and gaskets provided by your authorized dealer or manufacturer only.

The LEO series has been designed for your safety and comfort. This series has the ability to remotely control the operation of the fireplace by a remote control. The air supply to the combustion chamber and flue gases exhaust are achieved by the use of a coaxial chimney system. The LEO series is equipped with special means to prevent any uncontrolled outflow of gas from the system.

SAFETY

Carefully read the following information:

- Connecting a fireplace to a gas installation and its maintenance can be carried out only by a qualified fitter or a service technician of heating gas appliances. 46
- If the control flame goes out, wait for at least five minutes before trying again.
- It is strictly forbidden to make any modifications in the design of the fireplace.
- Gas control system components must not be exposed to moisture.
- Do not operate the unit without inserting its glass.
- Do not touch hot parts of the fireplace, in particular, the glass.
- While children or other unaware persons are near a working unit they should not remain unattended.
- It is forbidden to place decorative elements used for the lining of the combustion chamber in front of the control flame.
- Do not place flammable materials near the fireplace.
- It is prohibited to place combustible materials in the combustion chamber. If you feel gas leakage, do not operate the unit. As soon as possible, shut off the gas, ventilate the room where the fireplace is and contact your service representative.
- Any cracked glass should be immediately replaced.
- In the case of malfunctioning, cut off the gas supply and contact your service representative.

INSTALLATION INTRODUCTION

The fireplace is equipped with protective devices against uncontrolled outflow of gas from the main burner. Before connecting the appliance, please read all connection diagrams given in this chapter. The gas insert is adapted to be connected to a special coaxial chimney system allowing simultaneous supply of fire into the air and flue gas discharge to the outside of the building. To ensure proper operation, installation of the fireplace can only be done by qualified persons with appropriate licences.

Prior to the release of gas to the insert, the fitter should:

- Perform a leak test for the gas connections.
- Check the correctness of joining the components of the system.
- Check for proper connection of the insert to the chimney system.
- Perform test run of your gas fireplace.
- Check the correct operation of all components and system security.

Leg Leveling Note:
This appliance is equipped with four legs with leveling bolts. All bolts are adjusted by tipping the firebox and unscrewing them from the base.
Also note that use of the leveling bolts will affect required minimum clearance to combustible top trim and mantle construction

INSTALLATION RULES

Install in accordance with local codes. In the absence of local codes follow the current National Fuel Gas Code, ANSI Z223.1/NFPA 54 and the current National Electrical Code ANSI/NFPA 70 in the U.S.A., and the current CAN/CGA B149.1 Gas Installation Code and the current Canadian Electrical Code CSA C22.1 in Canada.

Connection to the chimney, wall and roof passages and all kinds of items used to install the fireplace should be done in accordance with applicable standards of construction law.

The fireplace insert has been tested and listed by Intertek Services of Middleton, Wisconsin as a Direct Vent Gas Fireplace Heater to the following standards: VENTED GAS FIREPLACE HEATERS ANSI Z21.88-2014/CSA 2.33-2014 and GAS-FIRED APPLIANCES FOR USE AT HIGH ALTITUDES CAN/CGA 2.17-M91.

LOCATION YOUR GAS FIREPLACE

Before connecting the device to a gas pipe and chimney, carefully choose the location of the device. The insert should be positioned so that the combustion air installation have the minimum number of bends. This will ensure appropriate chimney draft. It is also important that the flexible wires connected to the gas insert were not exposed to excessive bending. The fireplace must be at least 2,4 inches away from housing elements (Fig. 3). The temperature of the walls exposed to direct fire cannot be higher than 176°F. Under no circumstances should you place the device in the hinterland of combustible materials, such as wooden furniture, carpets and curtains. Due to the possibility of ignition, it is prohibited to dry clothes, towels, etc. nearby of the gas insert. The fireplace must be installed on a stable non-flammable surface. The gas insert is equipped with special adjustable feet and two adjustable mounting brackets allowing for attachment of the device to the wall. Never install the gas insert lying on the back, front or on the side wall. Installation is permitted only in the vertical direction (standing on his feet).

In selecting a location for the fireplace, consider the following points:

- Room location
- Clearances to combustibles
- Venting requirements
- Mantle clearances
- Framing and finishing requirements (surrounding framing and materials to be completed after fireplace installation)
- Put unit in place
- Install vent

- Make gas connections
- Make electrical control connections to receptacle supplied with unit
- Install standard and optional features:
  - Remove glass
  - Place, lay-in interior design media
  - Re-install glass, including sealant where there are glass to glass connections
- Test:
  - Gas Pressure
  - Pilot
  - Burner
- Complete framing and cover wall
  - Vent openings/louvers for air circulation
    - Above and below firebox
  - Access doors for service
    - Place spare label on interior side of access door
- Perform Burning Period
- Final check
- Before releasing unit to customer for use without installer supervision, the installer must:
  - Ensure that the appliance is burning correctly
  - Review and explain unit operation to customer
  - Review and explain safety warnings to customer
  - Review and explain to customer that glass is hot during and after operation
  - Review and explain maintenance requirements to customer
  - Review and explain warranty requirements to customer

Locating Your Gas Fireplace
When selecting a location for your fireplace
• Ensure that the minimum clearances to combustible materials are met as outlined in the next section.
• Provide adequate clearances for servicing.
• Minimum vent vertical and allowed horizontal lengths and number of bends must be considered during the location selection for your fireplace.
The appliance must be installed on a flat, solid, continuous surface (e.g. wood, metal, concrete). This may be the sub-floor or a raised platform to enhance its visual impact.

PLEASE NOTE: The clearances specified in this manual are the minimum requirements established as a result of safety testing. A combustible material is anything that can burn; i.e. sheet rock , wall paper, wood, fabrics, etc. These surfaces are not limited to those that are visible and also include materials that may be located behind non-combustible materials.

If you are not sure of the combustible nature of a material, consult your local fire officials. “Fire-resistant” materials are considered to be combustible. They may be difficult to ignite, but will burn. “Fire-rated” sheet rock is also considered combustible.

We recommend that you plan your installation on paper using exact measurements for clearances and floor protection before actually installing this appliance. Have a qualified inspector, dealer, or installer review your plans before installation.

This appliance is Listed for bedroom installations when used with a Listed Millivolt Thermostat. Some areas may have further requirements, check local codes before installation.

CLEARANCE REQUIREMENTS.

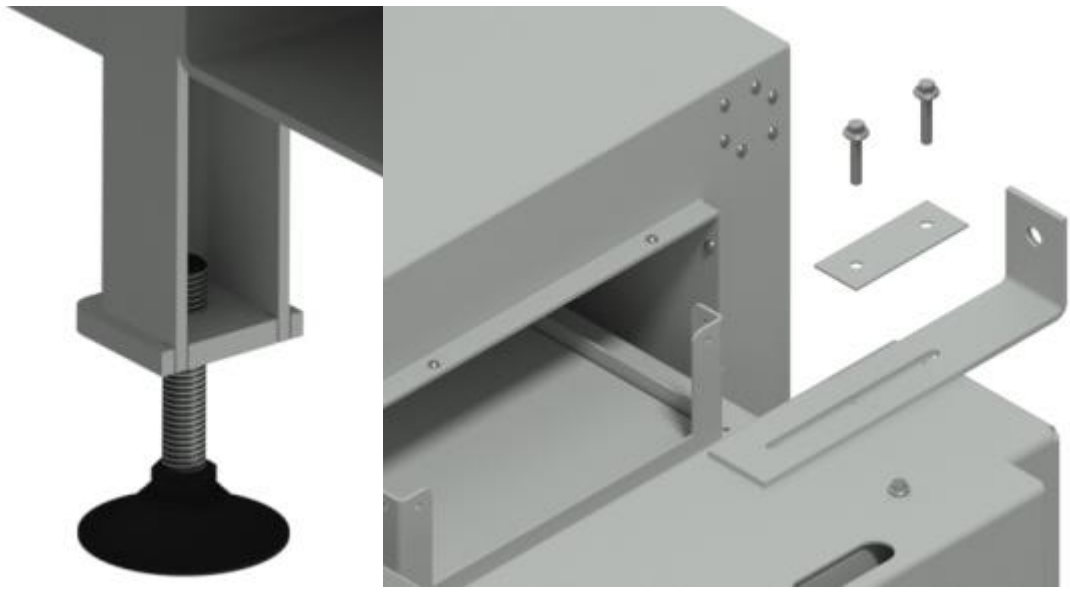


Figure 2. Levelling foot and adjustable bracket to attach to the wall.

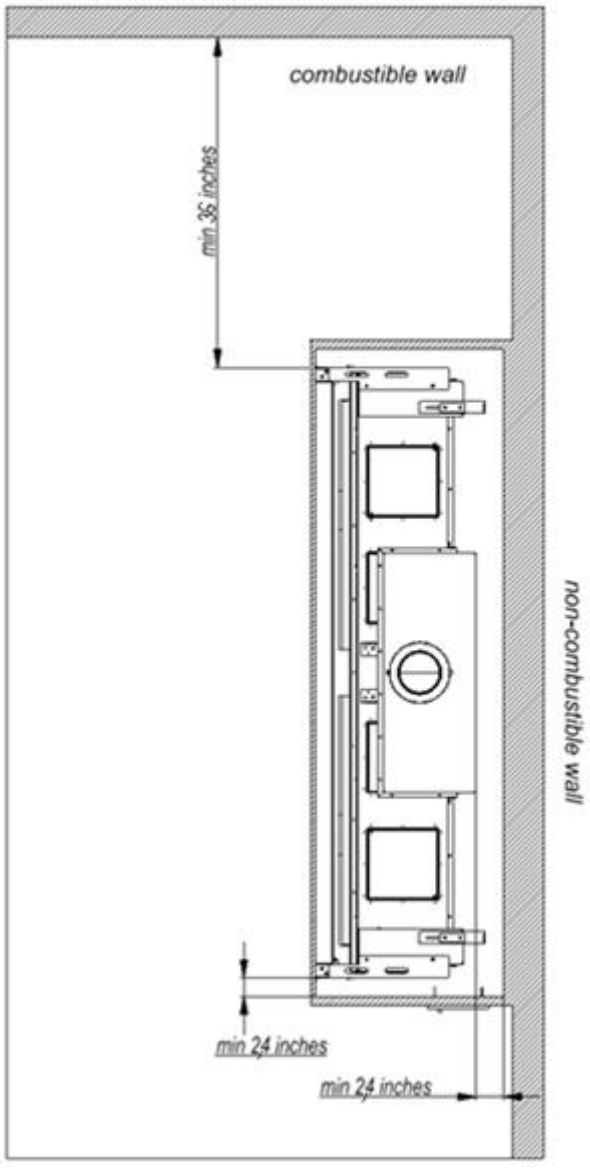


Figure 3. Minimum clearances of the LEO fireplace unit from the housing walls.

The clearances listed above are MINIMUM distances from the non-combustible housing unless otherwise stated:
A major cause of chimney related fires is failure to maintain required clearances (air space) to the housing walls. It is of the greatest importance that this fireplace and vent system be installed only in accordance with these instructions.

WARNING:
Fire hazard is an extreme risk if these clearances are not adhered to.

The appliance is approved with non-combustible housing only as shown in the diagrams provided with the 2,4 inches clearance on back and sides of the appliance where is no glass. To accommodate varying thicknesses and finishes of hearth materials, you must follow the instructions bellow.

Non-combustible materials, such as surrounds and other appliance trim, may be installed on the appliance face so long as it maintains the minimum clearances between the appliance and the non-combustible material stated above. Surrounding material is not allowed to transfer weight to the unit or be connected in any way to the unit. They must not cover any portion of the removable glass panel or the control compartment.

Determine the total thickness of non-combustible facing material to allow the finished surface to be flush with the front of the unit. Total facing thickness can vary from 0.6" (-15mm) to 1.2" (30mm) thick.

WARNING: Please consider your installation as there cannot be any combustible materials within at least 36-inches of this fireplace.

Inspection door – those are required for all LEO gas fireplaces. They allow for efficient and comfortable access to the fireplace receiver and controler which is required to service the unit(s). Inspection door can be uniquely placed and designed to not disturb the aesthetic incorporation of the fireplace to its surrounding living space. A technician should also service the fireplace controls and valves by going through the firebox. This procedure requires removing the glass panels, taking out the interior design media and lifting the revision box, burner and burner base out of the unit. The technician would then return all these fireplace components when service is complete.

Fireplace dealers/installers are advised to consult with their clients, project architects and/or interior designers regarding the advantages and disadvantages of each service option.

Grates - are required for all models housings. This allows for heat exchanging within the fireplace housing to be released back into the room which then helps keep the fireplace walls cooler. It must be located at the bottom and the top of the fireplace housing and we recommend the top one to be placed a maximum of 6 inches below the fireplace housing ceiling and the bottom one to be place at least 2 inches above the floor. It can be located on the front, sides or back of the fireplace housing so long as it is being released into an interior space and not outdoors. A minimum grate size required per series is:

• Minimum 700 sq. in. of the air inlet grate and 800 sq. in. of the air outlet grate for LEO 100 Series

• Minimum 1400 sq. in. of the air inlet grate and 1600 sq. in. of the air outlet grate for LEO 200 Series

This is the minimum required but can always be greater. The heat release can be added as a louver or as a reveal. If using a louver, please make sure that the free airspace allowed in the louvered area is equal or greater than the minimum square inches required per unit.

Fireplace Legs - All LEO built-in fireplaces come standard with leveling legs which can raise the height. A platform may also be built if needed to elevate the firebox higher. The legs cannot be removed.

FACING REQUIREMENTS

This fireplace requires a non-combustible facing material. The flanges on the front face of the fireplace are for a facing thickness of 0.6" (15mm).

FACING OVER 0,59" (15MM) THICK

If the facing material is over 0.6" (15mm) thick (example: brick or river rock), install the facing around the perimeter of the face. You may wish to make a face template.

Optional: Manufacturer may provide you a face tamplate to make it easier for you. Contact your authorized dealer to ask for further information.

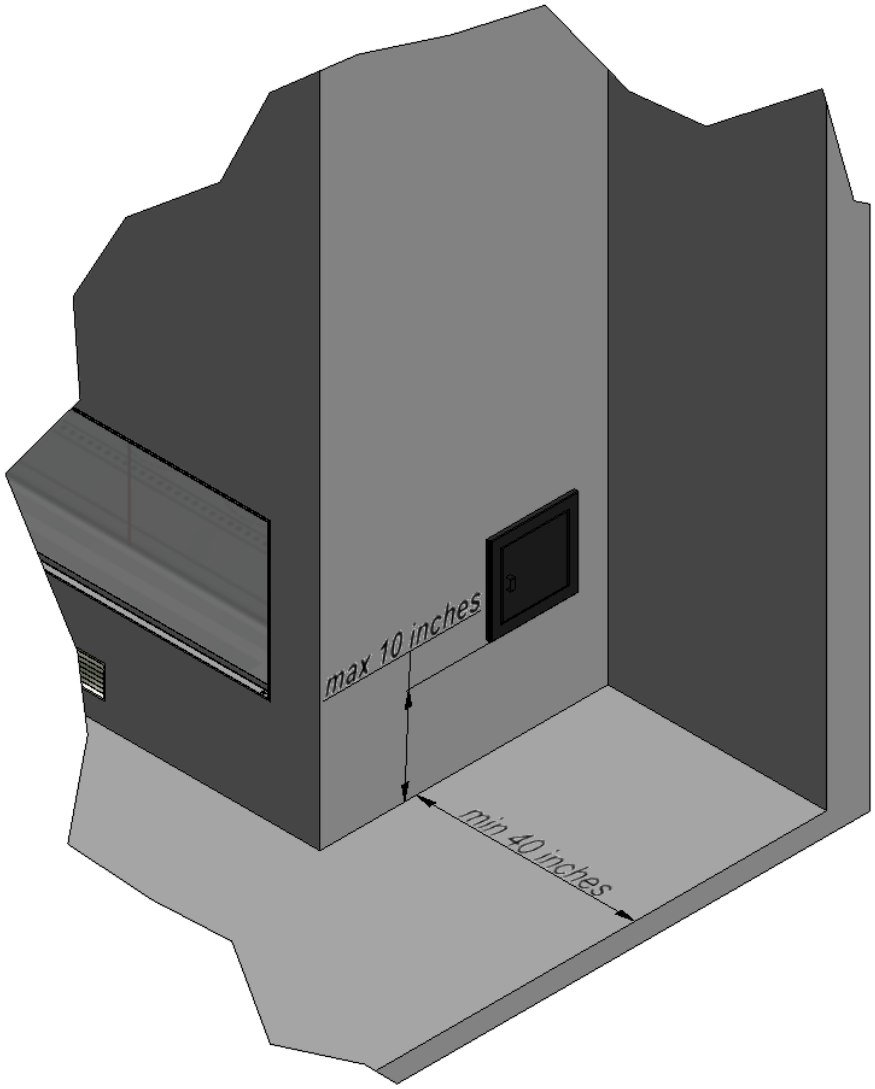


Figure 4. Scheme of the accessibility clearance for servicing.

Where the revision box is installed (it may be installed depending on what is your need, on the left or right side of the housing) you must left at least 40 inches accessibility clearance for purposes of servicing.

PLEASE NOTE that the Access door should not be installed higher than 10 inches above the floor because of extreme heat inside the housing.

HEARTH REQUIREMENTS FOR FLOOR PROTECTION

This fireplace requires a non-combustible floor protection made of tile, marble, bricks or other non-combustible material minimum 2 inches thick, that does not extending over the bottom grid. (Hearth must be under the bottom grid).

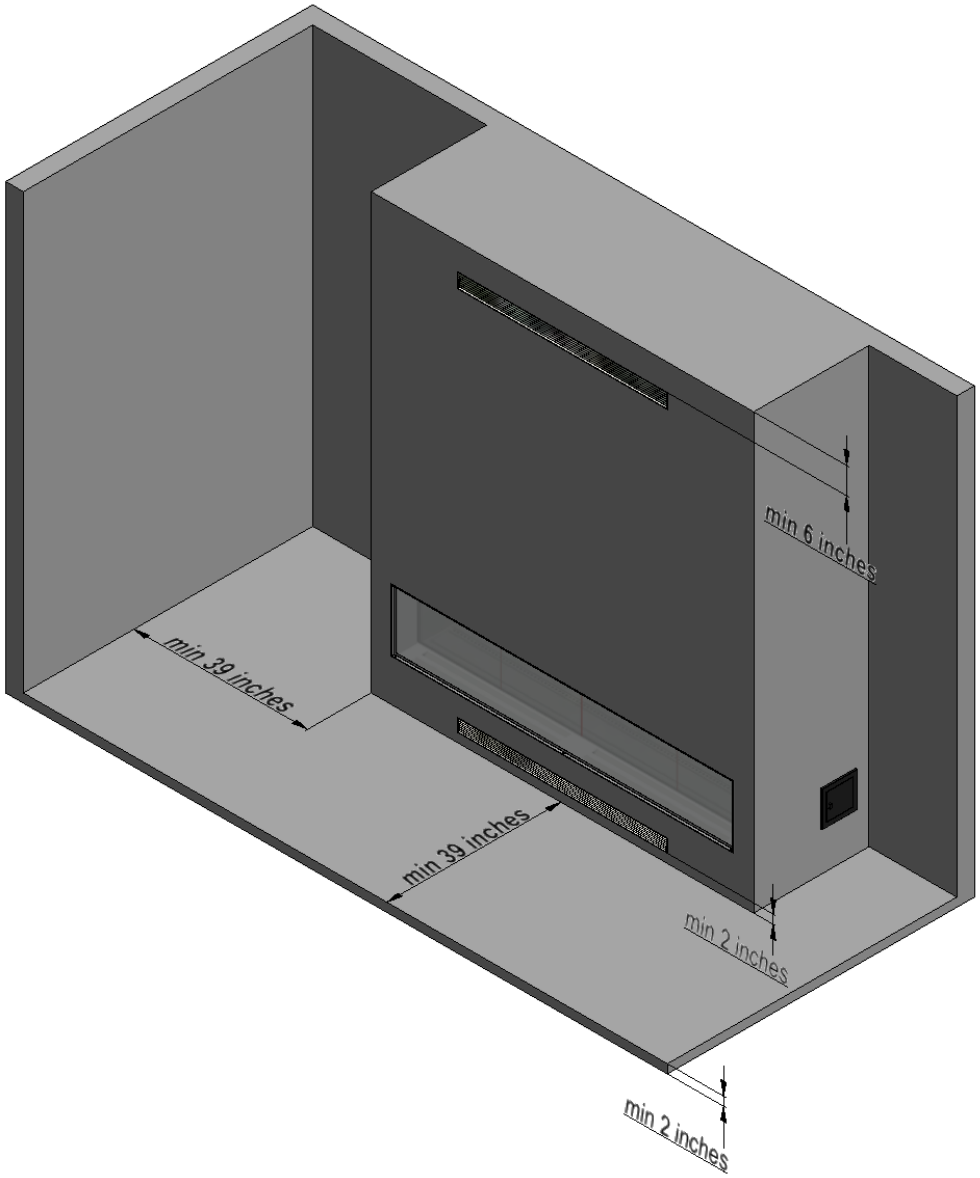


Figure 5. Scheme of floor protection and grids installation.

PLEASE NOTE that the floor protection should extend for at least 39-inches of the front and both sides of the unit unless the floor and the walls are non-combustible. This appliance must be placed on noncombustible, concrete floor.

The bottom air inlet grid shall be placed dunder the screen and at least 2 inches above the floor. Please left as much space as needed for accommodation of the grid.

MANTELS

Because of the extreme heat this fireplace emits, any mantel to be used with this fireplace has to be non-combustible. Any combustible materials are not approved to be used during the installation of this fireplace

VENT INTRODUCTION

WARNING: All vent components must be installed in accordance with the terms of their listing and manufacturer's instructions. Approved venting systems for LEO fireplace and reguirements are stated below.

• The minimum height of termination cap from the top of the unit shall be no less than 3 ft.(1 m), and the maximum height shall be no more than 39 ft. (12m)

• Steep roofs, nearby trees, or predominantly windy conditions can promote weak draft or occasional downdrafts. In such cases, increasing the height of the vent or installation of high wind termination caps may alleviate the condition.

• The remaining space around the liner in a factory-built flue CANNOT be used to vent any other appliance.

• Installation of any components not manufactured or approved by Kratki.pl or failure to meet all clearance requirements will void all warranties and could result in property damage, bodily injury, or loss of life.

• Never modify any venting component, or use any damaged venting product.

• THE GAS APPLIANCE AND VENT SYSTEM MUST BE VENTED DIRECTLY TO THE OUTSIDE OF THE BUILDING, AND NEVER ATTACHED TO A CHIMNEY SERVING A SOLID FUEL OR GAS BURNING APPLIANCE.

• The minimum vent height above the roof or adjacent walls is specified by building codes. A general guide to follow is the Gas Vent Rule below.

GAS VENT RULE		
ROOF SLOPE	Minimum Height From Roof	
Flat to 6/12	1'0"	0.3 m
Over 7/12 to 9/12	2'0"	0.6 m
Over 10/12 to 12/12	4'0"	1.2 m
Over 13/12 to 16/12	6'0"	1.8 m
Over 17/12 to 21/12	8'0"	2.4 m

All LEO series appliances are built-in fireplaces.

Listed vent systems that has been approved with your LEO fireplace:

LEO100 – 4" x 6 and $_{5}/^{8}$" DuraVent DirectVent PRO

LEO200 – 5" x 8" DuraVent DirectVent PRO

PLEASE NOTE: The termination cap designed for each approved vent system must be installed at the end of any vent run! There are different termination caps for horizontal and vertical terminations. (please see the typical installation scheme provided with DuraVent DirectVent PRO system).

ELBOWS AND VENT RUNS CALCULATION

Maximum two elbows are allowed for each installation. The maximum allowed lenght of the vent run is 39 feet (12 m) in total – this is the maximum vent run for 39 feet (12 m) vertical run without any elbows. Please note that each elbow should be treated as a 3 feet long (1m) section. Maximum lenght of a horizontal (H) run is 10 feet (3 m). The minimum vent lenght is 10 feet (3 m).

Please use the calculation below to establish the specification of your venting instalation.

A. When you have vertical run without any elbows, your vent should run from 10 to 39 feet (3 m to 12 m).

B. If there is one elbow in the vent system, an additional 3 feet must be added to the total calculation.

Example: *Total height of duct work = 12 feet((V)*

Total lenght of duct = 6 feet (H)

Vent total lenght calculation to be used as follows (H) 6 feet + (V) 12 feet + (Elbow) 3 feet, so the total length is 21 feet

Note: Total lenght of vent run may vary from 10 feet (3 feet (V) + 3 feet (H) + elbow) to 39 feet (26 feet (V) + 10 feet (H) + elbow).

C. If there are two eblows in the vent system, an additional 6 feet must be added to the total calculation.

Example: *Total height of duct work = 15 feet (V)*

Total lenght of duct including = 9 feet (H)

Vent total lenght calculation to be used as follows (H) 9 feet + (V) 15 feet + (2 Elbows) 6 feet, so the total length is 30 feet

NOTE:

1. Only two 90-degree elbows are allowed per installation. More than two 90-degree elbows require manufacturer's approval.

2. Each 45 degree bend can be calculated only as one 90 degree bend.

- - For example, a given installation can have:
  - 2 x 90 degree elbows
  - 2 x 45 degree elbows
  - 1 x 45 degree elbow and 1x 90 degree elbow

Vent coiaxial system installation:

Please notice that the inlet pipe (blue lined) should come inside the inlet pipe of the unit (red lined flue pipe) and the outsited pipe (green lined) should come outsied the outer pipe of the unit (red lined air inlet pipe).

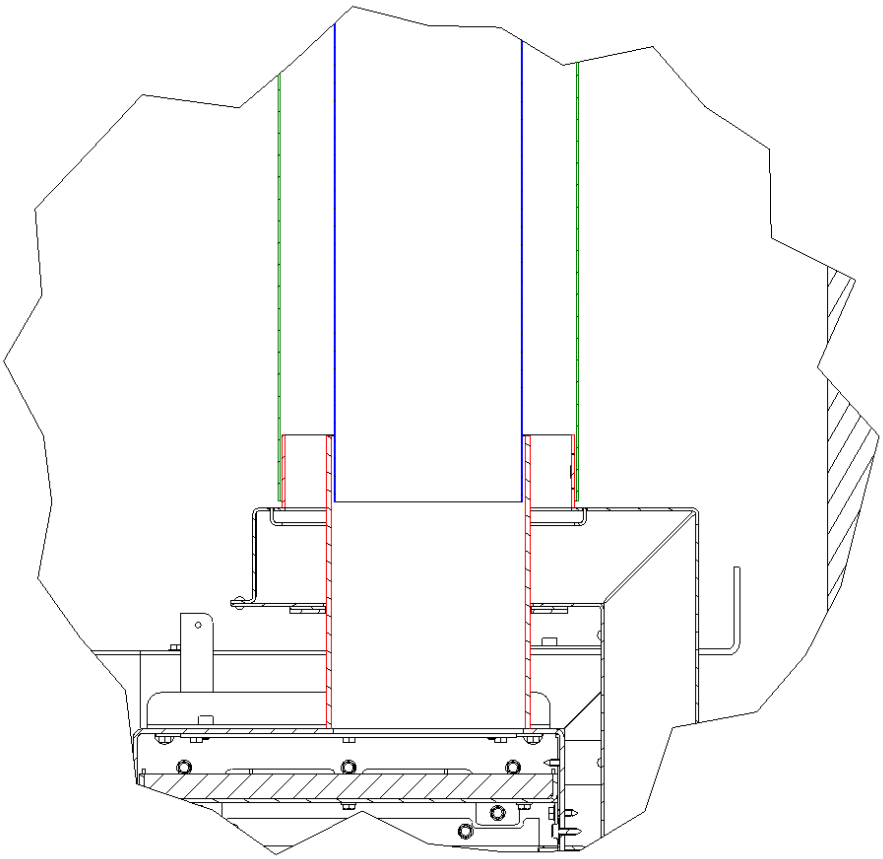


Figure 6. DuraVent DirectVent PRO installation scheme.

Your DuraVent DirectVent PRO system shall be screwed tightly with screws and high temperature resistan silicone as shown below.

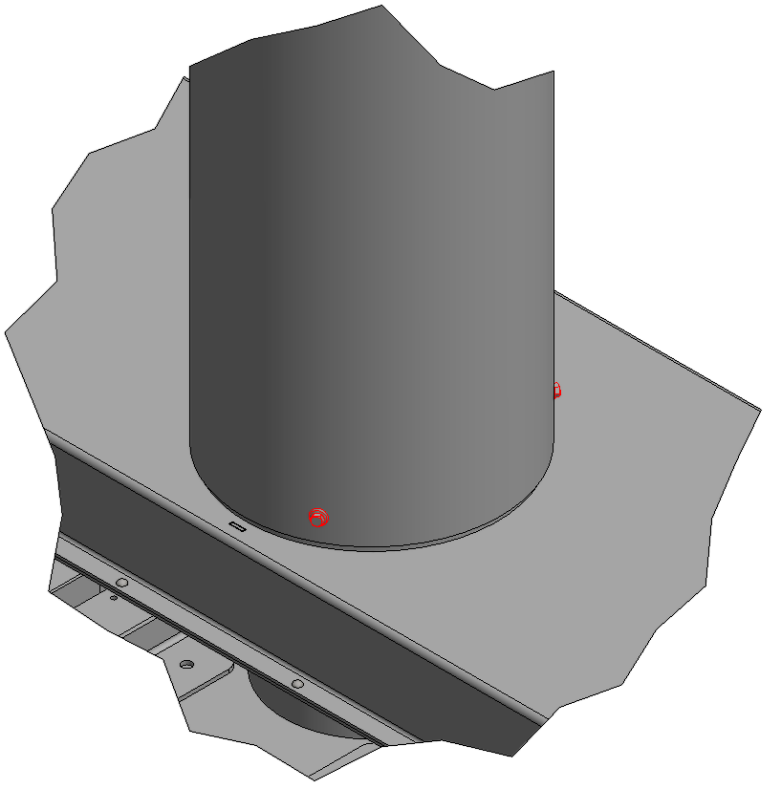


Figure 7. DuraVent DirectVent PROI installation scheme.

VENT TERMINATION – HORIZONTAL (SIDE WALL VENTING SYSTEM REQUIREMENTS)

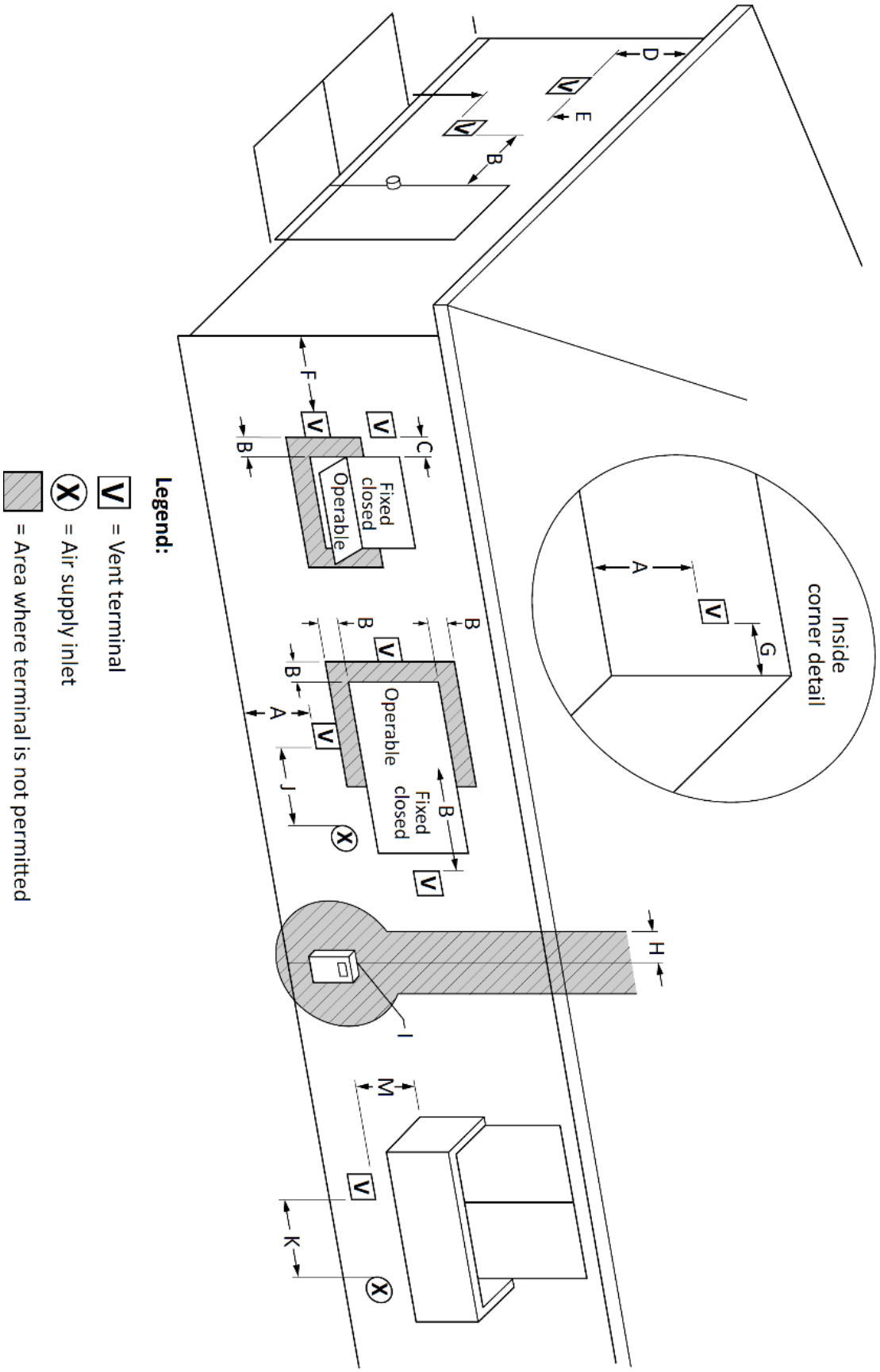


Figure 8. Venting system requirements.

		Canadian installations[1]	US installations[2]
A	Clearance above grade, veranda, porch, deck, or balcony	12 in (30 cm)	12 in (30 cm)
B	Clearance to window or door that may be opened	6 in (15 cm) for appliances ≤ 10,000 Btu/h (3 kW), 12 in (30 cm) for appliances > 10,000 Btu/h (3 kW) and ≤ 100,000 Btu/h (30 kW), 36 in (91 cm) for appliances > 100,000 Btu/ h (30 kW)	6 in (15 cm) for appliances ≤ 10,000 Btu/h (3 kW), 9 in (23 cm) for appliances > 10,000 Btu/h (3 kW) and ≤ 50,000 Btu/h (15 kW), 12 in (30 cm) for appliances > 50,000 Btu/h (15 kW)
C	Clearance to permanently closed window	*	*
D	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the center line of the terminal	*	*
E	Clearance to unventilated soffit	*	*
F	Clearance to outside corner	*	*
G	Clearance to inside corner	*	*
H	Clearance to each side of center line extended above meter/regulator assembly	3 ft (91 cm) within a height 15 ft (4.5 m) above the meter/ regulator assembly	*
I	Clearance to service regulator vent outlet	3 ft (91 cm)	*
J	Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance	6 in (15 cm) for appliances ≤ 10,000 Btu/h (3 kW), 12 in (30 cm) for appliances > 10,000 Btu/h (3 kW) and ≤ 100,000 Btu/h (30 kW), 36 in (91 cm) for appliances > 100,000 Btu/ h (30 kW)	6 in (15 cm) for appliances ≤ 10,000 Btu/h (3 kW), 9 in (23 cm) for appliances > 10,000 Btu/h (3 kW) and ≤ 50,000 Btu/h (15 kW), 12 in (30 cm) for appliances > 50,000 Btu/h (15 kW)
K	Clearance to a mechanical air supply inlet	6 ft (1.83 m)	3 ft (91 cm) above if within 10 ft (3 m) horizontally
L	Clearance above paved sidewalk or paved driveway located on public property	7 ft (2.13 m)†	*
M	Clearance under veranda, porch deck, or balcony	12 in (30 cm)‡	*

Notes:
1) In accordance with the current CSA B149.1, Natural Gas and Propane Installation Code.
2) In accordance with the current ANSI Z223.1/NFPA 54, National Fuel Gas Code.
** For clearances not specified in ANSI Z223.1/NFPA 54 or CSA B149.1, one of the following shall be indicated:*
a) A minimum clearance value determined by testing in accordance with Clause 5.24.5; or

b) A reference to the following footnote:

"Clearance in accordance with local installation codes and the requirements of the gas supplier."
† A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.

‡ Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

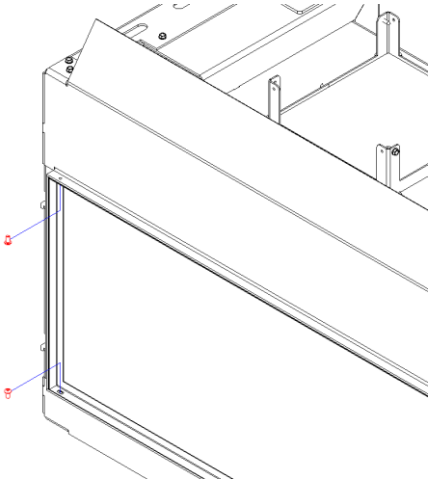
PLEASE NOTE: YOUR APPLIANCE MUST BE INSTALLED THE WAY PROVIDING ACCESS FOR FUTURE VENT CONNECTION INSPECTIONS! YOUR BUILDING INSPECTOR MAY REQUIRE YOU TO PROVIDE ACCESS TO VERIFY IF YOUR VENT CONNECTION HAS BEEN MADE IN ACCORDANCE WITH BUILDING CODE AND THIS MANUAL INSTRUCTIONS REQUIREMENTS!

REPLACING PARTS & CLEANING YOUR APPLIANCE

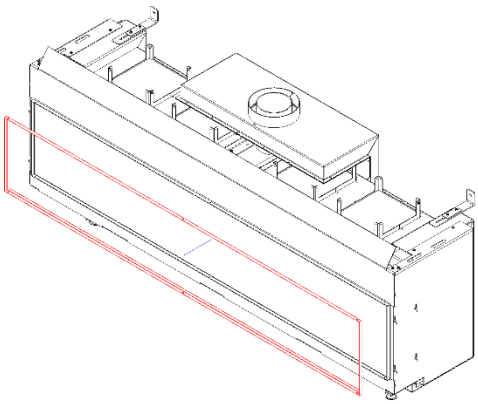
To be able to clean the glass, chamber or the burner or to replace the main burner, you need to remove the glasses according to the following instructions :

PLEASE NOTE: All the glasses has to mounted with instatling parts provided with the appliance only. No substitutes to be used for installation.

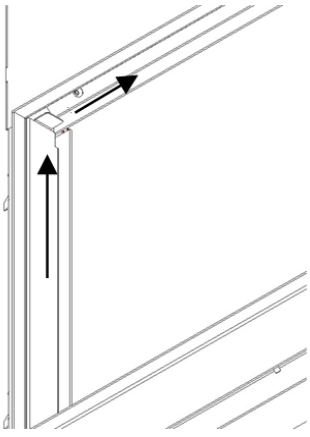
1) Unscrew the frame holding safety screen glass **(please be carefull as the glass my fall down)**



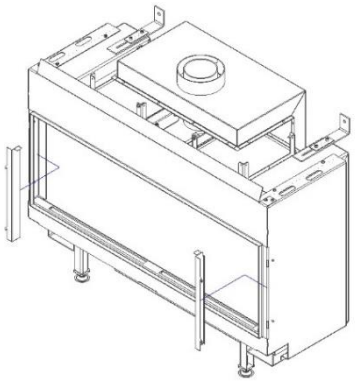
2) Remove the safety screen glass



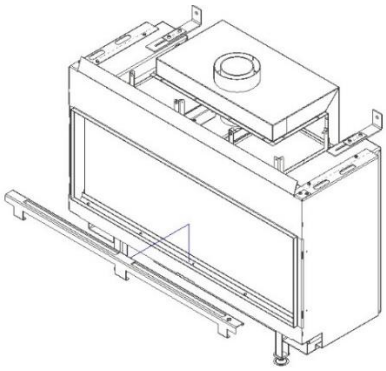
3) Remove side masks using special splines on top of them



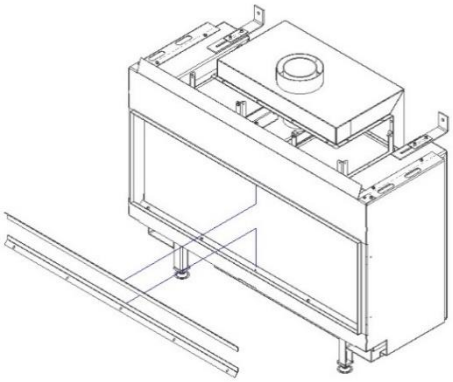
4) Remove side pressing battens by unscrewing the fixing screws



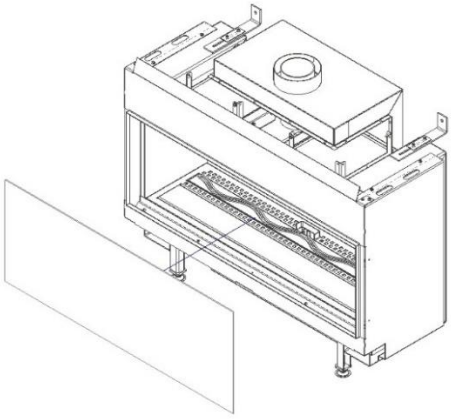
5) Remove bottom mask



6) Remove carefully down and top pressing battens by unscrewing the fixing screws **(please be carefull as the glass my fall down)**



7) Remove the glass



To find the right replacement part number for your model, please see the table below.

	LEO/100/ US	**LEO/100/L/ US**	**LEO/100/P/ US**	**LEO/100/LP/ US**	**LEO/200/ US**	**LEO/200/L/ US**	**LEO/200/P/ US**	**LEO/200/LP/ US**
Screws	ISO 7380-1 M5x8	ISO 7380-1 M5x8	ISO 7380-1 M5x8	ISO 7380-1 M5x8	ISO 7380-1 M5x8	ISO 7380-1 M5x8	ISO 7380-1 M5x8	ISO 7380-1 M5x8
Frame	LEO/100/ US/FRAME	LEO/100/L/ US/FRAME	LEO/100/P/ US/FRAME	LEO/100/LP/ US/FRAME	LEO/200/ US/FRAME	LEO/200/L/ US/FRAME	LEO/200/P/ US/FRAME	LEO/200/LP/ US/FRAME
Glass Screen	LEO/100/ US/SCREEN	LEO/100/L/ US/SCREEN	LEO/100/P/ US/SCREEN	LEO/100/LP/ US/ SCREEN	LEO/200/ US/ SCREEN	LEO/200/L/ US/ SCREEN	LEO/200/P/ US/ SCREEN	LEO/200/LP/ US/ SCREEN
Side masks	LEO/100/ US/SIDE MASKS	LEO/100/L/ US/SIDE MASKS	LEO/100/P/ US/SIDE MASKS	LEO/100/LP/ US/ SIDE MASKS	LEO/200/ US/ SIDE MASKS	LEO/200/L/ US/ SIDE MASKS	LEO/200/P/ US/ SIDE MASKS	LEO/200/LP/ US/ SIDE MASKS
Pressing battens	LEO/100/ US/PRESS BATTENS	LEO/100/L/ US/PRESS BATTENS	LEO/100/P/ US/PRESS BATTENS	LEO/100/LP/ US/PRESS BATTENS	LEO/200/ US/PRESS BATTENS	LEO/200/L/ US/ PRESS BATTENS	LEO/200/P/ US/ PRESS BATTENS	LEO/200/LP/ US/ PRESS BATTENS
Bottom mask	LEO/100/ US/BOTT. MASK	LEO/100/L/ US/ BOTT. MASK	LEO/100/P/ US/ BOTT. MASK	LEO/100/LP/ US/ BOTT. MASK	LEO/200/ US/ BOTT. MASK	LEO/200/L/ US/ BOTT. MASK	LEO/200/P/ US/ BOTT. MASK	LEO/200/LP/ US/ BOTT. MASK
Top & bottom battens	LEO/100/ US/T-B MASK	LEO/100/L/ US/ T-B MASK	LEO/100/P/ US/ T-B MASK	LEO/100/LP/ US/ T-B MASK	LEO/200/ US/ T-B MASK	LEO/200/L/ US/ T-B MASK	LEO/200/P/ US/ T-B MASK	LEO/200/LP/ US/ T-B MASK
Glass	LEO/100/ US/GLASS	LEO/100/L/ US/ GLASS	LEO/100/P/ US/ GLASS	LEO/100/LP/ US/ GLASS	LEO/200/ US/ GLASS	LEO/200/L/ US/ GLASS	LEO/200/P/ US/ GLASS	LEO/200/LP/ US/ GLASS

Each glass shall be treated carefully and cleaned with soft cloth and liquid glass cleaner only.

Do not use any hard or sharp materials or abrasive cleaners as it may cause glass damage or scratches.

NOTE: This appliance should be inspected before use and at least annually. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

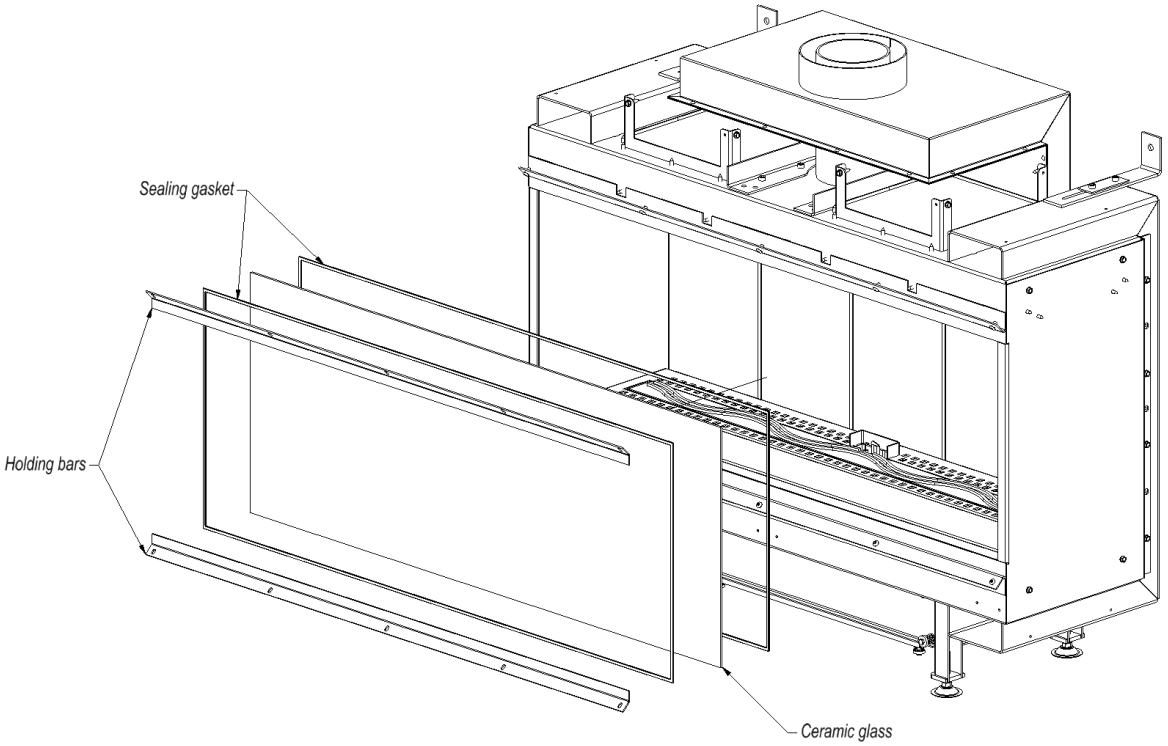
You can use a vacum cleaner to clean the chamber and burner or/and swipes for keeping your fireplace clean. Please note that glass and internal decorative elements should be installed properly and according the the following instrcutions. You can use only the glass certified with this appliance!

WARNING:

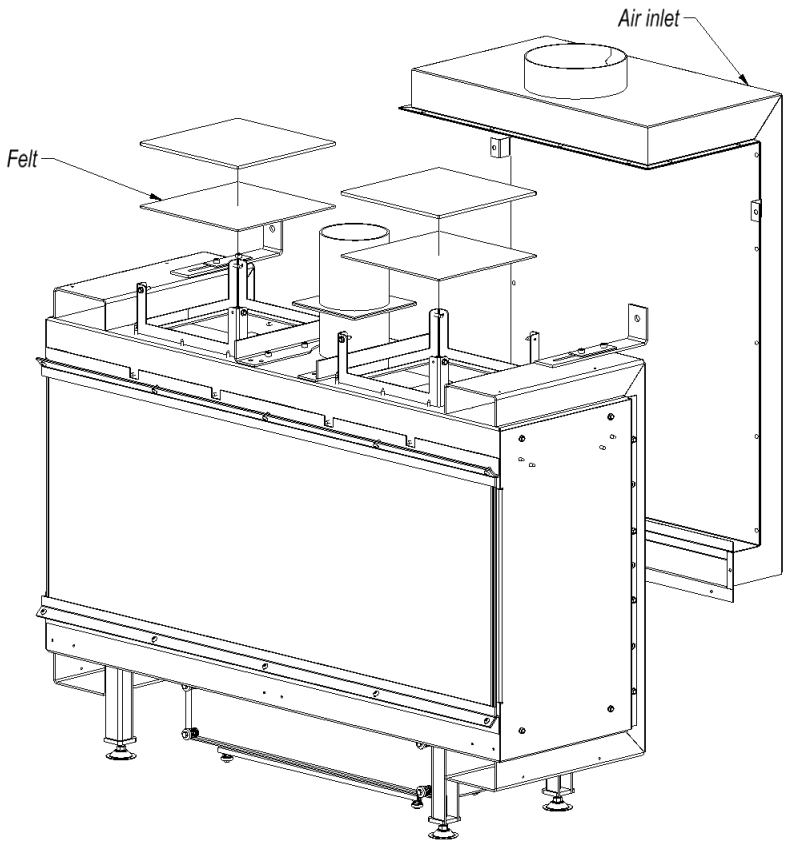
The glasses are hot during the operation and about one hour after the appliance has been shutted off. Clean the glasses only when those are cold.

GLASS REPLACEMENT

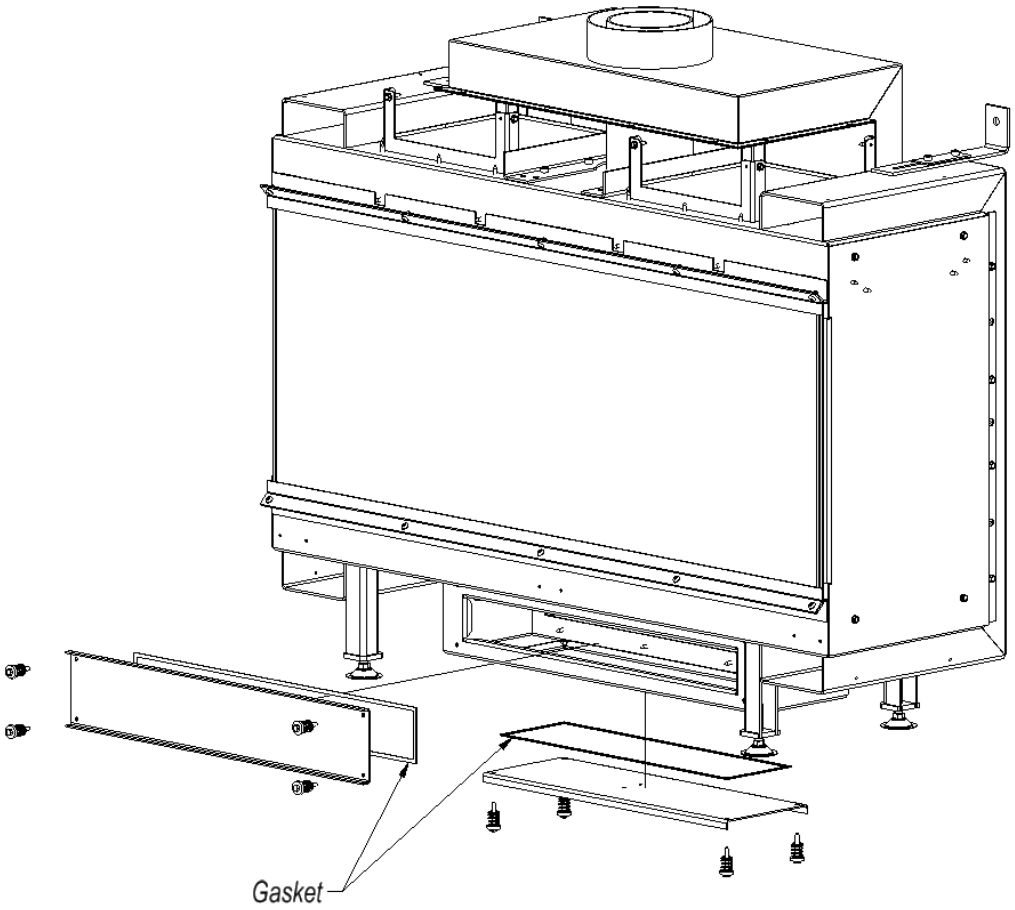
Replacement of the glass or the flashing doors may require a gasket replacement also. Please see the schemes below:



Ceramic glass and gaskets replacement scheme.



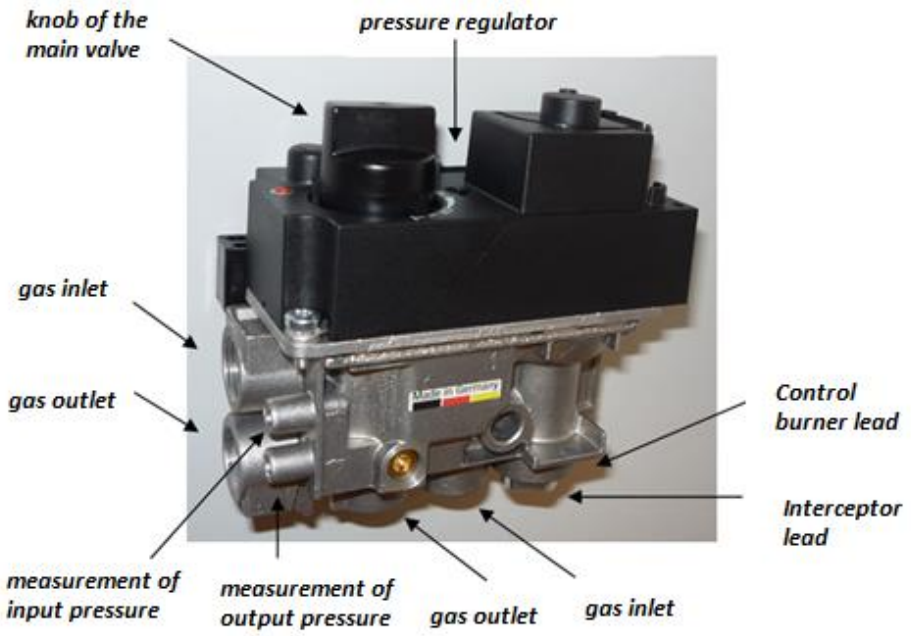
Top flashing doors, gaskets and air inlet scheme.

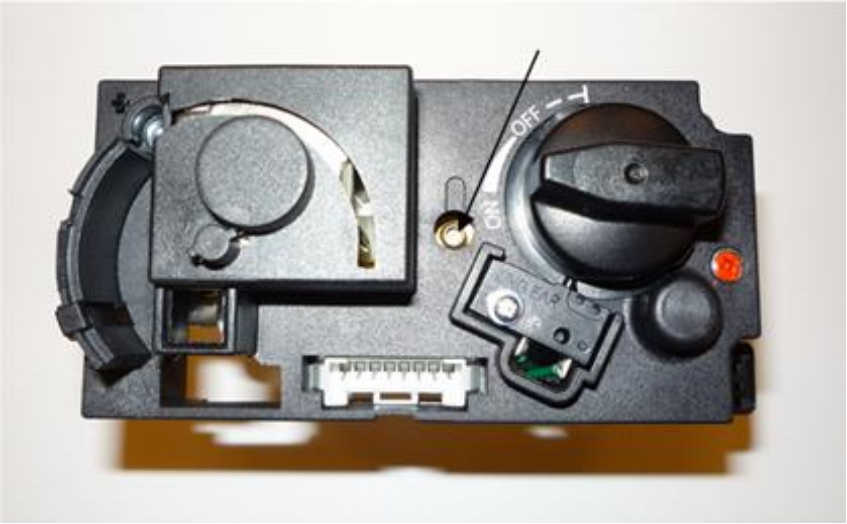


Bottom flashing doors and gasket replacement scheme.

Adjustment of gas pressure behind the regulator for the rated load.

Each time during the transition from each gas type to another, set the apprpriate gas pressure behind the regulator. Suitable pressures for the respective gases are shown in table 1.





Adjustment of outlet pressure

1. Connect a manometer to the output pressure measirung point. To do this you must firt remove the metal cap located on controler's casing.

2. Run the device.

3. The pressure regulator is located is located in the upper part of the controller's casing. To enable the adjustment, remove the plastic cap (see the picture above).

4. Turn the regulator's screw to set the desired pressure of the main burner (high flame). To increase the pressure turn the screw clockwise or to reduce the pressure turn it counter-clockwise.

5. Once you will set up the apprpriate pressure, secure the regulator's screw by installing a plsatic cap.

6. If you do not need to make any other adjustments, turn of the fireplace, disconnect the manometer and secure the connector of output pressure measuring point.

If, despite to regulation, you have failed to achieve the desired pressure, check the pressure of supplied gas by connecting a manometer to the input pressure measuring point. If the inlet pressure is in the normal range, you need to replace the driver. Otherwise take the necessary steps to achieve the proper gas pressure.

WARNING:
To lock the pressure regulator you need to maximally tighten the regulation screw.

Adjustment of minimum gas flow:

1. Connect a manometer to the output pressure measirung point. To do this you must firt remove the metal cap located on controler's casing.

2. Run the device.

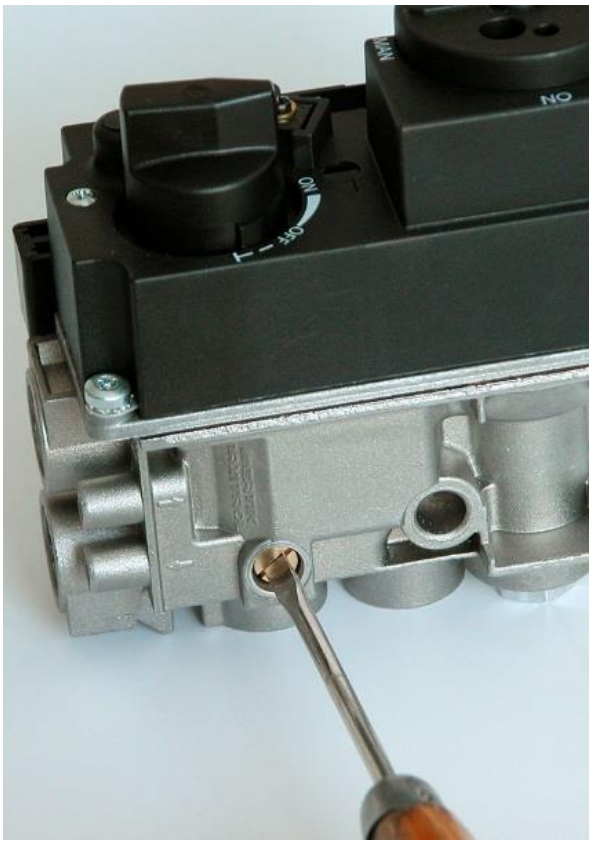
3. The minimum flow range is adjusted by suitable setting of regulation screw (see the picture below). Default adjusted screw is set so as to provide maximum flow.

4. Turn the screw clockwise to reduce the minimum flow

5. Depending on the version of the controller, the minimum flow rate may be adjusted by the manufacturer or it may be adjusted by the installer.

6. Turn of the fireplace.

7. If you do not need to make any other adjustments, turn of the fireplace, disconnect the manometer and secure the connector of output pressure measuring point.



HIGH ALTITUTE ADJUSTMENT

This appliany can be installed at high altitudes ranging from 2000 ft to 4500 ft. When installing this appliance at altitude above 2000 feet, it is necessary to compensate for the thinner air (less volume of air per cubic foot). Higher altitudes affect the atmospheric pressure and heat value of gaseous fuels. The lower oxygen content in the air and the lower gas viscosity require the adjustment of the gas control regulator to achieve efficient, clean combustion at the burner.

In the U.S.
THE DERATING KIT MUST BE INSTALLED BY AN AUTHORIZED SERVICE TECHNICIAN IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND ALL CODES AND REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION. THE INFORMATION STICKER MUST BE FILLED OUT BY THE INSTALLER AND APPLIED TO THE APPLIANCE AT THE TIME OF THE CONVERSION. THE QUALIFIED SERVICE AGENCY PERFORMING THIS WORK ASSUMES RESPONSIBILITY FOR THIS DE-RATING.

In Canada
This unit has been tested for installation at high altitudes in accordance with Canadian test standard CAN/CGA-2.17. THE DERATING SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROVINCIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN1-B-149.1 AND .2 INSTALLATION CODE.

High Altitude Installations:

2000 ft. to 4500 ft. installations (or 610 m - 1370 m) See table bellow.

For high altitude installations consult the local gas distributor or the authority having jurisdiction for proper rating methods. If the installer must adjust the unit to adjust for varying altitudes, the information label must be completed by the installer and applied to the appliance at the time of the conversion.

Derating procedure

1. Follow the regulator adjustment procedure detailed above.

2. Attach the high altitude conversion sticker provided to the rating plate on the appliance. See figure below.

High Altitude Conversion Notice Label

THIS APPLIANCE HAS BEEN CONVERTED FOR USE
AT AN ALTITUDE OF _____
Nozzle Size: _____ Manifold Press: _____
Input, BTU/Hr: _____ Fuel Type: _____
Date of Conversion: _____ / _____ / _____

SAFETY BARRIER INSTALLATION

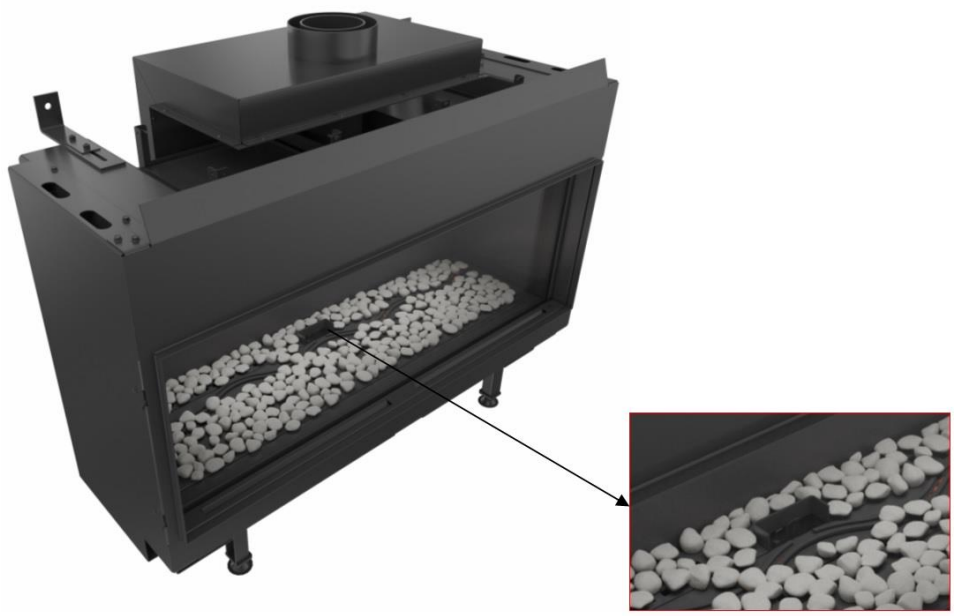
WARNING: Screen Barrier
A barrier designed to reduce the risk of burns from hot viewing glass is provided with this appliance and shall be installed.
If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.
Any safety screen, guard, or barrier removed for servicing the appliance, must be replaced prior to operating.

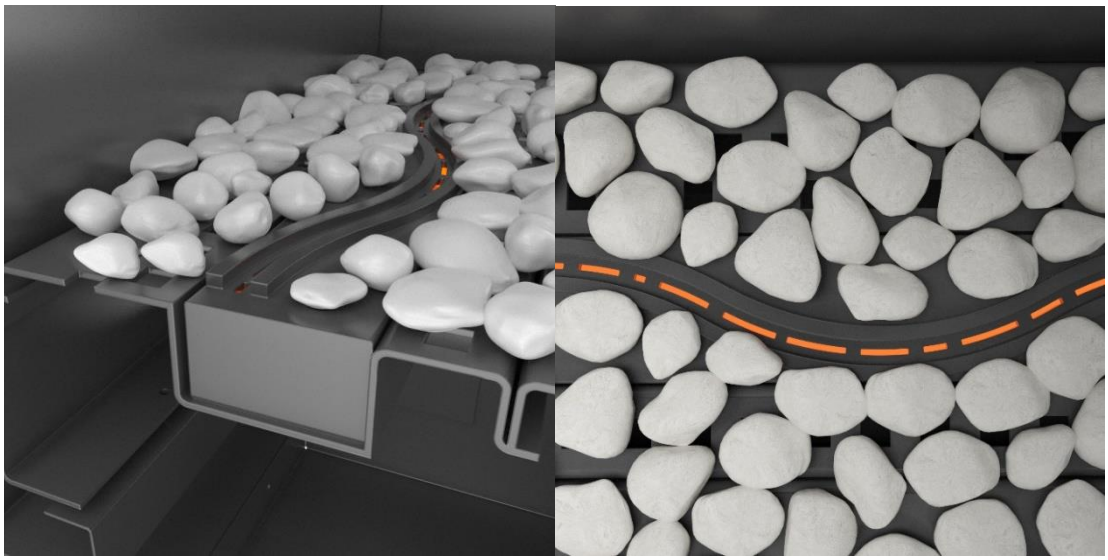
This unit has been designed to be used with second glass safety screen. Your unit should be shipped fully assembled, but during the installation, your authorized installer might need to remove both glasses to finish gas connection into your fireplace. At anytime when safety screein is removed for servicing or any other reason, it must be replaced prior to operating. It must be installed according to the instruction below. Please follow the steps below to install the screen correctly.

Unscrew the frame holding front screen **(please be carefull as the glass my fall down). Use VACUUM GLASS HOLDERS for your safety. (Follow the steps above for glass replacement instructions)**

DECORATIVE STONES AND CERAMIC WOOD LOGS DISTRIBUTION

PROPER installation of decorative Stones





PROPER installation of decorative logs

PROPER installation of decorative stones and logs

Please make sure that you will adhere to the above guidelines for proper fireplace operation. Make sure that materials are spread out to maintain proper appearance and function of the flame. **Under no circumstances DO NOT COVER burners openings!**

IMPROPER installation of decorative elements

The manufacturer recommends the use of decorative elements, optionally supplied with the device. Kratki.pl Marek Bal is not liable for damages resulting from the use of decorative elements other than recommended.

The combustion chamber, depending on the user's preferences, can be lined with one of several sets of decorative elements. The decorative elements are made of non-combustible material. The use of flammable components in the device is forbidden.

The elements should be arranged in such a way as not to obscure the flame control and the burner outlet openings, otherwise it may cause incorrect operation of the fireplace. The main burner of the fireplace is equipped with spacers to facilitate correct placement of decorative elements. Distribution of the elements in the combustion chamber of the device should allow the free flow of air around the main burner and the control flame. The ceramic elements should not touch the glass, as it may cause damage.

If you did not install decorative elements during the primary installation, you have to remove both front glass screens to install them. That is why it has to be done by authorized service.

INITIAL START-UP

Before the first use of the fireplace, make sure that all connections of individual elements of the system were made in accordance with the instructions. Incorrect cabling of the gas control system can cause damage.

The first few start-ups can contribute to smell which may persist even several hours after operation. This is a phenomenon caused by paint burning. Pets and birds can react sensitively to secreted fumes. To speed up the process of the paint burning, warm the fireplace for a few hours, setting the maximum height of the flame. If, during the first fire, there is sediment on the inside of the glass surface, remove it using a glass cleaner. The first operation of the gas insert must be carried out within a well- ventilated area.

When heating using gas you may encounter staining walls and ceilings. It is caused by the Convection movement of air and thus dust particles contained therein. A partial solution to this problem is frequent ventilation of the room in which the gas insert operates. If the fireplace is installed in a new building, you should wait at least 6 weeks before lighting it for the first time to remove construction moisture from the walls, floor and ceiling.

INSTALLATION OF THE CONTROL SYSTEM

NOTE!!!
The device with its gas control system can be installed only with its factory settings. At this stage, do not install the battery in the receiver. Earlier connecting to a power supply may cause damage to the electronics system.

NOTE!!!
Individual gas control system components, connect according to the diagrams provided in this manual.

The standard gas control system includes a MaxitrolMetrik GV60 controller and a B6R-R8U receiver from which an antenna enables operation of the device using a remote control. Remote control gas components should be installed in the connection box. The connection box must be installed in an accessible place for possible repair or replacement of individual components of the system. Exposure of the electronic system to temperatures exceeding 140°F will result i n irreparable damage. Elements of the control system should be installed in a place where the temperature does not exceed 77°F. The maximum distance between the contr ol box and the gas insert is determined by the length of the cables connecting the GV60 gas control with the electrode and thermocouple. Do not extend the cables provided with the unit, as this may affect the control system malfunction.

Keep in mind not to put the ignition cable too close to the metal parts. Contact of the ignition cable with the receiver housing can cause damage. Components of the system may not be exposed to moisture, dust, and factors affecting the formation of corrosion. The LEO fireplace inserts can operate only with the gas control system supplied with the unit. When replacing individual components of the system, use only original parts available for purchase from the manufacturer. Plugs of individual wires are chosen in such a way as to prevent incorrect connection of components.

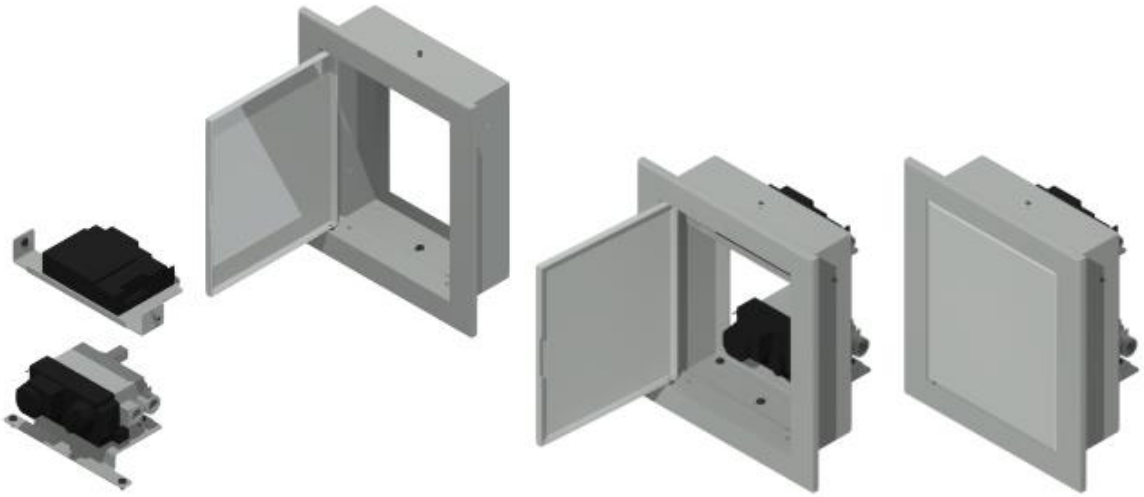


Figure. Mounting the gas controller with the receiver in the connection box

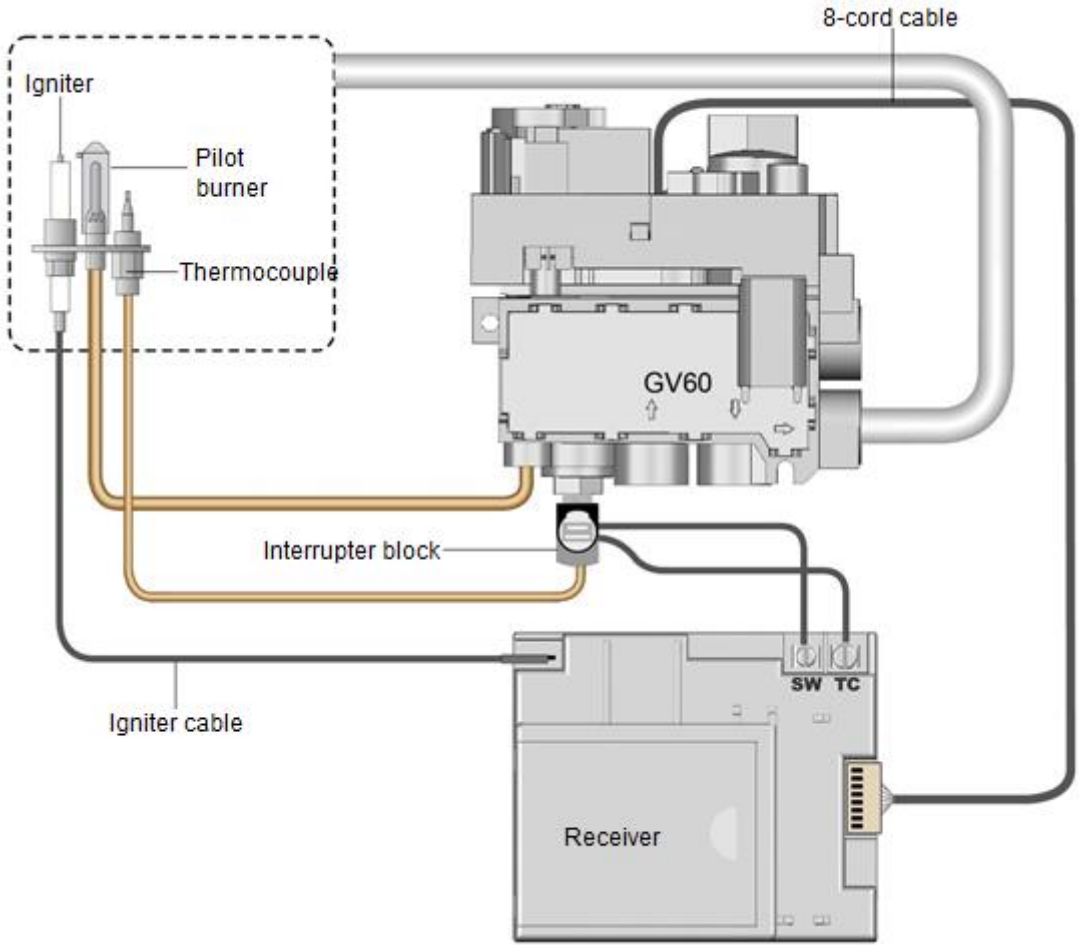


Figure. The wiring diagram of the system components for gas control

Receiver antenna

The antenna is part of the set, directly connected to the receiver's remote gas control B6R-R8U. It allows wireless control of the work of the fire using a remote control. By connecting the gas control system, special attention should be paid not to install the antenna too close to the ignition cable.

CONNECTING THE DEVICE TO THE GAS INSTALLATION.

NOTE!!!
Depending on the type of the NG / LPG, an appropriate nozzle must be mounted in the control burner block. The unit is equipped with a burner adapted to natural gas (NG) or LP gas, depending on your ordered value. In the case of connecting the fireplace to an different type of gas than specified, please contact your dealer for replacement of the main burner with the right one.

WARNING!!!
The main burner module used in gas appliances in the LEO 200 series consists of two parts connected to the outlet of the GV60 controller by a tee.

To be able to connect all of the system components of automatic gas control, you must first remove the glass front (Figure 15) and remove the inspection element in the base of the main burner.

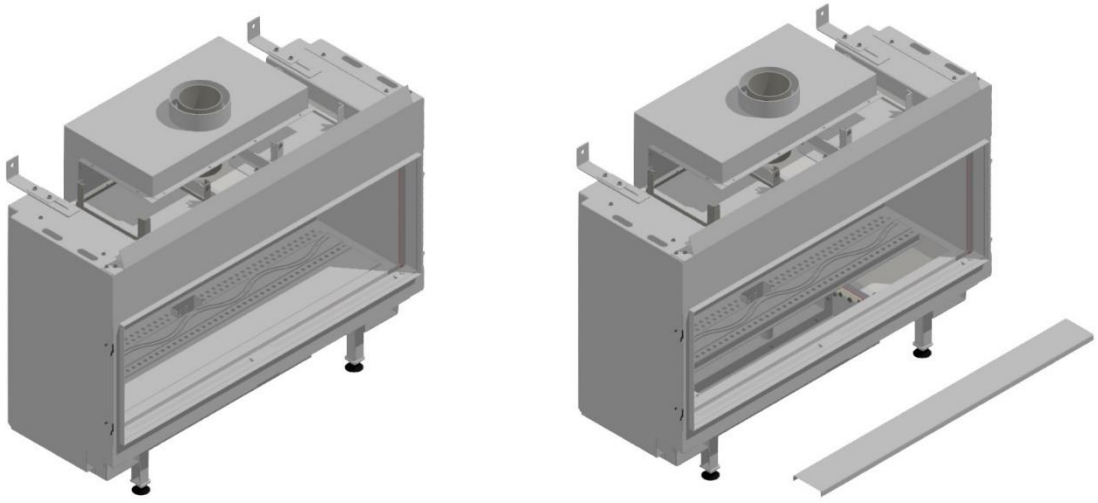


Figure. The procedure for removing the inspection element

Passing individual wires through the casing of the gas insert, pay close attention to how they are sealed. Sealing is achieved by means of special bushings and heat- resistant paper and with high temperature resistance silicone. Other elements should be sealed with high-temperature silicone.

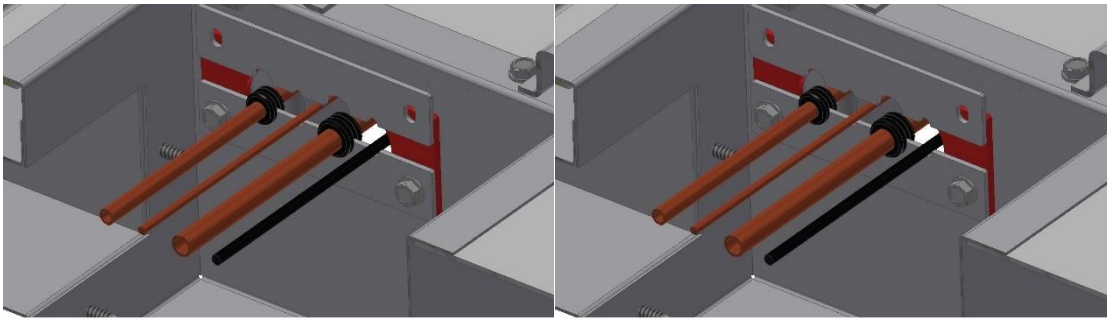


Figure. The way of routing out and sealing the capillary cable, the magneto wire, the tube of the main burner and the tube of the control burner

NOTE!!!
All activities associated with connecting the device to the gas installation should be carried out with the power disconnected. The insert installation can only be done by a qualified fitter/technician with appropriate licences.

NOTE!!!
It is absolutely forbidden to use open fire during the installation process of the gas insert. Failure to follow instructions could result in fire or explosions, causing severe damage, bodily injury or even death.

Tightness test
After connecting the system to the gas network it is essential to check the tightness of the connections made with a special sensor. In the case of leaks, shut off the gas supply shut-off valve and repeat the steps involved in installing various parts of the system.

POWER SUPPLY CONNECTION

NOTE!!!
Connect the power supply only after connecting the combustion air system and any gas control system components.

The B6R-R8U receiver is powered by four 1.5V AA batteries. Pay special attention to locate the wiring connecting the gas control and the receiver away from hot parts of the fireplace. The need to replace the batteries in the remote control is indicated by the indicator displayed in the upper right corner of the display, while short beeps periodically appearing for three seconds immediately after starting the firing process in the fireplace indicate the need to replace the batteries in the receiver. Used batteries located in the receiver can overheat, spill or even explode. Do not use batteries that have been exposed to the sun, moisture, heat or vibration. Install only batteries of the same type and the same manufacturer. Do not install new batteries with worn ones. The kit can optionally include the G60-ZB90 power module. This module is powered by four 1.5V AA batteries and should be connected directly to the receiver in the place of the AC adapter connection. The additional power supply module eliminates the need for batteries in the receiver. Optionally, customers can buy a cable connecting the interrupter block and the receiver for the gas control system, equipped with a switch. The switch also protects the system against uncontrolled flow of gas through the controller.

OPERATION INSTRUCTIONS

The LEO gas inserts are controlled wirelessly with a remote control. The system, as standard, is powered by four 1.5V batteries installed in the receiver. Short cyclical signals appear for about three seconds when you try to ignite the gas insert and it is necessary to replace the batteries in the receiver. A long beep means that the controller switch on the line between the receiver and the interrupter block (option) is in position „O" or one of the wires connecting the receiver to the controller is not connected properly. Set the switch to „I". If the control flame does not light, it is necessary to shut off the gas supply shut-off valve and contact a service technician. If, within six hours, the device does not receive a command from the user, a system of automatic gas control will reduce the main burner flame to the minimum. In the case of continuous operation without user intervention for five days after the last entry of settings, the system will turn off the unit and cut off the gas supply. Before the battery in the receiver is fully discharged, the controller will automatically shut off the gas supply to the fireplace.

NOTE!!!
The remote control should always be kept out of the reach of children and other persons unaware, not capable of assessing the consequences of their actions.

The user gets the device along with the included remote control, type B6R-H9 (see picture below).

NOTE!!!
The B6R-H9 remote control units have a built-in sensor used in the thermostat mode. The unit continuously measures the ambient temperature and compares it with the temperature set on the thermostat. It should be kept in a dark place, to rule out measurement errors associated with direct sunlight.

The LEO 100 inserts are equipped with a gas control system allowing the user to remotely lighten the fireplace and to fully control the hearth. To enable operating the insert from the remote control:

• Make sure that the shut-off valve installed on the gas supply to the fireplace is open.

• If the system is equipped with a cable with a switch, set it to „I" (on). The main valve knob is switched automatically.

NOTE!!!

Never use tools to change the position of knobs. Changing the position of the knobs can only be made by hand, otherwise you may damage the controller. In the case of locking the knobs, contact your service representative.

The LEO uses modern B6R-H9 remote controls set in accordance with standard for radio frequency 868MHz. The remote control supplied with the fireplace requires a new code transmission. To do it, in the first place, press and hold the „RESET" button on the receiver until you hear two characteristic signals and then release the button. This operation should be done by means of the thin element with blunt ends. Further on, from the remote control, press and hold ▼ , until you hear two short beeps, indicating the remote control is synchronized with the receiver. One long beep indicates that the elements of the system have not been properly paired.

Figure. RESET button – receiver

INFORMATION

To view the current version of the software used by the remote control, simultaneously press the ⧗ and ▲. Simultaneous pressing the ⧗ button and the ▲ button will display the remote control model.

Deactivating the remote control.

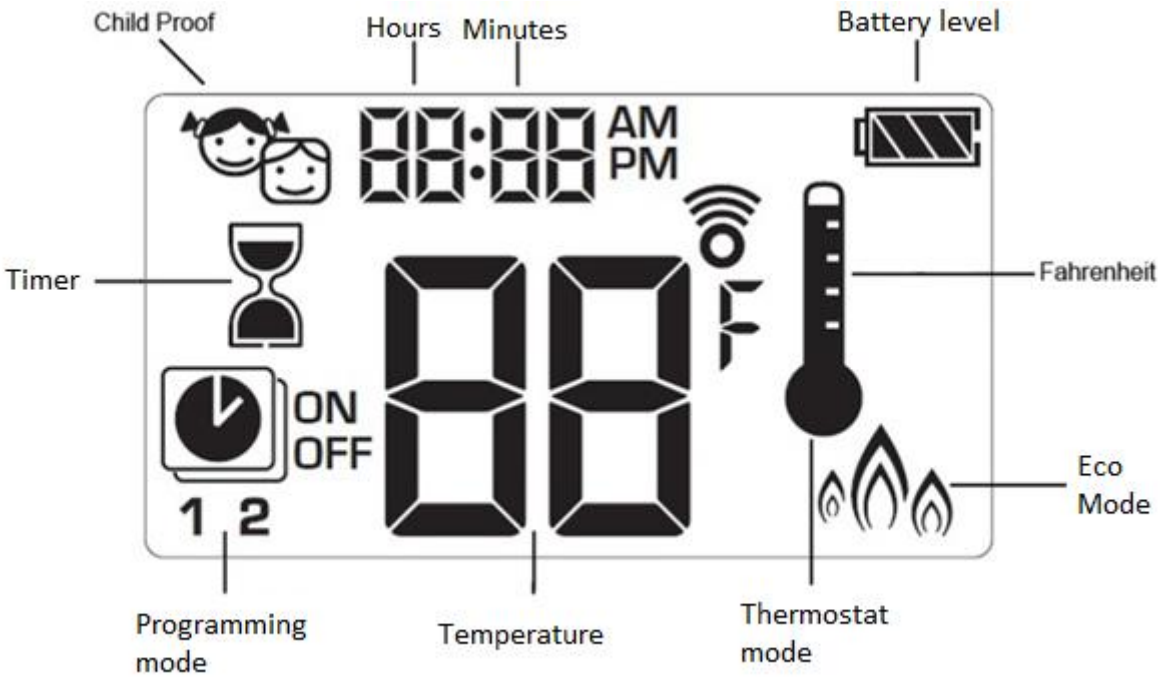
Install batteries. All available icons will appear on the display and will flash. During the flashing, press the appropriate icon for the function and hold it for 10 seconds. The icon appropriate for the selected button will flash until the end of the deactivation process. The remote control display shows the icon adequate for the selected function and two horizontal lines. If the function is deactivated two horizontal lines will appear on the display when pressing the button responsible for its selection. After replacing batteries, the settings will remain unchanged.

Activating the remote control.

Install batteries. All available icons will appear on the display and will flash. Press the appropriate icon for the function and hold it for 10 seconds. The icon appropriate for the selected button will flash until the end of the activation process. The remote control display shows the icon adequate for the selected function.

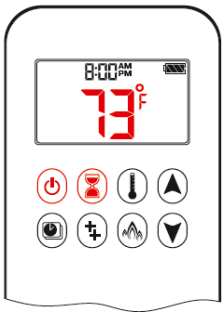
NOTE!!!
If, when you try to light it, the control flame goes out, wait for at least five minutes before trying again to light the fireplace.
If, after four attempts to light the fireplace, the control flame will not ignite, close the gas shut-off valve to the appliance and contact your service representative.

USER MANUAL OF THE 6-SYMBOL B6R-H9 CONTROL UNIT



SETTING OF THE TEMPERATURE UNIT.

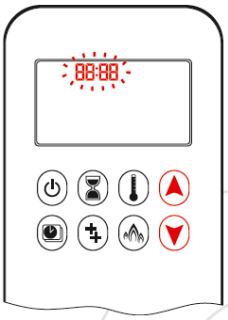
To change the temperature unit, simultaneously press the buttons. You can choose between Celsius and Fahrenheit degrees. Choosing °F will automatically set the clock in a 12-hour format, while the choice of °C sets the clock in a 24-hour format.



CHILD PROOF

To change the temperature unit, simultaneously press the buttons. You can choose between Celsius and Fahrenheit degrees. Choosing °F will automatically set the clock in a 12-hour format, while the choice of °C sets the clock in a 24-hour format.

TIME SETTINGS



1. To be able to adjust the day of the week, press the button and the button.

2. Press or to select a number corresponding to the day of the week (1 - Monday, 2 - Tuesday 3 - Wednesday 4 - Thursday, 5 - Friday, 6 - Saturday, 7 Sunday)

3. Simultaneously press the button and the button. Hours will flash.

4. Set the hour using the and buttons.

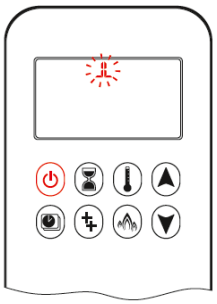
5. Simultaneously press the button and the button. Minutes will flash.

6. Set the minutes using the button and the button.

7. To confirm the setting, simultaneously press and or wait.

MANUAL MODE

Lighting the fire in the fireplace with a single button (default setting)

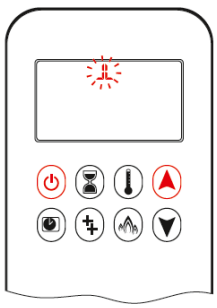


• Press the button until you hear two short beeps. Starting the firing sequence is confirmed by the occurrence of a flashing icon on the display of the burner. Release the button.

• Kindling the control flame is confirmed by a single signal.

• After kindling the main burner, the remote control automatically switches to the manual mode.

Lighting a fire in the fireplace with two buttons



Simultaneously press the button and the button until you hear two short beeps. Starting the firing sequence is confirmed by the occurrence of a flashing icon on the display of the burner. Release the button.

• Kindling the control flame is confirmed by a single signal.

• After kindling the main burner, the remote control automatically switches to the manual mode.

Information:

To change the kindling method, immediately after you install the batteries in the remote control, hold the button for 10 seconds. The remote control display shows „ON“ and a flashing digit corresponding to the current settings.

1 – Lighting a fire by pressing .

2 – Lighting a fire by pressing the and the buttons.

End of the procedure of changing the method of lightening a fire is confirmed with the display reading the appropriate number.

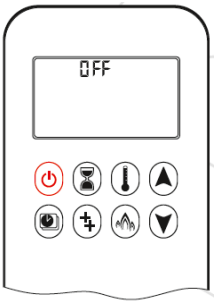
NOTE!!!
If, after several attempts to fire, ignition of the control flame does not take place, set the main valve knob to „OFF“ and refer to the section „Possible Problems and Solutions“.

Standby or off mode

To make the unit switch to the standby mode, hold the button until the main burner is extinguished.

To turn the device off, press . The control flame will be extinguished.

Before attempting to re-start the fireplace, wait 5 seconds.

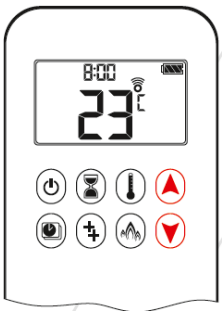


Adjusting the height of the flame

To make the unit switch to the standby mode, hold the button until the main burner is extinguished.

To turn the device off, press . The control flame will be extinguished.

Before attempting to re-start the fireplace, wait 5 seconds.



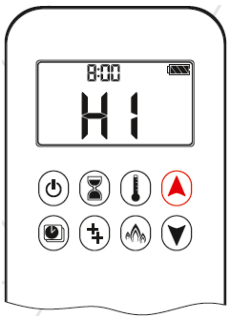
SETTING THE MINIMUM AND MAXIMUM HEIGHT OF THE FLAME

Minimum height of flame

To reduce the burner flame to the minimum height, double- press the button. The display shows the „LO” symbol

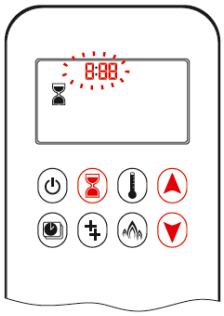
The maximum height of the flame

To increase the burner to the maximum value, double-press the button. The display shows the „HI” symbol.



SLEEP TIMER

Enabling/Settings



1. Press and hold until you see the icon. The hours’ box will flash.
2. Enter a value using the and buttons.
3. To confirm, press . The minutes’ box will flash.
4. Enter a value using the and buttons.
5. T o confirm, press or wait.

Disabling:

To deactivate the timer, press the button. The icon will disappear with countdown time.

Information:
After the expiry of the countdown time, the fireplace will be extinguished. The sleep timer only works in different modes: Manual, Thermostat and Eco. The maximum value of the timer is 9 hours and 50 minutes.

MODES

Thermostat mode

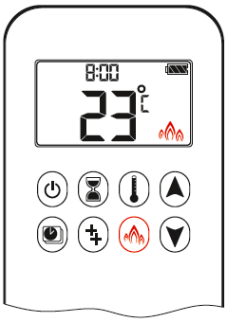
The room temperature is measured and compared with the temperature set on the thermostat. The flame height is automatically adjusted so as to reach the set temperature.

Programmed mode

The room temperature is measured and compared with the temperature set on the thermostat. The flame height is automatically adjusted so as to reach the set temperature.

Eco mode

The flame height is adjustable between its extremes. If the room temperaturę is lower than the temperature preset on the thermostat, the flame height reaches its maximum value and remains at a high level for a longer period of time. If the room temperature is lower than the preset, the flame height is reduced to a minimum for a long period of time. One cycle takes approximately 20 minutes.



THERMOSTAT MODE

Enabling and disabling the thermostat

Enabling:

Press the button. The display shows the icon and the preset temperatureas the first and the actual room temperature.

Disabling:

1. Press the button .
2. Press the button o the button.
3. Press the button, to enter the Programmed mode.

Thermostat settings

1. Press and hold until you see the icon . The temperature displayed flashes.
2. To set the desired temperature use the and buttons.
3. To confirm, press or wait.

PROGRAMMED MODE

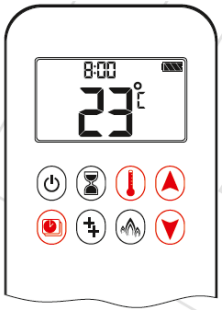
Enabling the programmed mode

Press the button. The display shows the icon and the **1** or **2** symbols and **„ON”** and **„OFF”.**

Disabling the programmed mode

1. Press the button or the button, or the button to go to the manual mode.

2. Press the button, to go to the Thermostat mode.



Information:
Entering the switch-on temperature of the thermostat will automatically set the same value for the switch-on temperature of the programmed mode.
Default settings:
Temperature of switching on: 21°C
Temperature of switching ff: „--” (only the control flame)

Temperature settings

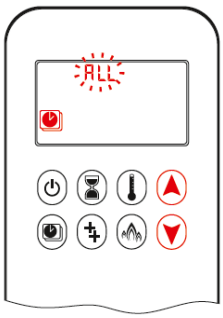
1. Press and hold the button until you see the flashing icon. „**ON**” and the switching off temperature will be displayed (set in the thermostat mode).

2. To continue, press or wait. The display shows the icon, the **„OFF”** symbol and a flashing value to symbolize the switching off temperature.

3. Set the desired temperature using the or buttons.

4. To confirm, press .

Setting the days

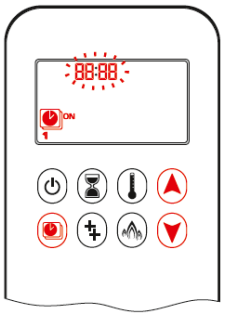


5. The display flashes **„ALL”.** Press the button or the button to select one of the three options to enter **(ALL, SA:SU, 1, 2, 3, 4, 5, 6, 7).**

6. To confirm, press .

(**SA:SU** symbols, respectively, mean Saturday and Sunday. Individual numbers correspond to the days of the week (e.g. 1 Monday 2 - Tuesday 3 – Wednesday 4 - Thursday, 5 - Friday, 6 - Saturday, 7 - Sunday).

Switching on time settings (Programme 1)



„ALL” option selected

7. The display shows , 1, **„ON”**, then for a while you will see the **„ALL”** symbol. Subsequently, the hour will begin to flash.

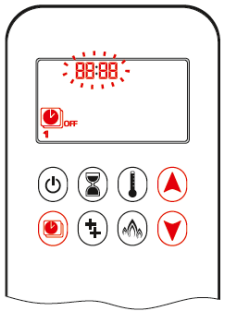
8. Set the hour using the and buttons.

9. To confirm, press . The display shows the icon, 1, **„ON”**, then for a while you will see the **„ALL”** symbol. Subsequently, the minutes will begin to flash.

10. Set the minutes using the and buttons.

11. To confirm, press .

Switching off time settings (Programme 1)



Wybrano opcję **„ALL”**

12. The display shows , **1** , **„OFF”**, then for a while you will see the **„ALL”** symbol. Subsequently, the hour will begin to flash.

13. Set the hour using the and buttons.

14. To confirm, press . The display shows , **1, „ON”**, then for a while you will see the **„ALL”** symbol. Subsequently, the minutes will begin to flash.

15. Set the minutes using the and buttons.

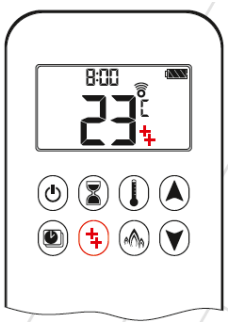
16.To confirm, press .

Information:
• Subsequently, the user can enter the time on and off for Programme 2. If not, Programme 2 will remain inactive.
• Temperature settings for enabling and disabling Programmes 1 and 2 are the same for all options **(ALL, SA: SU, 1, 2, 3, 4, 5, 6, 7).** Entering new settings for switching on and off temperatures automatically sets the default preset values.
• Entering new settings for switching on and off time for Programmes 1 and 2 will set new values as the default. To restore the factory settings for programmes 1 and 2, reset the remote control by removing the battery.

AN OPTIONAL AUXILIARY

This option is available only for gas inserts with more than one burner.

In the case of the LEO and LEO 200 series, the function remains inactive.



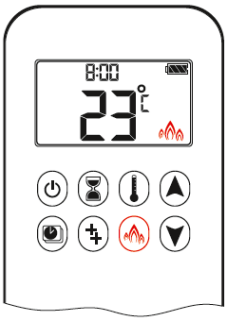
ECO MODE

Switching on:

Press the . button. The display shows .

Swtiching off:

Press the button. The icon disappears from the display.



REPLACEMENT OF BATTERIES

Batteries in the receiver, remote control or the power supply module can overheat, spill or even cause an explosion. Do not use batteries that have been exposed to the sun, moisture, heat or vibration. Install only batteries of the same type and the same manufacturer. Do not install new batteries with worn ones. The remote control is powered by two AAA batteries. The B6R-R8U receiver and the G60-ZB90 power module are powered by four AA batteries 1.5V. The battery life in the case of the remote control and the receiver is estimated at about 1 heating season. The device manufacturer recommends the use of alkaline batteries because of the lower risk associated with unsealing. It is also permissible to use rechargeable batteries. When removing batteries, do not use tools that can cause a short-circuit. Replacing batteries with conductive objects can permanently damage the electronic components of the remote control and the receiver.

Replacement of the batteries in the remote control:

• Remove the cover located on the rear of the remote control.

• Gently remove the used batteries from the remote control.

• Install new AAA batteries observing the polarity markings (+/-).

• Replace the cover on the back wall of the remote

Replacing batteries in the receiver/power supply module:

• Open the cabinet door panel.

• Carefully remove the B6R-R8U receiver/G60-ZB90 power module.

• Remove the cover.

• Remove the used four AA batteries and install new, paying attention to the

• polarity markings (+/-) on the receiver/power module.

• Replace the cover on the cover receiver/supply module.

NOTE!!!
Replacing batteries in the receiver/power supply module can only be done on a cool fireplace with the gas supply cut off.

NOTE!!!
Batteries are classified as hazardous chemical waste, so, after using them, they should not be disposed of with other household waste.

MAINTENANCE

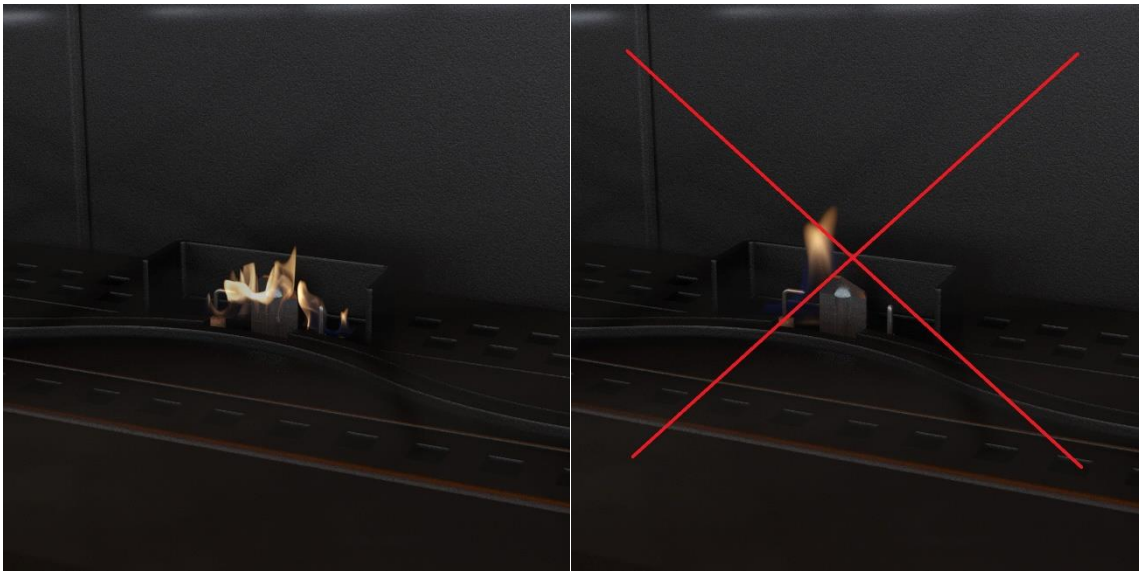
NOTE!!!
All maintenance work should be carried out on a cool fireplace with gas supply off and disconnected power supply.

NOTE!!!
Maintenance of the gas insert and the combustion air system can only be done by a qualified service technician.

NOTE!!!
Check if the flow of combutsion and ventilation air is not obstruced in any way.

PERIODIC VISUAL CHECK OF PILOT AND BURNER FLAMES

It is necessary to visual check the pilot and burner flames periodically.



The pilot flame should always reach the thermocouple (on the right of th burner). Otherwise it will affect on the work of the main burner and may cause failure of lightening of the appliance. Call authorized service agency if it is not.

The main burner flame should reach at least 1/3of the chamber height, otherwise it may affect on the performance of you appliance and its work. Please call authorized service agency if it is not.

PROPER MAINTENANCE CONTAINS:

• The device requires periodic inspection at least once a year.

• Cleaning the chimney system and a review should be conducted at least once a year.

• Glass with cracks and scratches should be immediately replaced with new ones.

• It is forbidden to make any changes in the design of the device.

• Fireplaces should not be cleaned with caustic agents.

• When replacing individual components, use only original spare parts available from the manufacturer.

No	Scope	Steps
1	General inspection	Perform lighting a fire in the fireplace. Check the operation of all safety systems. Check that the main burner flame burns steadily. Check that the main burner flame burns evenly. Check the batteries in the receiver and the remote control do not need to be replaced. Check the operation of all modes in the control unit.
2	Glass inspection	Make sure that the glass does not have any cracks Make sure the glass fits tight to the body of the fireplace.Check the wear of the glass sealing cords. If necessary, replace the sealing cords. Check the degree of dirtiness of the glass. If necessary, clean the glass.
3	Switch box inspection	Check the tightness of gas connections. Make sure the switch box has adequate ventilation. Check that the cables connecting the controller to the receiver are not damaged. Make sure gas control system components are not exposed to high temperatures. Make sure that the switch box is not exposed to moisture. Check that the connecting cords have no signs of corrosion.
4	Combustion chamber inspection	Make sure the control burner is not obscured by decorative elements. Check if the thermocouple is within the control flame. Check whether the combustion chamber requires cleaning. Make sure all air inlets to the combustion chamber are clear. If necessary, clear the openings. Check the tightness of the body of the fireplace. Check the combustion chamber with respect to any signs of corrosion. If necessary, remove corrosion and cover losses with a new coating of paint. Check that the main burner ignites smoothly.
5	Control of the chimney system	If possible, check the tightness of the chimney system. Check the coaxial combustion air system patency.
6	Control device inspection	Check that the receiver antenna is not damaged. Make sure that the main valve knob and the manual mode dial work correctly. Check if there is no insulation damaged in the circuits. Make sure the AC power cord is not damaged. Make sure that the control system components are not exposed to overheating.
7	Trim inspection	Make sure the gas insert trim has no cracks. Make sure that combustible elements are at a safe distance from the fireplace trim.

8	Decorative elements	Make sure that decorative elements do not require cleaning. Make sure decorative elements are not in contact with the glass. Make sure that decorative elements are not damaged.

WARNING!!!
Locking the pressure regulator is realized by the maximum tightening its adjusting screw.

Environmental protection

• All elements of the packaging in which the gas insert was supplied should be disposed of in an appropriate manner for their type.

• Due to the heavy metal included, the batteries are classified as hazardous chemical waste, so, after use, they should be thrown into special containers for hazardous waste.

• If the device operation is over, you should dispose of it. The user is obliged to submit the fireplace to an appropriate institution handling recycling this type of equipment.

POSSIBLE PROBLEMS AND SOLUTIONS

NOTE!!!
Removal of defects or replacement of system components for gas control can only be done by an authorized service technician.

There are many factors that could affect the gas insert malfunction. To exclude a possible fault in the unit or the automatic gas control system, be sure that the fireplace is connected in accordance with these instructions. The table below shows how to proceed in the case of individual symptoms.

NOTE!!!
Making replacement of damaged parts, use only original components offered by the manufacturer.

FAULT	SUGGESTED ACTIONS
The device will not start (no audible confirmation of the ignition procedure)	✓ Replace the batteries in the remote control and the receiver. ✓ If the receiver is powered by the power module assess its performance. ✓ Reset the receiver and program a new transmission code. ✓ Make sure the receiver antenna is properly installed and not damaged
No voltage on the controller coil (there are no specific „clicks")	✓ Make sure the switch cord in the gas control module is not damaged. ✓ Short cyclical signals appearing when you try to switch on the fireplace indicate the need to replace the batteries in the receiver. ✓ For one long beep:

	- Make sure that the switch on the connecting cable from the gas control module with the receiver is set to „I". (Option) - Check that the cable connecting the receiver to the gas control module is not damaged. - If the stepper motor is not working properly, replace the gas control module. - If the coil of the gas control unit is not working properly replace the module. - If the micro-switch of the gas control module is not working properly, replace the module
No spark at the electrode	✓ Check the cable connection between the receiver and the electrode. ✓ Check that the electrode is not damaged. ✓ Check the operation of the sparker. ✓ Check that there is no system breakdown. ✓ If the ignition components are working properly and the firing procedure does not start: - Press the „RESET" button on the receiver. - If it is possible, shorten the cable between the receiver and the electrode. - Add a grounding cable between the controller and the control burner.
No control flame	✓ Make sure that the gas shut-off valve is open. ✓ Repeatedly make attempts to ignite the fireplace. ✓ Check that the pressure in the gas installation is appropriate. ✓ Check the connection between the breaker and the receiver.
After lighting the control flame, spark still appears at the electrode	✓ Check the connection between the breaker and the controller. ✓ In the case of damage to the electronic amplifier, replace the receiver.
The control flame extinguishes automatically	✓ Make sure the thermocouple sensor is operating and ✓ Properly connected to the gas control module. ✓ Make sure the flame control is capable of heating the temp. sensor. ✓ Check that the gas valve of the gas control module is not damaged.
Weak control flame	✓ Check the gas pressure in the control flame. ✓ Check if draft reductor is mounted properly.

The main burner does not ignite	✓ Make sure the holes of the main burner are not blocked. ✓ Make sure the manual mode dial is set to the „ON" position. ✓ Check the control flame intensity. ✓ Make sure the control flame control is not blocked with decorations. ✓ Make sure the thermocouple sensor is operating and properly connected ✓ to the gas control module. ✓ Make sure the flame control is capable of heating the temp. sensor.
The main burner automatically turns off after the fireplace reaches a certain temperature	✓ Check the thermostat setting. ✓ Check if draft reductor is mounted properly.
There is sediment deposited on the glass	✓ Make sure the holes of the main burner are not blocked. ✓ Check that the gas pressure in the installation is correct. ✓ Check that nothing blocks the chimney system.
The device cannot be turned off using the remote control	✓ Try turning off the burner using the switch on the gas control module, setting it to „O". If there is no response, replace the gas control module. ✓ Check the connection between the breaker and the controller.

RATING PLATE INFORMATION

SAMPLE RATING AND INFORMATION PLATES BELOW. DO NOT REMOVE THE PLATES FROM ITS ORIGINAL POSITION AS THOSE HAVE TO REMAIN WITH THE APPLIANCE AT ALL TIME.

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Poland

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www.kratki.com

Product Code: LEO/100/NG
Name: LEO 100 series vented gas fireplace heater

Type of appliance: Vented Gas Fireplace Heater
Conforms to: ANSI 21.88-14
Certified to: CSA 2.33-14, CSA P.4.1-15, CAN/CGA 2/17-M91

Intertek
XXXXXXXX

Gas type suitable for the appliance:	NG (natural gas)
Input rate (BTU/hr):	22000
Manifold pressure 0-610m (in. w.c./kPa):	3,5/0,87
Manifold pressure 610-1370m (in. w.c./kPa):	4,8/1,20
Manifold pressure, Low setting (in. w.c./kPa):	0,9/0,22

Minimum inlet pressure (in. w.c./kPa)::	5,0/1,25
Voltage rating (V):	6
Frequency (Hz)	50

This appliance is only for use with the type of gas indicated on the rating plate and may be installed in an aftermarket, permanently located, manufactured home (USA only) or mobile home, where not prohibited by local codes. See owner's manual for details. This appliance is not convertible for use with other gases. This appliance is approved to be installed with type B venting system. For specified, listed system approved to be used with this appliance, please refer to the owner's information manual.

LIGHTING, OPERATING AND SHUTING OFF INSTRUCTIONS.

This appliance is approved to be operated with remote controler provided only. Do not try to start it any other way.

TURNING ON

• Press the button on your remote controler until you hear two short beeps. Starting the firing sequence is confirmed by the occurrence of a flashing icon on the display of the burner. Release the button.

• Kindling the control flame is confirmed by a single signal.

• After kindling the main burner, the remote control automatically switches to the manual mode.

• To make the unit switch to the standby mode, hold the button until the main burner is extinguished.

SHUTING OFF

• To turn the device off, press . The control flame will be extinguished.

• Before attempting to re-start the fireplace, wait 5 seconds.

SAFETY SHEET

This appliance must be installed in accordance with local codes, if any; if none, follow the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or Natural Gas and Propane Installation Codes, CSA B149.1

WARNING: Improper installation, adjustment, alternation, 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.

• This appliance must be properly connected to a venting system in accordance with the manufacturer's installation instructions.

• This appliance may be installed in an OEM installation in a manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280*, in the United States, or the Standard for Installation in Mobile Homes, *CAN/CSA Z240 MH Series*, in Canada.

• This appliance may be installed in a recreational vehicle also and must be installed in accordance with the Standard *CAN/CSA Z240 RV, Recreational Vehicles*, in Canada, or with *ANSI A119.2/NFPA 501C, Standard for Recreation Vehicles,* in the United States.

In case of any removal, swaping or maintaining of the venitng system it is necessary to reinstall or/and reseal the vent-air intake system properly. Improper reinstallation or resealing can cause serious injury or property damage.

This appliance is approved to be installed with type B venting system. For specified, listed system approved to be used with this appliance, please refer to the owner's information manual.

CAUTION: Hot while in operation. Do not touch. Severe Burns may result. Keep children, clothing and furniture, gasoline and other liquids having fl ammable vapors away. Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

CAUTION: Do not operate the appliance with glass removed, cracked or broken. Replacement of the panel(s) should be done by a licensed or qualified service person.

Rating plate shall be located on the back of the appliance. It should be placed also on the control compartment doors together with safety sheet, lighting, operating and shuting off instructions and elecrtrical diagrams.

LIMITED WARRANTY

The Kratki.pl Marek Bal company announces that the following warranty on the purchased device is only valid in its original installation, and only in relation to its original purchaser. The purchaser must have the have proof of purchase of the product and present it at the time of the complaint. Elements covered by this limited warranty and periods of such coverage are included in the table below.

Terms of warranty:

The warranty protects the purchaser exclusively from defects in the components manufactured or assembled by the Kratki.pl Marek Bal company.

Any part which proves to be defective during the applicable warranty period specified in the table above shall be repaired or replaced at the discretion of the Kratki.pl company, by an authorized distributor, reseller or agent, provided that the defective part is returned to the same distributor, reseller, or agent, at the request of the manufacturer.

The Kratki.pl company reserves the right to apply an alternative solution, i.e. the waiver of all warranty obligations for reimbursement of the total amount of the product purchase, confirmed by the original proof of purchase.

Indoor Gas Products	**10 years**	**5 years**	**2 years**	**1 year**	**Labor coverage (years)**
Combustion chamber / body	✓				**3**
Heat exchanger	✓				**3**
Burner	✓				**3**
Glass - only thermal damage	✓				**3**
Protective barriers made of glass or mesh	✓				**1**
Ceramic lining		✓			**3**
Steel lining		✓			**3**
Internal and external masking elements		✓			**3**
All the decorative elements of the combustion chamber (stones, ceramic pieces of wood, crystals)		✓			**1**
The valve assembly and gas control components (remote, thermocouple, control burner nozzle, control burner, controller, receiver).			✓		**2**
Other elements of the gas control system and other electrical components (cables, current breaker, clamp fittings, gaskets, caps, blower, thermostatic switches, blower ducting).			✓		**2**
Ventilation system / components of the ventilation system			✓		**2**
Housing parts made of stainless steel				✓	**1**

An authorized distributor or other seller approved earlier by Kratki.pl shall be responsible for all diagnosis and possible field service in relation to any warranty claims. The Kratki.pl company is not liable for results or costs incurred as a result of negligent service or maintenance performed by unauthorized sellers.

At any time, the Kratki.pl company reserves the right to verify all the claims on the spot in terms of reported irregularities before approving any filing of a complaint or taking any further action. The refusal to verify the claims at the manufacturer request results in an immediate loss of warranty.

All warranty claims must be submitted by the seller providing services i the area of complaint, including a copy of the original proof of purchase (receipt owned by the claim filing party). Any complaint application must be complete and contain complete customer data and a detailed description of defects in accordance with the requirements of Kratki.pl in order to obtain a final assessment. Incomplete applications may be rejected.

Each device must be installed according to the manufacturer's instructions.

All national and local building regulations must be observed both during installation and use.

The installer is required to ensure the device operation as intended after performing its installation.

The original purchaser is responsible for regular maintenance of the equipment according to the instructions described in the manual. As noted below, the warranty may be voided due to problems caused by lack of proper maintenance.

Exclusions:

This limited warranty does not cover any damage to the paint, occurrence of rust or corrosion resulting from lack of maintenance of the device or improper ventilation, sealing the doors or windows, supply of air necessary for combustion, corrosive chemicals (i.e. chlorine, salt, etc.).

Any malfunction, damage or irregularities related to the performance of the device occurring as a result of special environmental conditions, climatic conditions, location, chemical damage, the reverse thrust, installation errors, installation by unqualified personnel, improper chimney elements (including the size or type of chimney caps), operator errors, abuse, misuse, use of the wrong fuel, lack of regular maintenance, fortuitous events, acts of God, meteorological and weather events associated with hurricanes, tornadoes, earthquakes, floods, fire, impacts of thunder/lightning, riots, or acts of terrorism or war, which cause incorrect operation of the device are not covered by this warranty.

The Kratki.pl company is not required to enhance, improve or modify the device after manufacture (e.g. after introduction of improvements in the process of developing the product, no modifications will be taken into account or introduced for the already existing devices).

This warranty does not cover travel expenses of the seller for diagnosis or maintenance work. All labor rates paid to authorized dealers are subsidized at predetermined rates. The seller may charge the homeowner for the costs of travel and additional time beyond the designated subsidies.

Any unit which bears the signs of neglect or mishandling will not be covered by the terms of this warranty policy, which may also result in the total loss of the warranty. This also applies to devices with rusted or corroded parts of the furnace, which have not been reported as rusted or corroded within 3 months from the installation / purchase.

Devices bearing traces indicating the use after the damage has occurred or used despite the problems known to the user, causing further damage, are not covered by this warranty.

Devices which do not have a serial number or devices in which the serial number has been altered, deleted, removed or is illegible, are not covered by this warranty.

Small movements, expansion and contraction of the steel is a normal phenomenon and is not covered by this warranty.

Damage to products during loading, unloading and transportation is not covered by this warranty.

The use of products manufactured or supplied by other manufacturers in conjunction with the Kratki.pl company device without prior consent may result in the total loss of the warranty.

Any modifications on this appliance are strictly prohibited. Do not attempt to alter or modify the construction of this appliance or its components. Any modification or alteration will void the warranty, certification and listing of this appliance.

Limitations of liability:

The exclusive remedy for the original purchaser under this warranty, and at the same time while the sole obligation of the Kratki.pl company under this warranty, expressed or implied arising from the agreement or regulations relating to civil liability under the Code of civil law, should be limited to replacement, repair or refund, as described above.

The Kratki.pl company shall in no event be liable under this warranty for any incidental or consequential economic damage or property damage. To the extent permitted by applicable law, the Kratki.pl company makes no other expressed warranties than those specified in this warranty. The period of the warranty is limited to the duration of the warranty expressly set out above. If the implied guarantee cannot be repealed, then such warranty is limited in time to the period covered by this warranty.

Some US states do not allow limitations on how long an implied warranty lasts or allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions will not apply.

How to get warranty service?

Customers should contact an authorized dealer for warranty service.
In the event if an authorized seller is not able to provide the service, please contact us by mail at the address indicated below or by e-mail. Please include a brief description of the problem and your contact details. Our representative will contact you to arrange an inspection and/or warranty service.