

# LAVA<sup>®</sup>

Design Glass-Radiator  
By WarmlyYours

## Installation Manual



Read all instructions before installing or using this heater.

## IMPORTANT INSTRUCTIONS

LAVA® glass heating radiators are very versatile. They are an elegant design, featuring simple installation and easy operation. LAVA® provides great reliability and great performance.

This guide gives important information on safety, installation, use and maintenance of the equipment. Please read this information carefully.

The manufacturer is not liable if the instructions are not followed.

The packaging of your LAVA® high-quality glass radiator consists of recyclable materials.

**ATTENTION:** Operation of the heater causes high temperature on the glass surfaces. Prolonged contact may cause burns.

This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, curtains, et cetera, at least 20" (0,5m) from the front of the heater and keep them away from the sides and rear.

Extreme caution is necessary when any heater is used by or near children and whenever the heater is left operating while unattended.

This heater is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge of using the radiator.

Children should be supervised to ensure that they do not play with the device.

The heater must not be placed or mounted directly below a wall socket.



**WARNING:** Covering the glass surface causes overheating danger! May cause damage to the heating element.

**WARNING:** The glass heater must not be used if the front glass is broken.

Do not operate any heater after it malfunctions. Disconnect power at service panel and contact WarmlyYours at (800) 875-5285.

Do not use the heater outdoors.

To disconnect heater, turn off power to heater circuit at main breaker panel.

Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater.

To prevent a possible fire, do not block air intakes or exhaust in any manner.

Do not use unit in areas where gasoline, paint, or flammable vapors or liquids are used or stored.

Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury.

## OVERHEATING AND OVERLOAD PROTECTION

Each radiator has an overheating protection. The device automatically starts again after a cooling down to under 113° F, or 45°C.

## THESE INSTRUCTIONS MUST

- be passed to the owner/operator after the installation. In addition, ensure that the operator is trained in the operation of the glass-radiation heater.
- be stored in a secure location and transferred at change of ownership to the new owner.

## SAVE THESE INSTRUCTIONS!

**DELIVERY | PACKAGING**  
**LAVA® 500W | 750W | 1000W**

The LAVA® glass radiator has to be fixed only with the supplied mounting hardware. Screws and anchors must correspond with the building material of the wall (masonry, concrete, plasterboard, etc.). Drywall anchors are included. The wall must have a flat surface.



Electrical and electronic equipment frequently contain valuable materials. They may also contain harmful substances that were necessary for their function and safety. The residual waste or incorrect treatment can harm the environment. Please help protect our environment! Dispose your old unit according to local regulations.

**ATTENTION:** Packaging materials, must be disposed of properly.

**Wall mounting kit for**  
**LAVA® 500W | 750W | 1000W:**

- LAVA® Glass Radiator
- 1 x Wall mounting hardware:
  - A - 2 x mounting bracket
  - B - 4 x hex bolt M8 x 16
  - G - 8 x Anchors

After attaching hardware, do not tighten completely!  
Only tighten hardware when unit is assured to mount by test fitting unit.

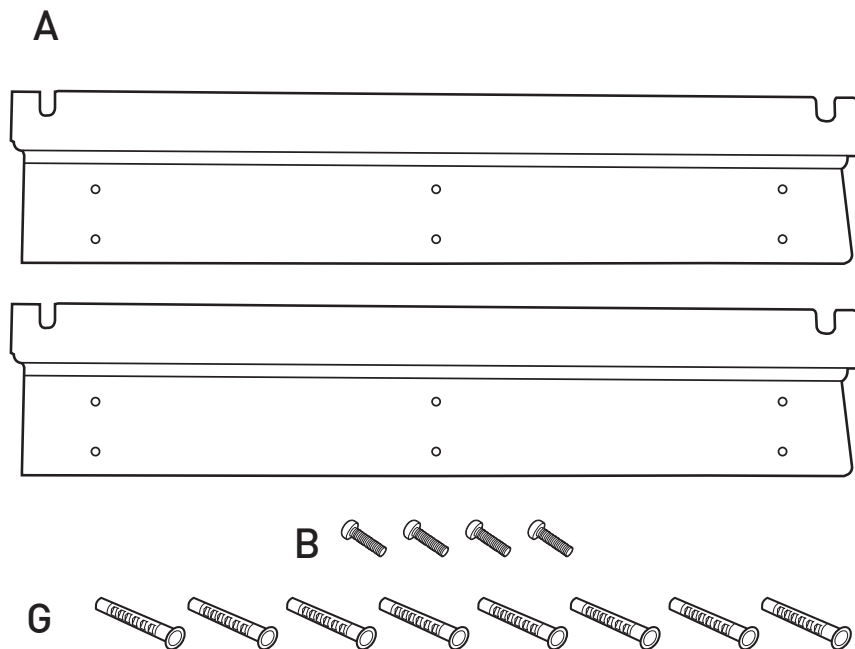
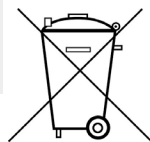


Fig. 1 = Mounting Hardware

## DELIVERY | PACKAGING LAVA® 500W | 750W | 1000W

The LAVA® glass radiator must be fixed only with the supplied mounting hardware. Screws and anchors must correspond with the building material of the wall (masonry, concrete, plasterboard, etc.). Drywall anchors are included. The wall must have a flat surface.

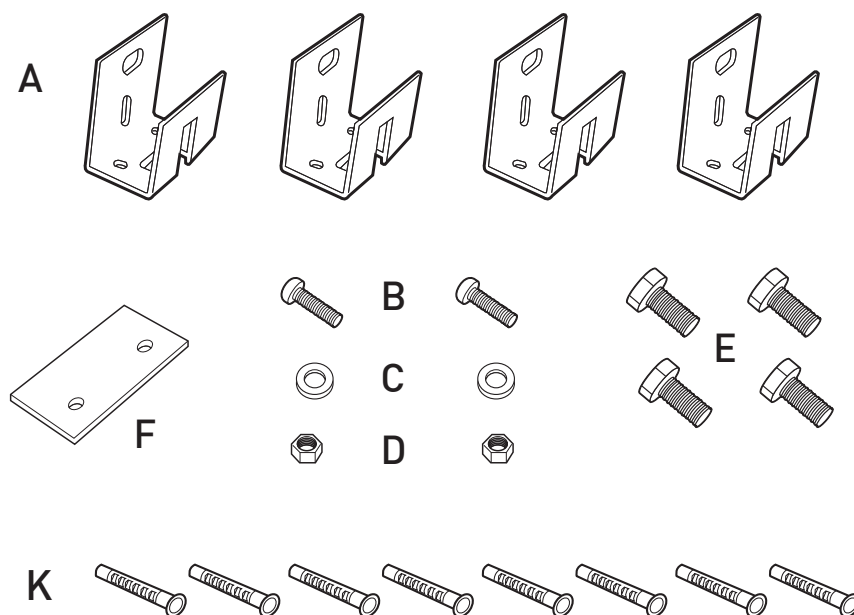


Electrical and electronic equipment frequently contain valuable materials. They may also contain harmful substances that were necessary for their function and safety. The residual waste or incorrect treatment can harm the environment. Please help protect our environment! Dispose your old unit according to the local regulations.

## Wall mounting kit for LAVA® 250W:

- LAVA® Glass Radiator
- 1 x Wall mounting hardware:
  - A - 4 x mounting bracket
  - B - 2 x screw M5 x 16
  - C - 2 x washer
  - D - 2 x nut
  - E - 4 x hex bolt M8 x 16
    - 1 x cable clamp (not pictured)
    - 4 x wall anchor & screw (not pictured)
  - F - 1 x wall protection plate
  - K - 8 x Anchors

After attaching hardware, do not tighten completely!  
Only tighten hardware when unit is assured to mount by test fitting unit.



## INSTALLATION AND USAGE INSTRUCTION FOR THE ELECTRICIAN

### IMPORTANT NOTES:

- Installation and service work must be carried out by a licensed professional or a qualified person. Verify that the electrical installation complies with the applicable local codes. The responsibility of the manufacturer is limited to the supply of the device.
- The devices are designed for wall mounting (vertical or horizontal)
- Wall mounting of the glass radiators corresponds IP24 Protection.
- When installing the unit in a bathroom, follow local building and electric code regulations.
- Specified minimum distances must be respected.

### INSTALLATION AND MINIMUM DISTANCES:

LAVA® glass heaters may be mounted horizontally or vertically on the wall. They must be positioned so that flammable items can not be ignited. Ensure that the required minimum distances, particularly to flammable objects like curtains, and upholstered furniture are correct. Please make sure that the glass radiator can radiate freely into open space. (See Fig. 2)

**ATTENTION:** Don't lean items against the glass or lean the radiator against other objects.

### ASSEMBLY OF THE RADIATOR:

Please verify that no shipping or handling damage occurred before installing the power cable to the radiator.

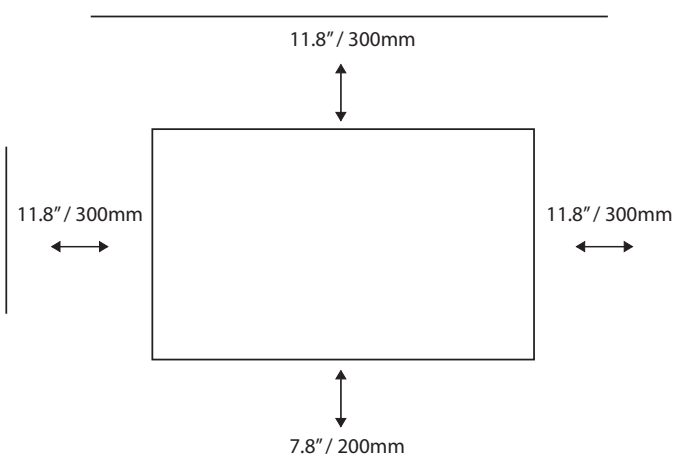


Fig. 2: Minimum mounting distances

### WALL MOUNTING:

The mounting brackets (supplied) have 3 groups of 2 holes spaced at 8" on center. This spacing allows the installer flexibility when choosing a mounting location. Please note the required minimum clearance distances from flammable materials (SEE Fig 2) when choosing your mounting location. Ideally, if the studs in the room are 16" on center, this bracket will allow the unit to be attached to at least one stud and optimally 2 studs. This bracket design also allows for the Lava to be mounted horizontally or vertically.

At this time, gather any needed items including a pencil, screw driver, screws, washers, hammer, tape measure, stud finder, wall anchors, and an assistant. Verify correct number of supplied parts are present.

Choose a location desired for mounting. Choose an area in compliance with local building and electrical codes.

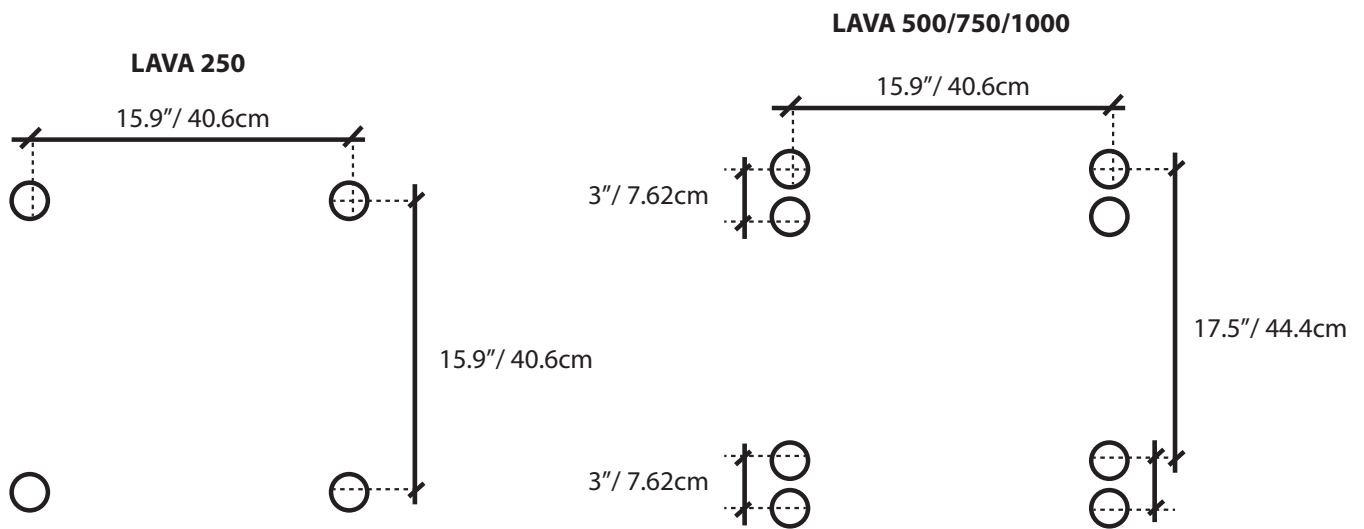
Use a stud finder to locate the studs present in the area. If possible, choose a location where 4 screws on each bracket will land in studs. If this is not possible, we suggest at least 2 of the screws on each bracket land in a stud. Use Heavy-duty anchors rated to 50 lbs. for this application. If mounting into concrete or other materials, use appropriate anchors suitable for that application. We require using at least 4 (six is even better!) screws in each mounting bracket. PLEASE VERIFY ACCESS TO ELECTRICAL BOX IS NOT BLOCKED BY INSTALLED MOUNTING BRACKET.

Use a level and a pencil to mark the location of the first bracket on the wall. Using the bracket, mark the hole locations. Drill and install the appropriate screws and/or anchors. We recommend Cobra, TripleGrip #8, p/n: 178S (available at Home Depot) or similar type anchors. We recommend using a #8 screw with washer (if needed), minimum, for mounting the mounting brackets.

Make corresponding marks 17 9/16" below the installed bracket for the lower bracket. ALWAYS INSTALL 2 BRACKETS per LAVA unit! Follow above instructions for this bracket.

Once the brackets are installed on the wall, install the 4, M8 x 16 hex mounting bolts loosely (at least 3 revolutions) into the Lava.

With the assistance of a helper, lift the Lava and make your electrical connections. Place the mounted bolts into the slots of the mounting brackets. If the unit is placed satisfactorily, use an open-ended wrench to fully snug the bolts, securing the Lava to the mounting products.

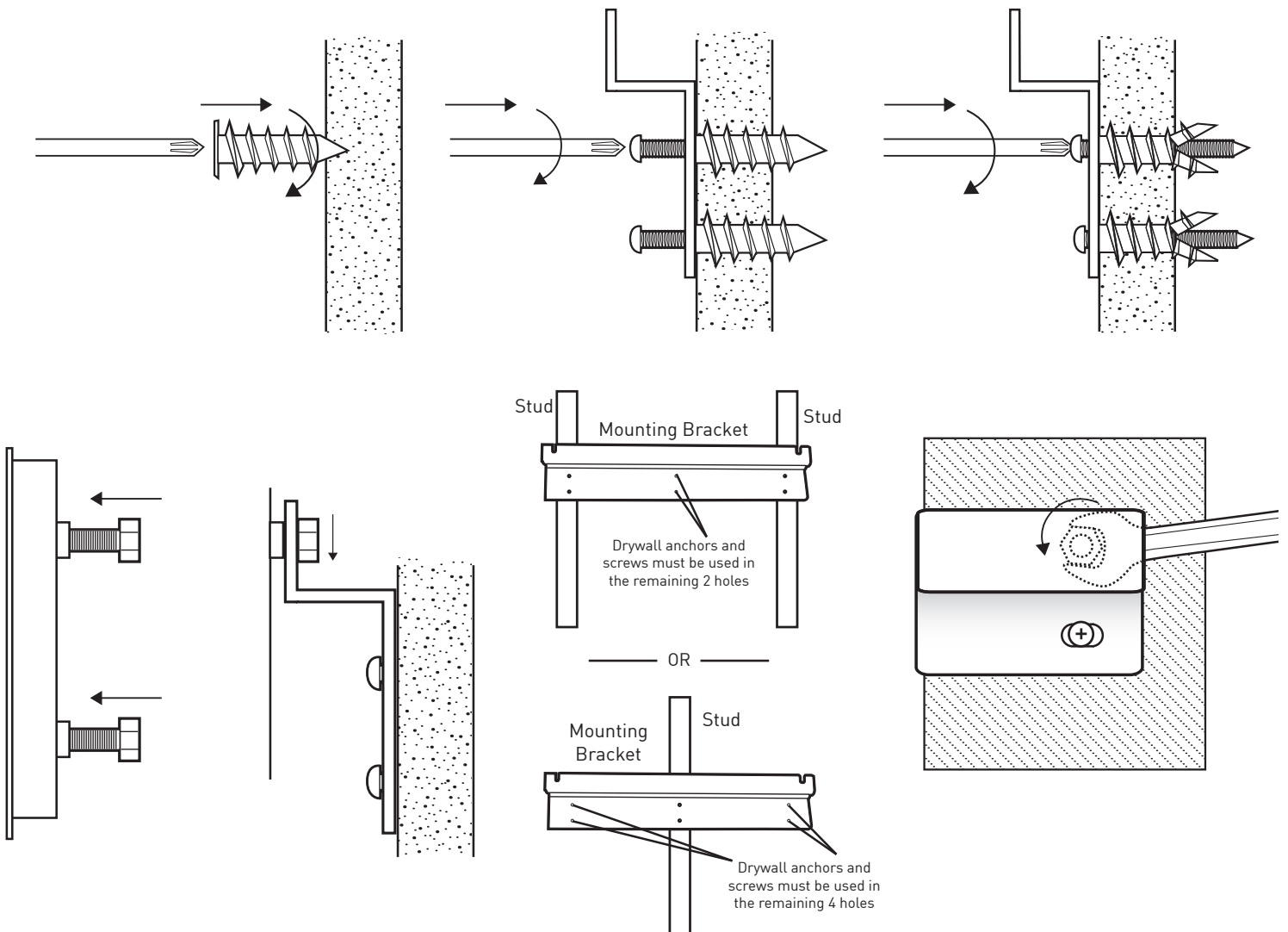


Graphic: LAVA® Glass radiators 250W | 500W | 750W | 1000W - Hole drilling pattern - Wall Mounting

**ATTENTION:** Verify minimum distances! Use required mounting holes!

**MOUNTING BRACKET ASSEMBLY -500W | 750W | 1000W**

**ATTENTION:** Verify minimum distances! Use required mounting holes!



## MOUNTING BRACKET ASSEMBLY -250W

**ATTENTION:** Verify minimum distances! Use required mounting holes and anchors!

Fig. 4

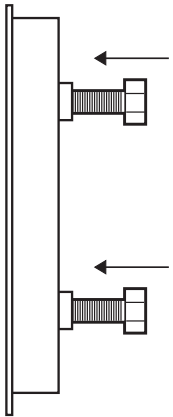
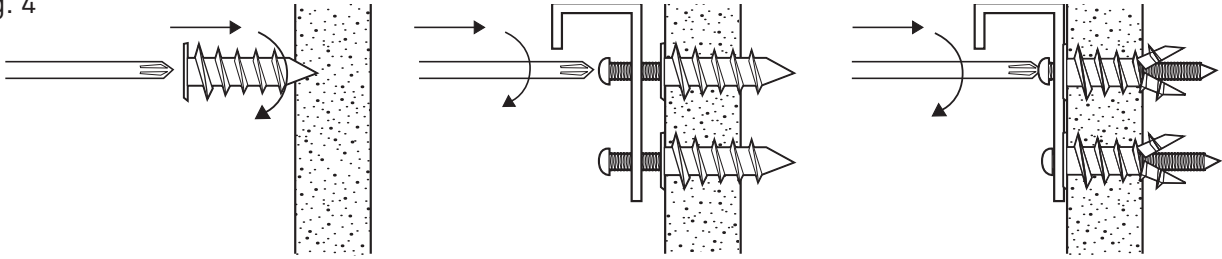


Fig. 5

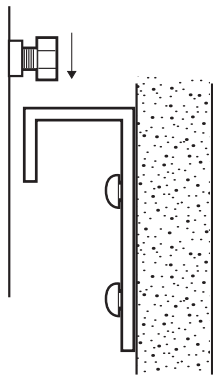


Fig. 6 = 4x

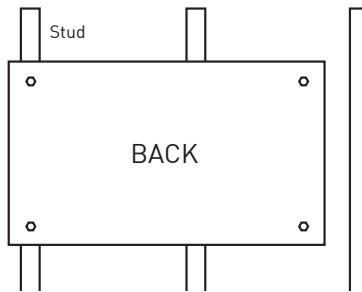


Fig. 7

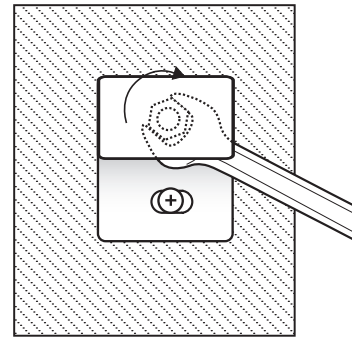


Fig. 8

## ELECTRICAL CONNECTION

The heater is designed for permanent connection to a suitable room thermostat. Please refer to the instructions of the room thermostat.

**ATTENTION:** If the power cord of the unit is damaged, it must be replaced immediately.

Fix mounted thermostats should be mounted next to the heated room's entry door at 4' or 1.3m height from floors. An alternate location is on an interior wall, not subject to direct sunlight. The thermostat should not be installed within 3 feet of the LAVA. Power the thermostat with a GFCI Protected Circuit.

The device is connected with the supplied connector to a junction box supplying the AC power supply. If a longer cable is required, it can be replaced by longer one, 18 AWG or Larger.

## HEATING

The heater is controlled by the externally mounted thermostat.

## GROUNDING

The heater is for use with 120 volts. The green-yellow grounding of the cord must be connected to a permanent ground inside the junction box.

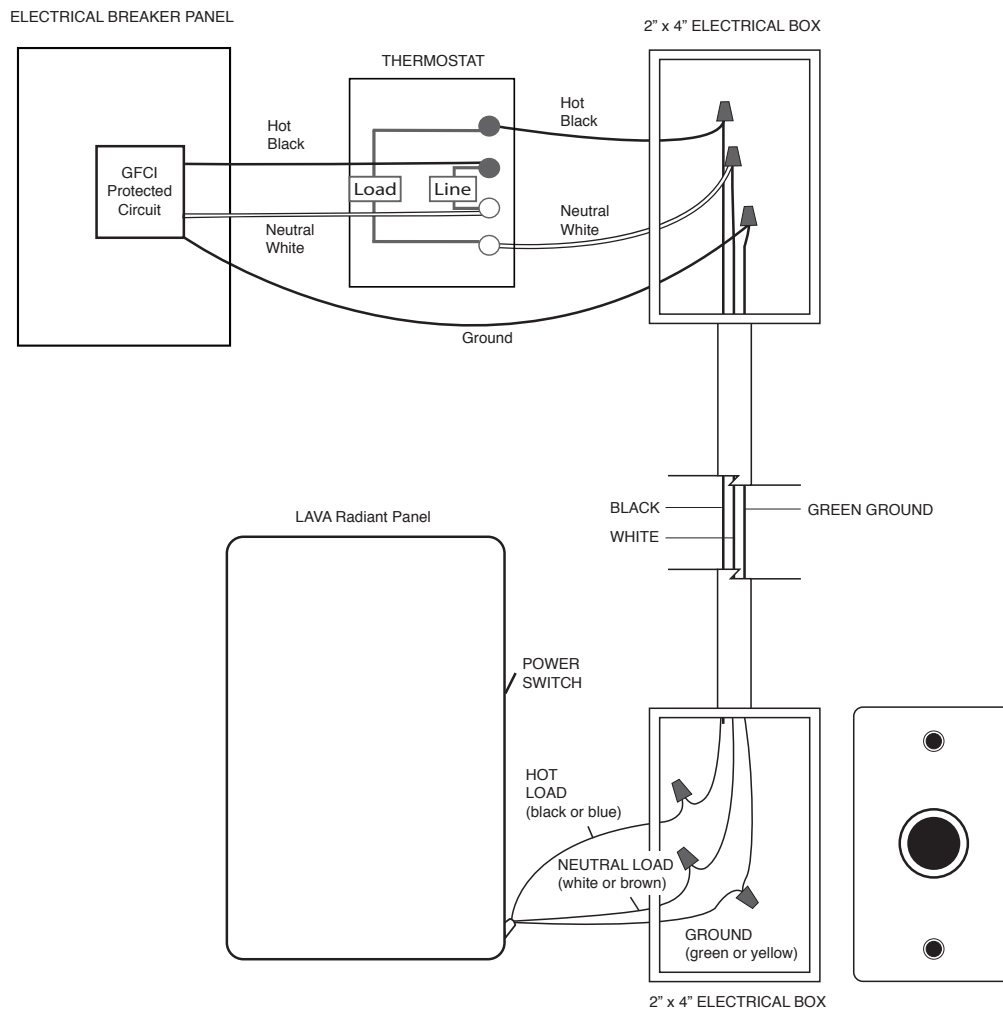


Fig 9: Connection diagram

## ELECTRICAL CONNECTION FOR LED KIT

The heater is designed for permanent connection to a suitable room thermostat. Please refer to the instructions of the room thermostat.

**ATTENTION:** If the power cord of the unit is damaged, it must be replaced immediately.

**Optional:** If you decide to purchase the optional LED kit, you may want to install a recessed duplex outlet behind the unit. One outlet in the duplex outlet will be controlled by the thermostat, and the other will be controlled by a wall switch. If your LAVA™ came with a plug, it will plug into that outlet. If your LAVA™ did not come with a plug, one can be easily installed. See instructions included in the plug box.

## OPTIONAL LED KIT WIRING

The device is connected with the supplied connector to a junction box supplying the AC power supply. If a longer cable is required, it can be replaced by longer one, 18 AWG or Larger.

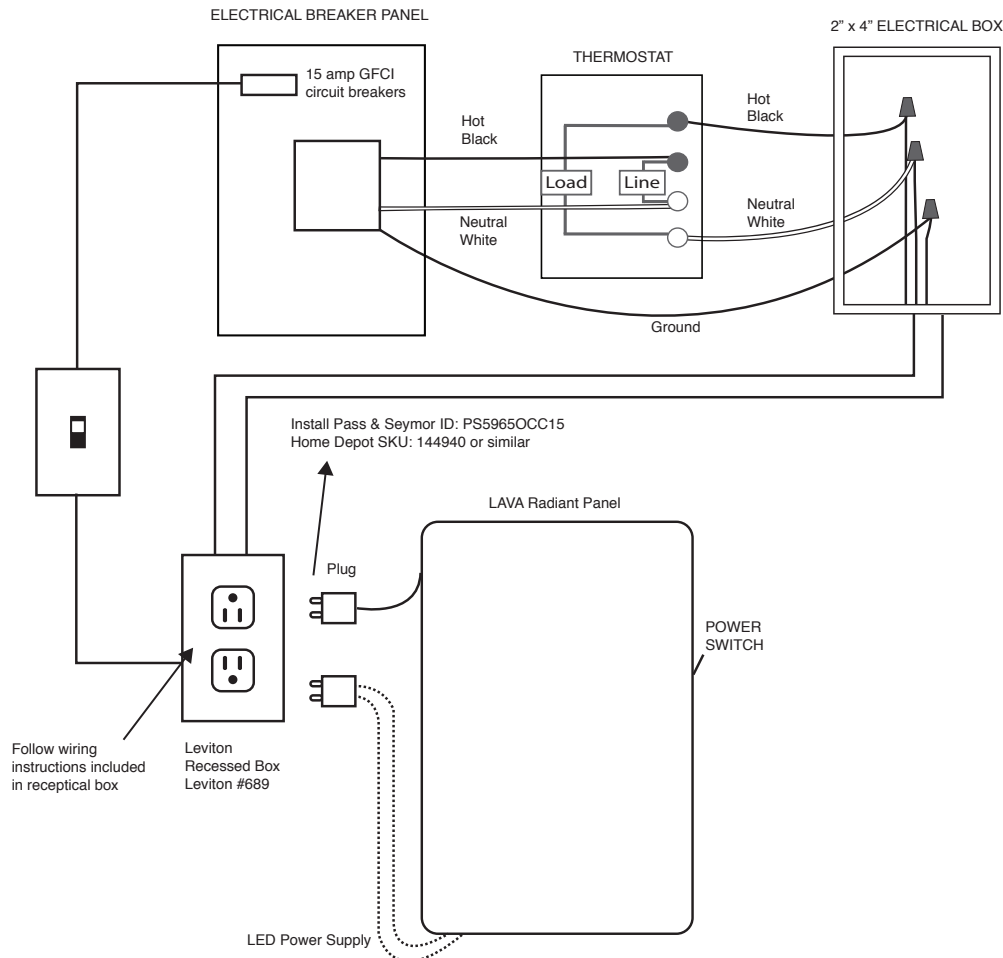
### HEATING

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Fix mounted thermostats should be mounted next to the heated room's entry door at 4' or 1.3m height from floors. An alternate location is on an interior wall, not subject to direct sunlight. The thermostat should not be installed within 3 feet of the LAVA. Power the thermostat with a GFCI Protected Circuit.



## USER INSTRUCTION

### HEATING

Do not power-on unit until it is installed.

Depending on the thermal insulation quality in your home, the required heat output of the radiator will range from 3 to 20 W/ft<sup>2</sup> (30 to 200 W/m<sup>2</sup>). The LAVA® glass radiator has a very high radiation fraction and a low proportion of convective heat output. The surface temperature, for safety reasons, is limited to approximately 203°F / 95 °C, thus the overall performance of the device is limited. For this reason, these devices are used as a sole heating solution only in very well insulated houses.

ETHERMA LAVA® glass radiators warm predominantly solid objects and only a small proportion of the air directly, so these devices are ideal for supplementary heat. In order to achieve the same feeling of comfort as with convection heating, the indoor air temperature can be lowered by 2-3 °C/F. Each degree reduction can save about 6% in heating costs, depending on the respective heating behavior and thermal insulation in the room. The unit can be turned on when a seldomly-used room is occupied, to provide a warm, cozy feeling.

Fix mounted thermostats should be mounted next to the heated room's entry door at 4' or 1.3m height from floors. An alternate location is on an interior wall, not subject to direct sunlight. The thermostat should not be installed within 3 feet of the LAVA. Power the thermostat with a GFCI Protected Circuit.

Depending on the size of the unit, the LAVA® glass radiator will require some time to reach its operating temperature. The glass sheet consists of 1/4" (6mm) toughened safety glass (ESG). This glass is much more durable than conventional glass, and is designed for significantly higher impact forces. However, you should avoid excessive use. In case of damage, ESG shatters into many small pieces with blunt edges, to minimize the risk of injury.

Please note when choosing an installation location, that a very small percentage of toughened glass products can exhibit "spontaneous breakage", i.e. when the glass shatters. This can occur even when external influence isn't indicated. Choose the installation location of the device so that there is no danger to people or nearby objects.

**ATTENTION:** Avoid any kind of load on the glass itself, especially directly on the edges! Do not lean it against anything, or lean anything against it!

Please refrain from placing any objects between the LAVA® glass radiator and the persons to be heated. Objects between the radiator and people will block the heat from the people themselves.

### MAINTENANCE AND CARE

The LAVA® glass radiator is designed to give its heat over the glass surface in the form of far infrared radiation. There are no moving parts located on the device that require special maintenance. For care of your glass radiator, we recommend commercial glass cleaner. Please do not use abrasive cleaners, as these can cause scratches to the glass as well as the painted surface. Clean the unit before every heating season, at a minimum of once a year.

**ATTENTION:** Prior to cleaning, please ensure that the LAVA® glass radiators are turned off at the circuit breaker panel and that the unit is at room temperature!

### SPARE PARTS

Please contact WarmlyYours for any replacement parts required. Only use original spare parts.

## TECHNICAL DATA AND ACCESSORIES

### TECHNICAL DATA

- Voltage: ..... 120 V
- Power: ..... 250-1000 Watt
- Body: ..... steel case, white, powdercoated
- Surface: ..... 6 mm safety glass (ESG)
- Protection: ..... IP24
- Protection class: ..... I
- Connection: ..... hot, neutral, ground
- Approvals: ..... cULus to UL2021 & CSA c22,2 no46
- Colors: ..... Pure White | Pale Green | Black | Red | Mirror
- Surface Temp.: ..... 203°F / 95 °C (maximum)
- Depth: ..... 1.9" / 50 mm
- Mounting: ..... horizontal or vertical
- Serial Number: ..... Located near "Power" switch or on rear of unit. Verify location and number before mounting LAVA.

Type	Watts	L (mm) B (mm) T (mm)	pnds/kg
LAVA-250	250	24.8" x 19.7" 630x500mm	18 lbs / 8kg
LAVA-500	500	24.8" x 35.4" 630x900mm	33 lbs / 15kg
LAVA-750	750	24.8" x 51.2" 630x1300mm	51 lbs / 23kg
LAVA-1000	1000	24.8" x 63" 630x1600mm	73 lbs / 33kg
LAVA-500-Mirror	500	35.4" x 47.2" 900x1200mm	33 lbs / 15kg
LAVA-750-Mirror	750	35.4" x 63" 900x1600mm	51 lbs / 23kg
LAVA-1000-Mirror	1000	35.4" x 63" 900x1600mm	51 lbs / 23kg

### TROUBLESHOOTING

Device does not heat:

- Circuit breaker tripped?
- Is external supply switch turned on?
- Is the temperature of the external thermostat set lower than the actual room temperature?

Radiant heat output not to expectations:

- Is the distance between glass radiation heater and person too great?
- Is the glass radiation heater undersized for the space?
- Are there objects between the person and the glass-radiation heater?

### EQUIPMENT MARKINGS

Data is included on the rating plate. The rating plate of the unit can be found on top or on the left (depending on the vertical or horizontal orientation of the unit).



Fig 10: Nameplate

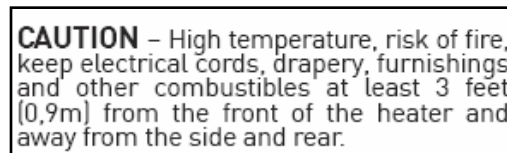


Fig 11: Warning on front side

**CONGRATULATIONS!**

You have made a wise choice by choosing the ETHERMA LAVA® glass heating radiator. Thank you for your purchase. The latest technologies and developments offer maximum comfort and safety. Each unit is tested several times during the manufacturing process and tested before shipment to exacting quality control standards. If you follow these installation and operating instructions, your LAVA® glass radiator will provide many years of trouble free enjoyment!



**WARMLYYOURS**  
RADIANT HEATING

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