

# ELECTRIC INFRARED HEATERS



**SUPERIOR**  
RADIANT PRODUCTS



## **SERIES eWAVE™** Long Wave Infrared Heater

### **MODELS**

<b>EW30L20Y</b>	<b>EW30L24D</b>
<b>EW45L48Y</b>	<b>EW45L24D</b>
<b>EW45L60Y</b>	<b>EW45L48D</b>
	<b>EW45L60D</b>



### **WARNING**

The manufacturer's instructions, the layout drawing, national and local codes and ordinances, and all applicable standards which apply to electrical wiring comprise the basic information needed to complete the installation. These criteria must be thoroughly understood before proceeding.

Only personnel who have been trained and understand all applicable codes should undertake the installation. Manufacturer representatives are Factory Certified in the service and application of this equipment, and can be called on for helpful suggestions about installation.

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## Applicable Codes and Standards

Installation of this heater shall be in accordance with local codes, or in the absence of local codes, the National Electrical Code, NFPA 70, or the Canadian Electrical Code, Part 1, C22.1.

The eWAVE heater is designed and manufactured for residential / commercial heating applications for indoor and outdoor use, according to the Standard for Fixed and Location-Dedicated Electric Room Heaters, UL 2021, and the Canadian Standard for Electric Air Heaters, CSA C22.2 No. 46.

## Technical Specifications

Model	Output Wattage	Supply Voltage	Supply Phase	Supply Amp Draw	Supply Voltage / Connection	Dimensions	Weight
EW30L20Y	3,000 W	208 V	3	8.3 A x 3	3Φ4W, 208Y/120Vac	73x10x3" (186x25x7.5 cm)	27.6 lbs (12.5 Kg)
EW30L24D	3,000 W	240 V	3	7.2 A x 3	3Φ3W, 240Vac Δ	73x10x3" (186x25x7.5 cm)	27.6 lbs (12.5 Kg)
EW45L24D	4,500 W	240 V	3	10.8 A x 3	3Φ3W, 240Vac Δ	96x10x3" (243x25x7.5 cm)	35.9 lbs (16.3 Kg)
EW45L48D	4,500 W	480 V	3	5.4 A x 3	3Φ3W, 480Vac Δ	96x10x3" (243x25x7.5 cm)	35.9 lbs (16.3 Kg)
EW45L48Y	4,500 W	480 V	3	5.4 A x 3	3Φ4W, 480Y/277Vac	96x10x3" (243x25x7.5 cm)	35.9 lbs (16.3 Kg)
EW45L60D	4,500 W	600 V	3	4.3 A x 3	3Φ3W, 600Vac Δ	96x10x3" (243x25x7.5 cm)	35.9 lbs (16.3 Kg)
EW45L60Y	4,500 W	600 V	3	4.3 A x 3	3Φ4W, 600Y/346Vac	96x10x3" (243x25x7.5 cm)	35.9 lbs (16.3 Kg)

## IMPORTANT INSTRUCTIONS

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

1. Read all instructions before installing or using this heater.
2. 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, etc. and curtains at least 3,3 feet (1 m) from the front of the heater.
3. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
4. Do not operate any heater after it malfunctions. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing.
5. To disconnect heater, turn controls to off, and turn off power to heater circuit at main disconnect panel.
6. This heater has hot parts. Do not use it in areas where gasoline, paint, or flammable vapours or liquids are used or stored.
7. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.

## SAVE THESE INSTRUCTIONS

### SAFETY INSTRUCTIONS



**CAUTION** – High temperature, risk of fire, keep electrical cords, drapery, furnishings, and other combustibles at least 3 feet (0.9 m) from the front of the heater and away from the side and rear.

1. This appliance is intended solely for use as an infrared heater and should not be used for other purposes. The manufacturer is not responsible for any damage that could happen for improper use.
2. After unpacking make sure that the appliance is complete and shows no signs of visible damage or tampering.
3. To reduce the risk of fire, do not store or use gasoline or other flammable vapors and liquids in the vicinity of the heater.
4. The heater is not intended for use in bathrooms, laundry areas or similar indoor areas. Never locate heater where it may fall into water.
5. Some fundamental rules which apply to all electrical devices must be observed when using the heater:
  - a. Do not touch the heater with wet hands.
  - b. Do not handle with bare feet.
  - c. Do not let children play with the electrical appliance.
6. Do not apply any modification to the product.
7. Keep connections dry.
8. If the appliance is not used for a long period, turn off the power at the circuit breaker panel.



Each enclosed area within which the heater is located shall have a temperature control device.  
The heater does not feature a device to control ambient temperature.  
All users should be made aware of all aspects of operation and safety and these instructions should be retained for reference.

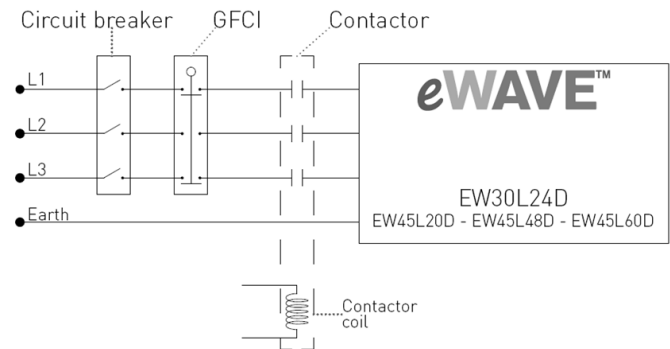
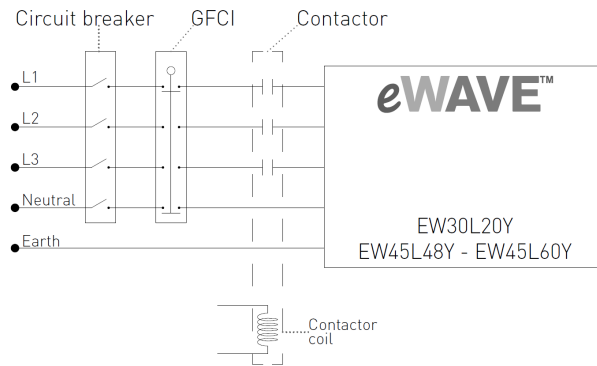
# ELECTRICAL AND OPERATING INSTRUCTIONS

## General Requirements



Turn the heater on only when you need heat and avoid any misuse. Do not use the heater if the ambient temperature exceeds 80°F (25°C). Before connecting the appliance make sure that the voltage is the same as indicated on the device and the line supply is corresponding to the relevant electrical code.

1. The installation should always be carried out by a qualified electrician in accordance with the relevant electrical code: in USA, National Electrical Code, NFPA 70; in Canada, Canadian Electrical Code, Part 1, C22.1.
2. The energy supply to the heater must always be properly grounded.
3. The appliance is equipped with a junction box.
4. For a correct installation of the heater it's necessary to set the unit with a fused switch or circuit breaker.
5. When required by the installation code, to prevent serious harm from an ongoing electric shock, a Ground Fault Circuit Interrupter (GFCI) with rated earth leakage operation not exceeding 30mA must be fitted upstream on the supply line. Additionally, for ensuring a total disconnection of the unit with a full interruption of the contacts in all poles, it's necessary to install a category III combined circuit breaker with contact opening distance of at least 3 mm.

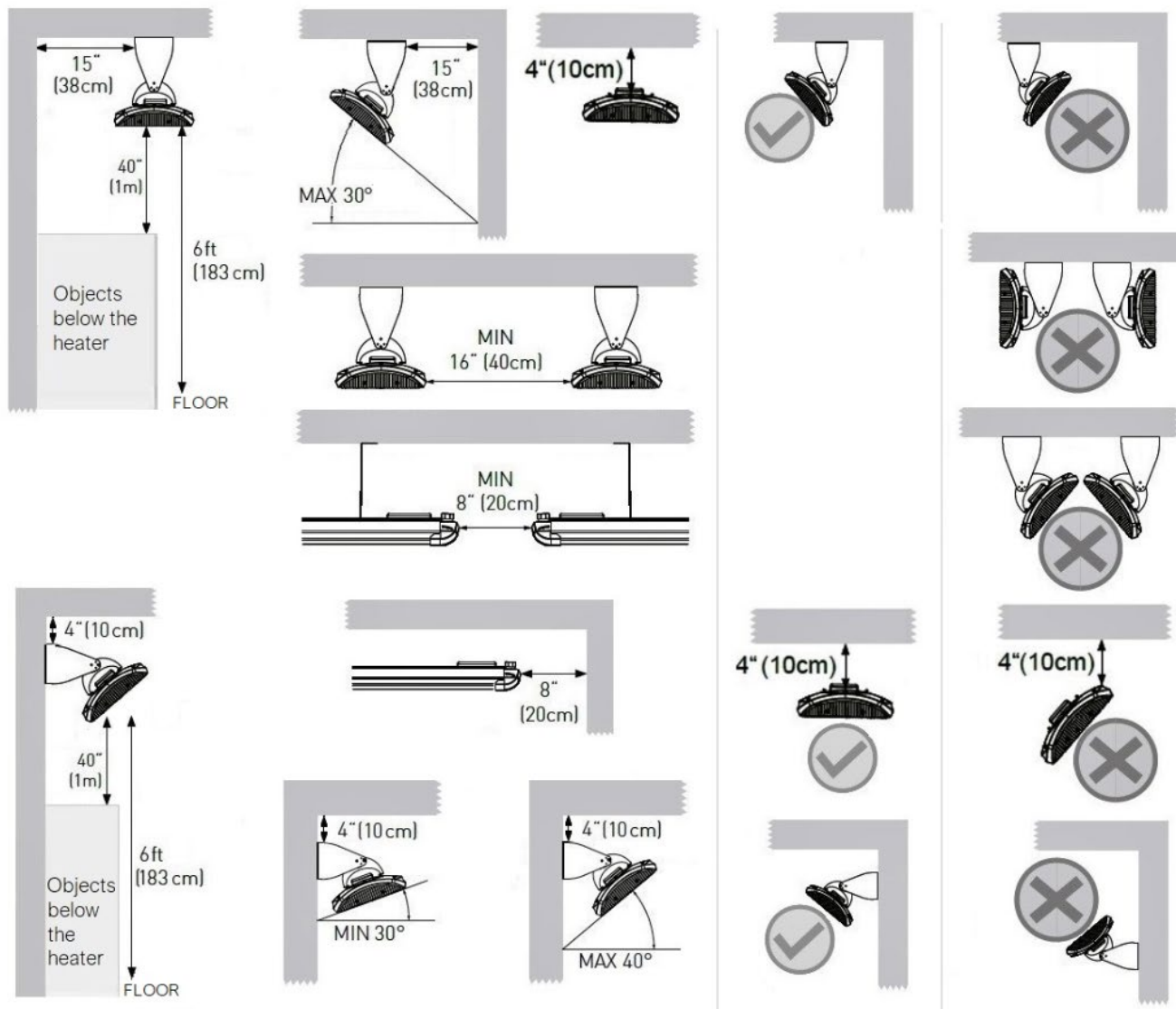


## Additional Information

1. For supply connections, use wires suitable for at least 167°F (75°C) with the section AWG16. Use copper wire only.
2. Do not turn the heater on if it's placed or lying down on any surface.
3. The color of the radiator could change from dark black to faded black when used inside smoky or polluted environments or at an ambient temperature above the 80°F (25°C). Such a color variation does not interfere with the functionality of the heater.
4. A safety clearance 40" (100cm) should always be maintained in front of the heaters.
5. The heater is not equipped with a power cord.
6. Keep the combustible material away from the heater.
7. There are no serviceable parts inside the heater.

## CLEARANCE TO COMBUSTIBLES

1. The minimum installation height from the floor to the heater shall be 6ft (183cm).
2. The minimum clearances from the ceiling, walls and other objects are shown in the pictures below.
3. The stated clearance to combustibles represents a surface temperature of 117°F (65°C) above room temperature.
4. Building materials with low heat tolerance (i.e. plastics, vinyl siding, canvas, tri-ply, etc.) may be subject to degradation at lower temperatures. It is the installer's responsibility to ensure that adjacent materials are protected from deterioration.

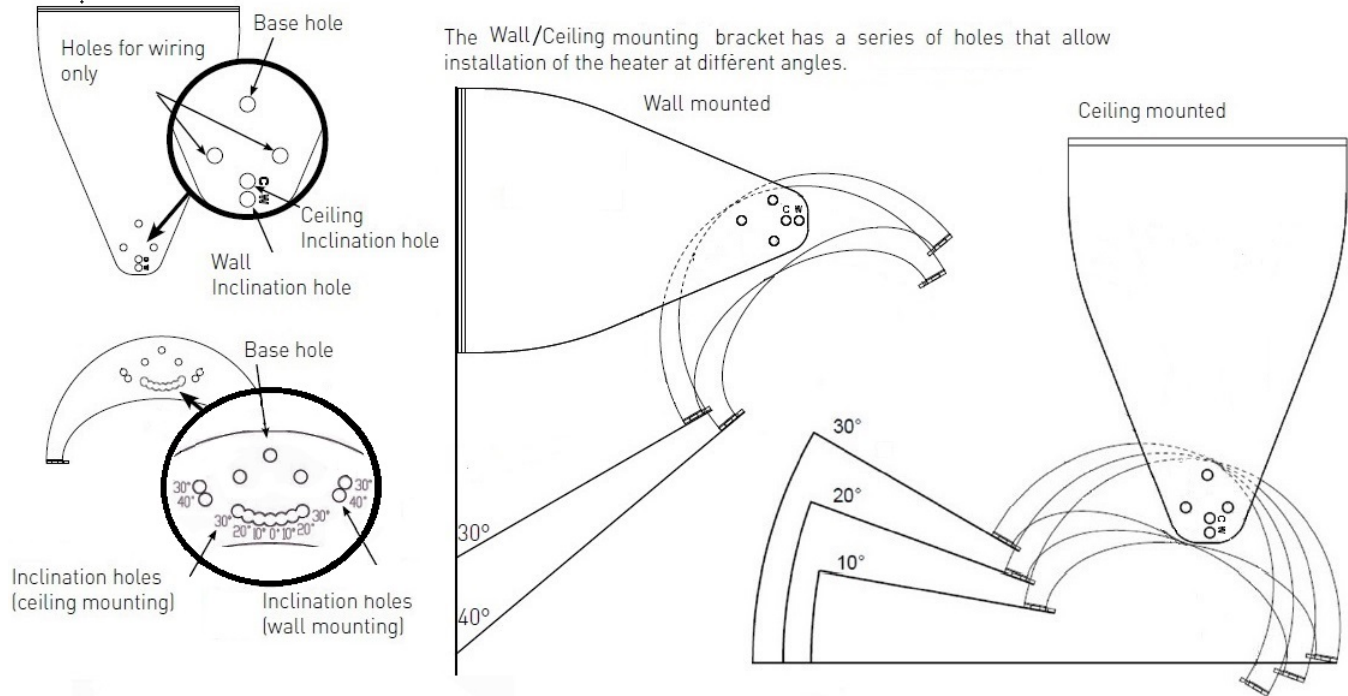


Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.




Once the product is powered, it automatically goes into ON mode. It will take a few minutes after powering on to reach the maximum temperature.

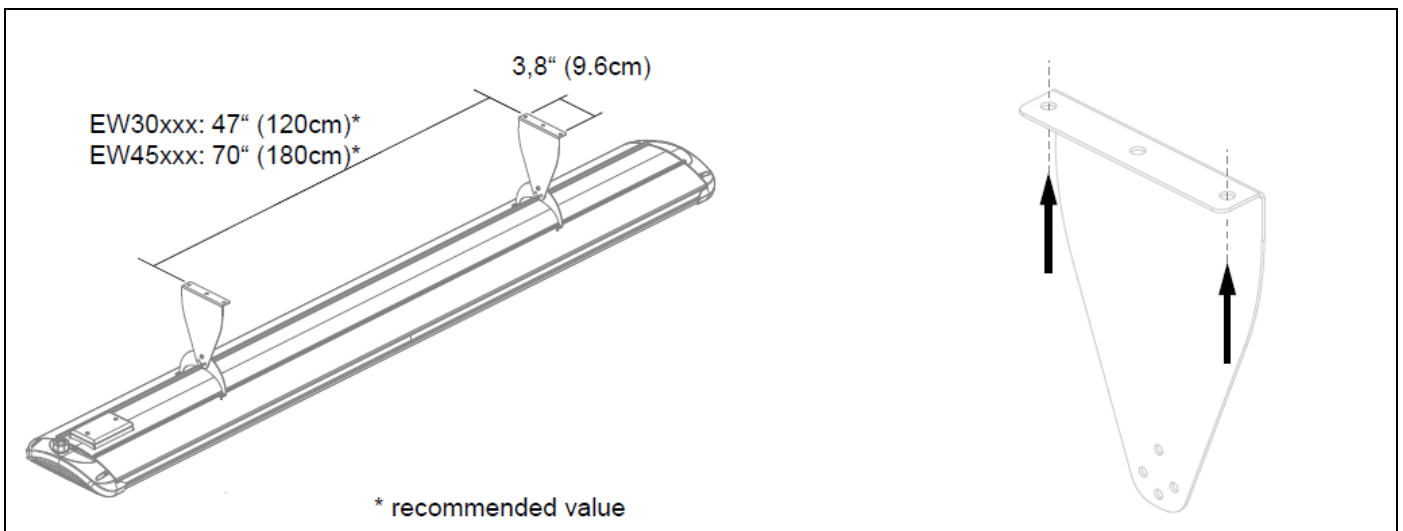
# SUPPLIED WALL/CEILING SUPPORT



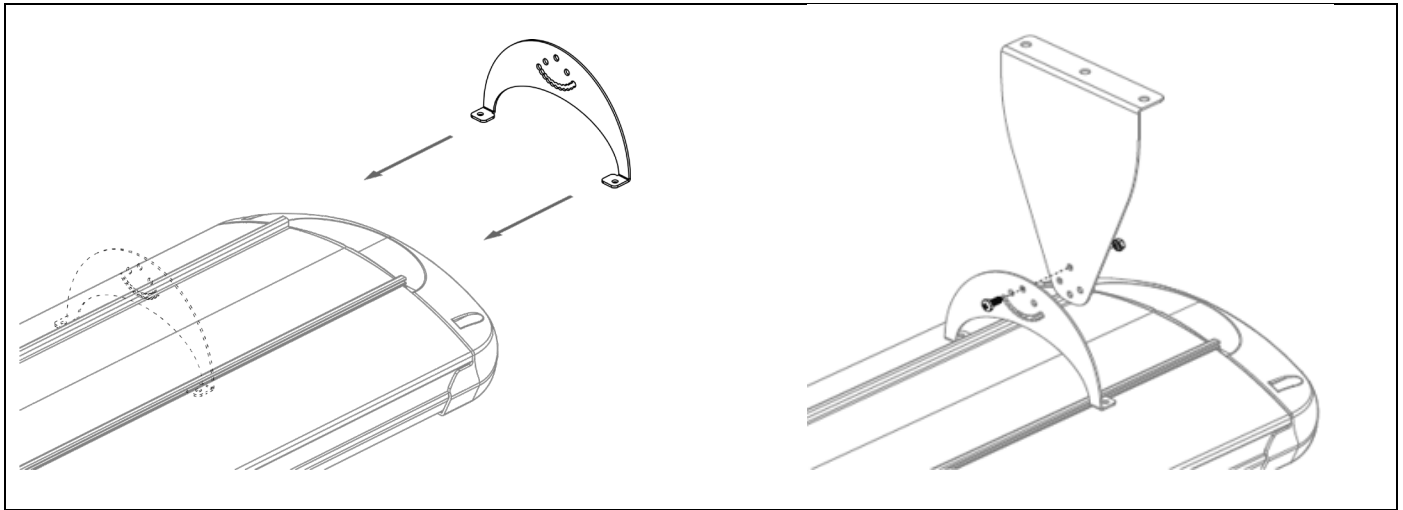
# INSTALLATION INSTRUCTIONS



Before being used, the heater must be fixed to the wall or to the ceiling by means of the provided supports. Ensure that the wall where you intend to install the heater is solid and that no electrical cables or water pipes pass behind it.

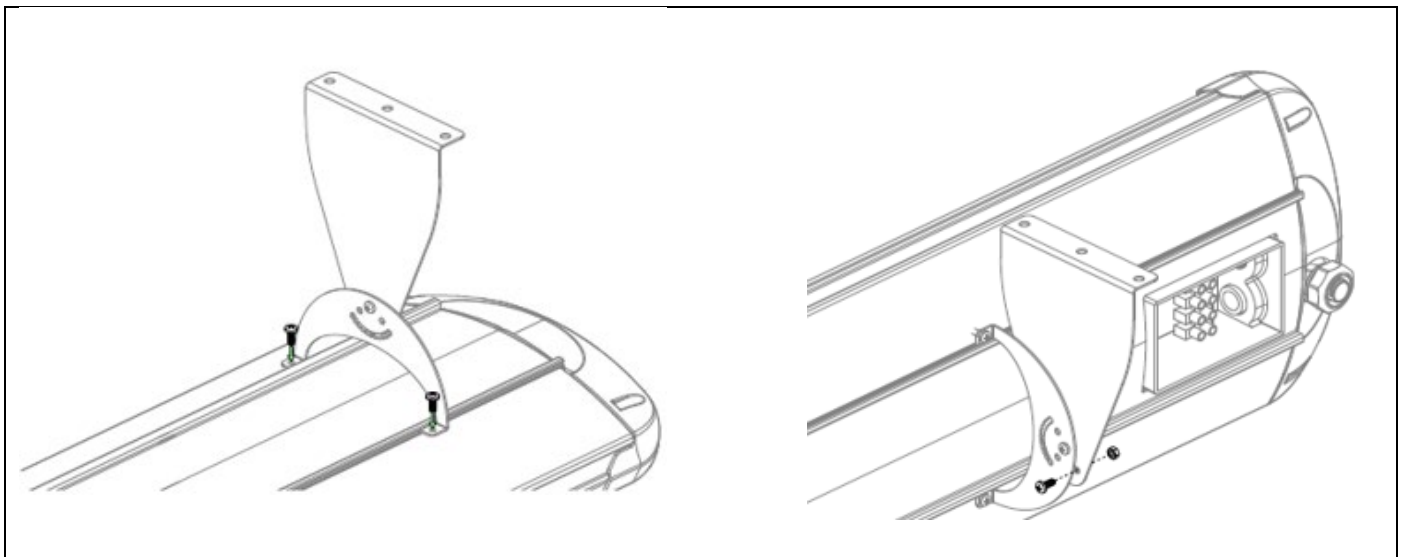


1. Drill four holes in the wall as shown in the picture.
2. Fix two supports on the wall using the proper mounting hardware (not included).



3. Insert the arch-shaped support in the rail on the upper side of the heater.

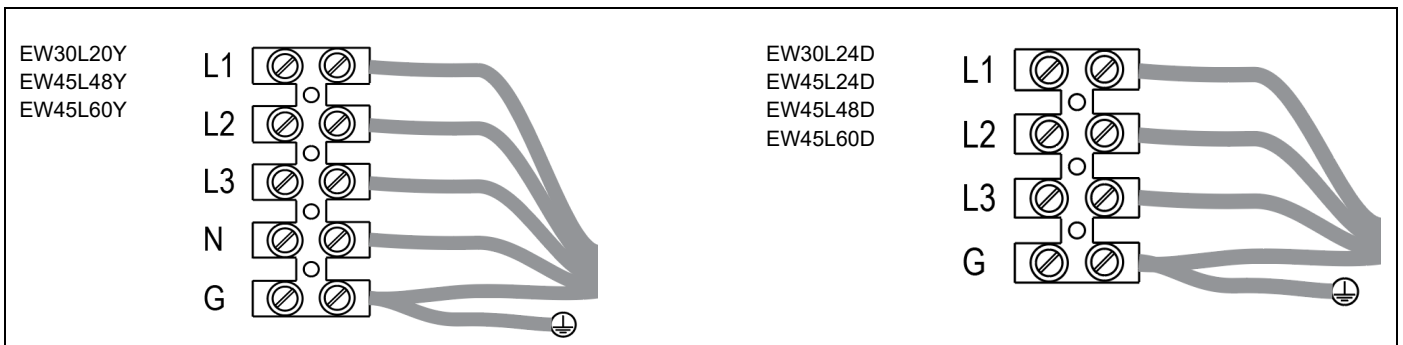
4. Align the base holes of the supports and join them together using the supplied screw and bolt.



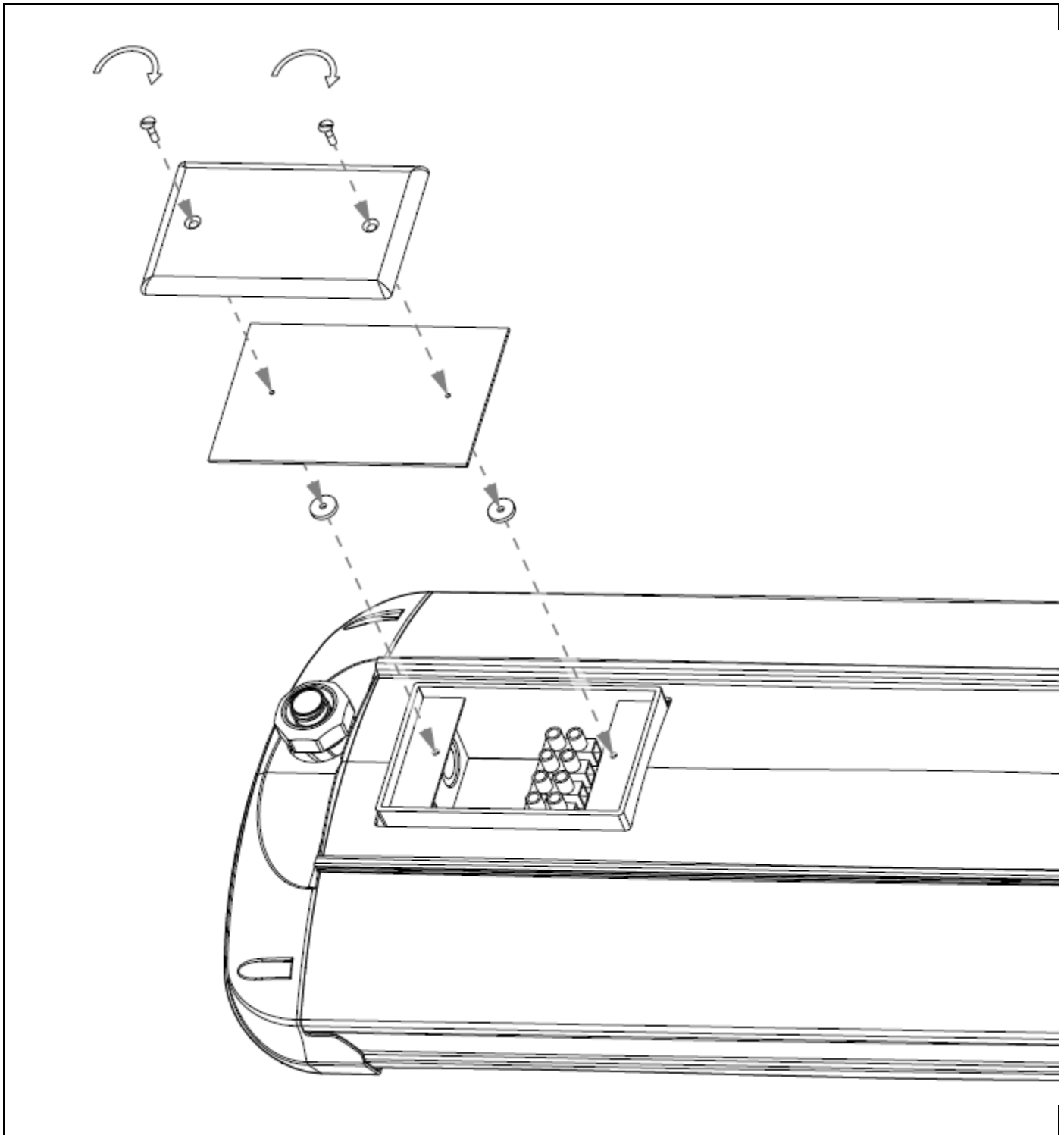
5. Fix the brackets in position by tightening the safety screws.

6. Tilt the heater until you can insert a screw in the hole. Now the junction box is easy to access.

7. Connect the power according to the following diagram



8. After finishing the wiring and closing the junction box cover, tilt the heater in the desired angle and insert the bracket screws in the matching holes.

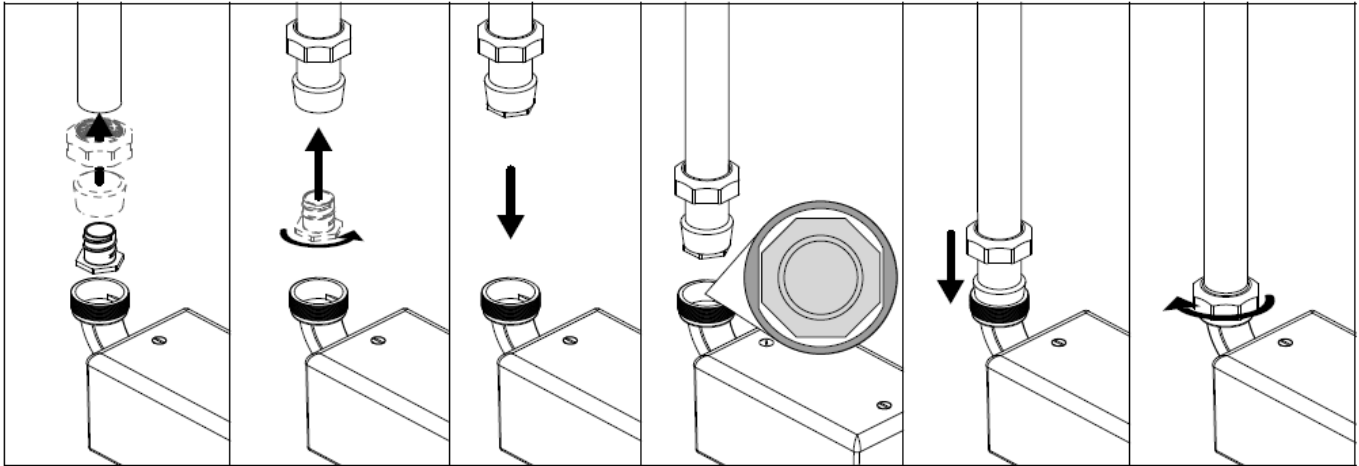


9. Once the wiring is completed, close the connection box with the appropriate screws, making sure to position the gaskets between the box and the cover as shown in the figure.



## IMPORTANT INSTRUCTIONS FOR OUTDOOR INSTALLATIONS

1. During installation, to maintain the water resistance of the junction box, it is necessary to make sure that all the components of the fitting are perfectly matched and placed in their position and sequence along the conduit hose (see pictures);
2. Furthermore, the cut end of the conduit attached to the fitting must be cut uniformly to allow correct pairing and assembly, which is crucial for ensuring water resistance. Therefore, make sure that the main ring nut of the fitting that fixes the conduit is firmly tightened. If intended for outdoor installation, a water-tight conduit must be employed.



## MAINTENANCE INSTRUCTIONS



Before cleaning, make sure the power has been turned off at the circuit breaker panel and that the heating element of the heater is cool.  
Never immerse the appliance in water or any other liquid.  
Cleaning and maintenance must be performed by the user and not by unsupervised children.

1. It is important that eWAVE units are regularly cleaned to ensure long and efficient operating life.
2. To clean, use a soft damp cloth and then dry thoroughly.
3. Make sure all parts are dry before powering the heater.
4. eWAVE units should be cleaned and inspected every 3 months.
5. Avoid the use of harsh detergents, solvents, and abrasive or aerosol cleaners as they may damage surfaces.
6. When cleaning the heater, always inspect the back of the heater for build-up of insects, bird droppings, dust, salt build-up, etc. and clean back thoroughly.

## TECHNICAL SERVICE



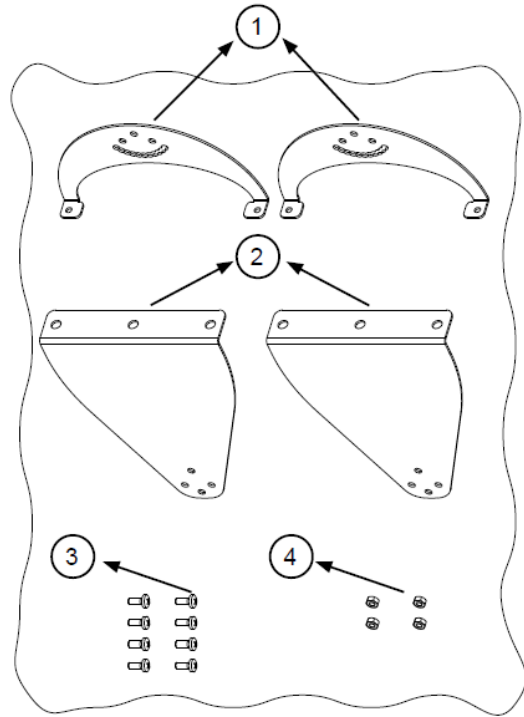
Always disconnect the appliance before doing any maintenance operation.

1. If the heater is removed from mounting brackets, it should be stored in an undercover dry location.
2. Always inspect the heater after high winds, earthquake, vandalism or any other unusual event that may have affected the heater. Ensure all parts are dry before powering the heater.
3. Any maintenance service, excluding cleaning, must be carried out by an authorized Manufacturer representative.
4. If you have any question about your appliance, call the local authorized distributor.

# REPLACEMENT PARTS

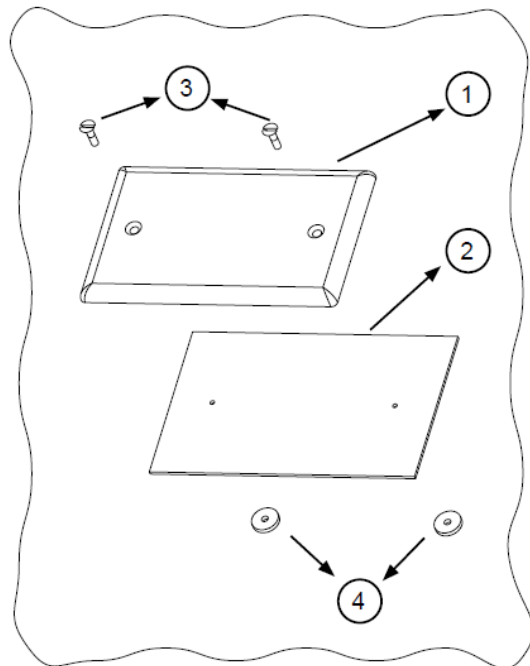
## eWAVE Hanging Brackets Kit (Part # ES314)

Item	Description	Quantity
1	Heater Bracket	2
2	Wall Bracket	2
3	M4x10mm Phillips Pan Scr S/S	8
4	M4 Nut S/S	4



## eWAVE Junction Box Lid, Gasket Kit (Part # ES315)

Item	Description	Quantity
1	Lid	1
2	Gasket	1
3	Screws	2
4	Washers	2



## WARRANTY TERMS & CONDITIONS

### eWAVE ELECTRIC INFRARED HEATERS WARRANTY TERMS & CONDITIONS

The manufacturer warrants to the original owner that the product will be free of defects in the material and workmanship. This warranty is limited to 12 months from the date of installation for all components.

The Manufacturer's obligation under this warranty is limited to repair or replacement, F.O.B. the factory, of the defective part. In the case of replacement parts, the warranty period shall be the longer of the original warranty or a period of 12 months from the date of purchase. In no event shall the Manufacturer be liable for incidental expense or consequential damages of any kind.

This warranty does not cover any shipping, installation or other costs incurred in the repair or replacement of the product. No materials will be accepted for return without authorization.

This warranty will not apply if in the judgment of the Manufacturer, the equipment has been improperly installed, unreasonably used, damaged or modified. This warranty will not apply to damage to the product when used in corrosive atmospheres and in particular atmospheres containing halogenated hydrocarbons. No person is authorized to assume for the Manufacturer any other warranty, obligation or liability.

Provision of this warranty is subject to:

- The eWAVE product must be installed in accordance with the installation instructions and relevant electrical standards and codes.
- The eWAVE product must be maintained and cleaned according to instructions detailed in the installation manual.
- Discoloration of the surface may occur after a period of time; this does not constitute a warrantable event.

Should products be determined as damaged on arrival, immediately notify the transport company of the condition and have them noted on the freight documents. If damage is discovered after unpacking, demand immediate inspection by the transportation company and insist that a record of the damage is made on the freight documentation.

The customer warrants using the product in accordance with:

- Any instructions provided to it by Superior Radiant Products from time to time.
- All government and local regulations, including but not limited to all relevant electrical, environmental laws and regulations governing the installation, storage, use, handling and maintenance of the goods.
- All necessary and appropriate precautions and safety measures relating to the installation, storage, use, handling and maintenance of goods.

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