innova™
HEATING CO.

FOR MODELS:
EF40, EF50, EF60

INSTALLATION, INSTRUCTION & SERVICE MANUAL

OUTDOOR RATED

Intertek

PLEASE SAVE THIS MANUAL FOR FUTURE REFERENCE.

READ THIS MANUAL CAREFULLY.
SEE INSIDE COVER FOR IMPORTANT INFORMATION ABOUT THIS MANUAL.
KEEP INSTRUCTION WITH APPLIANCE FOR FUTURE REFERENCE.

Version 20211004

Thank you for choosing Innova Heating Co. to meet your heating needs. This manual is designed for our EF40, EF50 and EF60 series of heaters.

In order to ensure your heater provides efficient, safe and comfortable heat, please take the time to review this manual.

Before installing your heater, review the safety information found on pages 6 through 10. Strict adherence to these guidelines is necessary to prevent personal injury or property damage.

Pages 11 through 16 reviews essential installation and assembly instructions, containing placement and orientation guidelines that are extremely important to a safe and efficient installation.

Please keep this manual in a safe place for future reference and urgent needs.

innova™
HEATING CO.

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Note: Innova Heating Co. reserves the right to make changes to specifications, parts, components and equipment without prior notification.
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PLEASE READ ALL INSTRUCTIONS PRIOR TO INSTALLING OR USING HEATER.

This unit may cause a shock or possible ignition if service is attempted without first disconnecting its power source.

Keep electrical cords, drapery, furnishings and other combustible materials at least 3.3ft (1m) from the heater's front fascia and keep them away from the two sides and rear.

A LICENSED ELECTRICIAN IS REQUIRED TO INSTALL THIS PRODUCT.

GOOD TO KNOW!

For optimal heater performance and longevity, a 15 minute cool down period is recommended after 4 hours of continuous usage.

WALL & CEILING HEIGHT/CLEARANCES

For the Canadian market, Heater must be installed more than 8ft (2.4m) off the floor.

For the American market, Heater must be installed more than 6ft (1.8m) off the floor.

- All adjacent heaters must be installed more than 3.3ft (1m) apart from each other.
- Heaters that are greater than 240V are for Commercial use only and have a higher risk of fire. These should never be used as a residential heater.
- Heater should never be blocked by any other object.
- Heater should not be operated within 25ft (7.6m) of any flammable or explosive materials.
- Heater is not to be used if the heating element is damaged or cracked.
- According to local wiring codes, disconnection provisions should be incorporated in the appliance.
- When possible, install heaters under a protective covering such as a roof when it is used in an outdoor application. This will prolong the product life and maintain it's appearance.

	WALL-MOUNTED	CEILING-MOUNTED
Min. distance from adjacent wall	18″	18″
Min. distance from ceiling	12″	6″
Min. distance from vertical surface	18″	18″
Min. distance from floor	72″ for UL Listed. 96″ for CUL Listed	72″ for UL Listed. 96″ for CUL Listed

PLEASE REFER TO THE FLUSH MOUNT INSTRUCTION MANUAL FOR FLUSH MOUNT APPLICATIONS

WARNING

The heater should only be used as described in this manual. Any use not recommended by the manufacturer may result in fire, electric shock, or personal injury.

- Failure to follow the instructions and warnings in this manual and improper installation, adjustment, or modification can result in severe personal injury, death, or property damage.
- Damage caused by improper use is not the responsibility of the manufacturer. It is important to use this appliance responsibly and to follow all the procedures, warnings, and safety instructions contained in this manual.
- The heater is hot when it is in use. Keep bare skin away from hot surfaces to avoid burns. The front, sides, and rear of the heater should be at least 3.3ft (1m) away from flammable materials such as furniture, pillows, linen, papers, clothes, etc.
- Extreme caution should be used when heater is on. Children should be carefully supervised when they are in the area of the heater.
- This heater is not intended for use by anyone, including children with reduced physical capabilities, or lack of experience and knowledge.
- Keep wet or damp hands away from the heater at all times.
- Do not touch the heating surface at any time, even when the heater is turned off and has cooled down.
- In order to prevent burns, clothing igniting, or other serious injuries, children and adults should be warned about the dangers of surface temperature.
- Clothing or other flammable materials should not be hung from the heater or placed on or near the heater.
- Do not attempt to alter the unit in any manner, including painting the surface of the unit.
- Do not insert any foreign objects to the front cover or front opening of the heater as this may cause an electric shock or fire, or damage the heater.
- Do not use or use or store flammable materials near this appliance. This includes spray aerosols.
- Do not use the heater in areas where there are flammable liquids or vapors, such as areas where gas is stored.

INSTALLATION

- IMPORTANT - Installation must be completed by a licensed and authorized person.
- The installer is to ensure that the requirements of the local authority, local electrical installation code, municipal building codes, and any other relevant statutory regulations are followed.
- Once you have unpacked the appliance, make sure there are no signs of damage or tampering. If the appliance appears damaged, contact the place of purchase.
- Remove packaging before use, and ensure packaging materials are out of reach of children.
- This heater should not be used in bathrooms, laundry rooms or other similar indoor areas. Do not place heaters where they might fall into a bathtub or other water container.
- Heater and switches should not be installed near bathtubs, showers or swimming pools.
- This heater is not intended to be installed on recreational vehicles and/or boats.
- Heaters are not intended to be installed in wardrobes.
- Avoid running cords under carpeting. Do not cover cords with rugs, runners, or other coverings, but rather place them away from traffic areas in a manner that they will not be tripped over.
- It is not recommended to remove this Installation manual from the site of installation.
- Any guard or other protective device removed for servicing (conducted by an authorized person) must be replaced before operating the heater.
- An appliance must not be installed directly in front of or below an electrical outlet on the wall. As a result, the heat radiated from the appliance may damage the electrical outlet or plug.
- A means for disconnection of the heater must be incorporated in the fixed wiring according to the local electrical codes.
- The heater should not be mounted vertically. Install the heater so that the infrared elements are horizontal. If you do not do this, the heating element may sag and prematurely burn out. Manufacturer's warranties will be voided if installed vertically.

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.

Innova Heaters are designed and manufactured for residential / commercial heating applications for indoor and outdoor use, in accordance with 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 AMP DRAW	DIMENSIONS	WEIGHT
EF40208	4000W	208V	19.2	8.17" x 39.37" x 9.35" (20.75 x 99.9 x 23.75cm)	14 lbs (6.36Kg)
EF40240	4000W	240V	16.7	8.17" x 39.37"x 9.35" (20.75 x 99.9 x 23.75cm)	14 lbs (6.36Kg)
EF40277	4000W	277V	14.4	8.17" x 39.37" x9.35" (20.75 x 99.9 x 23.75cm)	14 lbs (6.36 Kg)
EF40480	4000W	480V	8.3	8.17" x 39.37" x 9.35" (20.75 x 99.9 x 23.75cm)	14 lbs (6.36 Kg)
EF50208	5000W	208V	24.0	8.17"x 39.37" x 9.35" (20.75 x 99.9 x 23.75cm)	14 lbs (6.36 Kg)
EF50240	5000W	240V	20.8	8.17" x 39.37" x 9.35" (20.75 x 99.9 x 23.75cm)	14 lbs (6.36 Kg)
EF50277	5000W	277V	18.1	8.17" x 39.37" x 9.35" (20.75 x 99.9 x 23.75cm)	14 lbs (6.36 Kg)
EF50480	5000W	480V	10.4	8.17" x 39.37" x 9.35" (20.75 x 99.9 x 23.75cm)	14 lbs (6.36 Kg)
EF60208	6000W	208V	28.8	8.17" x 61.26" x 9.35" (20.75 x 156.60 x 23.75cm)	21 lbs (9.54 Kg)
EF60240	6000W	240V	25.0	8.17" x 61.26" x 9.35" (20.75 x 156.60 x 23.75cm)	21 lbs (9.54 Kg)
EF60277	6000W	277V	21.7	8.17" x 61.26" x 9.35" (20.75 x 156.60 x 23.75cm)	21 lbs (9.54 Kg)
EF60480	6000W	480V	12.5	8.17" x 61.26" x 9.35" (20.75 x 156.60 x 23.75cm)	21 lbs (9.54 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 3.3ft (1m) from the front of the heater, and keep them away from the two sides and the rear.
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 3.3 feet (1m) 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 Installations

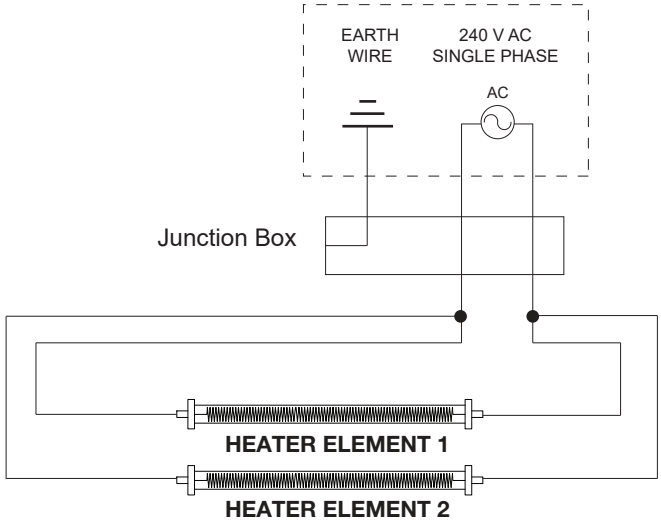
Turn the heater on only when you need heat and avoid any misuse.

Do not use the heater if the ambient temperature exceeds 80°F (26.6°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.

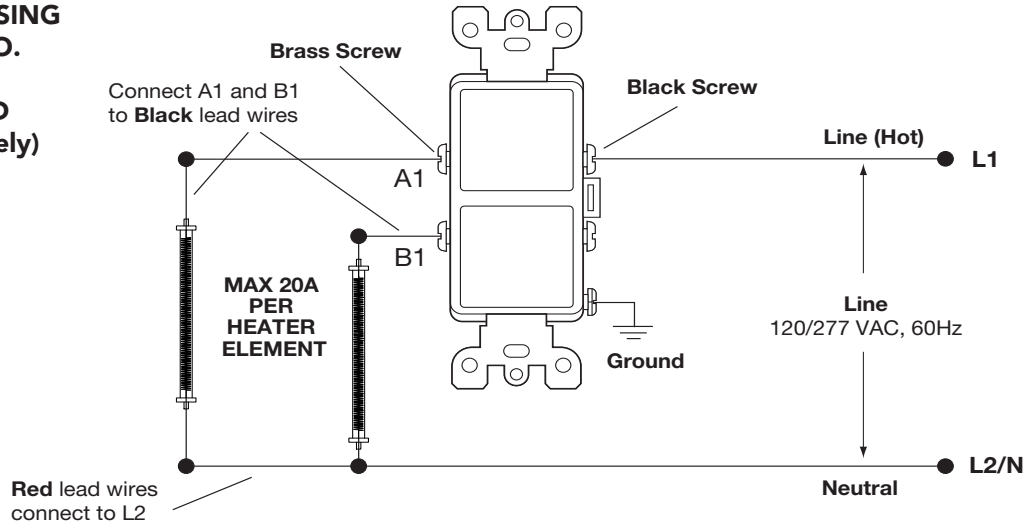
This heater MUST be permanently installed and hard wired by an authorized/licensed person. Do not perform maintenance, or carry out installation or assembly procedure while electrical power is switched on.

ELECTRIC SHOCK HAZARD!
Serious injury or death may occur. Disconnect from electrical supply before installing or servicing this heater. Read and follow installation clearance requirements outlined in this manual. The Appliance MUST be connected to a properly grounded electrical source.

WIRING DIAGRAM STANDARD INSTALLATION EF40, EF50 AND EF60 MODELS

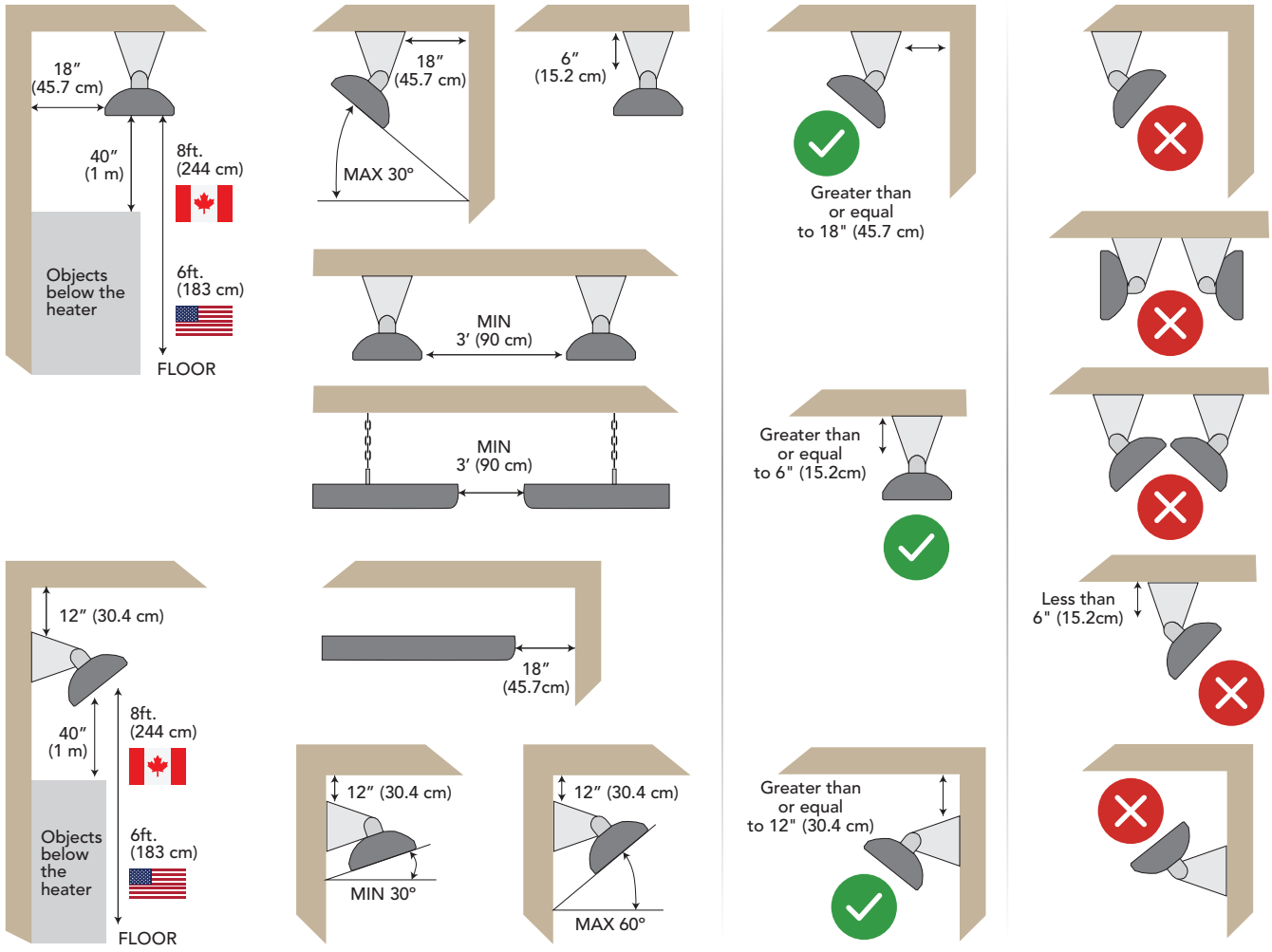


WIRING DIAGRAM USING INNOVA HEATING CO. DUPLEX SWITCH MODELS EFSWP AND EFDWP (sold separately)



innova™ HEATING CO.

1. The minimum installation height from the floor to the heater shall be:
   6ft (183 cm) American Standard, 8ft (244 cm) Canadian Standard
2. The minimum clearances from the ceiling, walls and other objects are shown in the pictures below.
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.

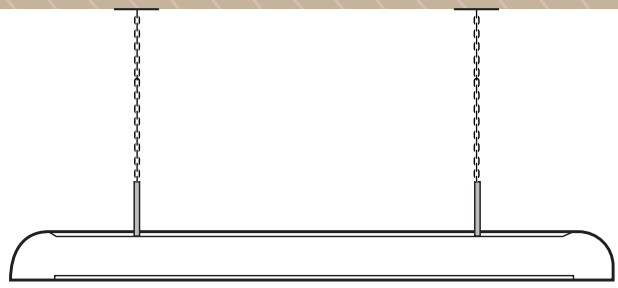


Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.

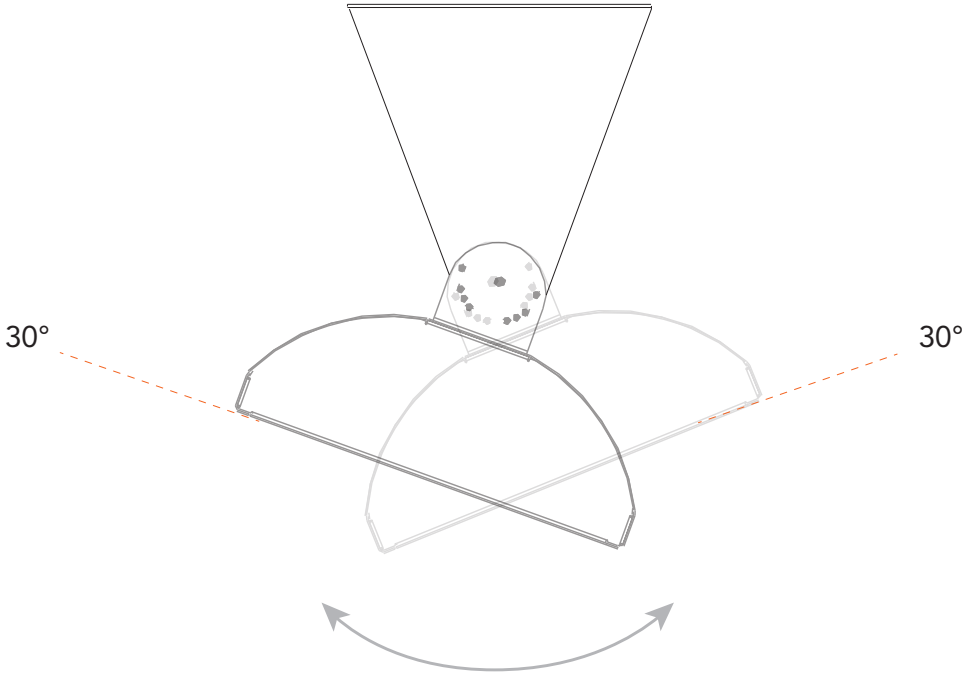
Once the product is powered, it automatically goes into ON mode. It will take a few minutes after powering on to reach the maximum temperature.

Ceiling Mount

CEILING MOUNT APPLICATION



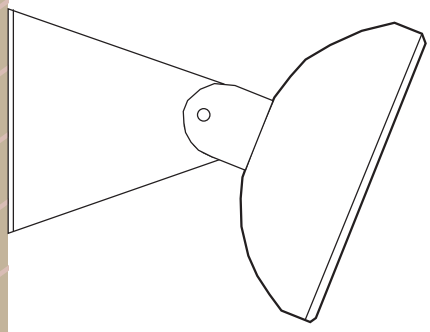
Optional Chain Mounted (not included)

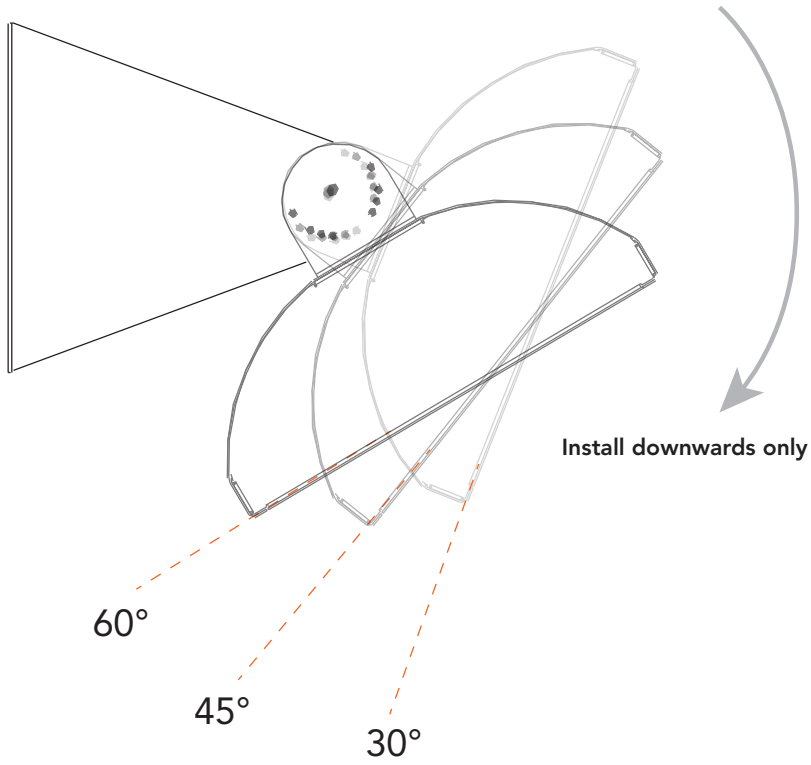


Rotatable on both ends.

Make sure heater is leveled equally during installation to achieve equal heat distribution. Improper leveling can cause shorter lifespan of the Quartz Element.

WALL MOUNT APPLICATION

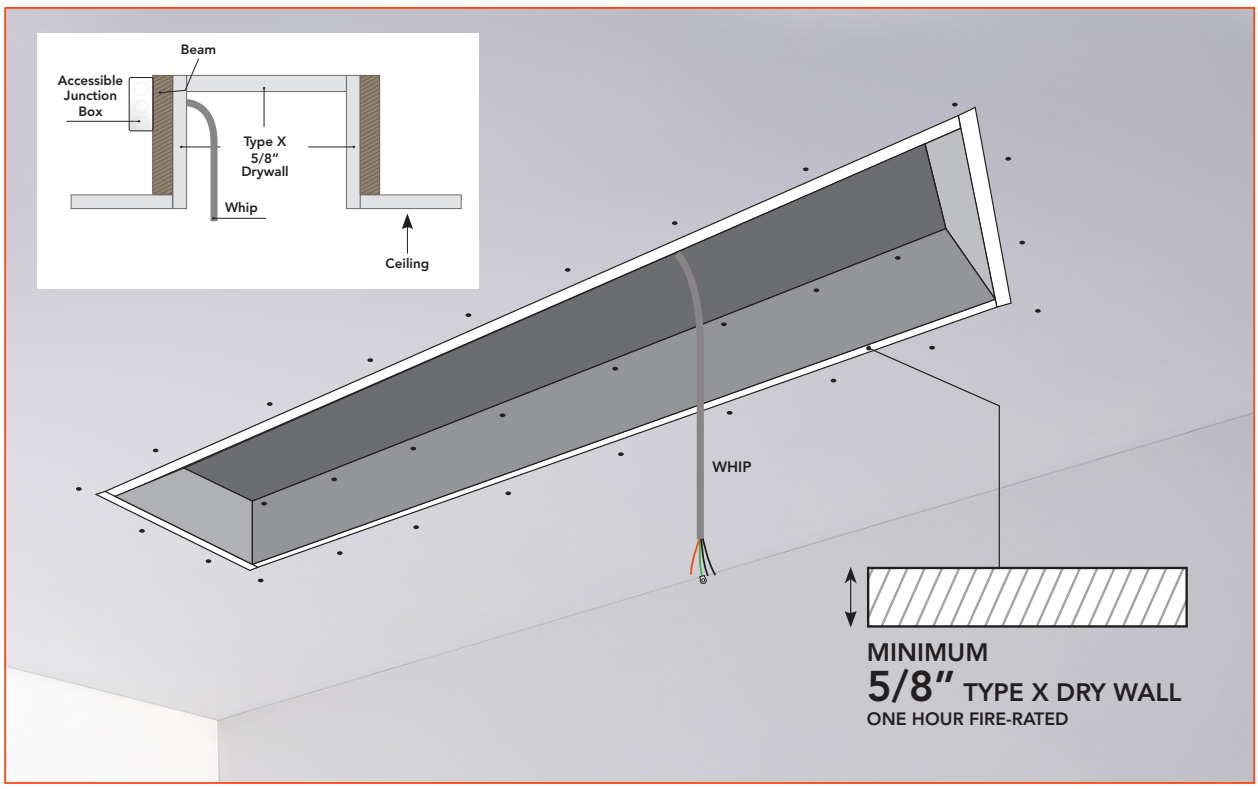




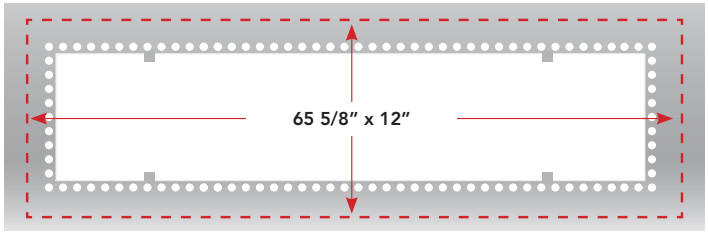
Flush Mount

2 x 8 STUDS MINIMUM

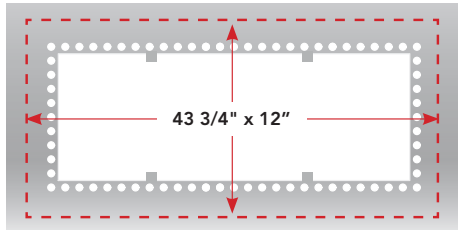
FLUSH MOUNT APPLICATION



EF61FMPFS - 61" FLUSH MOUNT FRAME*



EF39FMPFS - 39" FLUSH MOUNT FRAME*



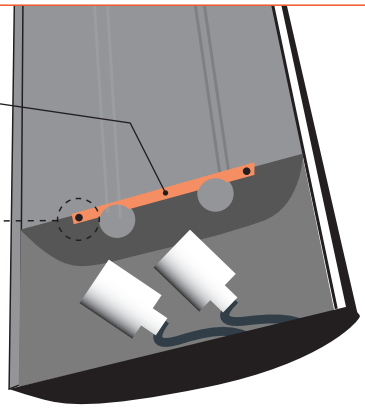
Please reference Flush Mount Instruction Manual for Flush Mount applications.

* SOLD SEPARATELY

1.

OPEN ELEMENT LOCK BRACKET

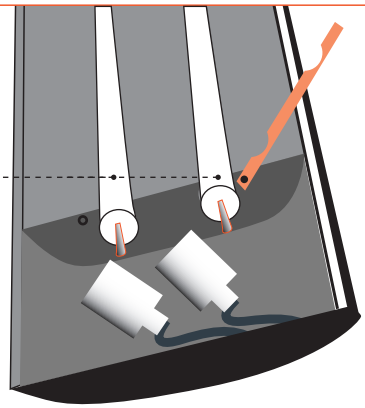
Loosen screw to open Lock Bracket



2.

INSERT ELEMENTS INTO SUPPORT BRACKET

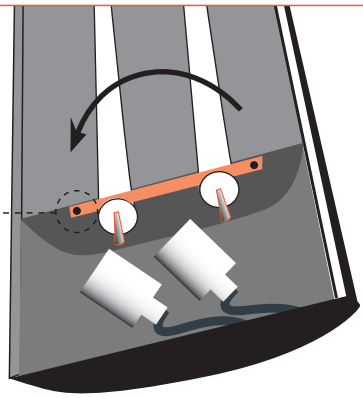
Insert Quartz Element (x2)



3.

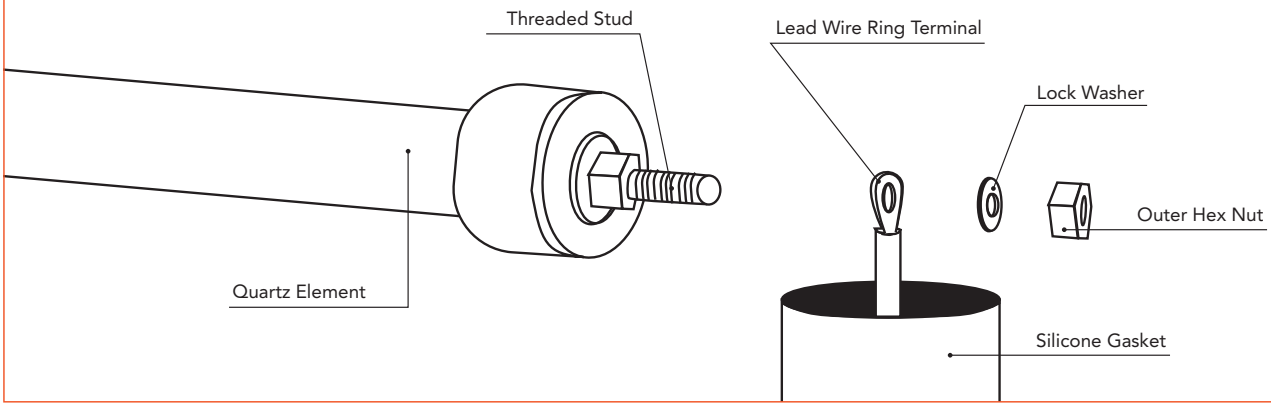
CLOSE ELEMENT LOCK BRACKET

Tighten screw once closed to secure the 2 Quartz Element



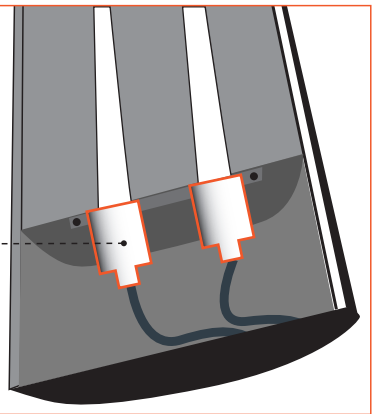
4.

TIGHTEN OUTER HEX NUT, LOCK WASHER AND LEAD WIRE RING TERMINAL TO THE THREADED STUD



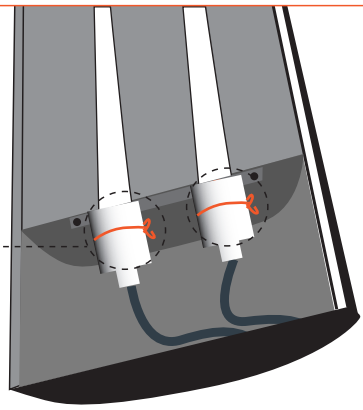
5.

CONCEAL THE 2 ENDS OF THE QUARTZ ELEMENT WITH THE 2 SILICONE GASKETS



6.

SNUG FIT THE SILICONE GASKETS WITH THE RETAINING RINGS



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 these heating 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. These heating units should be cleaned and inspected every three 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

Item #	Description	Volts	Watts	Length (in)	Fits
EF20208E	208V 2000W Quartz Element	208	2000	39	EF40, EF50
EF20240E	240V 2000W Quartz Element	240	2000	39	EF40, EF50
EF20277E	277V 2000W Quartz Element	277	2000	39	EF40, EF50
EF20480E	480V 2000W Quartz Element	480	2000	39	EF40, EF50
EF25208E	208V 2500W Quartz Element	208	2500	39	EF40, EF50
EF25240E	240V 2500W Quartz Element	240	2500	39	EF40, EF50
EF25277E	277V 2500W Quartz Element	277	2500	39	EF40, EF50
EF25480E	480V 2500W Quartz Element	480	2500	39	EF40, EF50
EF30208E	208V 3000W Quartz Element	208	3000	61	EF60
EF30240E	240V 3000W Quartz Element	240	3000	61	EF60
EF30277E	277V 3000W Quartz Element	277	3000	61	EF60
EF30480E	480V 3000W Quartz Element	480	3000	61	EF60

Consult the label on back of heater for proper watts, voltage, and replacement element part number.

Need help? To order replacement elements for your Innova Heating System, please contact us via phone or visit our website.

Item #	Description	Qty	Fits
EFDEEF2	Dual Element End Reflector	2	EF40, EF50, EF60
EF39BOD	Body Reflector – 39"	1	EF40, EF50
EF61BOD	Body Reflector – 61"	1	EF60
EF39LWR	Lead Wire Set – 39"	1	EF40, EF50
EF61LWR	Lead Wire Set – 61"	1	EF60
EFMBSS2	Mounting Bracket, Stainless Steel	2	EF40, EF50, EF60
EFMBBL2	Mounting Bracket, Black	2	EF40, EF50, EF60
EFMBWH2	Mounting Bracket, White	2	EF40, EF50, EF60
EF39GGRD	Grill Guard, 39", Stainless Steel	1	EF40, EF50
EF61DCS	Grill Guard, 61", Stainless Steel	1	EF60

General Notes

- Innova Heaters are furnished with wall/ceiling mount swivel brackets. If the heater is hung with chains, special bracketing, or installing with a frame, these brackets can be discarded.
- For pricing and full list of models with descriptions and voltages, please see product brochures.
- Wiring our Duplex/Stack Switches with our Dual Element Heaters gives users the ability to operate each element independently, providing half power and full power capabilities.
- For optimal comfort, it is best to heat from two sides rather than from just one. However, this may not be practical in some cases.
- Coverage areas vary in size, depending on personal comfort level and weather conditions.
- The performance of heaters in extreme cold/windy environments may be reduced.

Manufacturer Warranty

Our heater is designed to provide you and your family with great outdoor experiences for years to come. To register, please fill in the Model and Serial number as well as the date of purchase in the areas below. For future reference, please save this information. Your electric heater's owner's manual should be carefully read before use. Please make sure that all family members are aware of the proper way to operate the heater and how to prevent serious injury.

Innova Heating warrants that this electric heater is designed and manufactured to be free from defects in materials and workmanship for a period of three years from original date of purchase.

THREE YEAR LIMITED WARRANTY

THIS WARRANTY IS APPLICABLE TO THE ORIGINAL OWNER ONLY in accordance with the warranty terms and conditions specified below.

Innova Heating Co. (warrantor) will furnish the original owner replacement parts for any component part which fails before three year of use from date of original purchase. At our option, Innova Heating Co. may offer to rebuild or replace the heater within the limited warranty period. Installation, use and maintenance must be in accordance with instructions contained in the Installation Instructions.

THE WARRANTY DOES NOT COVER:

- Service and labor costs incurred for diagnosing, removing or reinstallation of the heater(s) or parts(s) thereof.
- Shipping and delivery charges.
- Damage or repairs due to faulty installation, misapplication, negligence, thermal shock, earthquake, flood, fire, and purposeful damage to the heater.
- Failure to operate due to electrical service issues including voltage conditions, blown fuses or circuit breakers.
- Damage due to the inadequacy or interruption of electrical service.
- Normal product wear (oxidation, scratches, heating element replacement, etc.)

GENERAL CONDITIONS PERTAINING TO WARRANTY

The warranty shall be null and void if the heater is not installed by a licensed heating contractor and/or licensed electrician or if the heater is not installed according to the Installation Instructions, normal industry practices and/or if the heater is not maintained and repaired according to the instructions.

Written permission is required for the return of any parts or equipment and any such return must be made on the basis of transportation charges prepaid. Shipment may be refused unless prior written permission is obtained and good returned prepaid.

LIMITATION ON IMPLIED WARRANTIES

Implied warranties, including any warranty of merchantability imposed on the sale of this heater under provincial or State law are limited to three year duration. Some states do not allow limitations on how long an implied warranty lasts.

CLAIMS PROCEDURE

Any claim under this warranty should be initiated with the dealer who sold the heater, or with any dealer handling the warrantor's products. If this is not practical, the owner of the heater should contact Innova Heating Co. toll free at 1-800-660-5390 (hours of operation 8-5 MF) or via email info@InnovaHeatingCo.com.

Innova WARRANTY REGISTRATION

Customer Name: _____

Address: _____

City: _____ State/Province: _____ Zip/Postal Code: _____

Country: _____ Phone: _____

Model #: _____ Serial No.#: _____

Dealer's Name: _____ Date Purchased: _____

Dealer's Address: _____

This Warranty Registration Card must be returned within 30 days of purchase to properly activate your warranty.
This information is for our internal use only.

innova™ HEATING CO.

33 West Beaver Creek Road, Richmond Hill, ON L4B 1L8 Canada
Tel: 1.800.660.5391 | www.innovaheatingco.com

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Postage
Here

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