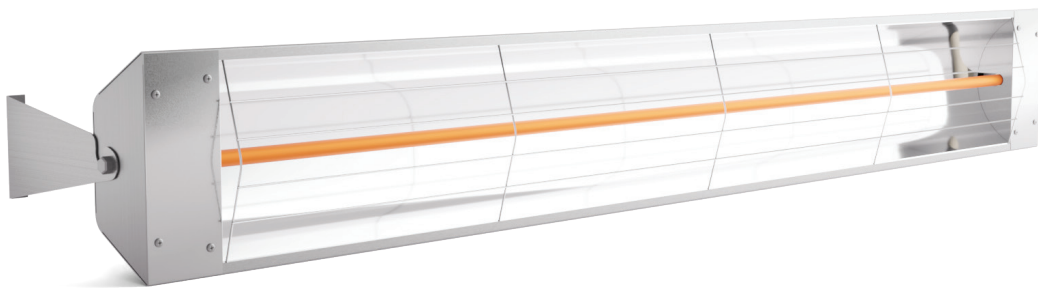




Heater Specifications and Installation Instructions

READ ALL INSTRUCTIONS BEFORE INSTALLING



Phone: 778-871-9013
Email: info@kelrayheating.ca
Web: kelrayheating.ca

Kelray heaters 2500 Watts and higher must be permanently installed and hardwired by a qualified electrician, strictly in accordance with national or regional electricity regulations.

Kelray heaters below 2500 Watts may be permanently installed and hardwired, or supplied with a cable and plug on request

**Incorrect installation can cause electric shock,
fire or personal injury.**

Be sure to switch off/isolate the power source for installation, as well as any assembly, maintenance or service.

Table of Contents

Limited Warranty	3
Warning	3
Maintenance Instructions	3
Product Specifications	4
Wiring Instructions	6
Fitting Quartz Elements	7
Mounting Instructions	8
Safety Guidelines	11

Limited Warranty

This heater is manufactured in New Zealand and has a limited 5-year warranty on the heater body (excluding the polished aluminum rear reflector which has a 2-year warranty excluding wear and tear). There is a 1-year warranty on the element(s) for material defect only. Warranty DOES NOT include physical damage to heater or element(s). Read warranty instructions on back of heater for fitting of element(s). Return appliance with proof of purchase to manufacturer who will at their discretion either replace or repair the heater. This Warranty will be invalidated if the heater is not cleaned as per the Cleaning Instructions.

See full warranty details at www.kelrayheating.ca/resources

Warning

Care must be taken when transporting / handling the heater as the quartz glass element is fragile. Never handle heater while hot - wait until it has fully cooled

Maintenance Instructions

Before performing any maintenance, power must be disconnected and the heater cool to touch. Waiting for 30 minutes after heater is used is recommend.

Heater housing, reflectors, and heating element can be rinsed with a hose or wiped down with isopropyl alcohol, acetone, or glass cleaner. Use a clean, scratch-free rag or paper towel.

Make sure all water, solvents, or cleaners are removed and reflector is dry to avoid water spotting before reconnecting the power.

Refer to HEATER CLEANING INSTRUCTIONS form for detailed breakdown on cleaning schedule

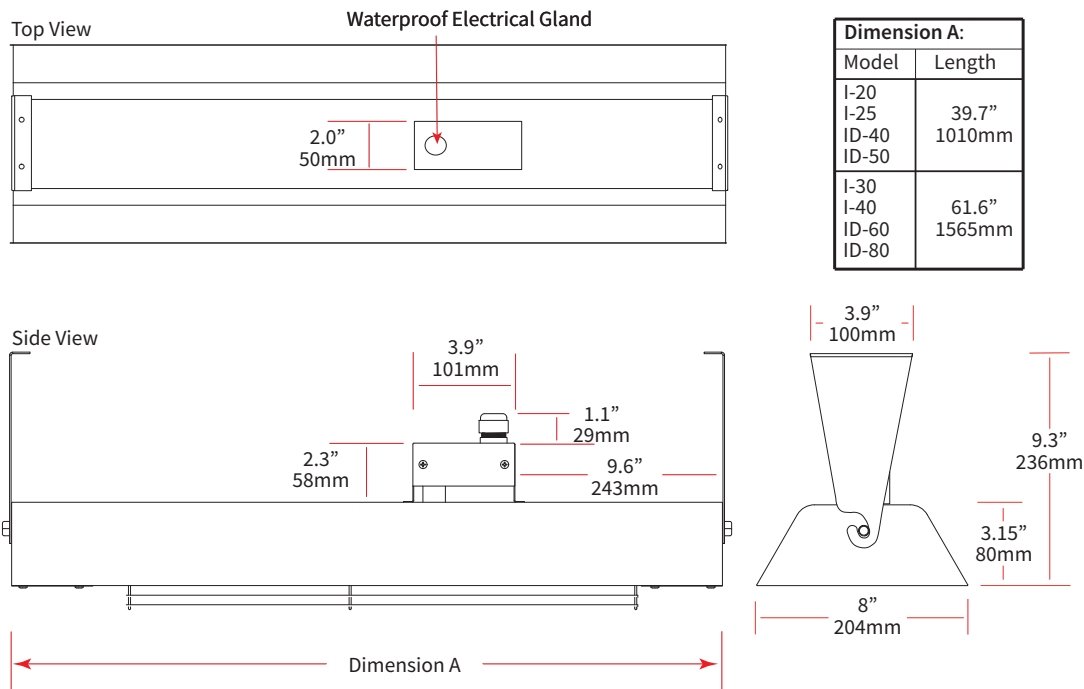
Product Specifications

Model	Unit Length	Mounting Height *	Overhead Mount **	Number of Elements	Watts	Amps	Heat Coverage***
I-20	39.7" / 1010mm	7' - 8' 2.0 - 2.5m	9' - 11' 2.8 - 3.2m	1	2000	8.3	7' x 7' 2.25 x 2.25
I-25	39.7" / 1010mm	7' - 8' 2.0 - 2.6m	9' - 11' 2.8 - 3.5m	1	2500	10.4	8' x 8' 2.5 x 2.5m
I-30	61.6" / 1565mm	7' - 9' 2.1 - 2.7m	10' - 12' 3.0 - 3.6m	1	3000	12.5	10' x 10' 3.0 x 3.0m
I-40	61.6" / 1565mm	7' - 10' 2.2 - 3.0m	11' - 14' 3.5 - 4.2m	1	4000	16.7	11' x 11' 3.5 x 3.5m
ID-40	39.7" / 1010mm	8' - 10' 2.3 - 3.2m	12' - 15' 3.8 - 4.5m	2	4000	16.7	13' x 10' 4.0 x 3.0m
ID-50	39.7" / 1010mm	8' - 10' 2.4 - 3.2m	13' - 15' 4.0 - 4.7m	2	5000	20.8	15' x 11' 4.5 x 3.25m
ID-60	61.6" / 1565mm	8' - 11' 2.6 - 3.5m	14' - 16' 4.3 - 5.0m	2	6000	25	15' x 15' 4.5 x 4.5m
ID-80	61.6" / 1565mm	10' - 13' 3.0 - 4.0m	16' - 20' 5.0 - 6.0m	2	8000	33.4	16' x 16' 5.0 x 5.0m

* Mounting Height for heaters angled between 30-60 degrees. This angle projects the heat horizontally out towards the desired space, allowing the heater to be mounted lower than if the heater were to be mounted overhead pointing directly downwards.

** Mounting Height for Overhead Mounted pointed downwards. Due to the intense heat generated close to the heater, increased height is required to maintain comfort and safety.

*** Heat Coverage is estimated for partially enclosed environments (typically 2 sides/walls and roof coverage). For more open areas, the estimated heat coverage will be slightly reduced and for fully enclosed or indoor spaces, the heat coverage will slightly exceed these estimates.



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OUTDOOR HEATING

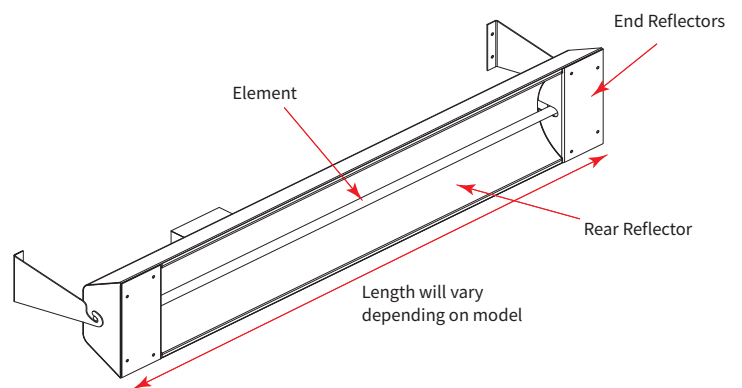
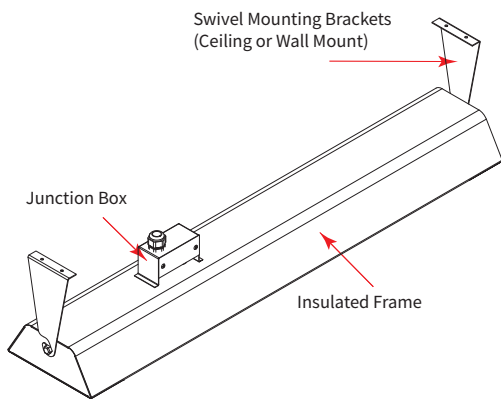
Angled Mounting:



Overhead Mounting:



Kelray Infrared heaters produce a radiant heat that heats objects in front of the heater, rather than the air. The heat does dissipate further away from the heater, so selecting mounting position within range of the selected model is crucial. Overhead mounts offer the most even distribution of heat, while Angled mounts can be mounted at lower heights and can offer a variance of warmer and cooler zones.



Wiring Instructions

The installing electrician will need to provide the appropriate cable (based on Amps required and distance to power source) to the heater junction box for connection at the installation location.

- Observe local electrical regulations
- Remove cover plate from Junction Box (2 screws & rubber seal)
- Attach cable to both Phase and Neutral Connectors
- Ensure Earth is Connected
- Allow sufficient extra cable at Junction Box for heater to be able to swivel on horizontal axis
- Re-install cover plate - 2 screws & rubber seal (ensure rubber seal is well placed)

The Junction Box inlet hole is sized for a standard 0.8" (20mm) nylon weather tight cable fitting (supplied).

The electrician must install a Single On/Off switch (or a Dual On/Off switch for dual-element heaters) in a position requested by the customer (indoors or outdoors).

Dual Element Heaters (All 'ID-' Models) should be wired with a switch for each element, enabling the ability to turn on and off each element independently to provide both half or full power capabilities.

The electrician must install the Element(s) which are packaged separately. These are fragile and the carton must be opened carefully by cutting all tape along the long edges and removing side staples.

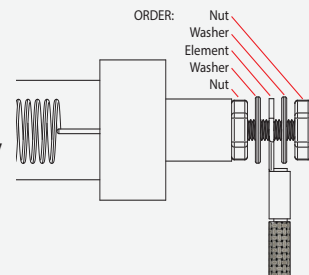
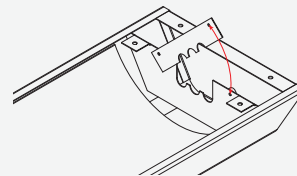
Note: The element may break if you try to pull it out from the end of the packaging.

Instructions for fitting Elements is on the following page.

Fitting Quartz Elements

Spanners supplied must be used to ensure a positive and tight electrical connection at the element end. Failure to do this may result in the premature failure of the element and the warranty being void. We recommend installing the element(s) before hanging the heater

- Handle with care - this element is extremely FRAGILE
- The element can be touched
- Unscrew and remove both End Reflectors (4 screws each)
- Unscrew element gate at Junction Box end of heater (1 screw). Lift gate open
- Gently place element(s) into position and unscrew first nut and washer
- Ensure second nut is snug against the ceramic end of the element
- Place cable lug onto the end of element and push up to second nut
- Re-attach nut and first washer and screw on - hold the ceramic end of the element firmly while you tighten the first nut to ensure you do not damage the element. Use the spanners provided to clasp each nut simultaneously and then tighten. This should be a snug fit. A loose connection can cause the element to short or fail prematurely
- Repeat to attach cable to the other end of the element
- Lay the element in the cradle and then lower the element gate and screw in
- Re-attach the two end reflectors (4 screws each) - do not over-tighten as this will dent the reflector and be visible on the mirror finish



Mounting Instructions

Kelray Heaters can be hung using either chain or mounting bracket (supplied, or custom) to any ceiling, wall or horizontal surface.

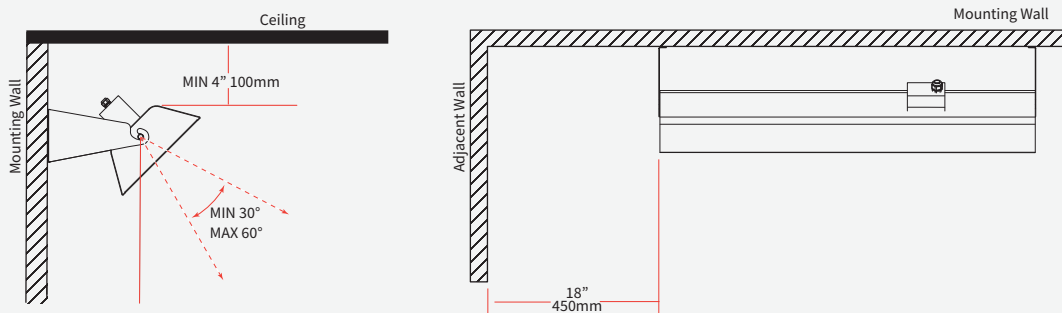
Do not place anything closer than 32" (800mm) directly in front of a heater.

Common installation positions are Wall Mounting, Soffit or Ceiling Mounts, Chain Mounts or Flush Mount/Recess Kits.

Heater must be installed level, so that the quartz element is horizontal, however it can be rotated around its horizontal axis.

Wall Mount:

For wall mounting, the supplied bracket will maintain a safe distance from the mounting surface as long as the heater is angled between 30-60 degrees away from the wall. This will also direct the heat away from the wall and direct heat towards desired area.



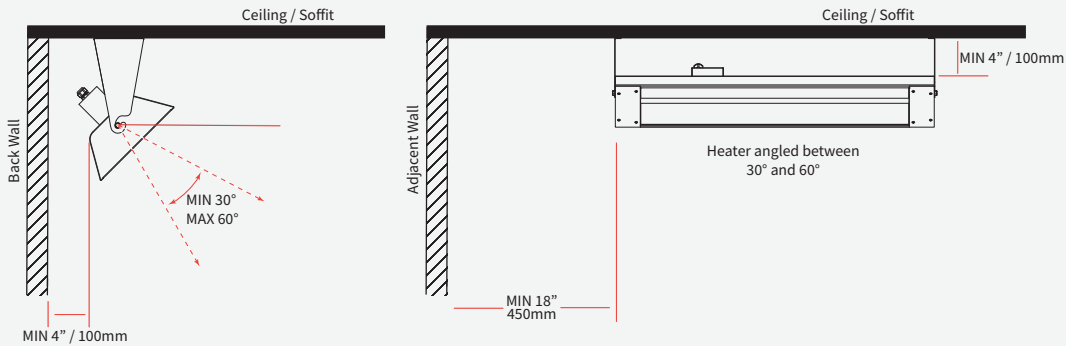
Do not install heater closer than 18" (450mm) from any adjacent walls (excludes the distance between the mounting wall and the back of the heater which is set by the mounting bracket).

Maintain 6" (150mm) minimum clearance from combustible surfaces (eg. canvas awning) above the heater - clearance of 4" (100mm) behind and above the heater is acceptable from all non-combustible surfaces.

Refer to Product Specification table on Page 4 for Mounting Height Guidelines.

Ceiling and Soffit Mount:

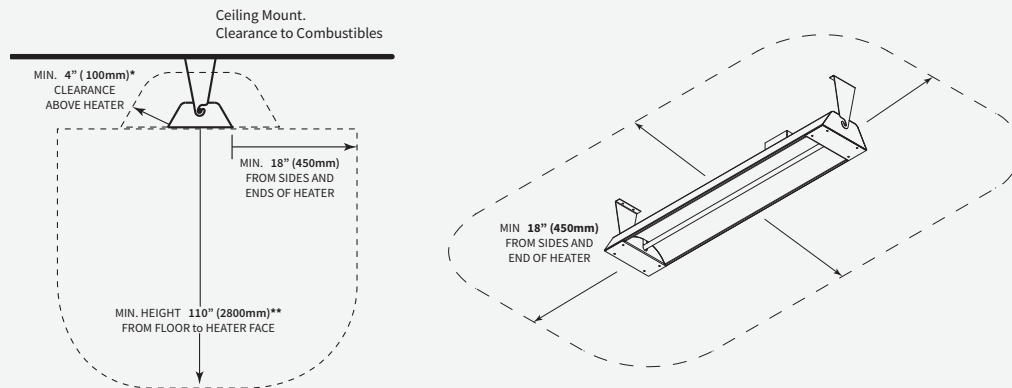
For Ceiling or Soffit mounting, the supplied bracket will maintain a safe distance from the mounting surface above.



If the heater is close to a wall, angle the heater between 30-60 degrees away from the wall, and ensure a minimum clearance of 4" (100mm) behind the heater from non-combustable materials, or 6" (150mm) from combustible materials. This will also direct the heat away from wall and direct heat towards desired area.

Ceiling Overhead Mount:

When the heater is mounted overhead and angled directly downwards, ensure heater is at least 18" (450mm) from any adjacent walls or combustible surfaces:



* Distance Clearance is 6" (150mm) from Combustable Surface and 4" (100mm) from non-Combustable Surfaces

** Height Must Increase as Wattage Increases. See Table of Mounting Heights (Page 4)

When heater is facing straight down, do not install less than 110" (2.8m) high if directly overhead of desired area.

Refer to Product Specification table on Page 4 for Mounting Height Guidelines.

Additional Mounting Requirements:

- Do **NOT** attempt to flushmount in a ceiling cavity without using purpose designed Flush Mount Recess Kits within a constructed Fire Box rated at a minimum of 1 Hour
Drawings for this are available at www.kelrayheating.ca/resources
- For optimum heat spread, heaters installed end-to-end should be positioned no less than 24" (600mm) apart, and a minimum of 40" (1,000mm) apart if side-by-side
- Do **NOT** operate within 26' (8 meters) of exposed flammable or explosive material
- **NEVER** cover the heater against weather conditions unless you have first isolated the heater by turning the power off at your main or sub board
- A means for isolation of the appliance must be incorporated in accordance with all local wiring regulations

Safety Guidelines

WARNING - SOURCE OF POSSIBLE IGNITION

- Never block front of heater
- Do not install or operate heater close to combustible materials
- **WARNING!** Possible danger if installation close to curtains and other similar combustible materials (such as fabrics) - must keep at least 39" (1m) clearance.

WARNING - SOURCE OF POSSIBLE ELECTRIC SHOCK

- Never attempt to service appliance without disconnecting power supply
- Appliance must be installed and serviced by persons with appropriate qualifications
- When cleaning the heater or reflector always isolate the power supply

WARNING - SOURCE OF POSSIBLE IGNITION

- Children of less than 3 years should be kept away from heater unless continuously supervised
- Children aged from 3 to 8 years should only switch on/off the appliance if it has been placed or installed in its intended normal operating position and they have been given supervision and instruction concerning use of the appliance in a safe way and understand the hazards involved. Children aged less than 8 years should not regulate and clean the appliance or perform user maintenance
- Do not use if the heating element is damaged