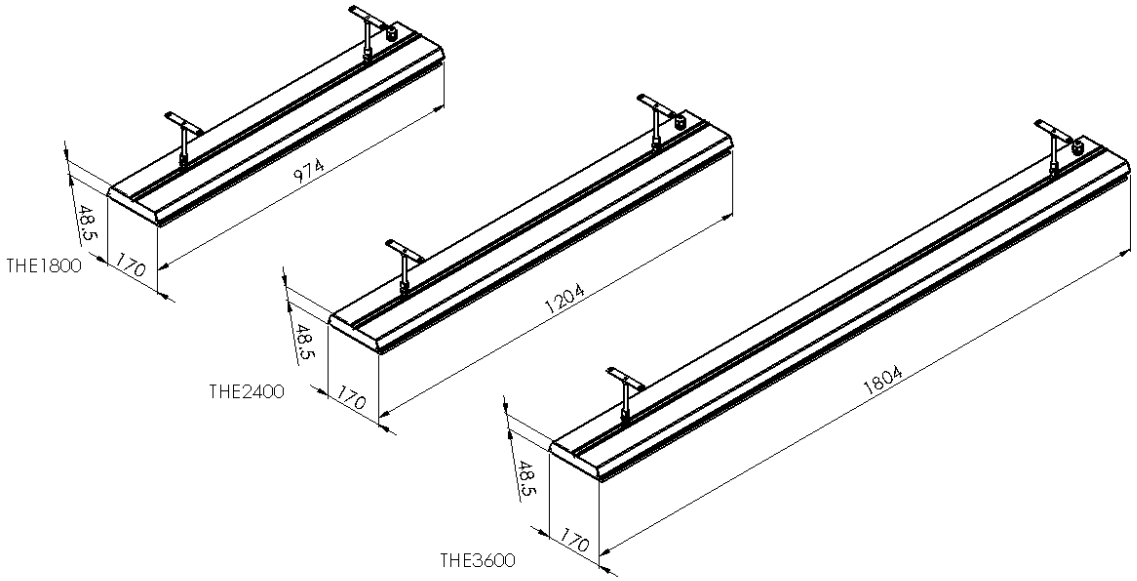
Specifications - Australia

MODEL	POWER (WATTS)	CURRENT (AMPS)	DIMENSIONS (mm)	WEIGHT (Kg)	LEAD LENGTH (mm)	PLUG
THE1800	1800	7.5	974x 170 x 48.5	4	1000	YES
THE2400	2400	10	1204 x 170 x 48.5	7	1000	YES
THE3600	3600	15	1804 x 170 x 48.5	9	1000	NO

MODEL		
HEATER TYPE	High intensity electric radiant overhead heater with high surface area profiled alloy	
OUTPUT	Refer to model code chart above	
POWER	240 Volts Nominal at 50 Hertz, Single Phase	
CONNECTION	3 Core Cable 2.5mm^2	
APPROVALS	AUSTRALIA/NZ	
MOUNTING HEIGHT	MINIMUM RECOMMENDED MAXIMUM	2.1 m 2.3 m to 2.5 m 2.7 m in a fully enclosed outdoor area (For higher ceiling heights, units can be lowered using optional bracket kits or refer to the Heatstrip Max range)
MOUNTING OPTIONS	Suitable for ceiling, wall, beam, fixed umbrella and recess mounting. Also available for extension mount using rigid fixing poles and chains / wire suspension.	
PROTECTION RATING	IP55 Protection from water ingress from all directions	
COUNTRY OF ASSEMBLY	Australia	



THERMOFILM AUSTRALIA

Operating cost comparison

In many instances, patio heaters powered by gas bottles are used as an outdoor heating source. The below table shows the operational cost comparison between HEATSTRIP® and a bottled gas outdoor heater. Not only are the hourly running costs considerably less with HEATSTRIP®, but you never have to worry about running out of gas, no refilling, no unattractive gas bottle to waste space; and HEATSTRIP® actually improves the value of your property.

RUNNING COST	OUTDOOR GAS HEATER	HEATSTRIP ELEGANCE ELECTRIC RADIANT HEATER		
		THE1800	THE2400	THE3200
PER HOUR	$2.78/hr	$0.45/hr	$0.60/hr	$0.90/hr
PER YEAR	$500.40	$81.00	$108.00	$162.00

Notes:

1. Calculations of hourly running cost for outdoor gas heater is based on $25.00 average to fill a 9kg gas bottle and average running time of 9 hours. $25.00 / 9 hours = $2.78 per hour
2. Electricity rate of 25.0 cents/kWh
3. All calculations are excluding GST.

   1.8kW x 0.25 cents = $0.45 or 45 cents per hour

   2.4kW x 0.25 cents = $0.60 or 60 cents per hour

   3.6kW x 0.25 cents = $0.90 or 90 cents per hour

Calculations of yearly running cost are based on 180 hours usage

180 hours x $2.78 = $500.40 yearly running cost for outdoor gas heater

180 hours x $0.45 = $81.00 yearly running cost for 1800W Heatstrip Elegance

180 hours x $0.60 = $108.00 yearly running cost for 2400W Heatstrip Elegance

180 hours x $0.90 cents = $162.00 yearly running cost for 3600W Heatstrip Elegance

Spot heating principle

In most outdoor or difficult-to-heat indoor applications, there are 2 options when calculating the size and quantity of the heaters required.

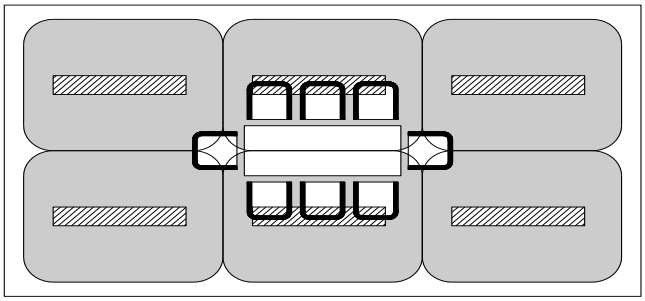
Option 1 is to comfort heat the entire area based on the total dimensions of the space, regardless of whether the entire area is being fully occupied.

Option 2 is to spot heat the high use areas, such as over outdoor tables, BBQ's, lounges, assembly lines or in-door workstations.

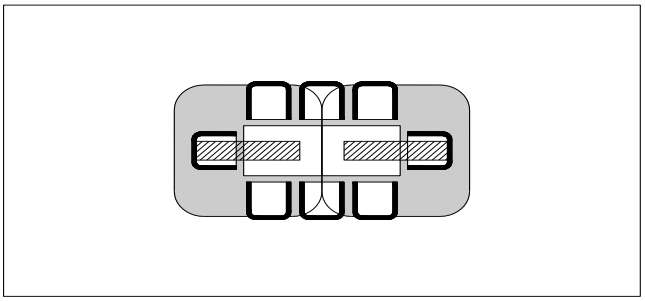
Often it is more practical and efficient to spot heat high use areas. Spot heating will reduce both the initial capital cost as well as the ongoing running costs. Spot heating will allow the area to be "zoned", meaning only the areas that are being used are heated, such as tables in a restaurant or outdoor alfresco area.

Option 1 and 2 show a comparison between heating an entire area or spot heating over a table.

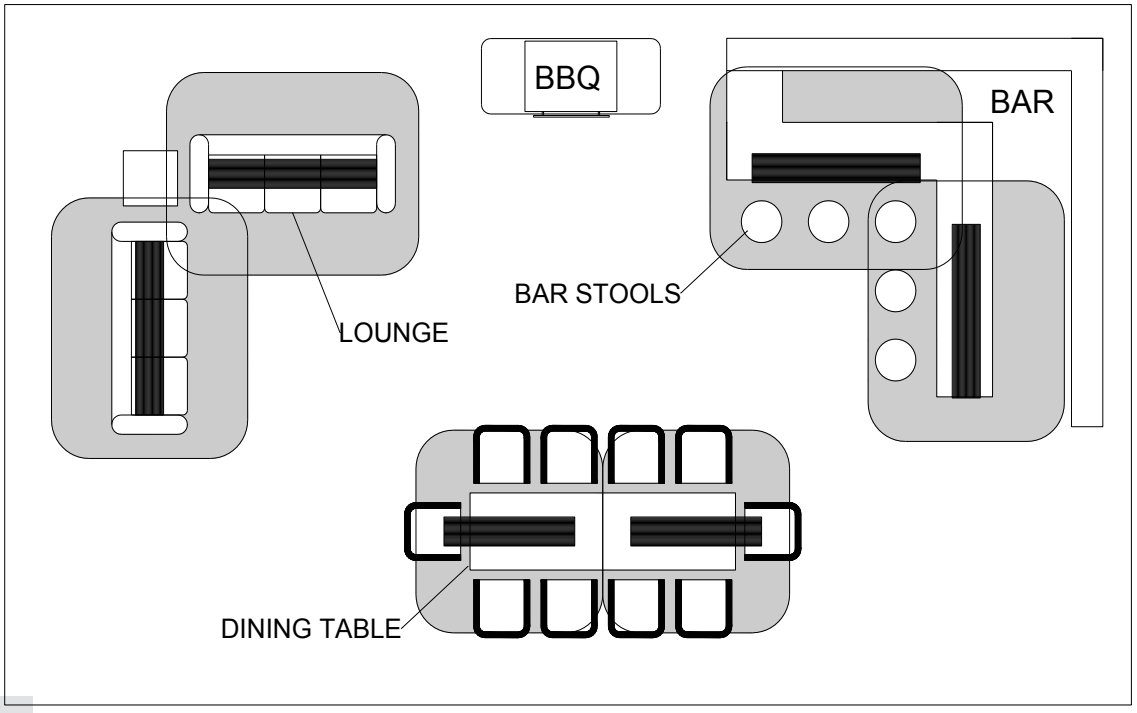
The bottom layout shows the flexibility of using HEATSTRIP to provide a comfortable environment, even when the layout of the area is very unusual.



Option 1: 6 x THE2400



Option 2: 2 x THE2400



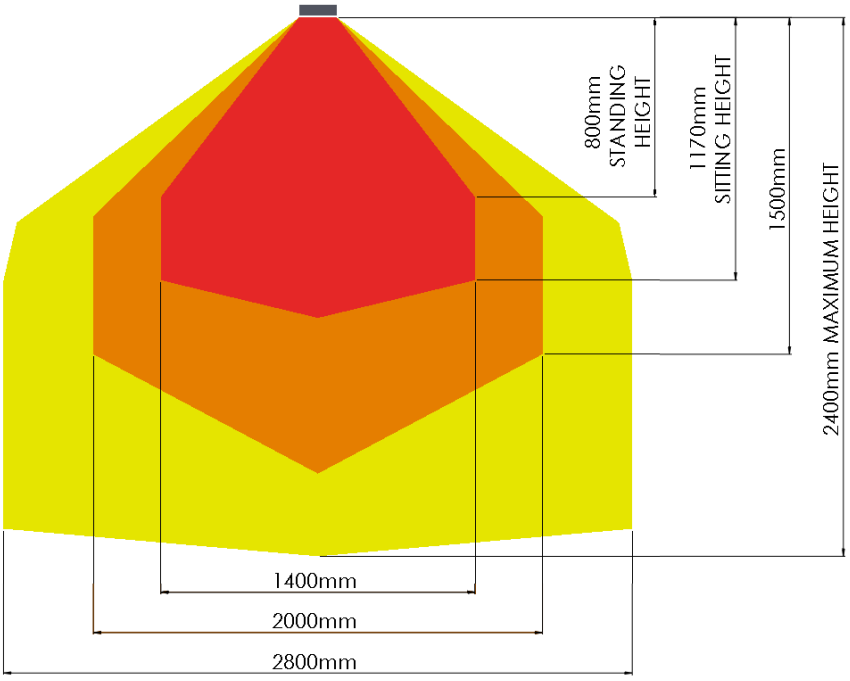
Radiant footprint

HEATSTRIP electric heaters produce radiant heat which heats objects rather than the air. Therefore, it is imperative that objects to be heated (ie. people), are within the direct radiant footprint of the heater.

The diagram to the right shows the radiant footprint of HEATSTRIP Elegance and is an approximate guide based on a fully enclosed outdoor environment.

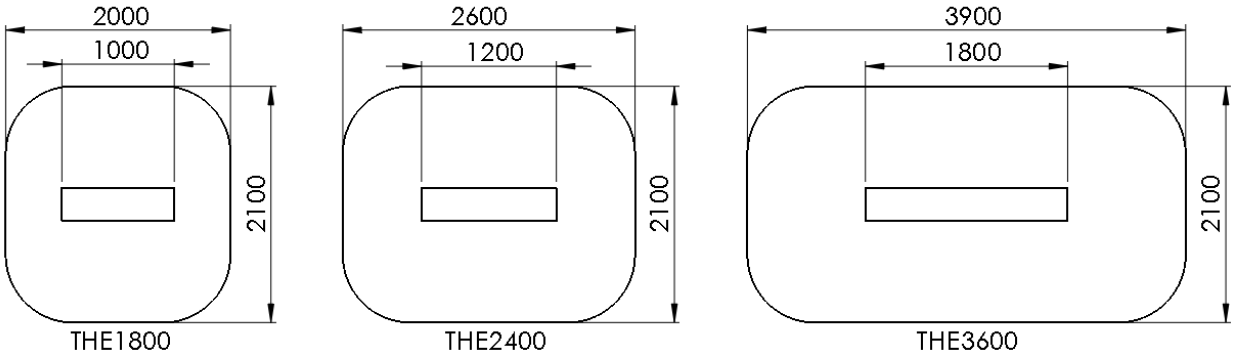
This diagram shows that the maximum heat output is found directly under the heater, and the temperature decreases as you move away from the heater.
It highlights the importance of maintaining recommended mounting heights, and if possible, positioning the heater directly above the area to be heated.

Note that the temperature is similar for all 3 models, regardless of the wattage however, as the size increases and the length of the unit increases, the radiant footprint will be longer.

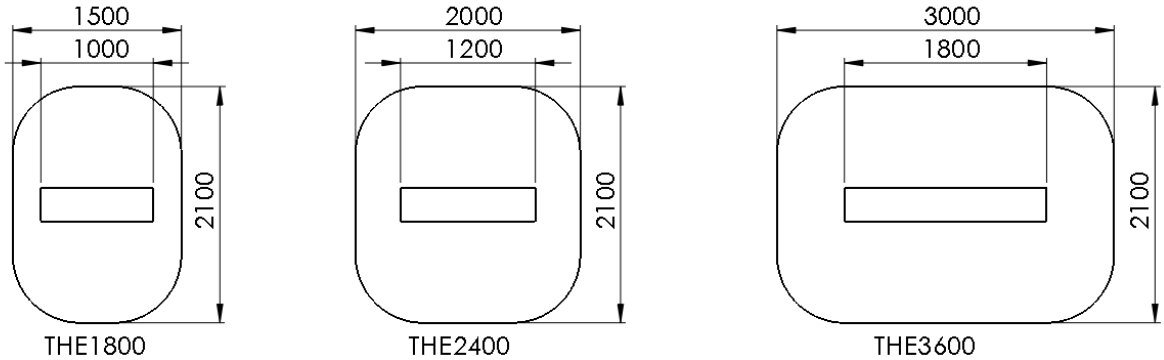


The below diagrams show the approximate heating area for each model, based on both an indoor and outdoor enclosed environment, with direct overhead mounting.
The radiant footprint is reduced in angled and wall mounted installations.

HEATED AREA
INDOOR SPOT HEATING



HEATED AREA
OUTDOOR ENCLOSED HEATING



Selection guide

General recommendations for **HEATSTRIP Elegance:**

- Ideal mounting height: 2.3m to 2.5m. Maximum is 2.7m in a fully protected/enclosed outdoor environment.
- Ideal mounting location: ceiling mounted, directly above area to be heated (eg. above a table)
- Minimum recommended heating capacity for various installations are: 400W/m^2 for indoor spot heating; 500W/m^2 for protected outdoor areas, and 600W/m^2 for exposed outdoor areas. To ensure the Heatstrip Elegance provides satisfactory performance, Thermofilm strongly recommends using conservative coverage areas when specifying how many heaters are required for each installation.

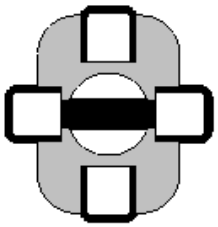
The table below outlines the *maximum* coverage of each **HEATSTRIP Elegance** model based on 3 different scenarios with direct overhead mounting at minimum installation height. For example, for an outdoor area that is protected from prevailing winds by walls, café blinds etc, Model THE1800 will cover a *maximum* of 3.6m^2 and Model THE2400 will cover a *maximum* of 4.8m^2.
For angled wall mounting applications, the coverage is reduced by up to 40%.

MODEL	INDOOR PROTECTED (m^2)	OUTDOOR ENCLOSED (m^2)	OUTDOOR EXPOSED (m^2)
THE 1800	4.5	3.6	3
THE 2400	6	4.8	4
THE 3600	9	7.2	6

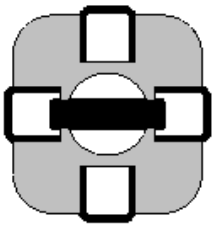
Table layout

For the majority of outdoor applications, the most effective method is to spot heat a table or similar area. The diagrams below provide an easy selection guide for the approximate model and quantity of heaters required to heat common residential table settings.

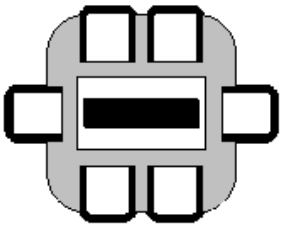
Selections are based on HEATSTRIP Elegance being mounted at 2.4m from the floor in a fully enclosed undercover outdoor area.



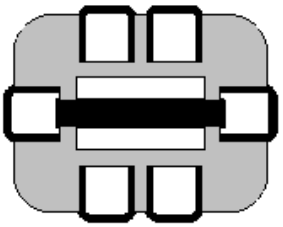
THE1800



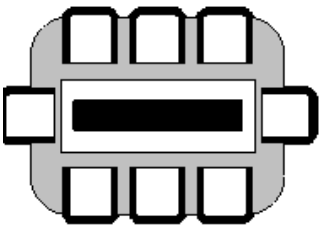
THE2400



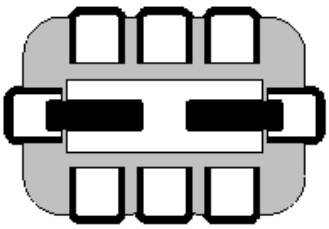
THE2400



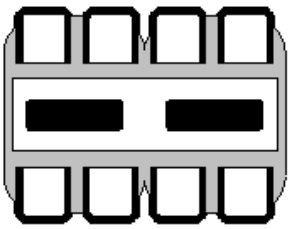
THE3600



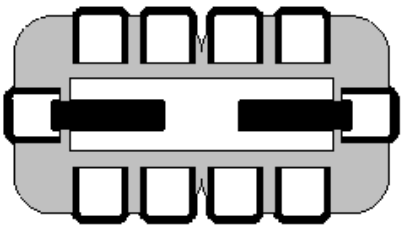
THE3600



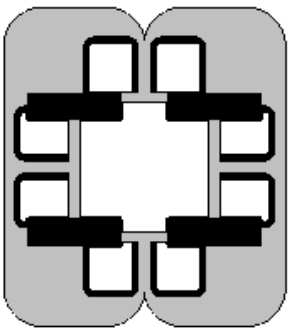
2 x THE1800



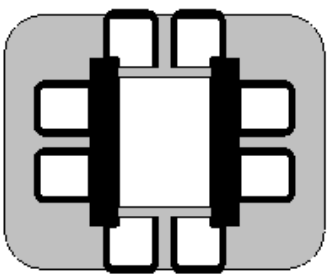
2 x THE1800



2 x THE2400



4 x THE1800



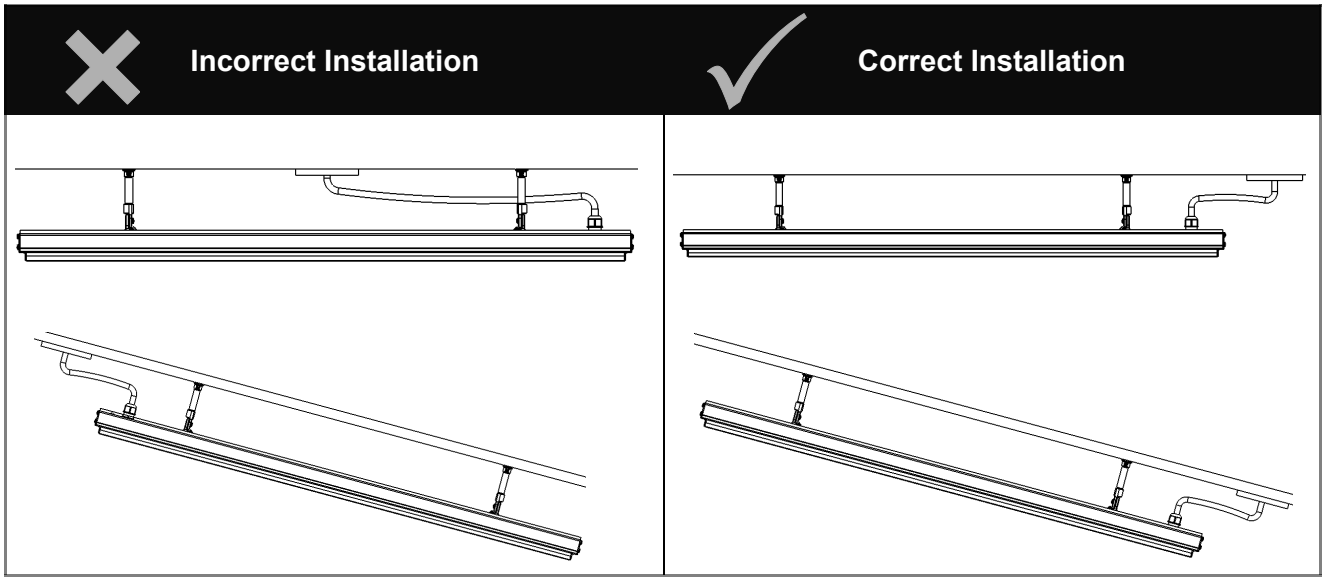
2 x THE3600

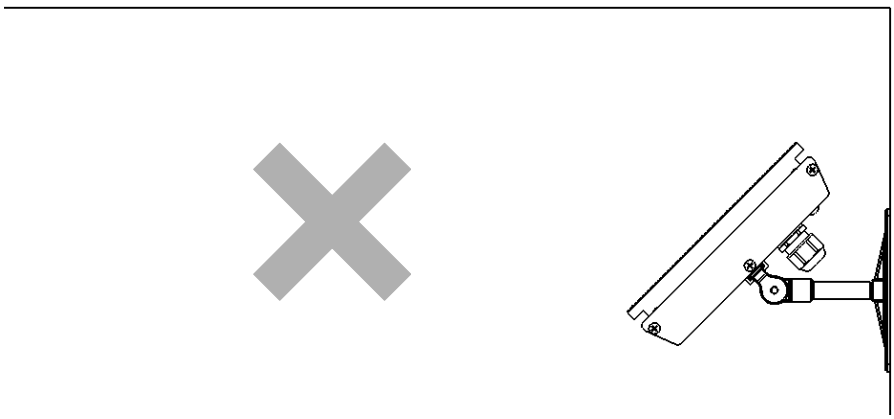
Installation Requirements

The ideal mounting position for the HEATSTRIP Elegance is on the ceiling directly above the area to be heated. If this is not possible, HEATSTRIP can be mounted on a wall and angled downwards. In this situation, ensure the mounting height is in the range of 2.1m to 2.7m and the table is close to the wall.

For mounting heights more than 2.7m, we recommend the use of the optional accessories to reduce the height of the heater to 2.3m—2.5 m. This will increase the effectiveness of your HEATSTRIP. Refer to the Mounting Accessory section for more information.

Electrical connections/GPO's should not be located at the back of the heater. They should be located outside the physical footprint of the units to minimize heat build-up behind the units.
If the heater is to be mounted on an incline (e.g. vaulted ceiling), ensure the electrical connection is located at the lowest point of the heater.



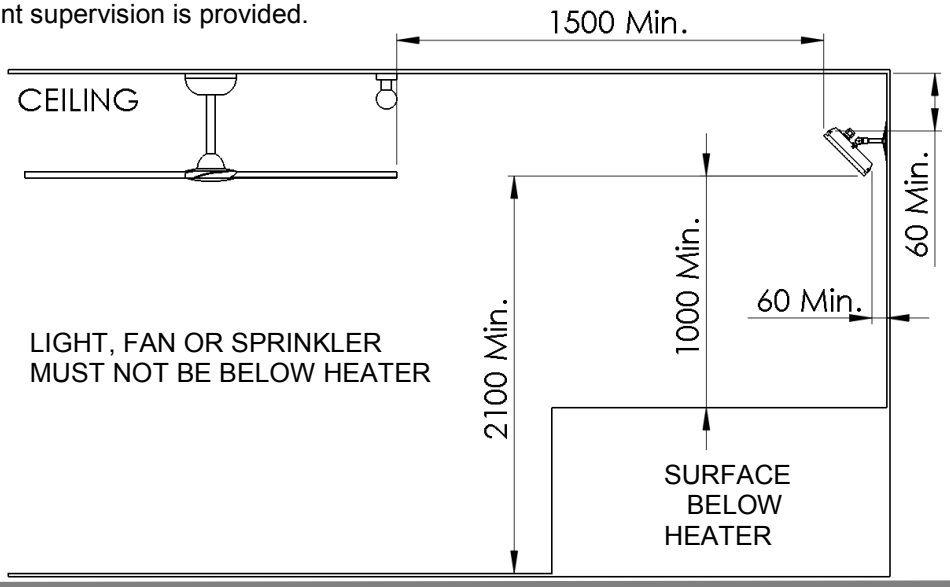


The heating surface must never be directed toward the ceiling

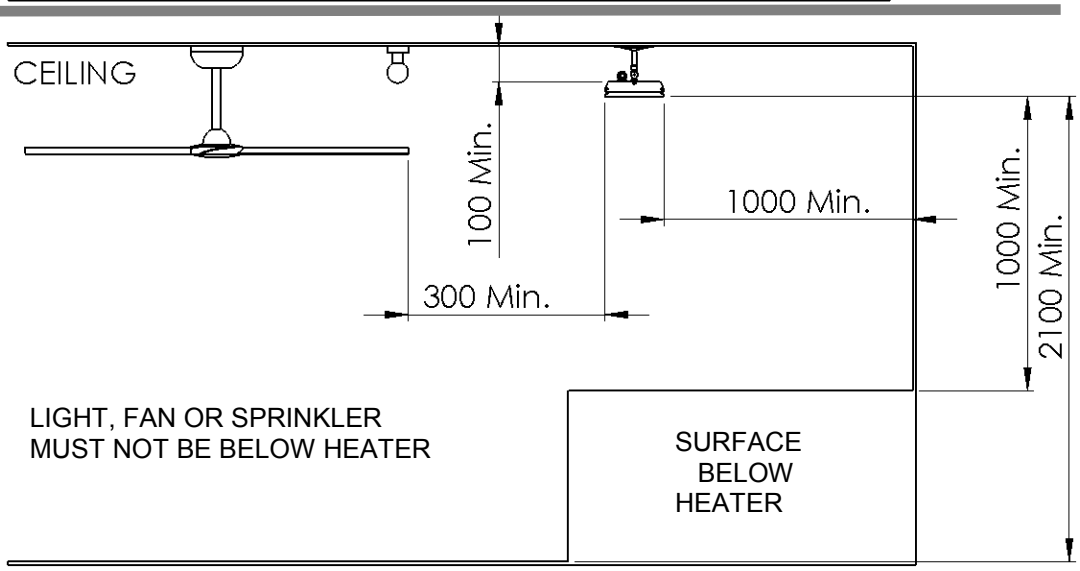
Installation location —the diagrams below provide the minimum recommended clearances in mm.

WARNING: This heater is not equipped with a device to control the room temperature. Do not use this heater in small rooms when they are occupied by persons not capable of leaving the room on their own, unless constant supervision is provided.

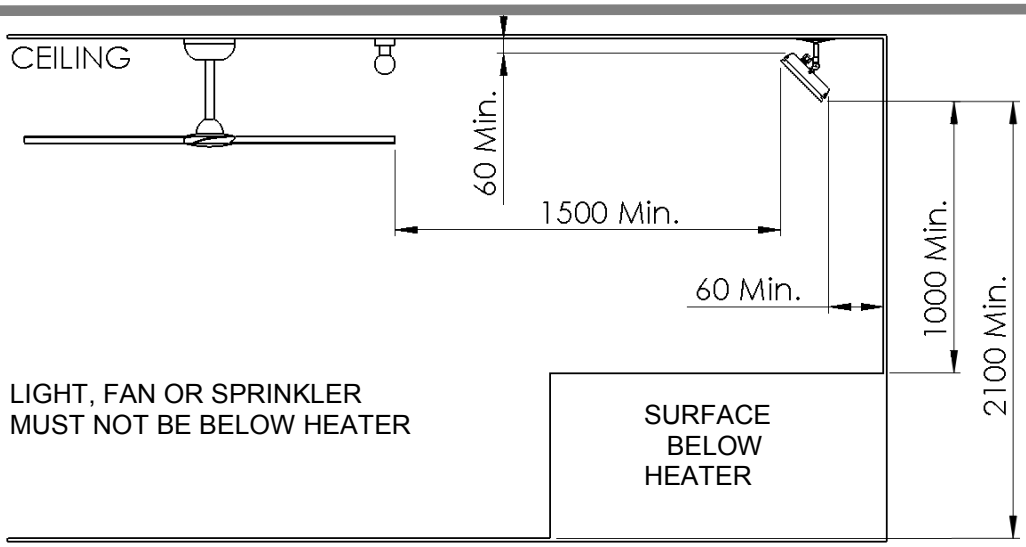
Angled Wall Installation



Ceiling Installation



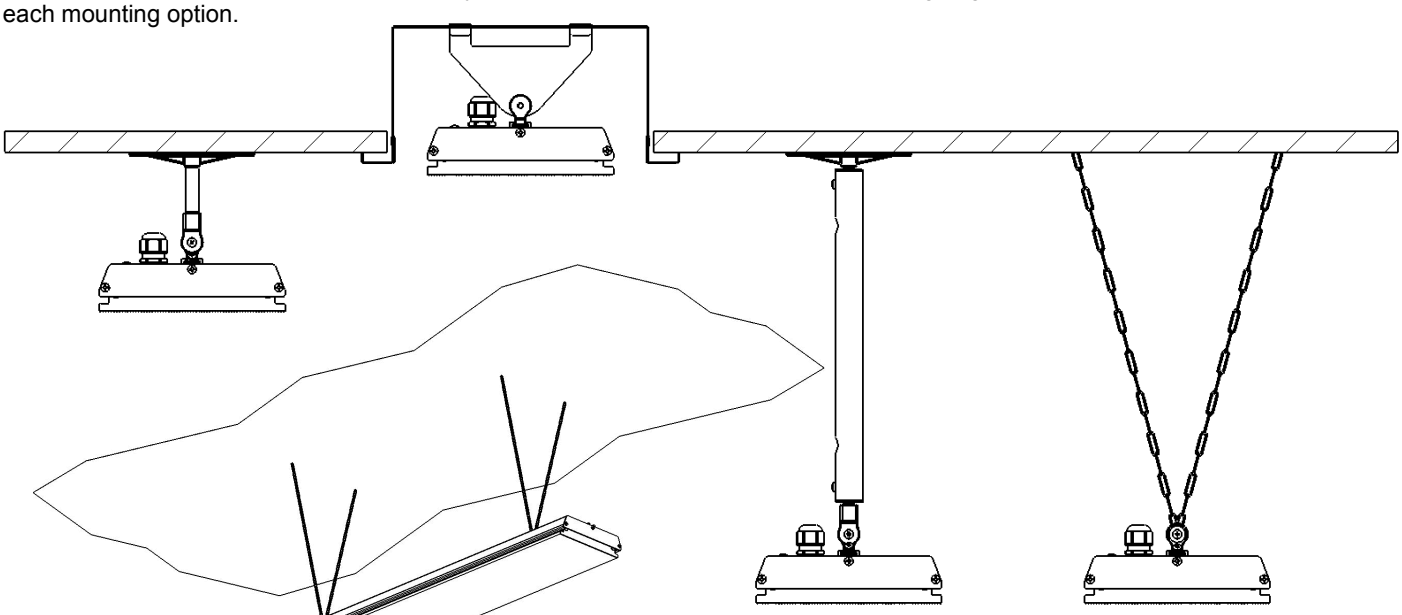
Angled Ceiling Installation



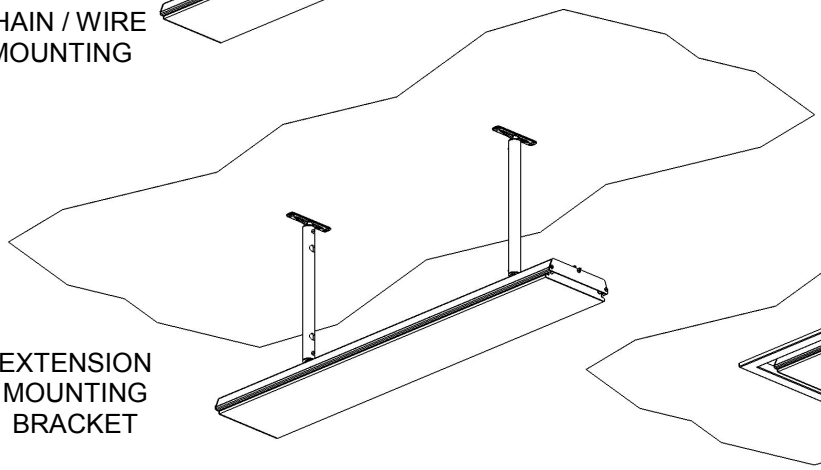
Mounting options

Installing the HEATSTRIP Elegance is simple and easy using the standard mounting brackets supplied. For other irregular locations there are range of mounting options available - refer to diagrams below

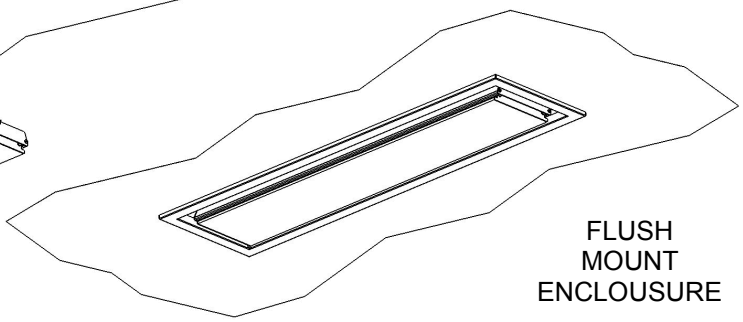
The HEATSTRIP Elegance can be mounted directly to the ceiling, angled downwards on a wall, fitted flush with the ceiling, attached to beams or poles or suspended by rods, wires or chain . Refer to the following pages for more detailed information on each mounting option.



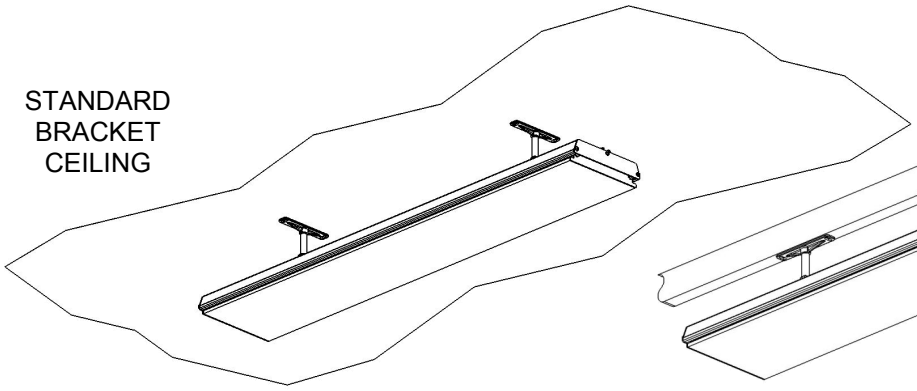
CHAIN / WIRE MOUNTING



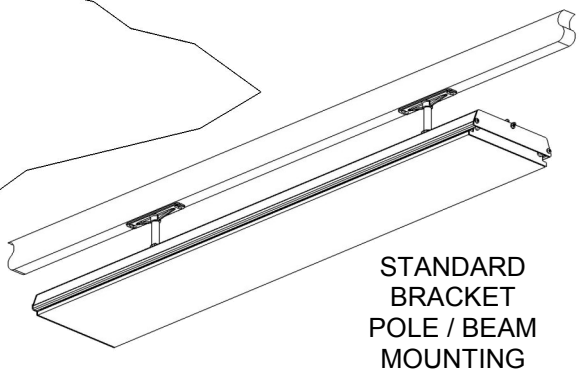
EXTENSION MOUNTING BRACKET



FLUSH MOUNT ENCLOUSURE



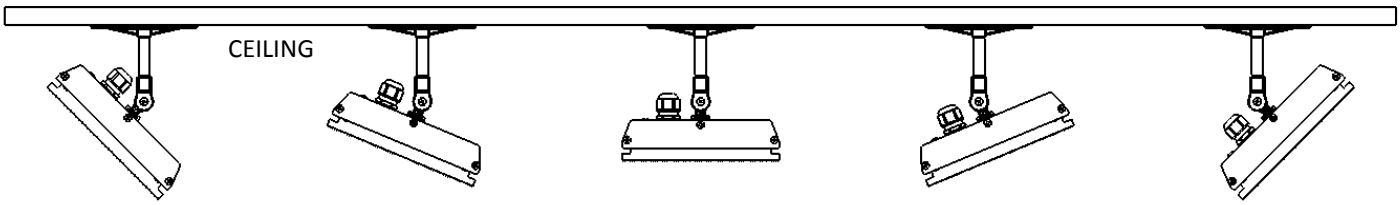
STANDARD BRACKET CEILING

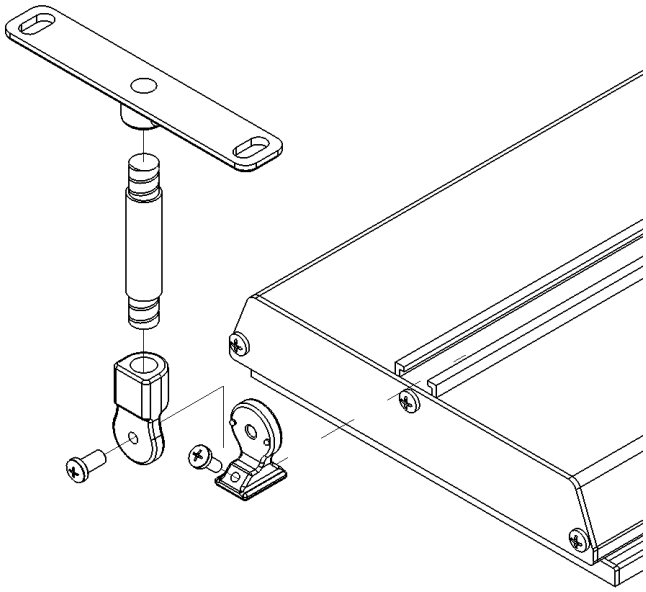


STANDARD BRACKET POLE / BEAM MOUNTING

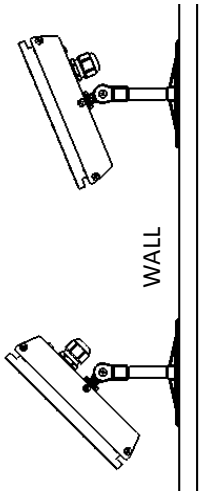
Standard mounting brackets

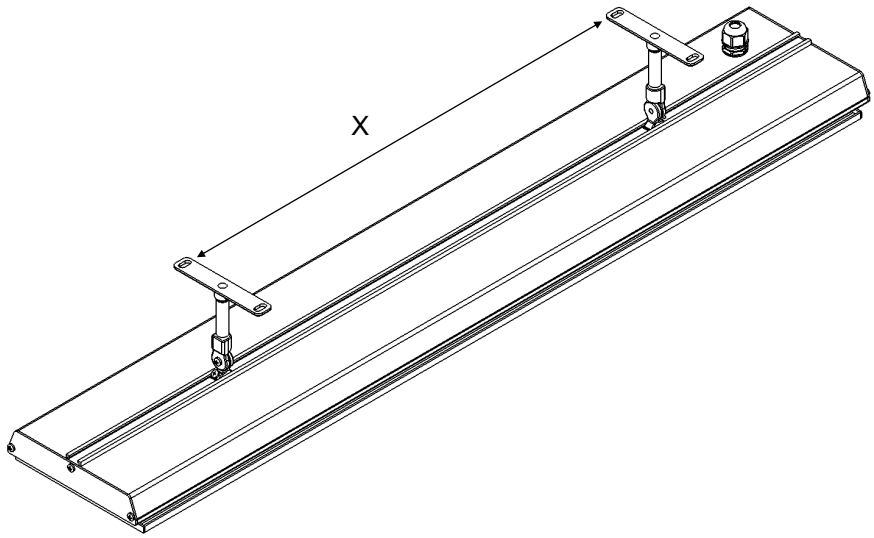
The HEATSTRIP Elegance comes with a pair of standard mounting brackets. These adjustable brackets allow direct ceiling, wall or pole/beam mounting, and come with preset angle options of parallel, 22.5° and 45°.

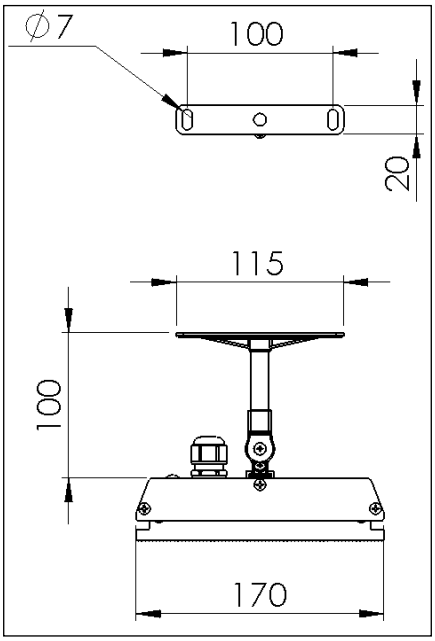




MODEL	"X" MINIMUM DISTANCE (mm)
THE1800	570
THE2400	700
THE3600	1000







PART No	PACKAGED DIMENSIONS (mm)	WEIGHT (kg)	MATERIALS
ZBRAK-110	125 x 150 x 40	0.2	ALLOY

Flush mount enclosure

The Flush Mount Enclosure is an ideal way to neatly install the HEATSTRIP into a ceiling. They are available for all HEATSTRIP Elegance models, and are supplied as a one-piece unit suitable for mounting individual heaters. Flush mounting can be used with plaster or timber lined ceiling materials.

An ideal mounting height is 2.3m-2.5m, with a maximum ceiling height of 2.7m in an outdoor enclosed environment. Maximum mounting heights should be strictly followed, otherwise the performance of the units may be reduced.

A minimum clearance of 50mm behind the enclosure must be provided.

The enclosure is manufactured from powder coated steel.

Please refer to the Flush Mount Enclosure Installation Manual for more detailed installation information.

SUITABLE FOR MODEL	PART No	HOLE CUTOUT DIMENSIONS (mm)	OVERALL DIMENSIONS (mm)	WEIGHT (kg)
THE 1800	THEAC-040	1030 x 240	1080 x 290 x 125	6
THE 2400	THEAC-041	1260 x 240	1310 x 290 x 125	8
THE 3600	THEAC-042	1860 x 240	1910 x 290 x 125	9