

# HEATSTRIP<sup>®</sup>

RADIANT OUTDOOR HEATERS



## Product Manual



## HEATSTRIP<sup>®</sup> ELEGANCE (THE Range)

*Superior Technology. Superior Style.*





## Product Overview

Rev D JUN18

There are 5 different ranges within the electric HEATSTRIP® product category. Each has a different temperature rating making them suited to a variety of applications. Below is a list of some common applications, to assist with the selection of the most effective and efficient series. This is a general guide only, please refer to the Product Manual for each product, for more information.

**HEATSTRIP® Indoor** (THS-A models) is a medium intensity heater used for protected indoor applications only with installation heights up to 2.5m (THS800A) or 2.7m (all other THS-A models).

**HEATSTRIP® Classic** (THH-A models) is a premium high temperature heater and is primarily used for protected outdoor areas with an ideal mounting height of 2.3m to 2.5m and maximum mounting height of 2.7m.

**HEATSTRIP® Elegance** (THE models) is a premium high temperature heater and is primarily used for protected outdoor areas with an ideal mounting height of 2.3m to 2.5m and maximum mounting height of 2.7m.

**HEATSTRIP® Max** (THX models) is an ultra high temperature heater used for uncovered or open indoor or outdoor areas with an ideal mounting height of 2.3 m to 2.7m, and up to a maximum 3.5m for protected indoor applications.

**HEATSTRIP® Intense** (THY models) is an instant high temperature heater perfect for any exposed outdoor or indoor areas with an ideal mounting height of 2.3m to 2.8m, and a maximum of 3m in an outdoor exposed application.

| APPLICATION                                                                     | THS | THH<br>THE | THX | THY |
|---------------------------------------------------------------------------------|-----|------------|-----|-----|
| Indoor insulated areas: classrooms, offices, bathrooms, wet areas, drying rooms | √   | √          |     | √   |
| Outdoor under cover: café, veranda, patio, balcony ceiling height 2.7m or less  |     | √          | √   | √   |
| Outdoor under cover: café, veranda, patio, balcony ceiling height 2.7m or more  |     |            | √   | √   |
| Highly exposed outdoor area                                                     |     |            | √   | √   |
| Indoor open area: warehouse, factory, production areas, sports facilities       | √   | √          | √   | √   |
| Indoor spot heating, above tables, assembly areas                               |     | √          | √   | √   |



HEATSTRIP® Indoor (THS-A)



HEATSTRIP® Classic (THH-A)



HEATSTRIP® Elegance (THE)



HEATSTRIP® Max



HEATSTRIP® Elegance (THY)

(THX)



## HEATSTRIP® Elegance. Superior Technology. Superior Style

After many years of developing, researching and working in partnership with coating technology experts, Thermofilm, a world leader in electric heaters, has produced a unique composition to produce the new generation of outdoor heaters.

HEATSTRIP® Elegance comes in an “off-white” colour which blends

in seamlessly with most white ceilings in alfresco areas.

- Electric radiant heater perfect for your protected alfresco area, pergola, verandah or café
- The elegant, slimline design and “off-white” colour blends in seamlessly with most white ceilings
- World leading element design produces a more compact and higher output heater
- Significantly more cost-effective than bottled gas heaters
- Corrosion-resistant to handle the toughest outdoor environments
- Convenient DIY installation of 1800W and 2400W models, 3600W model must be hard wired
- Optional mounting brackets and controllers
- 2 year residential warranty and 1 year commercial warranty



We recommend installing your HEATSTRIP® Elegance with a timer controller to ensure the unit is turned off after a pre-set time. Thermofilm recommends Model TT-MTM controller which includes a timer function and temperature control.



## 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<sup>2</sup>

#### APPROVALS

AUSTRALIA/NZ

#### MOUNTING HEIGHT

MINIMUM 2.1 m  
 RECOMMENDED 2.3 m to 2.5 m  
 MAXIMUM 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

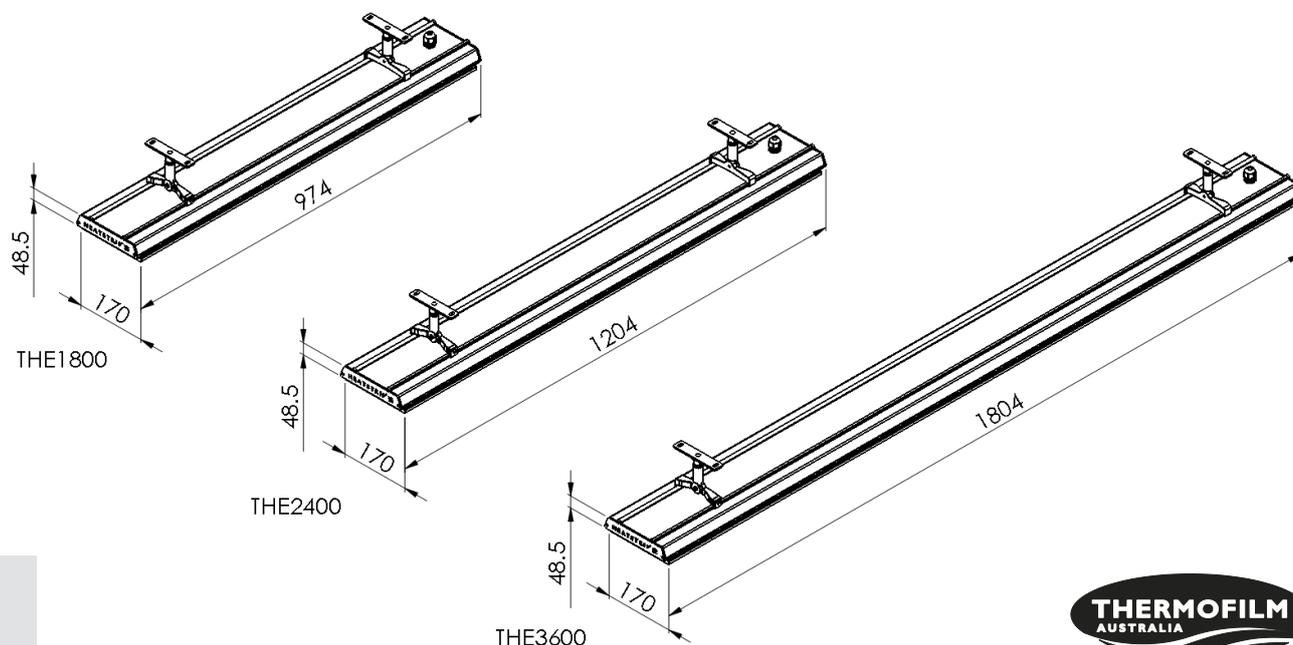
IP55 Protection from water ingress from all directions

#### MATERIALS OF CONSTRUCTION

High temperature coated aluminium alloy

#### COUNTRY OF ASSEMBLY

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:

- 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.  $\$25.00 / 9 \text{ hours} = \$2.78 \text{ per hour}$
- Electricity rate of 25.0 cents/kWh
- All calculations are excluding GST.
  - $1.8\text{kW} \times 0.25 \text{ cents} = \$0.45 \text{ or } 45 \text{ cents per hour}$
  - $2.4\text{kW} \times 0.25 \text{ cents} = \$0.60 \text{ or } 60 \text{ cents per hour}$
  - $3.6\text{kW} \times 0.25 \text{ cents} = \$0.90 \text{ or } 90 \text{ cents per hour}$



Calculations of yearly running cost are based on 180 hours usage

$180 \text{ hours} \times \$2.78 = \$500.40$  yearly running cost for outdoor gas heater

$180 \text{ hours} \times \$0.45 = \$81.00$  yearly running cost for 1800W Heatstrip Elegance

$180 \text{ hours} \times \$0.60 = \$108.00$  yearly running cost for 2400W Heatstrip Elegance

$180 \text{ hours} \times \$0.90 \text{ cents} = \$162.00$  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.

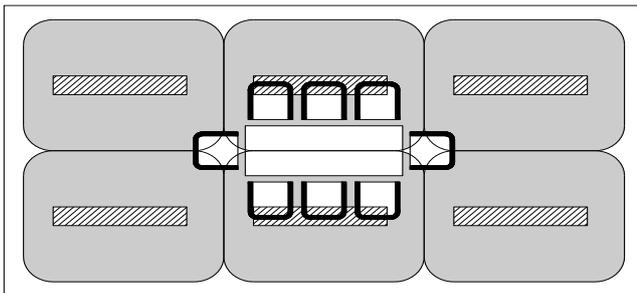
Option 1 is to comfort heat the entire area based on the total dimensions of the space, regardless of whether the entire area is being fully occupied.

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

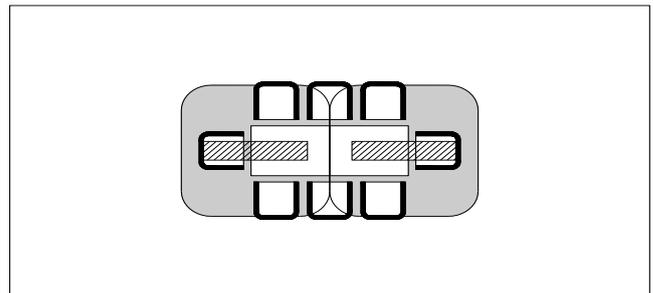
Often it is more practical and efficient to spot heat high use areas. Spot heating will reduce both the initial capital cost as well as the ongoing running costs. Spot heating will allow the area to be "zoned", meaning only the areas that are being used are heated, such as tables in a restaurant or outdoor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

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

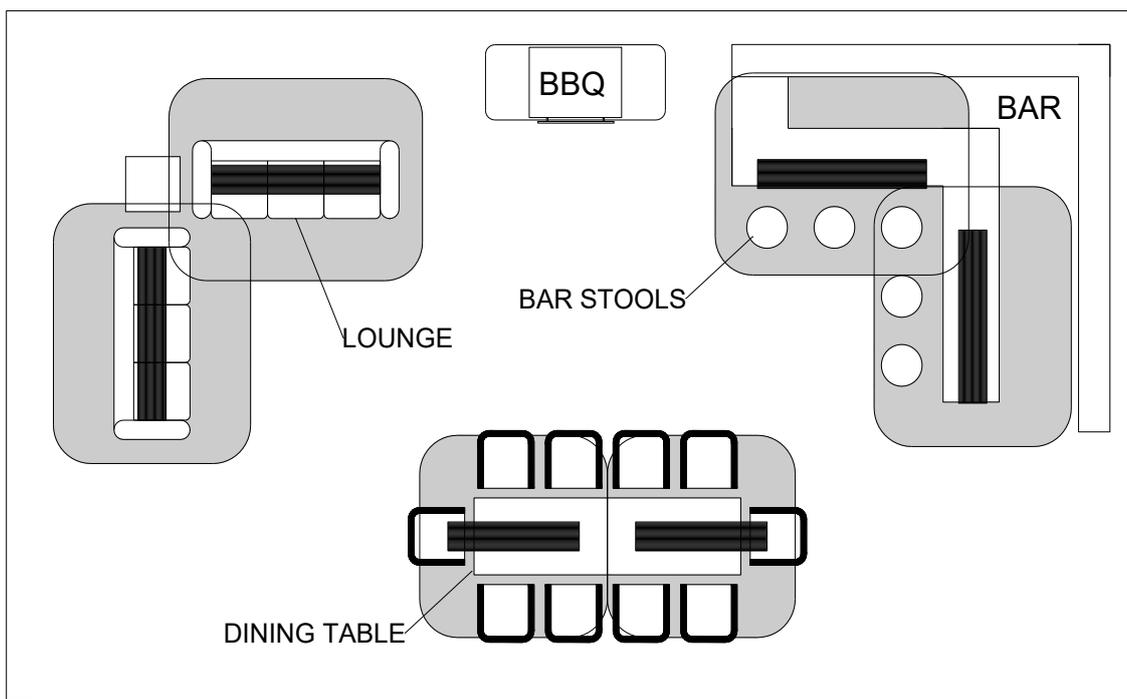
The bottom layout shows the flexibility of using HEATSTRIP® to provide a comfortable environment, even when the layout of the area is very unusual.



Option 1: 6 x THE2400



Option 2: 2 x THE2400





## Radiant footprint

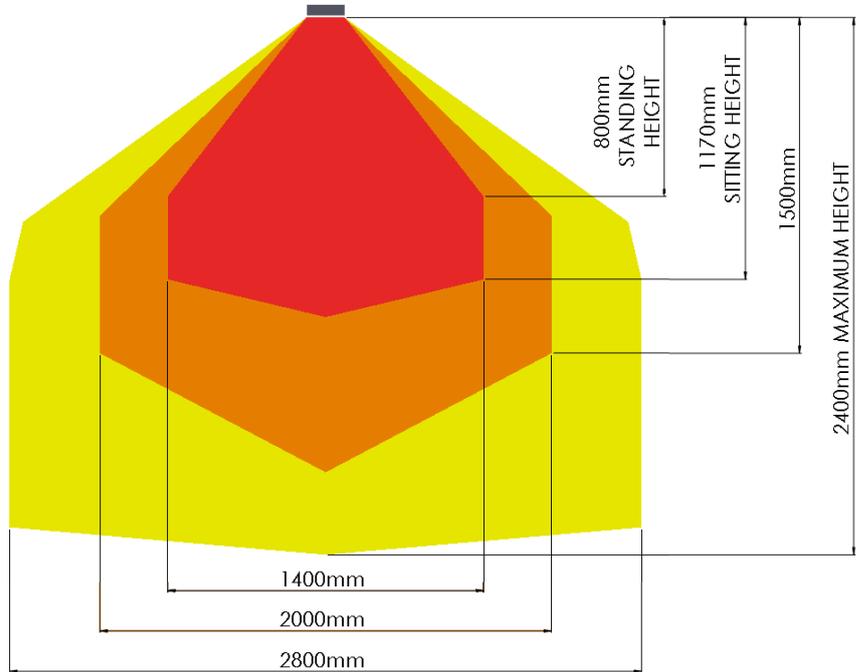
HEATSTRIP® electric heaters produce radiant heat which heats objects rather than the air. Therefore, it is imperative that objects to be heated (ie. people), are within the direct radiant footprint of the heater.

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.

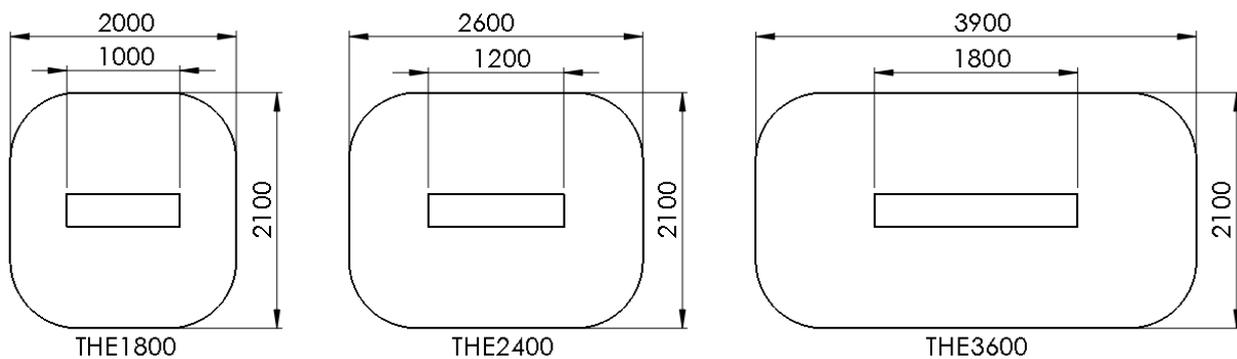
Note that the temperature is similar for all 3 models, regardless of the wattage however, as the size increases and the length of the unit increases, the radiant footprint will be longer.



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.

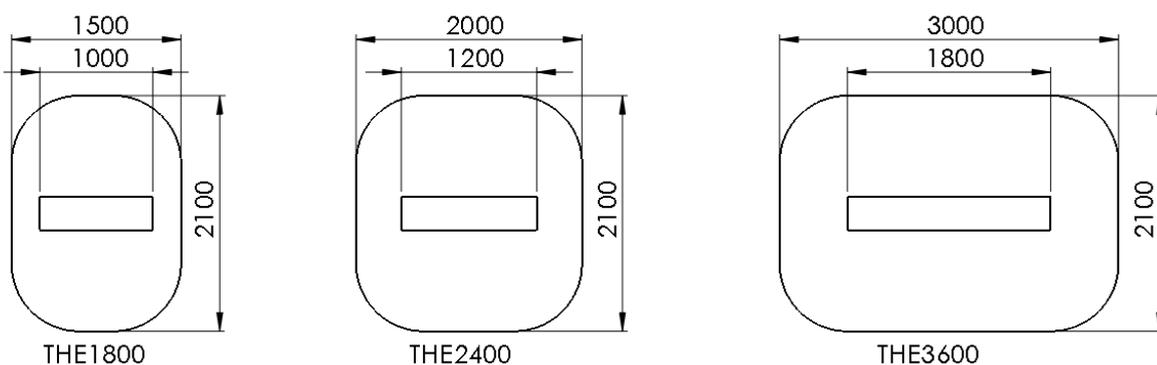
### HEATED AREA

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<sup>2</sup> for indoor spot heating; 500W/m<sup>2</sup> for protected outdoor areas, and 600W/m<sup>2</sup> 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<sup>2</sup> and Model THE2400 will cover a *maximum* of 4.8m<sup>2</sup>.

For angled wall mounting applications, the coverage is reduced by up to 40%.

| MODEL    | INDOOR PROTECTED (m <sup>2</sup> ) | OUTDOOR ENCLOSED (m <sup>2</sup> ) | OUTDOOR EXPOSED (m <sup>2</sup> ) |
|----------|------------------------------------|------------------------------------|-----------------------------------|
| THE 1800 | 4.5                                | 3.6                                | 3                                 |
| THE 2400 | 6                                  | 4.8                                | 4                                 |
| THE 3600 | 9                                  | 7.2                                | 6                                 |

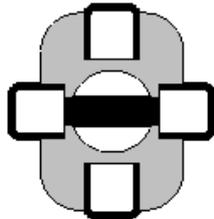




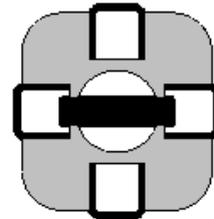
## Table layout

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.

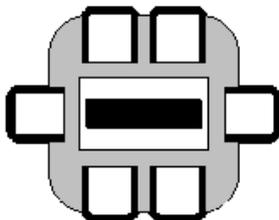
Selections are based on HEATSTRIP® Elegance being mounted at 2.4m from the floor in a fully enclosed undercover outdoor area.



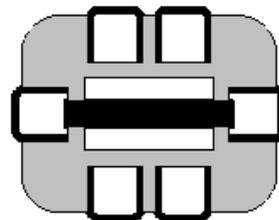
THE1800



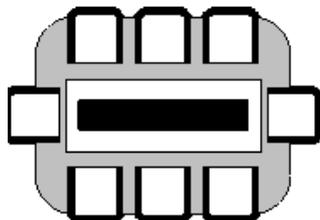
THE2400



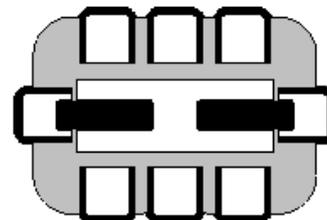
THE2400



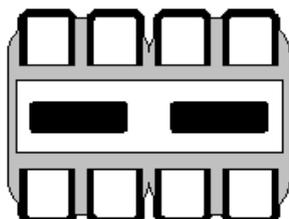
THE3600



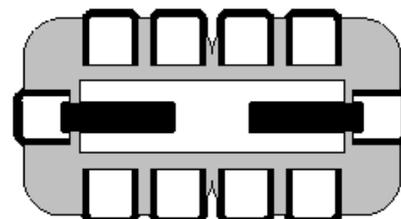
THE3600



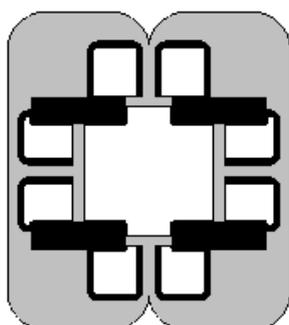
2 x THE1800



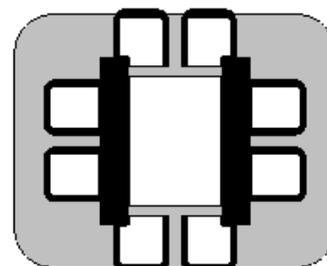
2 x THE1800



2 x THE2400



4 x THE1800



2 x THE3600



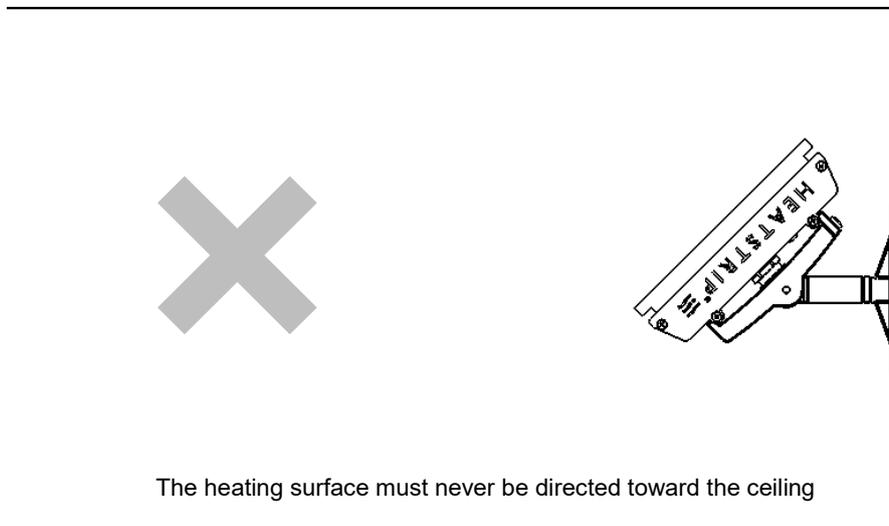
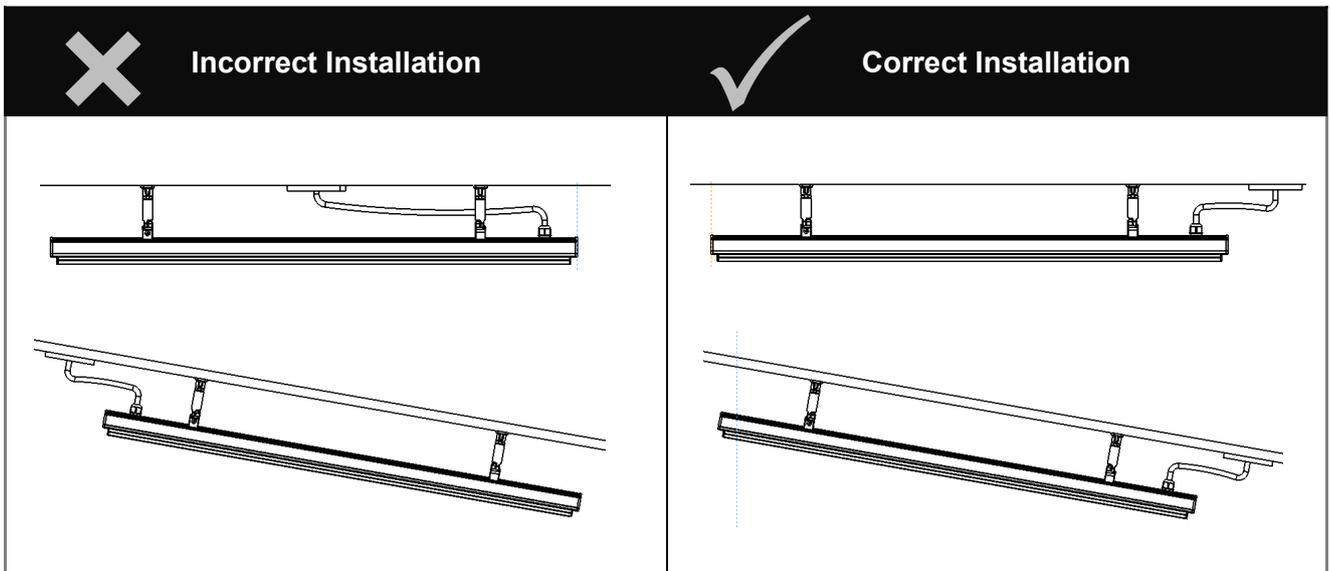
## Installation Requirements

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.

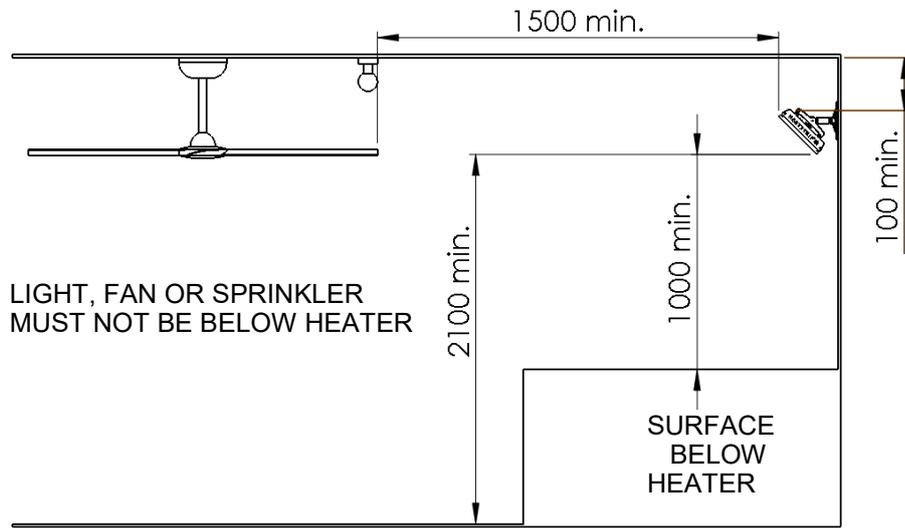




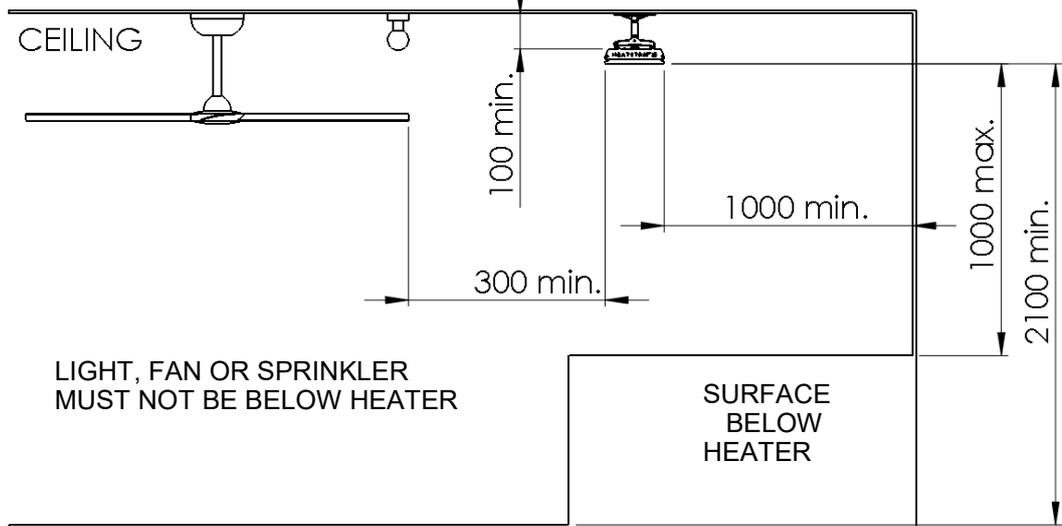
## Installation location —the diagrams below provide the minimum recommended clearances in (mm).

**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.

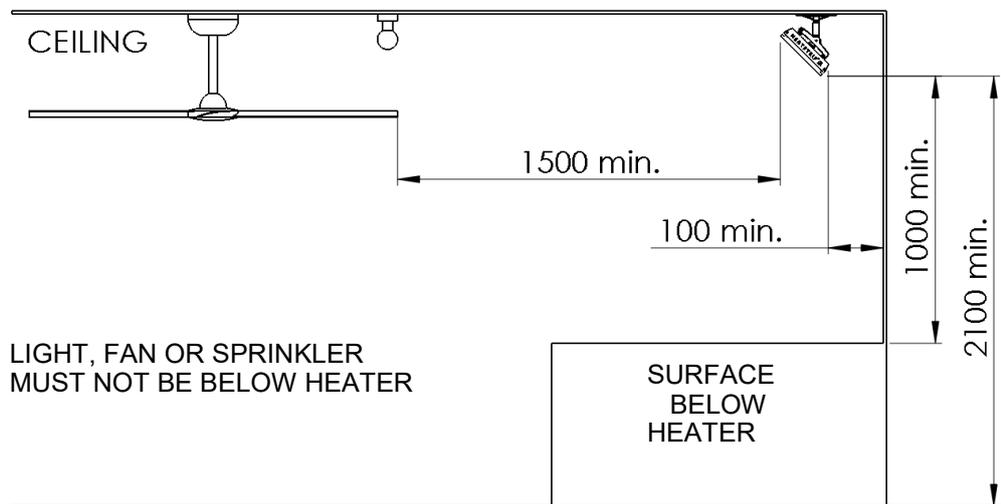
### Angled Wall Installation



### Ceiling Installation



### Angled Ceiling Installation

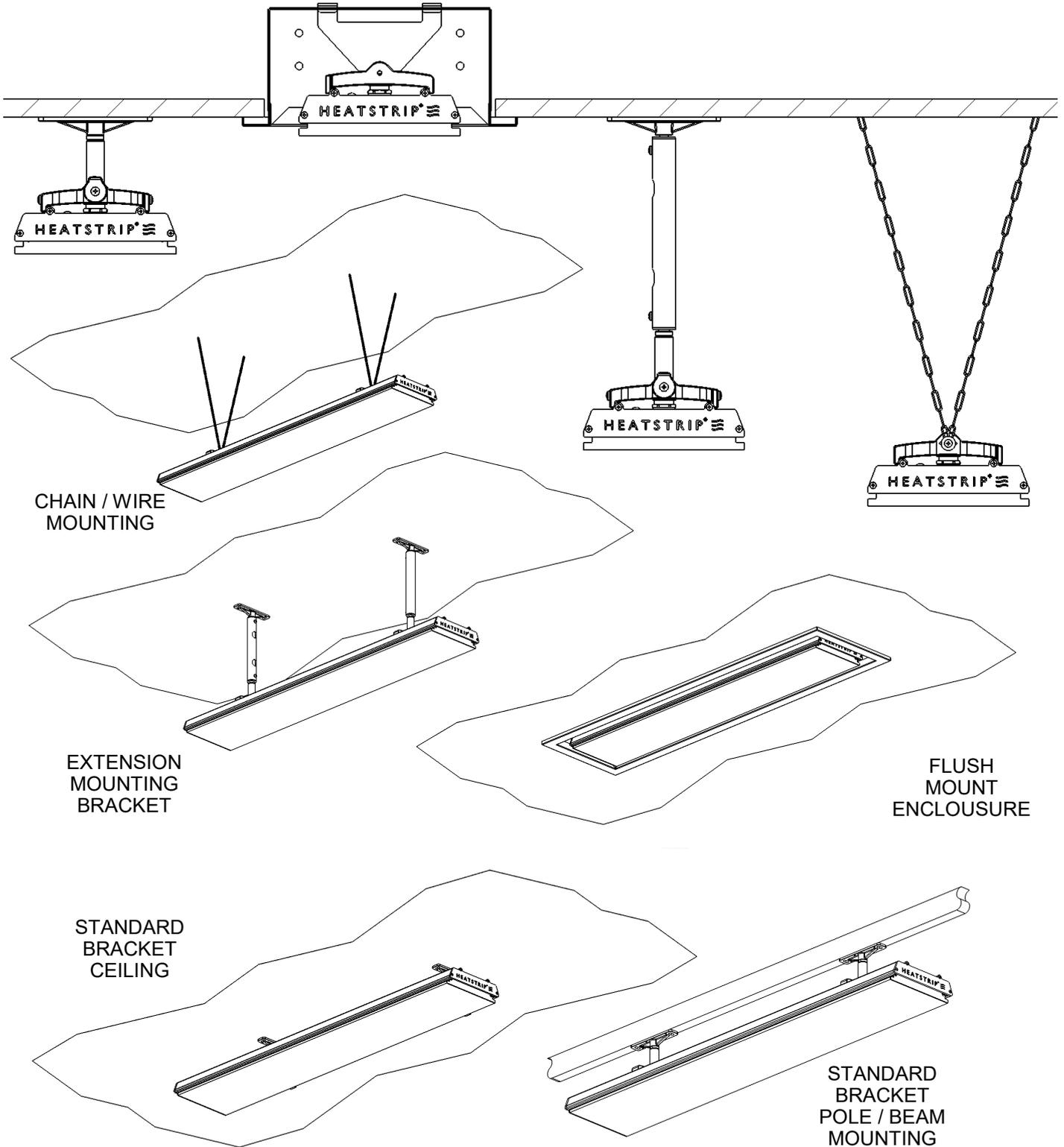




## Mounting options

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,



CHAIN / WIRE MOUNTING

EXTENSION MOUNTING BRACKET

FLUSH MOUNT ENCLOSURE

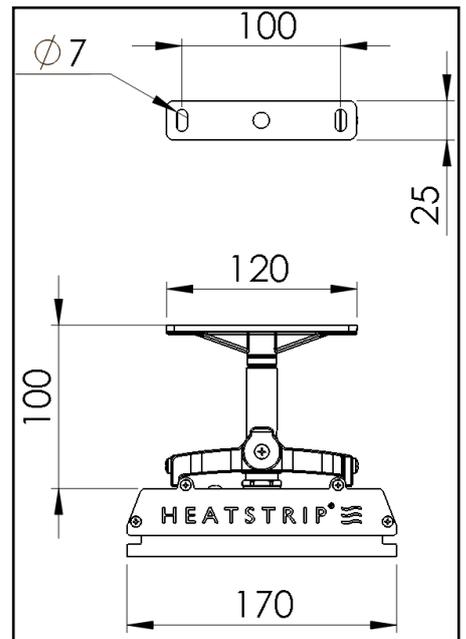
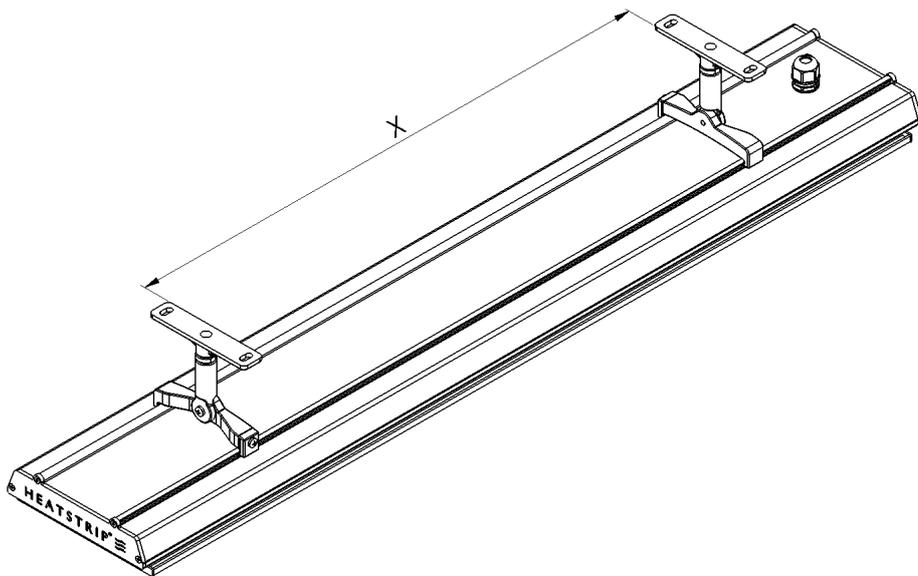
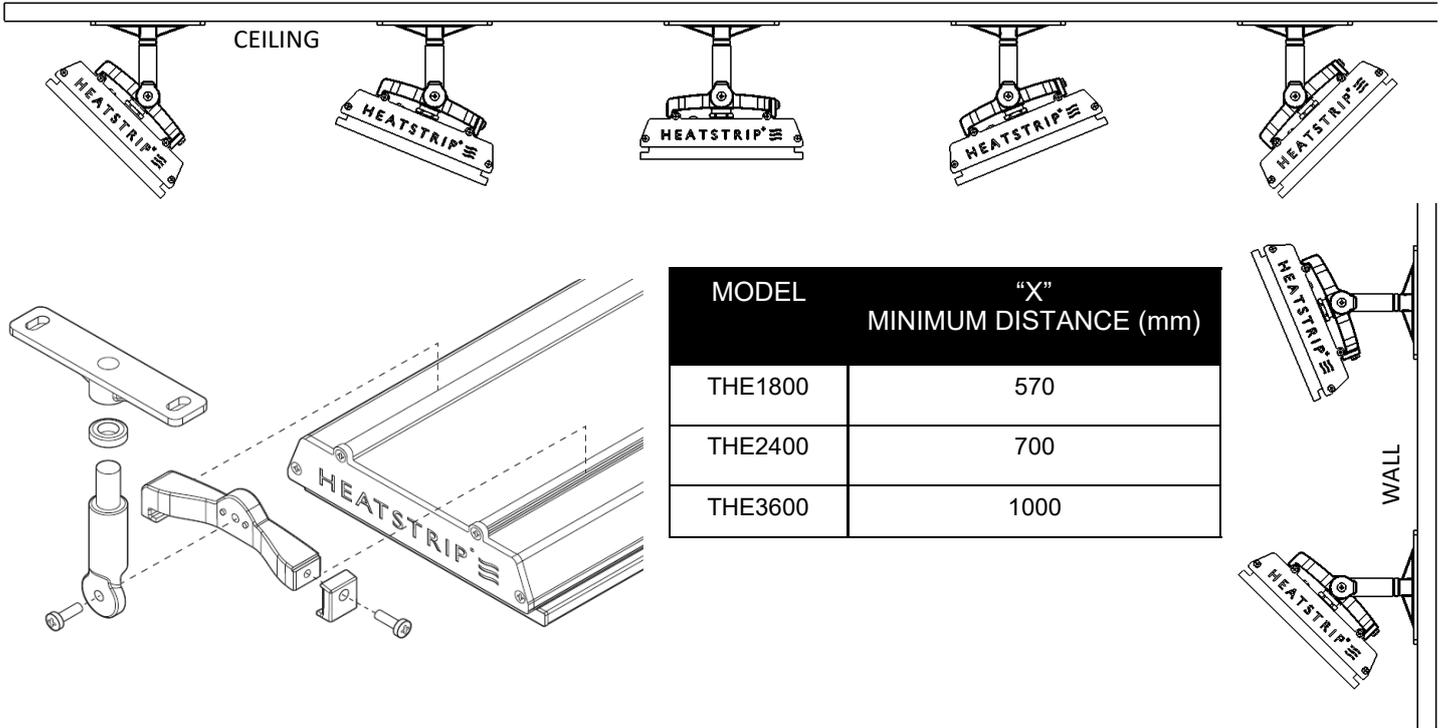
STANDARD BRACKET CEILING

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°.



| PART No    | PACKAGED DIMENSIONS (mm) | WEIGHT (kg) | MATERIALS |
|------------|--------------------------|-------------|-----------|
| ZBRAK-113W | 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.

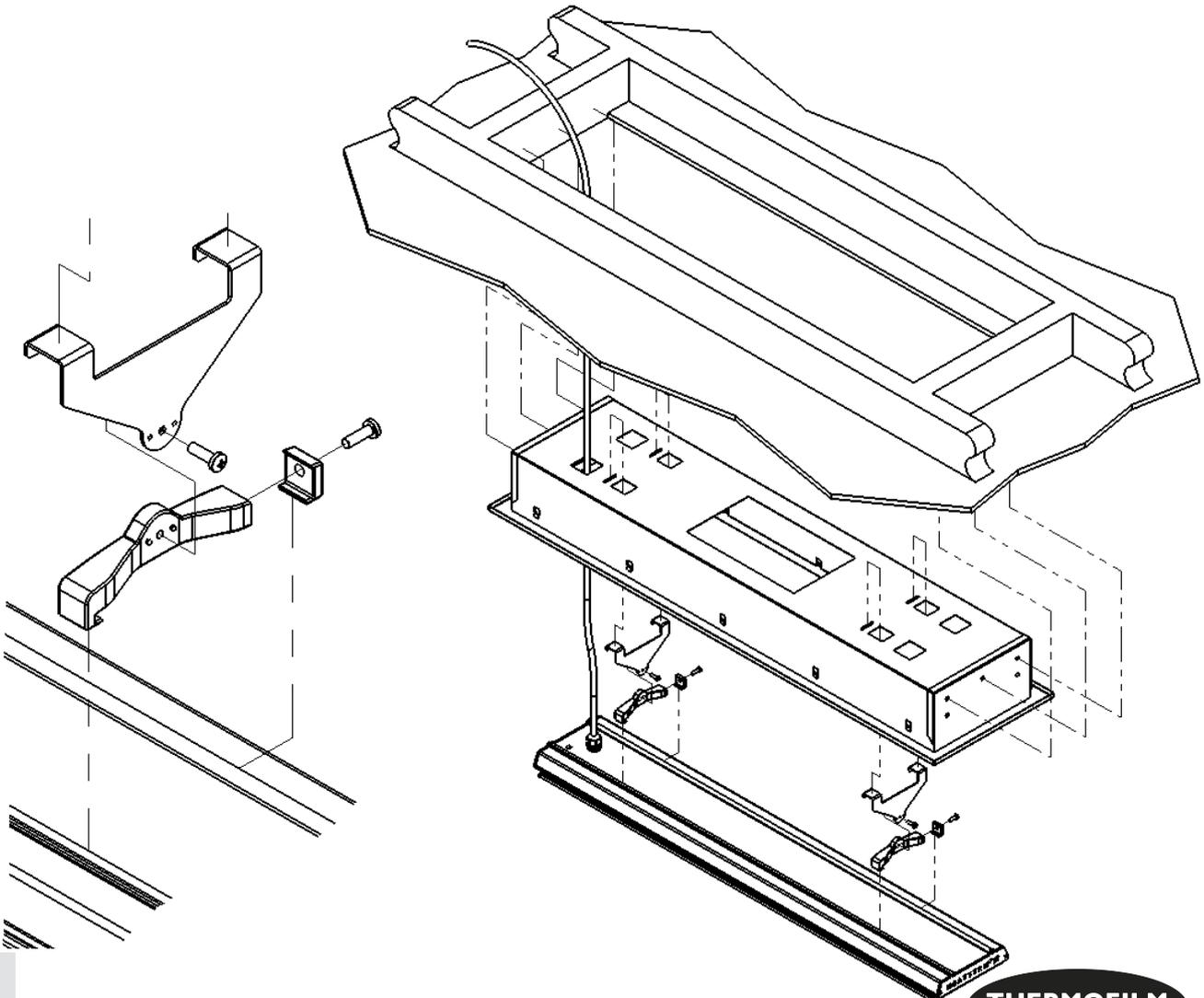
An ideal mounting height is 2.3m-2.5m, with a maximum ceiling height of 2.7m in an outdoor enclosed environment. Maximum mounting heights should be strictly followed, otherwise the performance of the units may be reduced.

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           |





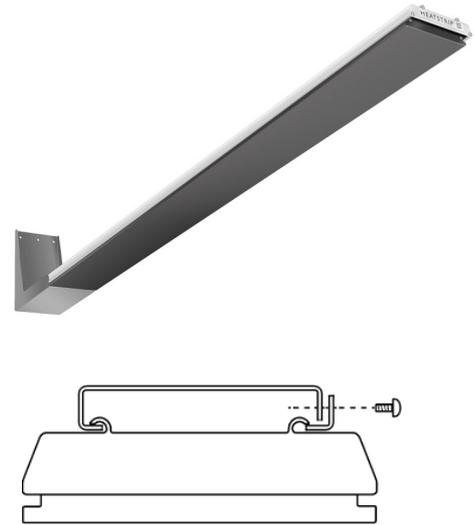
## HEATSTRIP Wall Mounting Kit - (THHAC-028)

HEATSTRIP Wall Mounting Kit is an ideal way to install units into hard to mount applications where wall mounting is preferable to direct overhead mounting, applications include heating over tables, lounges, work stations etc. These kits are suitable for all HEATSTRIP Elegance & Classic models.

### Instructions:

Fix the wall bracket in the desired location using 6 x 8 mm fasteners that will be more than adequate to safely support the bracket and the HEATSTRIP unit.

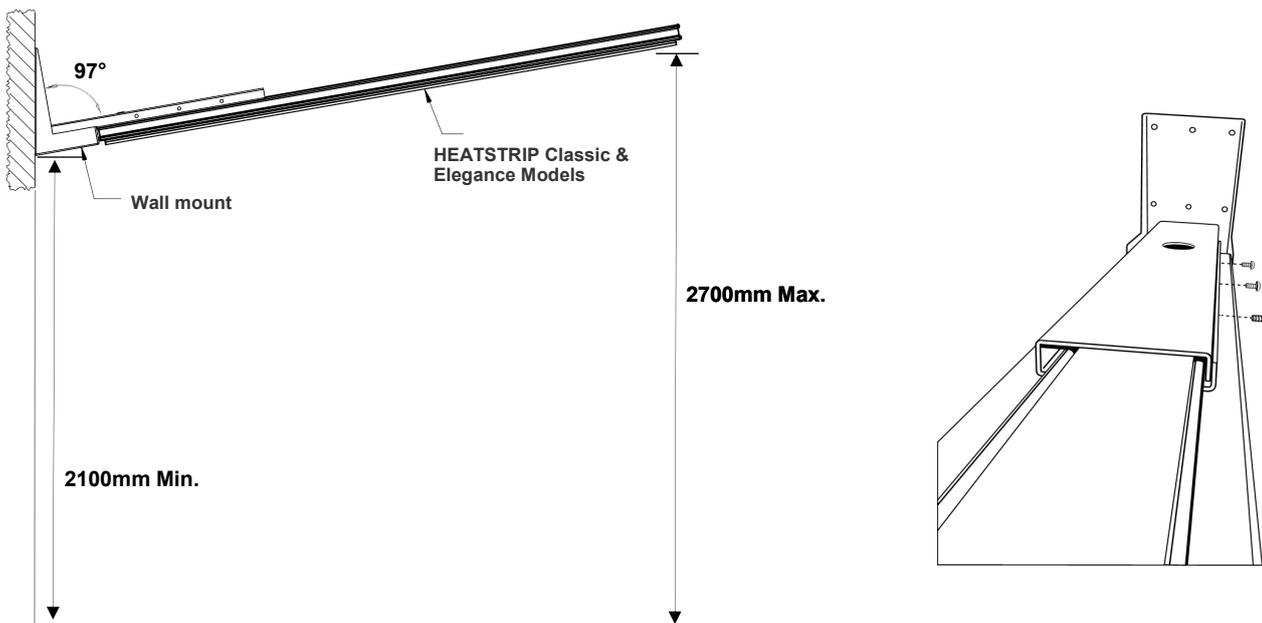
When bracket is installed lift the heater into position passing the power cord through the hole. Locate the heater so the L bracket fits into the mounting groove located on the back of the HEATSTRIP. Position the angle piece into the mounting groove on opposite side of the heater and secure firmly onto the bracket using the 3 screws provided.



### Installation Location

The below diagram outlines the recommended clearances.

Note: The minimum height from the ground to bottom of the bracket is 2.1m, and the maximum height from the ground to the end of the heater is 2.7m. We recommend a mounting height of 2.3 to 2.5m.



FLOOR

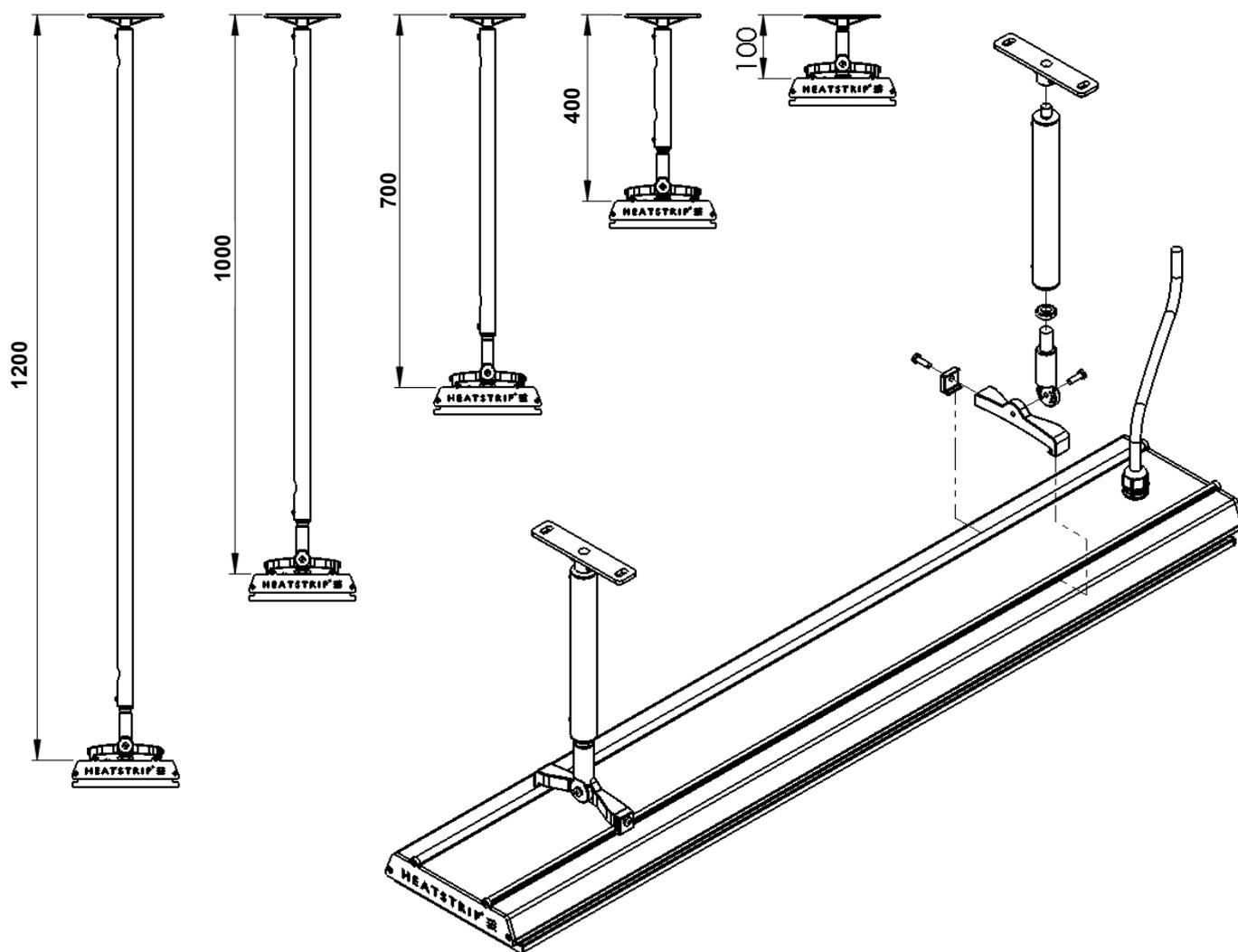
| DIMENSION (mm)              | WEIGHT (Kg) | MATERIALS                |
|-----------------------------|-------------|--------------------------|
| 550 (L) x 165 (W) x 250 (H) | 3.5         | Powder coated Mild Steel |



## Extension Mount Bracket

The Extension Mount bracket allows HEATSTRIP® Elegance units to be lowered from high ceilings using rigid connections. The standard length options as part of the kit are 300mm, 600mm, 900mm and 1200mm.

The extension mount bracket utilises component from the standard bracket kit which is supplied with each heater. For minimum distance requirements between poles please refer to page 14.



| PART No   | DIMENSIONS (mm) | WEIGHT (kg) | MATERIALS | NOTES                                  |
|-----------|-----------------|-------------|-----------|----------------------------------------|
| THEAC-043 | 300 x 20 x 20   | 0.21        | Aluminium | Kit includes 2 x 300mm extension pole  |
| THEAC-044 | 600 x 20 x 20   | 0.38        | Aluminium | Kit includes 2 x 600mm extension pole  |
| THEAC-045 | 900 x 20 x 20   | 0.55        | Aluminium | Kit includes 2 x 900mm extension pole  |
| THEAC-046 | 1200 x 20 x 20  | 0.71        | Aluminium | Kit includes 2 x 1200mm extension pole |



## Chain / Wire Suspension Mount

HEATSTRIP® Elegance can be suspended using chain or wire to lower the installation height from high outdoor or indoor roofs or ceilings.

Thermofilm does not provide any dedicated installation kit for this type of mounting, however the following information may be used to assist in safely installing the HEATSTRIP® Elegance.

Any chain or wire must be suitably rated to withstand the weight of the heater.

The use of chain or wire mounting is NOT recommended for unprotected outdoor installations.

It is recommended to use the component from the standard bracket kit (shown below) which is supplied with each heater to attach any chain or wire to the heater.

For minimum distance requirements between poles please refer to page 14.

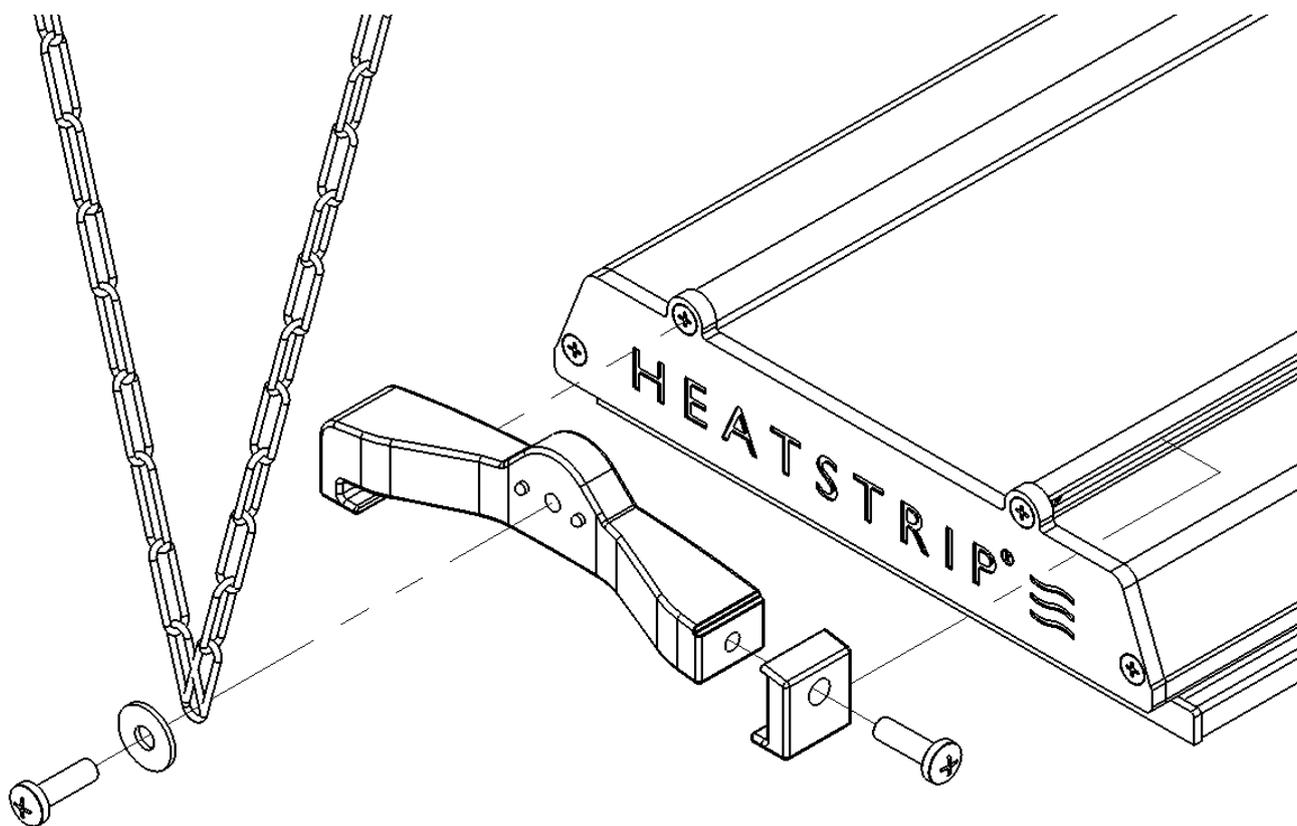


Diagram above shows one potential means of installation using chain or wire



## Safety

HEATSTRIP® Elegance has an IP rating of 55. This means it is safe for water ingress from all directions. The HEATSTRIP® can be safely hosed down.

HEATSTRIP® has undergone extensive testing both in laboratory conditions, in Thermofilm's manufacturing facility in Melbourne and field trials in Australia and overseas. It is this testing that gives the purchaser the confidence of a high quality product. Independent laboratory testing has confirmed Thermofilm's full compliance with Australian and other International Standards including CE, AS/ANZ, UL/CSA

HEATSTRIP® is Class 1 equipment and must be earthed.

In operation, this heater is VERY HOT— do not touch any part of the heater while it is turned on. Do not touch any part until 30 minutes after it is turned off.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or intellectual capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure they do not play with the appliance.

**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.

Do not allow any cables, furnishings, flammable materials or other items come in contact with any surface of the heater.

If installed in wet areas, the heater switches or controls must be located so that they cannot be touched by persons in the bath or shower.

The heater needs to be installed as per the installation instructions paying special attention to the minimum clearances. The heater needs to be mounted on a rigid bracket or fixing.

The heater must not be mounted immediately below or in front of a socket outlet.

The heater comes in both plug (1800W & 2400W) and hardwired (3600W) versions. In both cases the fixed wiring must be installed by a licensed electrician in accordance with the relevant wiring regulations. Provision for disconnection must be incorporated into any fixed wired heater installation.

The supply cord can not be replaced. If the supply cord is damaged the appliance shall be scrapped or returned to the point of purchase for return to Thermofilm.

## Maintenance

The HEATSTRIP® Elegance is made from durable materials, however regular care and maintenance of your heater will help prolong the life of the heater.

It is recommended that you clean the heater with a soft cloth gently wipe the surfaces of the heater with a mild detergent to remove the built up contaminants from the environment. Then rinse all detergent off the heater. All chemicals in the atmosphere including cigarette smoke, pollution etc. will tarnish the surface of the heater. In this case, additional cleaning and maintenance may be required. Carrying out the cleaning process at least every three months will reduce the amount of build up and keep the HEATSTRIP® in good condition. If the heater is in a corrosive environment eg. salt spray, we recommend that you clean your heater with a light spray of fresh water every week. After cleaning, turn the heater on for 20 minutes to dry any water residue and prevent water staining. Before cleaning or inspection activity, the heater must be switched off and cooled down completely. Do not use any abrasive materials or products to clean the heater, this includes solvents, citrus based cleaners or other harsh cleaning products.

When handling the heater, ensure that your hands are clean or that you use clean gloves as grease or dirt can mark the surface of the heater.

Do not use high pressure water to clean heaters.



## HEATSTRIP Plug In Remote Controller

The TT-MTR-PLUG has been designed to provide easy remote control timer functionality to wall socket powered HEATSTRIP® heaters. The unit can however be used to remotely operate with timer functionality any device powered by a standard 10A Australian wall socket outlet.

The TT-MTR-PLUG controller consists of a remote control and a plug-in wall socket timer unit to provide easy wireless timer operation.

### Design Features

- The TT-MTR-PLUG provides an easy means of remotely turning on appliances that are normally permanently connected to a standard wall socket.
- An easily selected 1 hour, 2 hour and 4 hour timer function accessible on both the wall unit and remote
- Programmable remote control unit capable of controlling multiple units.

### Specifications:

|                     |                                             |
|---------------------|---------------------------------------------|
| Remote battery      | CR2025, 3V, Lithium                         |
| Remote range        | 10m                                         |
| Wall socket supply  | 220V — 240V, 50Hz                           |
| Max load            | 10A (2400W)                                 |
| Standby consumption | <1W                                         |
| Remote frequency    | 38kHz IR                                    |
| Approvals           | Australian Standards AS/NZ 3105, 3112, 3100 |
| Packaged dimensions | 140 x 65 x 67                               |
| Unit weight         |                                             |





## HEATSTRIP Wall Mounted Controller with Remote

For hardwired installations the HEATSTRIP® Elegance can be controlled via a simple on/off wall mounted switch, however it is recommended to use a controller with a multiple heat setting and a timer, to give the best performance and lowest running cost. This controller is optional, not mandatory.

### TT-MTM Wall Controller

This controller is a custom designed and manufactured controller for HEATSTRIP® heaters. It has been designed for ease of use and to provide low running costs of your heater. It provides both temperature control (allowing the user to turn the heat output up or down depending on the ambient temperature and conditions) and a timer for automatic heater shut-off operation.

The timer function has four settings: 1 hour, 2 hours, 4 hours or constantly on. This feature is ideal for applications such as BBQ, alfresco areas, restaurant dining, assembly line production etc. when continuous heat is not required. The timer also reduces the likelihood of heaters being inadvertently left turned on.

Depending on the ambient temperature there may be a requirement to adjust the heat output of the heater. The controller has 3 settings, they are High, Medium and Low.

The controller allows a combination of the multiple timer (1/2/4 hour) and heat outputs (High/Medium/Low).

The controller comes with a remote control unit which provides convenient control of the heater power output and timer functions.

### Controlling multiple heaters

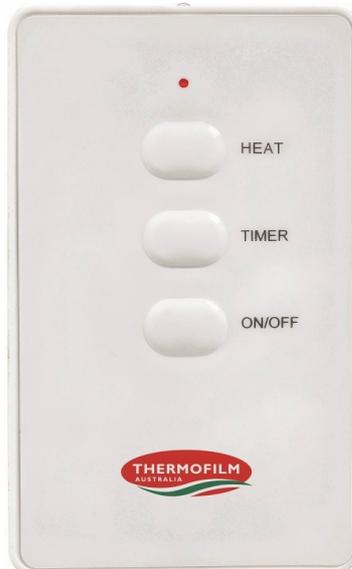
It is possible to use one wall controller to control multiple heaters. The wall controller is rated at 16 Amps and 240 volts. For a larger current draw, talk to your electrician who can use a relay to connect more units.

### Remote pairing

All units operate using the same remote control frequency, therefore, multiple wall controllers can be operated using a single remote control. The remote will function at distances up to 8m when used in a straight line. This distance reduces when used at an angle.

### Dimmers

The use of dimmers with the HEATSTRIP is NOT recommended.

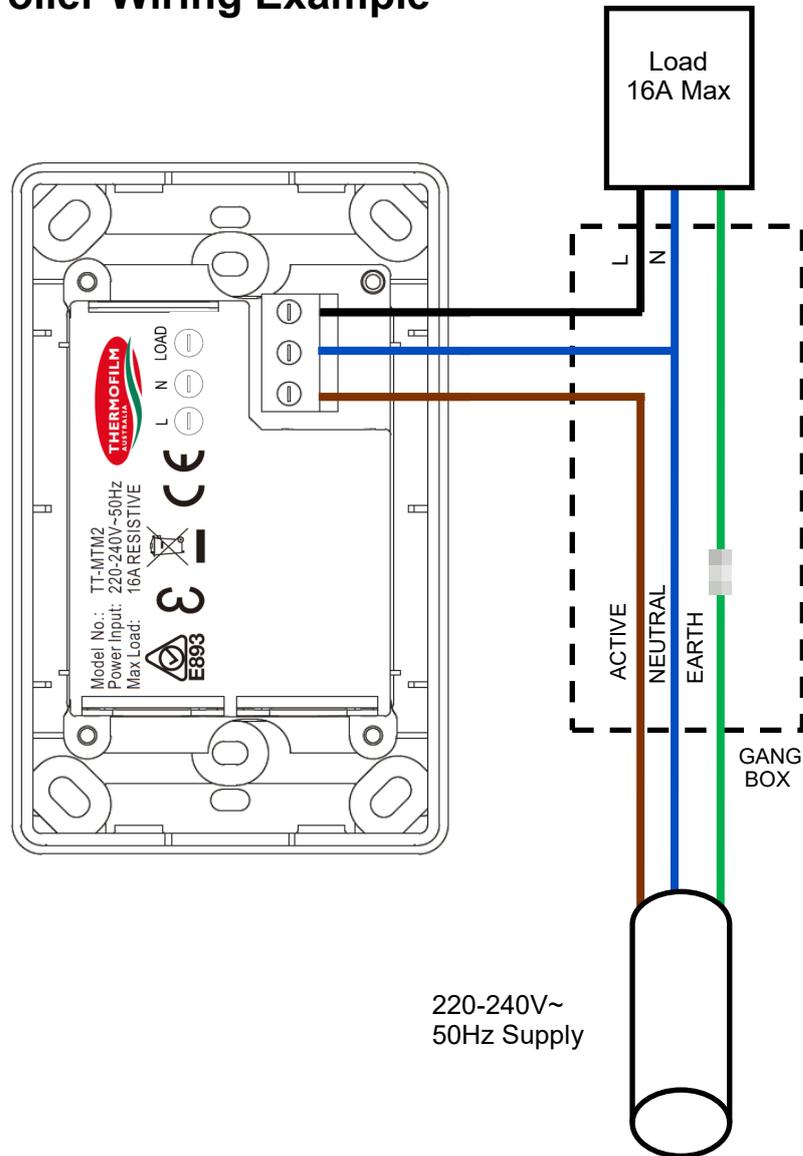


| MODEL  | MAXIMUM VOLTAGE (Volts) | MAXIMUM CURRENT (Amps) | PACKAGED DIMENSIONS (mm) | UNIT WEIGHT (kg) |
|--------|-------------------------|------------------------|--------------------------|------------------|
| TT-MTM | 240                     | 16                     | 150 x 95 x 55            | 0.3              |



## TT-MTM CONTROLLER INSTALLATION GUIDE

### Controller Wiring Example



The TT-MTM controller requires sufficient air circulation in order to provide continuous operation on the high power load setting. The vents must remain clear at all times; never block or cover the vents.

An ideal controller installation will provide significant space around the back of the controller. Installing into restricted spaces, such as brick walls, may result in overheating if adequate ventilation is not provided.



## Heater wiring schematic diagrams

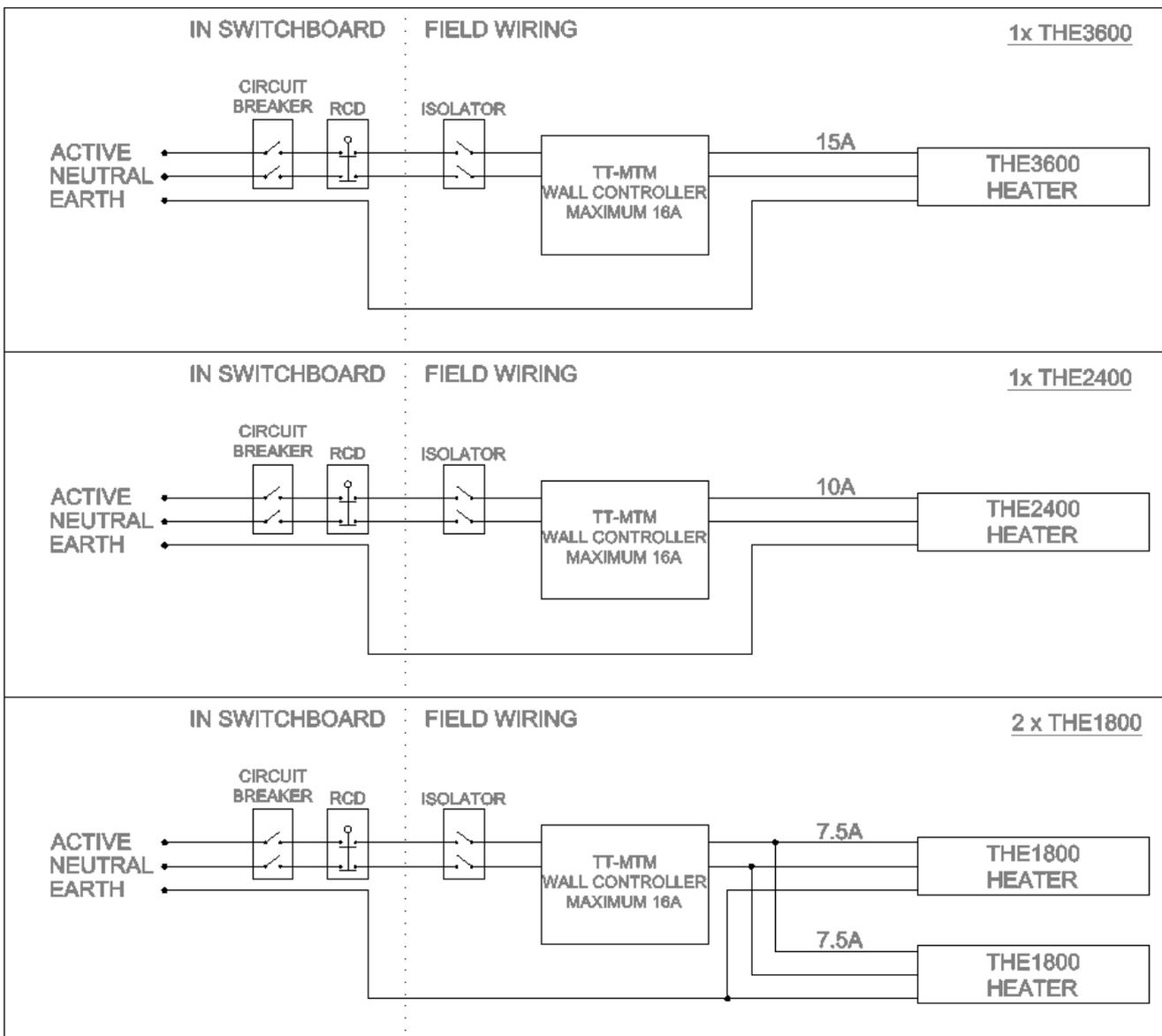
It is recommended to install an ON/OFF isolation switch before the controller and ensure the unit is turned OFF after use.

Multiple heaters can be operated using a single controller, however the maximum current rating of 16A must not be exceeded. For example, 2 x THE1800 can be connected directly to the controller.

Below are example circuits indicating potential installation configurations.

Always check with your electrician and ensure all wiring is in accordance with local regulations.

To control multiple units from one wall controller when the combined current rating is over 16A, it is recommended to talk to your electrician who will use a relay or contactor.



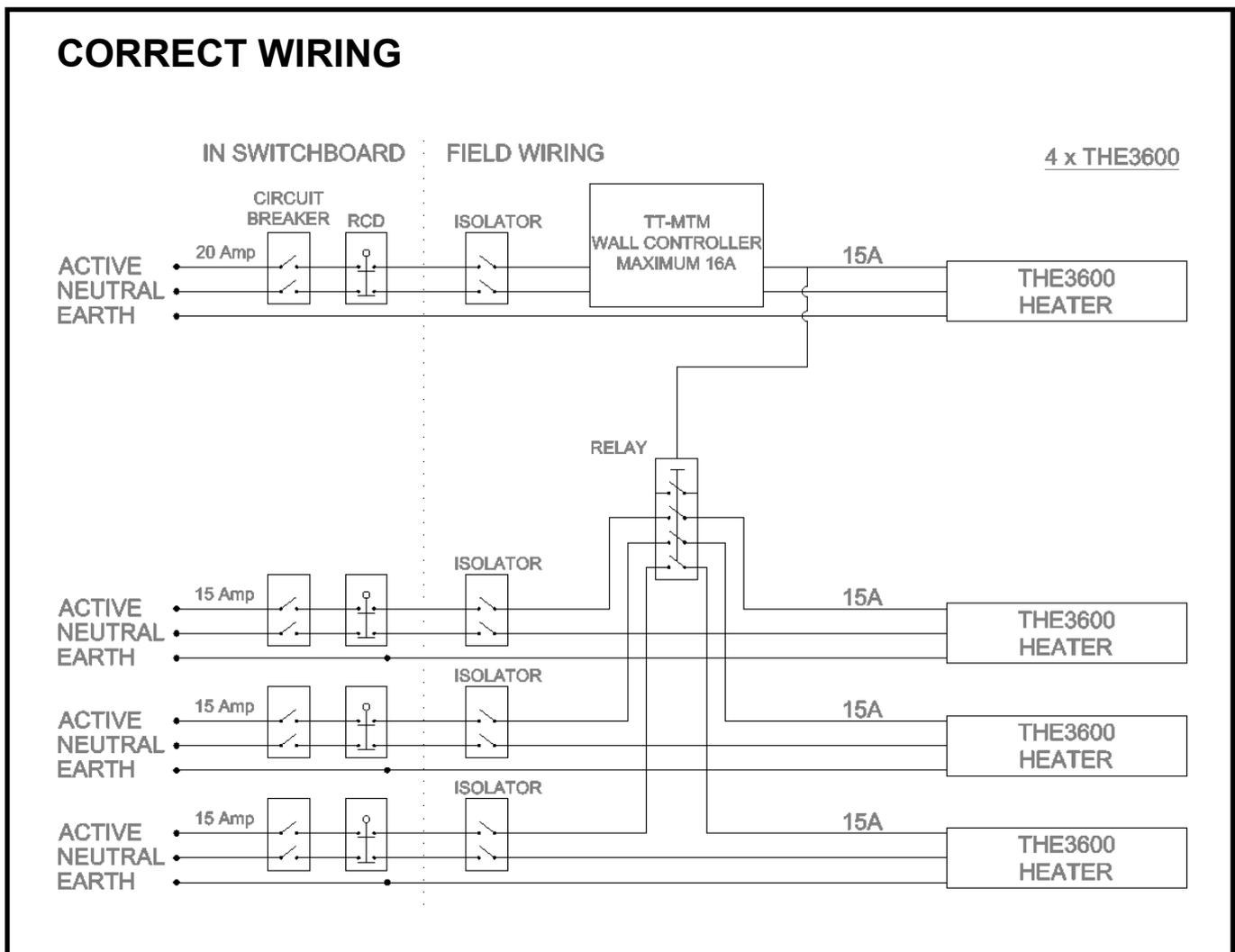
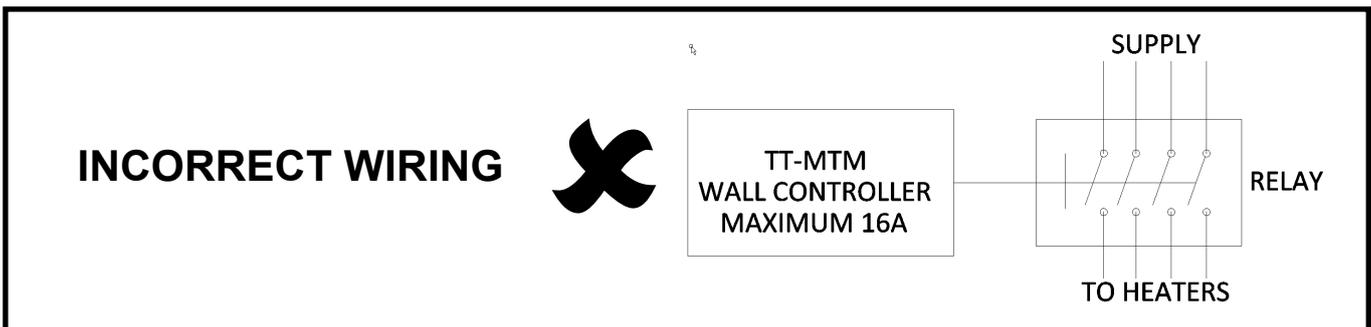


## Heater wiring schematic diagram with relays

When multiple heating units need to be connected from a single controller a relay will be required. It is recommended that you talk to your electrician for more detail. Below is an example circuit indicating a potential installation configuration. Always check with your electrician and ensure all wiring is in accordance with local regulations.

Note to electrician: The controller modulates the heat output using a "timed on / timed off" function. The controller does not modulate the voltage output. A relay is therefore suitable for this application.

**CAUTION: A MINIMUM 250W LOAD MUST BE PLACED ACROSS THE CONTROLLER**  
 Failure to provide this minimum load will potentially damage both the relay/contactors AND





## Warranty Terms & Conditions

The below Warranty Terms and Conditions apply for **New Zealand and Australia only**. For international warranty please refer to international warranty terms and conditions.

Thermofilm warrants to the original owner that HEATSTRIP Elegance products will be free from defects in materials and workmanship for a period of 24 months from the date of purchase for residential applications and 12 months for commercial applications in accordance with the following warranty terms and conditions.

Provision of this warranty is subject to:

- The HEATSTRIP® products must be installed in accordance with the Installation Instructions and relevant electrical standards and codes.
- The HEATSTRIP® products must be maintained and cleaned according to instructions detailed in the Installation Manual.
- There is no warranty expressed or implied with regard to capacity requirements. The selection of the unit or units depends entirely upon the system design and capacities as determined by the purchaser.
- The customer has not repaired, opened or altered the product in any unauthorised manner.
- This warranty excludes damage to the product or components arising from circumstances outside the control of Thermofilm, including, but not limited to, where the product is not used for intended purpose; where the product has been rectified in any way; incorrect installation; incorrect power supply; damaged caused during delivery; misapplication, misuse, abuse, vandalism, lack of maintenance or accident.
- Thermofilm's obligations under this warranty are limited to repair or replacement at Thermofilm's factory of any components of the product which Thermofilm identifies to its satisfaction to be defective.
- Transportation charges involved in return of the product to the Thermofilm factory (or any other location authorised in writing by Thermofilm) is the sole responsibility of the customer.
- All products are inspected and tested before despatch and are at the risk of the purchaser after the shipment from the Thermofilm factory, if not delivered by Thermofilm to destination.
- No products or components will be supplied in advance of an examination of the faulty product or components by Thermofilm or an authorized representative of Thermofilm.
- Thermofilm does not participate in any site related costs or labour expenses incidental to replacement of parts, repairing, removing, installing, servicing, transportation or handling of parts to complete products, and assumes no liability on parts repaired or replaced without written authorisation. Thermofilm shall not be liable for any default or delay in performance of its warranty obligations caused by any circumstances beyond its control, including, but not limited to, judicial or government restrictions, strikes, fires, floods, abnormal weather conditions, delayed supply of components.

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 Thermofilm 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.

*Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.*

All warranty requests for repairs or replacements must be accompanied by a complete "Warranty Claim Form" available from Thermofilm, together with proof of purchase (and where possible, photos of the installation) and the heater returned to the place of purchase.

In the event of a warranty claim, the goods need to be returned to the distributor/retailer for repair/replacement. Contact  
 Thermofilm Australia Pty Ltd  
 17 Johnston Court, Dandenong South, Victoria 3175, Australia  
 Telephone: (03) 9562 3455,  
 Email: [info@thermofilm.com.au](mailto:info@thermofilm.com.au)