



Under Carpet Heater Kit Installation Guide

Please watch the under carpet heater installation video
at www.coldbuster.com.au/learning-centre/videos/

WARNING: Failure to read this guide prior to installing the
COLDBUSTER heater may result in installation problems
that could void the heater warranty.

Coldbuster Helpline: 1800 85 75 65

Contents

| |
|---|
| Page 1- Introduction |
| Page 1- Coldbuster Contact Details |
| Page 2 – Installation Dos and Don'ts |
| Page 2 - Product Information |
| Page 2 - Tools Required for Heater Installation |
| Page 3 - Electrical Preparation |
| Page 4 - Floor Preparation |
| Page 4 - Underlay Preparation |
| Page 4 - Floor Sensor Preparation |
| Page 4 - Plan the Layout |
| Page 5 - Heater Installation |
| Page 6 - Monitor Installation |
| Page 6 - Laying the Carpets |
| Page 7 - Multiple Heater Installations |
| Page 7 -Thermostat & Floor Sensor Connection |
| Page 8 - Warranty |
| Page 9 - Safety & Operating Instructions |
| Page 10 - Heater Position/Layout Sketch |

Introduction

To ensure a simple and hassle-free installation, read this guide before commencing with installation.

Coldbuster does not accept responsibility for any loss or consequential damage suffered because of installations that in any way contravene the instructions detailed in this guide.

If you require further assistance, please contact Coldbuster during office hours (EST).

Contact Coldbuster

Unit 2/36 Campbell Avenue Cromer NSW 2099

1800 85 75 65

info@coldbuster.com.au

www.coldbuster.com.au

Installation Dos and Don'ts

Dos

- Ensure all under carpet heaters are installed as per these instructions
- Ensure the floor surface is smooth, clean and dry before installing the underlay
- Plan the installation, especially when more than one heater is being installed
- Maintain a minimum 30mm spacing between elements
- Install the carpet as soon as possible after heaters are installed
- Protect heaters with cardboard or hardboard if carpet installation is delayed
- Test heaters before installing the carpet
- Ensure heaters are connected to an RCD (safety switch) protected circuit
- Retain your invoice as proof of purchase for warranty purposes
- Complete the last page of this booklet for future reference

Do Nots

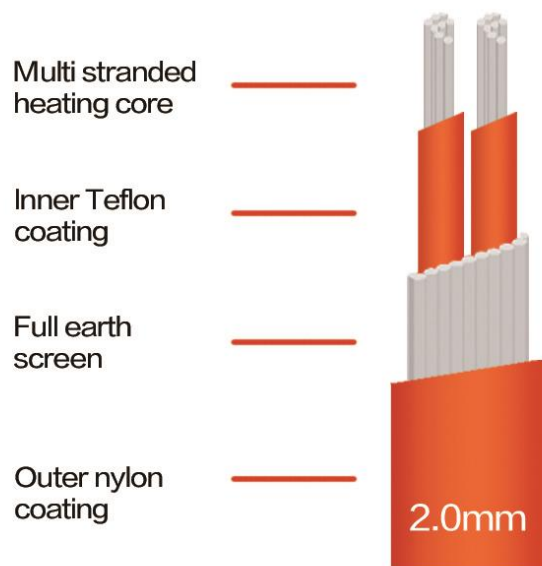
- **Do not ever cut heating elements**
- Do not allow heating elements to touch or cross one another
- Do not allow harmful traffic (e.g. spiked boots, ladders, wheelbarrows) over heaters before installing carpet
- Do not place sharp or heavy objects on uncovered heaters
- Do not install heaters under any surface not suitable for floor heating
- Do not commence installing the final floor cover before testing heaters

Product Information

The Coldbuster Under Carpet Heater Kit contains the following items:

- heater stitched to fiberglass mesh
- installation alarm monitor
- installation guide

The heating element is made up of 4 parts:



Tools Required for Heater Installation

The following tools are required:

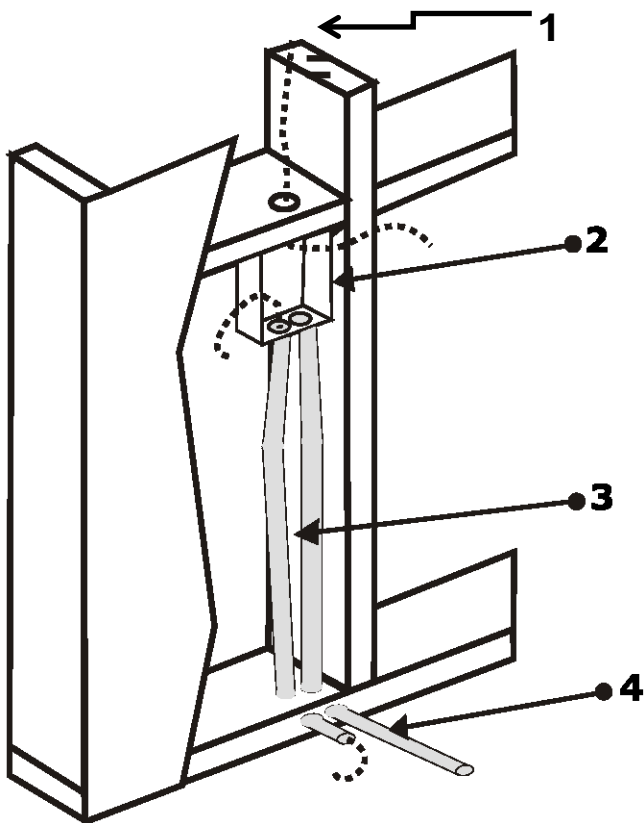
- tape measure
- ballpoint or marker pen
- masking tape or cloth tape
- scissors
- stanley knife
- screwdriver
- Optional: glue gun
multimeter

Electrical Preparation

The Coldbuster heater element has been classified as an electrical appliance. You must engage a licensed electrician for the heater installation if this is required by your state codes.

However, all electrical connections including the connection of the thermostat must be undertaken by a licensed electrician in accordance with current electrical codes of practice, AS/NZS3000: 2007 and state codes.

Hardwire Connection

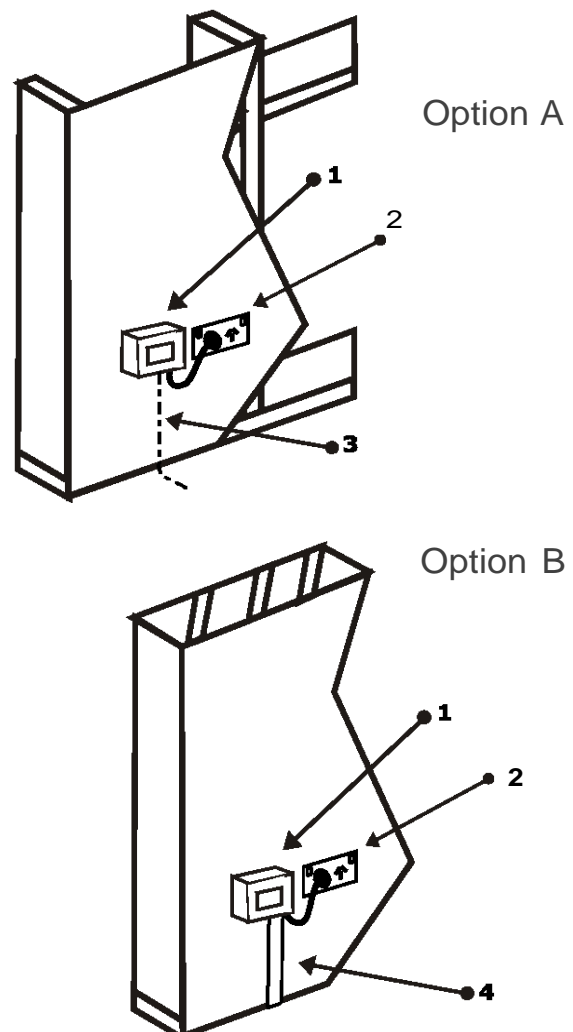


1. Power supply must be RCD protected
2. Standard flush box or C-bracket mounted horizontally or vertically, height between 1000mm -1500mm above the floor
3. 20mm conduit for the heater leads - maximum 2 heaters per conduit
4. 20mm conduit for floor sensor extended into the heated area (optional: the thermostat also has a built-in sensor and can be set up for air sensor)

RCD

The heater element must be connected to a circuit with RCD protection. Please consult with your electrician to ensure any existing cabling and RCD's already installed are working and capable of handling the additional load.

Plug-In Connection



1. Thermostat mounted between 300-600mm from the floor
2. Power point must be RCD protected
3. **Option A** - for cavity walls fit heater lead and floor temperature sensor inside the cavity
4. **Option B** - for brick walls fit heater lead and floor temperature sensor inside PVC trunking and notch out the thermostat baseplate for cable access

Floor Preparation

This guide intends to serve only as an outline for the most common floor preparation required. Please contact us for any additional advice.

Underlay Preparation

The floor must be clean before fitting the underlay. After the underlay has been fitted to the floor, vacuum it and carefully remove any foreign objects like staples, grit or nails which may damage the carpet heater.

The underlay must not be stapled or nailed to the floor, but if considered necessary can be butted together and taped at joins and edges.

Floor Sensor Preparation

Install the supplied floor probe sensor as shown in the electrical connection drawing, particularly if another form of heating such as air conditioning or a fireplace will also be used in the area.

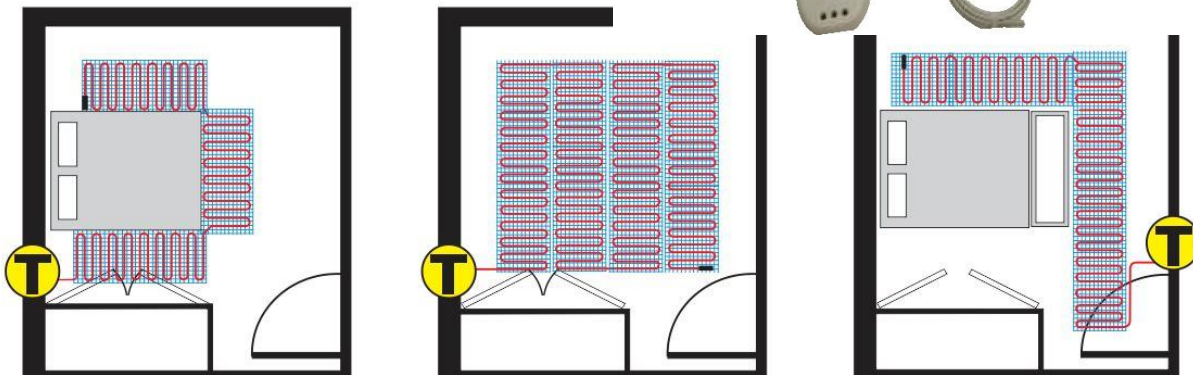
Plan the Layout

Plan the position and shape of the heater(s) in the area(s) to be heated.

It is important to choose the correct heater(s) for the size of area. Installing a heater too small for the area will not produce enough heat to warm the area sufficiently. If the heater is too big for the area it simply won't fit and cannot be cut. If you are unsure about which heater size, refer to the kit packaging or the Coldbuster website before choosing your heater size.

The heaters are manufactured in strip form, 500mm wide. The strips may also be taken apart by cutting the mesh and sticking the mesh strips down in various positions. **Care must be taken never to cut or cross the heating element.**

Ensure there is a 30mm gap between strips to maintain consistent space between the elements. Also ensure a distance no less than 200mm from any wall or permanent fixture is maintained.



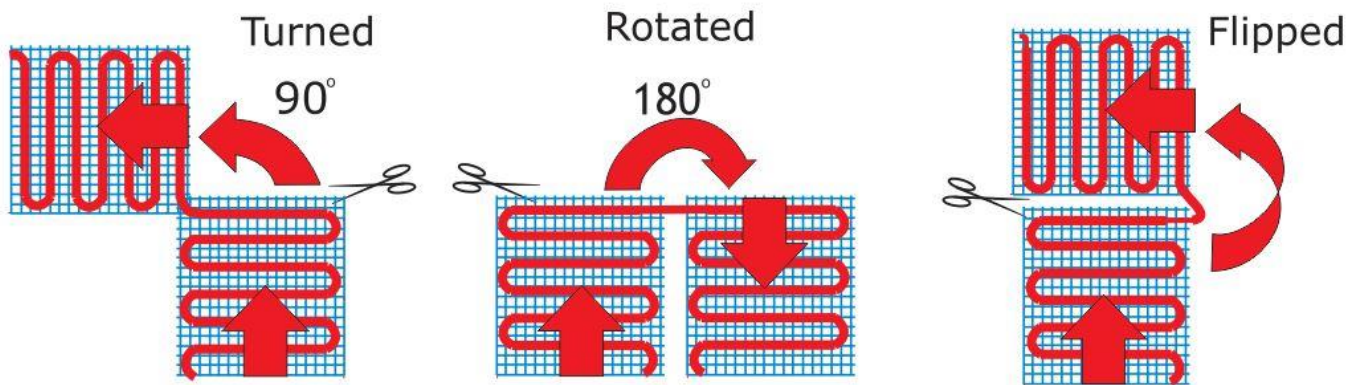
Heater Installation

Step 1

Mark the preferred layout of the heater(s) on the underlay, considering the length of heater(s) you have. Ensure the edge of the mesh is far enough away from the wall (about 200mm) so the teeth of the carpet kicker (used to stretch the carpet to the wall) does not damage the heater(s) when fitting the carpet.

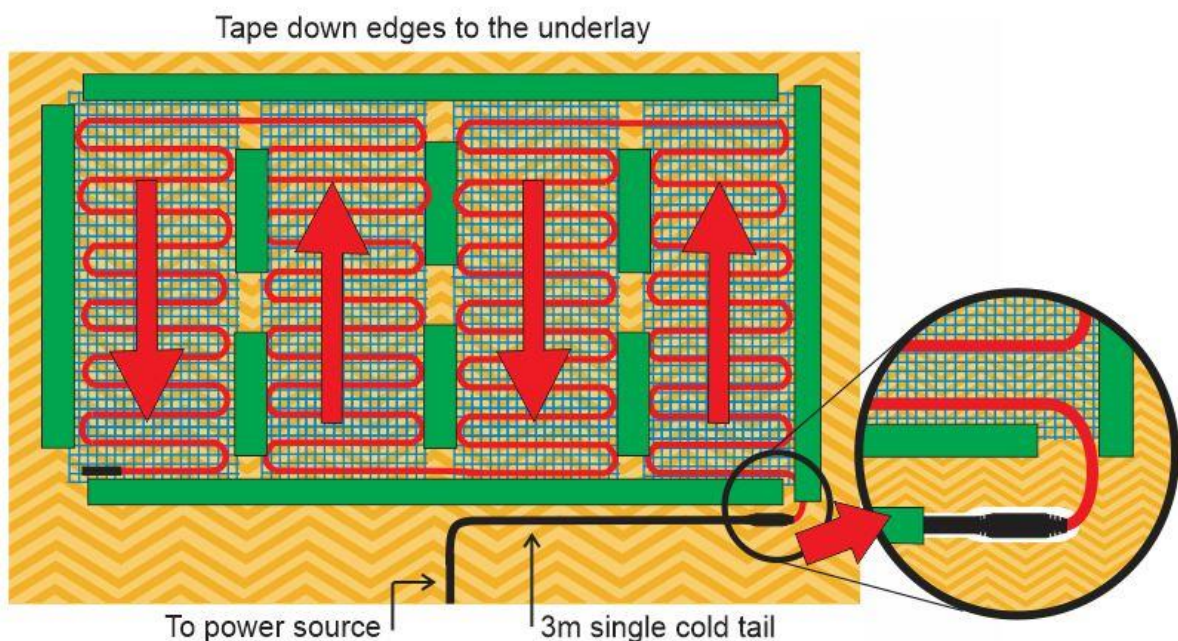
Step 2

Roll out the heater(s) on the floor, cutting the mesh where necessary to allow the element to be in the best position. **Take care not to cut the element.** Preferably do not position the block (junction between the heating element and cold tail) in a high traffic area.



Step 3

Stick the edges of the mesh down with masking tape a little at a time as you lay down the heater(s). Do the same with the masking tape between the heater strips. **The element wires should never cross each other**, remaining at least 30mm apart. Option: the mesh can also be fixed to the underlay with hot-melt glue.



Step 4

Pull the cold tails up the conduits. At the mouth of the conduits, cut out the underlay to place the block and power leads in, so that they are level with the underlay.

Monitor Installation

Step 1

- a) Open the battery cover and check the battery is connected. Replace the battery cover and switch the unit to 'ON'.
- b) The alarm should sound and the red light should be on when there are no connections to a heater. If these things do not occur, inspect the battery connection or replace the battery. During normal use, the white light indicates that the monitor is continually checking the heater(s) for damage. Should the white light go out, replace the battery before continuing work.
- c) Make sure the heaters to be monitored are not connected to a power source. Connect the leads to the monitor prior to commencing any work to ensure faults are detected.



Step 2

- a) Strip the insulation around the tips of the cold tail and earth wire. Insert the blue wire into the black alligator clip, the brown wire into the red clip and the green earth wire into the green clip. Pull the rubber boots over the metal clips.
- b) Set the switch to the "ON" position. A white light indicates the monitor is operating.
- c) Hang or place the monitor where it can be seen and heard during the heater installation.
- d) A red light and alarm indicates that:
 1. a lead wire has come loose from the terminals; or
 2. either the red or black alligator clip is touching the green alligator clip; or
 3. damage has occurred to the heater.
- e) In any such event, stop work straight away and locate the damaged spot. In event of damage, call Coldbuster 1800 85 75 65 for assistance.



Important: Leave the monitor connected to the heater until the carpet laying has been completed and your electrician has connected the thermostat.

Laying the Carpets

- Additional care should always be taken when working over floor heaters. It is recommended that a piece of cardboard or carpet is used to temporarily cover the heaters to avoid accidental damage to the heaters while laying floor covering in other areas.
- If the monitor sounds an alarm: stop work immediately and check monitor connections (see above), the heater element resistance and the insulation resistance. Test yourself if you have a multimeter, otherwise contact Coldbuster or your electrician.
- When placing the carpet over the heaters, do not drag the carpet into position.
- Do not cut or join the carpet on top of the heaters. If joining the carpet with heat bond tape, a strip of cardboard must be moved under the heat bond tape below the join, along with the iron.
- Do not allow any heavy or sharp objects to fall, stand upon, run over or be dragged across heating elements.
- Ensure that the fitting of the carpet does not change the position of the heaters.
- When stretching carpet, avoid putting the carpet stretcher or knee kicker on top of the heaters.
- Disconnect the monitor from the heater before connecting heater to thermostat & mains.

Important: The monitor will detect damage to the element needing to be repaired immediately (cuts to the element). Bruising damage will only manifest at 240V. An insulation (Megger) test by an electrician is recommended.

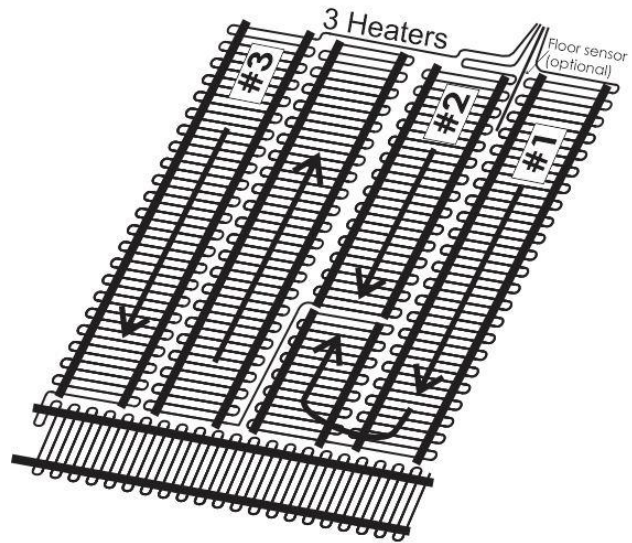
Multiple heater installations

If you are installing multiple heaters into an area and using just one thermostat, all heater wires will need to start at the same point.

Remember to maintain spacing of no less than 30mm between heater wires. Do not allow heater wires to cross. Do not allow the blocks to touch in the cavity.

Each heater must be tested and fitted with its own monitor. Monitors can be reused for future installations

MULTIPLE heaters must be connected in PARALLEL



Thermostat & Floor sensor connection

Important: Check your thermostat instructions for wiring details.

Remember:

- These are double insulated devices - there is no earth connection to the thermostat.
- The earths of the heater(s) connect directly to the earth of the supply in a screw connector.
- The floor sensor is essential where the thermostat is mounted inside a cupboard or vanity or outside the area being heated. Otherwise, the use of the floor sensor is optional, but recommended.

Warranty

Coldbuster guarantees its products subject to the following conditions:

1. The product is free of defects at the time it was supplied. The product will be deemed to be defect-free if no defect has been detected and reported to Coldbuster:
 - a) within 10 years (120 months) from date of purchase (for heaters); or
 - b) 3 years (36 months) from date of purchase (for thermostats).
2. The following are conditions of this guarantee:
 - a) a competent person installed the product;
 - b) the installation was carried out according to the directions as supplied by Coldbuster;
 - c) the installation was carried out in accordance with all applicable electrical regulations; and
 - d) the heater has been connected to a RCD protected supply circuit.
3. Damage during installation by others is not covered by warranty.
4. Damage or repair to a product by another party voids this guarantee. Repairs done by Coldbuster to rectify such damage cannot be guaranteed and the client will be charged regardless of the result.
5. Claims under this guarantee must be lodged with Coldbuster, in writing, within the period prescribed. Full particulars must be given and a copy of the invoice as proof of purchase must be enclosed.
6. In settlement of its obligations under the guarantee set out above, Coldbuster shall, at its option, either:
 - a) repair or replace the defective part without charge; or
 - b) pay the purchaser a sum equal to the price paid for the defective part at the time of purchase.
7. Coldbuster's liability to the purchaser is limited to amounts referred to herein. The purchaser agrees that Coldbuster shall not be liable for any other or additional damages suffered by the purchaser caused by any defects in the product, the installation itself or any constituent part of it. Coldbuster shall not be liable to compensate the purchaser for any floor coverings or any other item damaged or destroyed as a result of any such defects.
8. This guarantee is subject to the purchaser adhering to all safety and operating instructions.
9. This warranty is non-transferable.

Safety & Operating Instructions

Safety Guidelines

Every heater is thoroughly tested before shipping and is guaranteed to be in good working order on dispatch. This is an electrical heating system and must be used strictly in accordance with the manufacturer's instructions.

- DO NOT drill holes or drive sharp objects i.e. nails or screws into your floor without knowing with absolute certainty that you will not touch the heating elements.
- DO NOT cover heated carpets with thick rugs, mattresses or other insulating materials (e.g. thick duvets, bean bags etc.) and DO NOT allow children to sleep in sleeping bags or swags on the heated carpets. Any of these actions will trap the heat and raise the temperature under the carpet, with the possibility of discolouring or burning the carpet.
- DO NOT allow small children or people who are immobile or insensitive to heat to lie on the heated carpet for prolonged periods.
- DO NOT subject heaters to abnormal conditions such as under home exercise equipment or castor chairs without a carpet protector. or in an industrial environment.
- Turn off the power when steam cleaning carpets. Never use floor heating to dry out carpets.
- Heaters **must** be connected through an RCD (safety switch) circuit breaker. In case of damage or the unlikely event of heater failure, the RCD switch will trip and cut off power to the heating. In this case, turn off the thermostat and contact Coldbuster. Do not attempt to repair the heater.
- Inform any person who takes occupation of the property about the position of the heaters.
- Pass these safety and operating instructions on to new owners or tenants.

Economy Tips

Most people find 20°C a comfortable room temperature. The lower the temperature you set on the thermostat, the less electricity the heating uses. We advise you to experiment to find the most comfortable setting. 18-20°C is often found to be warm enough, depending on activities in the area, because floor heating is efficient in creating comfort.

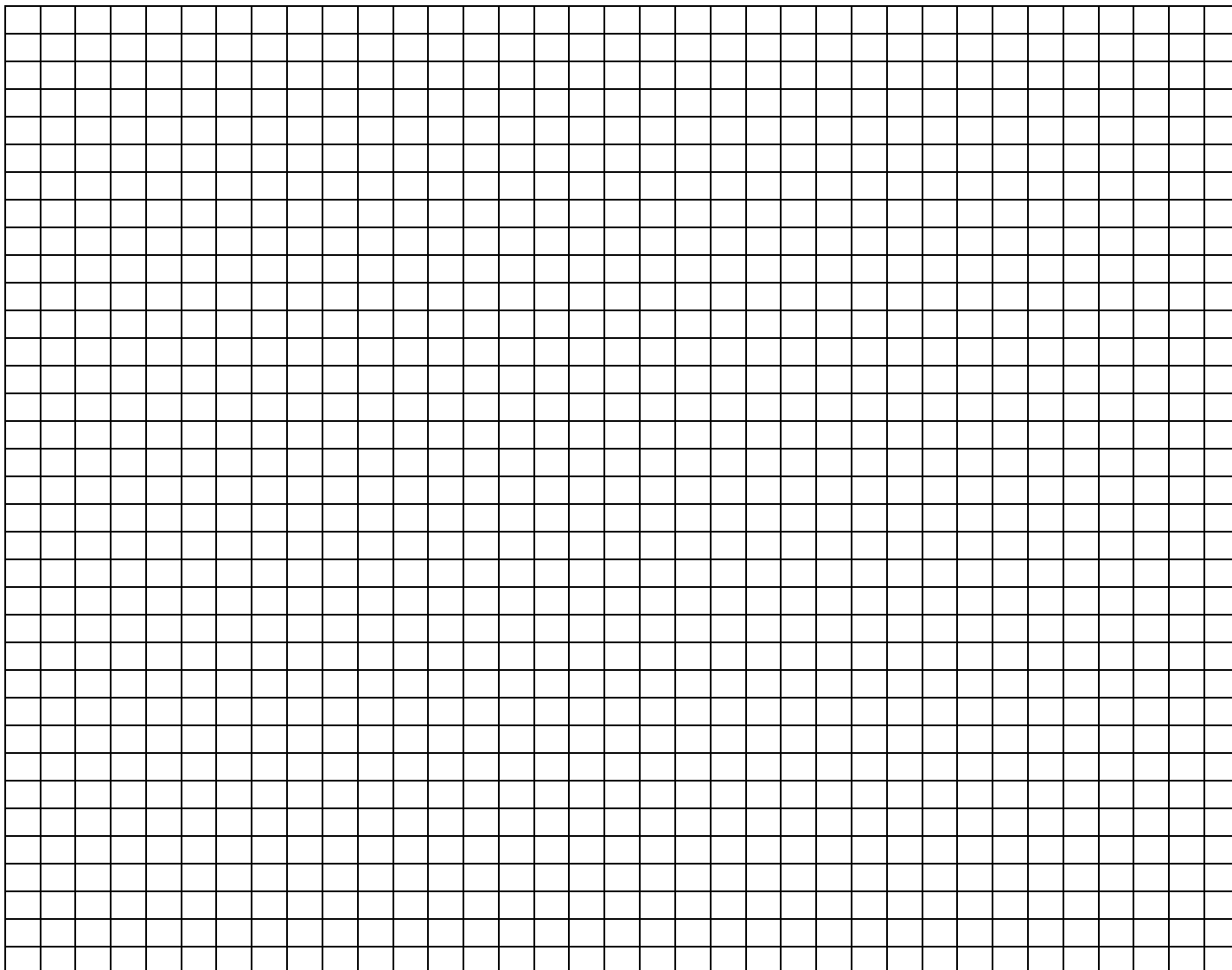
The temperature of the floor depends on the heat required to maintain the room temperature you select. If it is very cold outside, the floor will have to be warmer to maintain the same room temperature than when it is moderately cold outside.

For regularly occupied areas, you may wish to consider leaving the thermostat on a setting between 12-15°C rather than switching it off when not occupied, so the floor and area never become too cold. This may be cost effective as the heater may not have to stay on very long to maintain the required temperature and will require less power when getting to the selected temperature when occupied.

A cold area will not heat up any faster by setting the thermostat to its maximum setting. Simply set the thermostat to your desired temperature and the heater will draw maximum power until the selected temperature is reached.

Heat is lost through windows, doors, ceiling and walls. Having insulation in the ceiling and walls and keeping doors, windows and curtains closed can reduce heat losses. Reducing heat losses will make your heating system run more efficiently and economically. Other common sources of heat loss: open chimneys, fireplaces, stairwells and A/C ceiling grilles.

**Heater position/layout sketch
KEEP FOR FUTURE REFERENCE**



Sketch out the position of your heater(s), the walls and other fixed fittings. Keep this manual and diagram for your reference and pass on to future occupants. Record the details below, as this can be used to validate the heater and thermostat warranties.

Date of Purchase..... Heater model number(s).....

Invoice number..... Installed by.....

| | | | | | |
|-----------------|-------------------------|-------|-------|---------------------------------------|------------------------------|
| Date Installed: | Element Resistance Test | | | "Megger" Insulation test @ 500V | Sensor Resistance Test |
| / / | A - N | A - E | N - E | | |
| Date Connected: | Ohm | Ohm | Ohm | M Ohm | K Ohm |
| / / | Ω | Ω | Ω | MΩ | KΩ |

Record heating layout and test readings on this page to comply with the 10-year warranty.



Unit 2/36 Campbell Avenue, Cromer NSW 2099

1800 85 75 65

Info@coldbuster.com.au

www.coldbuster.com.au