



Ecofloor under tile heating mat installation guide.

The Ecofloor under tile heating kit you have purchased is a twin conductor, single ended element that is affixed to a thin flexible fibre-glass mat. The element and mat have a profile of 2.6mm and the mat has a hole to grid ratio of approximately 90% which ensures that there is ample area for the self leveling compound or tile adhesive to bond to the surface onto which the mat is installed.

The cold-tail and the end termination are 5mm in diameter and the cold-tails are 3 metres in length.

The Ecofloor twin-conductor mats are easy to install, as it is not necessary to return both ends of the element to a power circuit.



The Ecofloor under-tile heating includes:

- 1 element with adhesive strips to secure the element to the floor.
- A 10mm diameter 1.5 metre long length of flexible conduit.
- Installation instructions and test certificate.

Step 1: Preparation



Do not install the Ecofloor under tile heating mat beneath permanent floor mounted fixtures or fittings such as vanities, cupboards, toilet pans, etc. Doing so may result in the element overheating and increases the risk of element damage.

- Install Ecofloor under-tile heating elements directly onto a clean and primed surface.
- The floor may be smooth concrete, wood or a suitable tile backing board.
- If the floor is wood, we recommend that you first lay thermally insulating F-Board over the floor. (If F-Board is unavailable, other product such as Tile and Slate board may be substituted).
- Seal or prime the surface on which the element is to be installed, to ensure that the adhesive strips of the mat adheres well to the floor surface. This will ensure that the mat does not float to the surface of the floor leveling compound (where applicable).
- Measure and mark out the area to be heated to establish the square meterage of the element that you require. (refer page 1 FIG 2)
- Check that you have selected the correct size of under-tile heating mat by checking both the label on the box and the label on there element cold-tail.
- If you are installing F-Board under tile backing board, please lay the F-Board in accordance to the relevant instructions before proceeding. (Refer to the separate F-Board installation instructions).
- Determine where you wish to mount the thermostat and where the cold-tail and sensor cable are to enter the floor area and facilitate their entry to the floor.
- Chase a channel in the floor to accommodate the cold-tail joint.
- Chase a channel into the floor to accommodate the sensor cable conduit tube.
- If you propose to **not** install the sensor tube, we recommend that you install a spare sensor.

Declaration

The manufacturers of Ecofloor, their agents or their distributors accept no liability, expressed or implied, for any loss or consequential damage suffered as a result of installations which in any way contravene the instructions here in or any relevant code of practice.

Installation of Ecofloor under tile heating mats must comply with the provisions set down in AS/NZS3000:2007.

In the event that you require advice or have any question, please call Ecofloor, free phone 0800 927 635

Warranty and Test sheet

Ecofloor under tile heating mats are covered by the standard Ecofloor warranty.
For the warranty to be applied, the test information must be completed and returned to:

Comfortline NZ Limited
PO Box 8082
Riccarton
Christchurch

or emailed to

Warranty@Ecofloorheating.co.nz

Site address	
Date installed	
Installer name	
Installer phone number	

Immediately after installing and before covering with FLC/tile adhesive

Element model	
Element resistance	
Element ohmic resistance	
Element insulation resistance	

Immediately before connection to power circuit

Element ohmic resistance	
Element insulation resistance	
Date tested	
Tested by	

- Before securing mat to the floor with the self adhesive strips on the under side of the element, determine the amount of element that is required to be decoupled from the mat and loosely lay the heat mat according to your plan.



Note that the element must not be cut or damaged when decoupling from the mat

Starting at the thermostat end of the element, secure the heat mat (and decoupled element according to your plan.

- To secure the decoupled portion of the element to the floor, use either tape or hot glue gun.
- The end termination of the element will require to be chased into the floor.

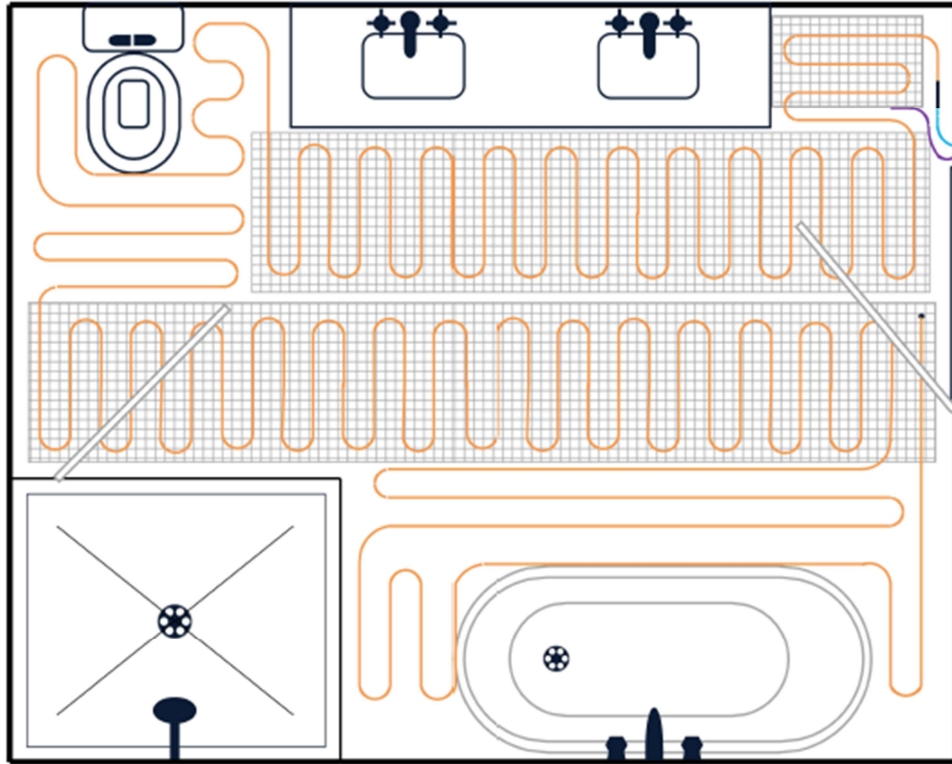








Figure 2

Legend

-  Ecofloor under tile heat mat; element attached to mat.
-  Ecofloor element decoupled from mat
-  Cold-tail lead to element
-  Floor sensor in conduit
-  Cold-tail connection to the element
-  Factory end termination of element

After finishing the installation of the element, inspect to ensure the element and mat are flat to the floor.



The element should be inspected by the certifying electrician before it is covered with floor level compound or tiles. All electrical connection of the thermostat and element must be performed by a registered electrician.

Upon completion of the installation and inspection, mail the warranty/test certificate through to enquiries@Ecofloorheating.co.nz.

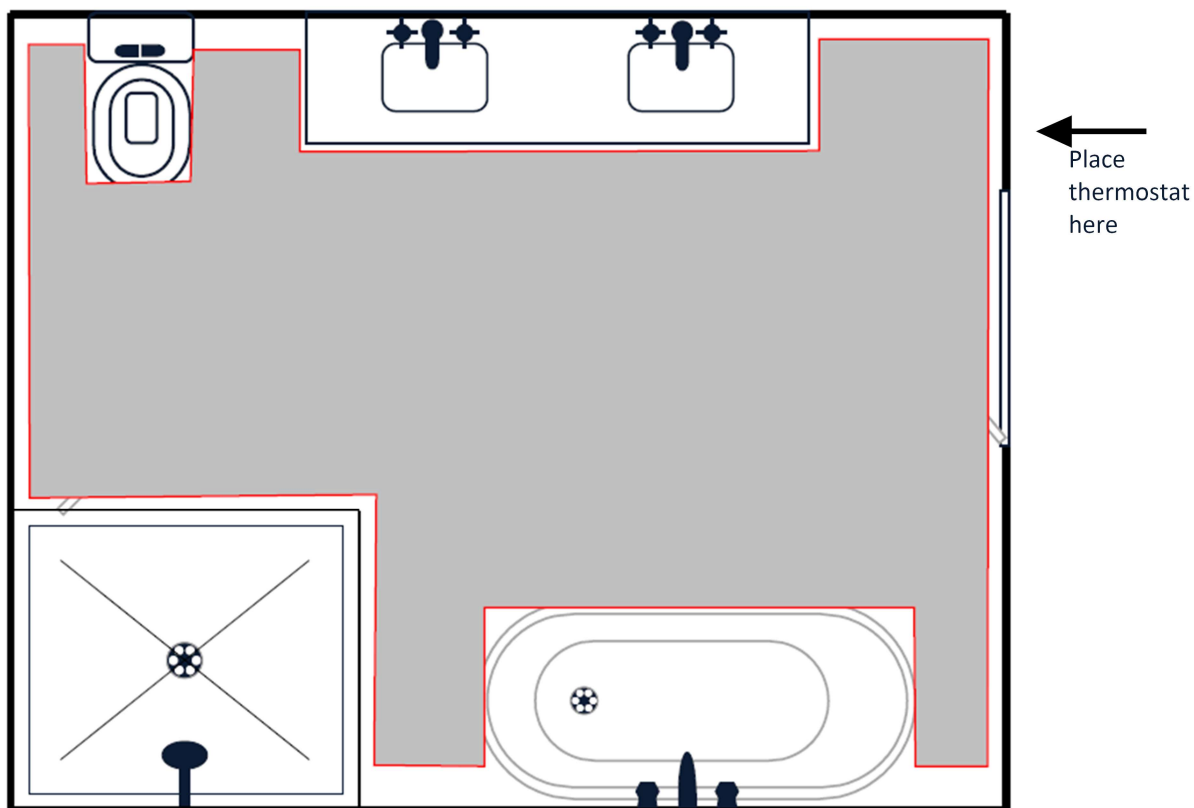


Figure 1

Step 2: Installation



Elements must not be installed within 50mm of adjacent loops and be 50mm from walls and fixed furnishings. Elements must never cross one another.

Because the Ecofloor under-tile heating mat has a cold tail at only one end, there is no need to allow for a return path to the demarcation point. This not only simplifies the laying of the heating mat, it also simplifies the wiring to the thermostat.

Install the flexible conduit.

The flexible conduit is installed immediately adjacent to the cold-tails point and is intended for installing the thermostat floor sensor.

- Where installing onto a prepared floor, chase the conduit into the floor by between 8 and 10 (mm).
- When installing onto F-Board or a suitable under tile heating backing board, slot board into which the conduit is to position (this will require chasing into the floor beneath the backing board by approximately 5mm).
- The flexible conduit shall not have a bend radius of less than 50mm.



Note: Tape over the floor end of the conduit to seal it from ingress of floor leveling compound and do not install the conduit with a bend radius of less than 50mm.

Laying the Ecofloor heating mat.



Note that once the heating mat has been laid onto the floor, care must be taken to avoid any damage to element while exposed. Avoid standing on the element, or placing sharp or heavy object on the element.



Note: Refer [page 3 FIG 2](#) drawing which illustrates a typical installation layout.