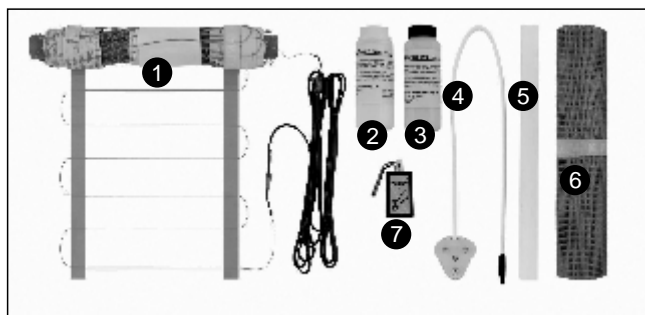


## INSTALLATION INSTRUCTIONS

# TileWarm™

Congratulations on your purchase of one of the safest and most effective floor heating systems. Please take a few minutes to read these installation instructions and user guide to ensure that you enjoy many years of trouble-free service from your COLDBUSTER® tile floor heating system.



### Box contents

1. Heater
2. KlimaCoat™
3. KlimaFlex™
4. 16Amp moulded plug
5. Trunking for retrofit
6. Self-adhesive mesh
7. KlimaGuard®

Compatible with these thermostat models:



KlimaStat™



EzeeStat II™



RemoStat™

Thermostats should be carefully selected in order to maximize comfort levels, reduce energy consumption and enhance lifestyle.

COLDBUSTER® offers three types of thermostats: manual, programmable and wireless programmable.

Precautions

**CAUTION!  
WET CEMENT  
ELECTRICAL WIRING**

**IMPORTANT**



**STOP TILING!**

**PHONE IMMEDIATELY**

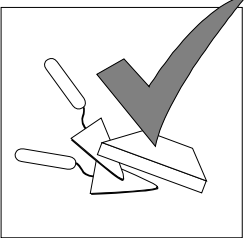


**0860 554 629**

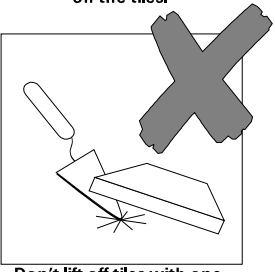
**TILING INSTRUCTIONS**

**DO NOT lift tiles once tile cement has set**

If tiles have to be lifted **BEFORE** cement has set:

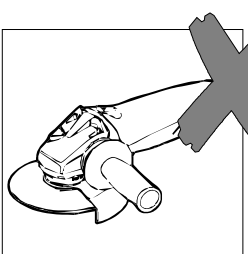


Use two trowels to lever off the tiles.

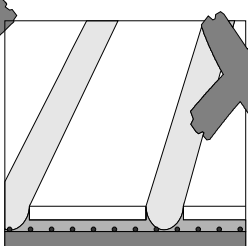


Don't lift off tiles with one trowel, use two.

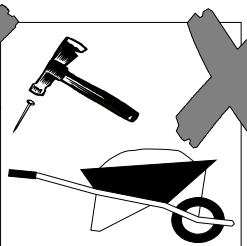
**DO NOT**



Do not use an angle grinder



Do not scrape out grouting to below the bottom of the tile.



No heavy or sharp objects.

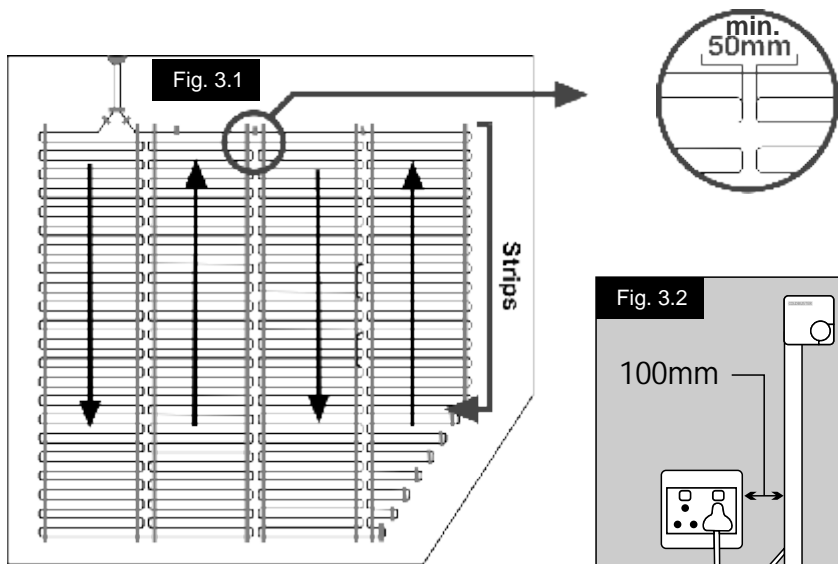
## Planning

Before starting, carefully plan the position and layout of the heater in the area to be heated. The heater is manufactured in a strip form either 300 or 600mm wide. The strip is stuck to the floor with tape allowing a 50mm gap between element loops (see Fig. 3.1). Thereafter, the heater is covered with mesh and then protected with a thin layer of modified tile adhesive.

This configuration allows the heater to be installed with a width of 1, 2, 3, 4 etc, times the width of the strip (+50mm gap between strips). The length of the heater becomes  $\frac{1}{2}$ ,  $\frac{1}{4}$ , etc, of the original strip length. The strips may also be taken apart by cutting the tape and sticking the element down in any position.

Try to maintain a gap between elements of approximately 50mm, otherwise the floor will not be evenly heated(Fig.3.1).

The position of the thermostat/electrical supply point must be marked. Below the controller position or supply point, chip away the floor screed with a small chisel to form a cavity about 10mm deep to allow the connector blocks to be recessed into the floor. Keep the trunking about 100mm away from the supply socket to allow for an optional multiplug socket. (Fig. 3.2)



## Additional tools/materials



Additional material required: Flexible setting tile adhesive (20kg per 5m<sup>2</sup> of heater). Tools: Broom, paint roller, chalk or pencil, small chisel and hammer, a pair of scissors, insulation tape, large bucket and stirring paddle and a steel or nylon float with rounded corners.

## Installation instructions

Ensure the floor surface is smooth and dry; unpainted and free of dust, oil, grease, tar or glue residue. (Fig. 2.1). Mark the position of the heater(s) on the floor (Fig. 2.2).



Fig. 2.1



Fig. 2.2

Connect the KlimaGuard® monitor (Fig. 2.3) according to the instructions in the KlimaGuard® packet to test the heater prior to commencing installation. Disconnect as the strip is unrolled, then reconnect again after unrolling. Leave connected during the entire installation and tiling process. If the KlimaGuard® beeps then there may be a break in the element. In that case stop tiling immediately and call the helpline.



Fig. 2.3

Apply the KlimaCoat™ primer (Fig. 2.4) to the area where the heater(s) will be fitted, using a paint roller (Fig. 2.5) and allow to dry. Wash the roller immediately after use with (warm) water. Cupboards, etc. should have been installed beforehand, otherwise mark the position of bathtub, vanity, etc., so they can be left free of heating.

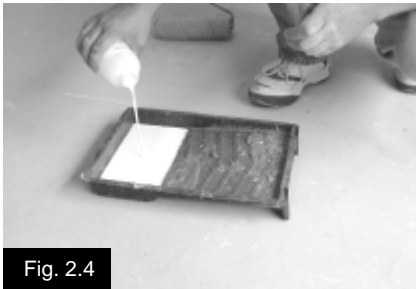


Fig. 2.4



Fig. 2.5

Unroll the heater on the floor (Fig. 2.6). Cut the tapes where necessary to allow the element to be located in the best position (Fig. 2.7). Take care not to damage the element. Try not to walk or stand on the heating element. If this cannot be avoided, place a piece of cardboard over the heater before walking on it.

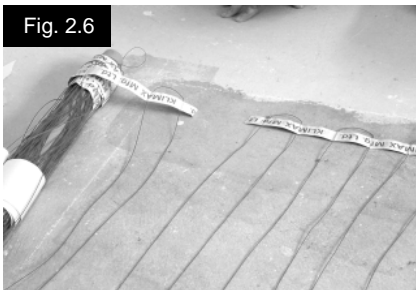


Fig. 2.6



Fig. 2.7

Pull the wax paper backing off the double-sided tape a little at a time and, keeping it straight, stick it to the floor (Fig.2.8). Do the same with the tape on the other side of the heater, ensuring that the element is straight and under slight tension (Fig.2.9). Element wires should never cross or be closer than 50mm apart.



Fig. 2.8

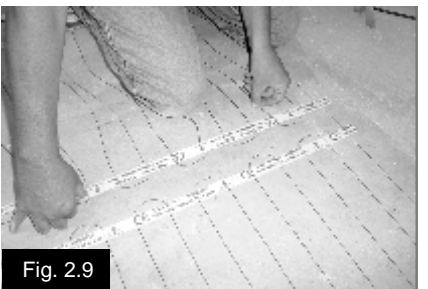


Fig. 2.9

Make sure that there is enough element left over to take the connector blocks to the power source (Fig. 2.10).

Place the blocks in the cavity (Fig. 2.11) and tape them down. If other heaters are to be connected to the same power supply, install them in the same manner. Keep the elements at least 50mm apart.



Fig. 2.10

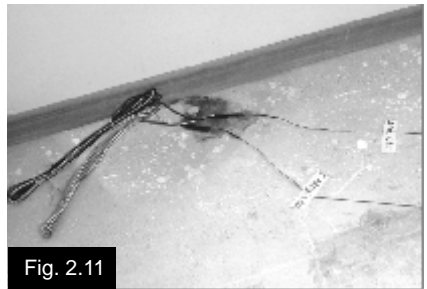


Fig. 2.11

Lay the green mesh, sticky side down, over the heater (Fig. 2.12). Cut the mesh as necessary to cover all the heater element including those to the connector blocks. Press the mesh down so that it sticks to the floor and keeps the element in position (Fig. 2.13). Do not overlap the mesh.

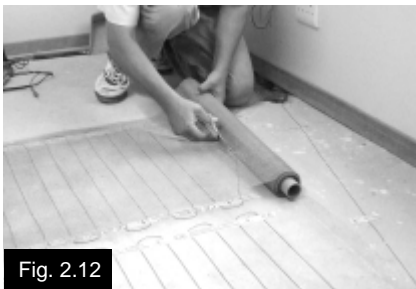


Fig. 2.12



Fig. 2.13

For every 5m<sup>2</sup> of heater to be covered, mix 20kg of good quality, fast set floor tile adhesive with the correct amount of liquid - see the tile adhesive guide (Table. 2.1) (at this stage add the KlimaFlex™ liquid with the water) and stir to a smooth paste (Fig. 2.14). Spread the tile adhesive evenly over the mesh with a steel or nylon float with rounded corners (Fig. 2.15).



Fig. 2.14



Fig. 2.15

Make sure that the element stays in position and that the adhesive is pushed through the mesh. Use additional adhesive if the element is not completely covered. The amount of KlimaFlex™ and mesh is sufficient for the heater size it comes with.

The KlimaGuard® monitor must remain connected until tiling and grouting is complete. This is to ensure that you are alerted should any damage to the element occur during the tiling and grouting process.

If the heater is damaged and this is only noticed after tiling is complete, repairs are more difficult and costly, but can be done.

Explain the risks of damage and the tiling precautions to the tiler and if possible, supervise to prevent damage.

Table. 2.1 - Tile adhesive mixture guide.

Heater	Coverage m <sup>2</sup>	Tile cement kg	KlimaFlex™ I	Water l
Orange 1500W	9.5 m <sup>2</sup>	40	1 l	9 l
Red 1200W	7.5 m <sup>2</sup>	32	1 l	7 l
Blue 940W	5.9 m <sup>2</sup>	25	1 l	5 l
Green 760W	4.8 m <sup>2</sup>	20	500 ml	4.5 l
Black 570W	3.6 m <sup>2</sup>	15	500 ml	3.5 l
Yellow 440W	2.8 m <sup>2</sup>	12	500 ml	2.5 l
White 285W	1.8 m <sup>2</sup>	8	250 ml	1.75 l

Tip: use the KlimaFlex™ bottle that is supplied as a measuring container.

## Thermostat connection (KlimaStat™)

**Retrofit:** Your COLDBUSTER® heating system is classified as an electrical appliance. You are therefore not required to be an electrician to install the heater.

**New building or renovation:** All permanent electrical connections must be undertaken or be approved by a qualified electrician and must be in accordance with electrical standards.

If you do not use the 16 amp plug supplied, a double pole isolator is required to disconnect the heater(s) from the electrical supply (your electrician can advise).

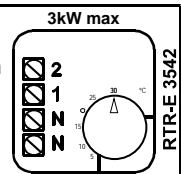
Ensure that the heating is connected through an ELCB (Earth leakage circuit breaker). Plug sockets are all ELCB protected. Test your ELCB regularly to ensure it is working.

To connect the KlimaStat™ via a plug and socket refer to the installation guidelines above. EzeeStat II™ and RemoStat™ connections are as per insert inside the packaging of these models.

**Bathrooms/showers:** Ensure the thermostat and it's connections are at least 600mm (0.6m) away from the bathtub or shower pan measured in a horizontal direction and take special care that bathroom floor heaters are properly earthed and connected through an ELCB (consult an electrician).

## Connections for KlimaStat™ Thermostat.

1. Supply Live  
Red or Brown
2. Heater(s)  
Brown  
N Neutral - Blue  
or Black



All earth wires (green/yellow) must be earthed!

## Limited Product Warranty

COLDBUSTER® products are guaranteed to be defect free at the time of supply to the purchaser. The manufacturer's liability is limited to the replacement of faulty heaters.

The manufacturer and COLDBUSTER® assume no responsibility for the improper installation of its products nor for any consequential loss.

We recommend that COLDBUSTER® floor heating is installed by an experienced installer and that electrical connections be made by a qualified electrician.

## Contact details

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www.coldbuster.co.za



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