

## FAQ's

### Q. Why is ThermaCurve better than a standard panel heater?

A. Conventional panel heaters not only take up valuable wall space, but also concentrate all their heat output in one area. Therefore; whilst mathematically they are providing enough heat energy to warm the occupied space, they often create hot and cold spots as they try to heat the whole room from one point, predominantly using convection currents (air movement).

Where wall space is at a premium, or where the risk of damage can be reasonably foreseen, ThermaCurve can be mounted at the junction between wall and ceiling, similar to a coving feature and thus completely out of harms way. When mounted vertically in a corner, the grille-free, robust aluminium profile means that there is no opportunity to tamper or for liquids or dirt to penetrate the housing – especially when the unit is sealed to the walls using the unique caulking trim.

If mounted up and out of the way, and with an operating temperature similar to a conventional wet radiator, the risk from a scald or burn is completely eliminated.

In addition, conventional panel heaters must include a failsafe thermal fuse to avoid starting fires if covered over; both these concerns are eliminated by ThermaCurves unique Fire Sure™ heating element, and its location away from furnishings and curtains.

### Q. Why is ThermaCurve better than underfloor heating?

A. Whilst electric UFH can provide a nice even heat similar to ThermaCurve, it's performance can be adversely affected by the choice of floor construction and covering, or the amount of furniture placed over it. This is especially true in small occupied spaces such as student living, hotels and temporary accommodation or assisted living.

By placing the heating up and out of the way, or standing vertically in a corner, ThermaCurve takes up no useable floor or wall space and starts to heat the space almost from the moment it is activated; irrespective of the floor covering or furniture.

It is simple to install and retrofit, and in the unlikely event of a fault is easily accessed using typical service engineers' tools.

Being above ground, not only does ThermaCurve respond quickly to heat demand, it also cools quickly which can help to address overheating which is a common concern in modern well insulated buildings using UFH.

### Q. Why is ThermaCurve better than overhead radiant panels?

A. Overhead or ceiling radiant panels are often used where space is limited. However, ceiling mounted radiant panels projecting heat straight down can create an uncomfortable environment for any occupant beneath them and can trigger challenging behaviour in teenagers or persons with learning disabilities or dementia.

Similarly, with the ceiling void needed for distributed LED lighting (either downlighters or integrated ceiling panels), fire alarms, building control systems and other services including water, finding room to install an overhead panel can be difficult.

Whilst some overhead panels are designed to be integrated into the plaster ceiling, the majority are still surface mounted and thus potentially visually intrusive. Ceiling mounted heaters will also require some additional local strengthening to safely support their weight, ThermaCurve however, can be simply installed using conventional wall plug and screws to the walls, as the lower weight is evenly distributed over a wide area.

The Radiant Profile that **heats** your home™



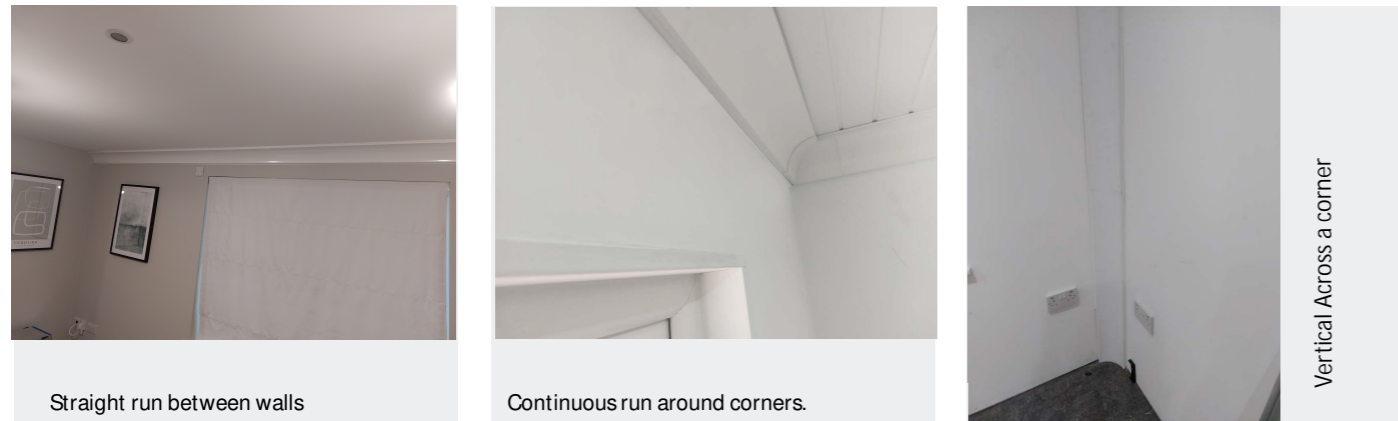
DiscreteHeat Company Limited  
1 Victoria Works Industrial Estate,  
Atherton, Manchester, M46 0FY.

01942 88 00 66  
info@discreteheat.com  
www.discreteheat.com



**ThermaCurve is a unique, ingeniously simple and innovative way to heat your room.**

It combines the heating into a discreet, robust, architectural feature that can be installed where wall space is practically non-existent or where traditional panel heaters would be vulnerable to damage. These include temporary accommodation, hotel rooms, student accommodation, portable buildings or dementia care and assisted living and many other hard to heat spaces.



**ThermaCurve™** has been developed from the highly successful **ThermaSkirt™** product, (that combines the heating into a skirting profile). **ThermaCurve** provides a surface mounted aesthetically pleasing, far infra-red heater, designed to look like an integral architectural feature.

### How does it work?

Manufactured from a highly efficient aluminium polymer, ThermaCurve is warmed by a unique fire-safe heating element, secured to the rear of the profile. When energised, almost immediately ThermaCurve starts to evenly warm the room using infra-red radiant heat, distributed over a wide area – often the full length of one wall.

The innovative curved profile creates a broad beam of heat, projected downwards at all angles between 90~180°, providing a gentle, even heat that can help to improve comfort levels and reduce running costs.

### How is it installed?

ThermaCurve is manufactured in sections up to 6m, (20') and so almost any wall can be installed in a single length as the profile is simply cut with conventional power tools. The aluminium profile is also available in a building industry friendly 2.2~2.4m pre-prepared length to adjust from floor to ceiling if vertically mounted in a corner. Cleverly designed adjustable wall brackets allow the profile to be securely fixed to the wall, and permit an initial 'hinged' opening function, providing access to the rear of the profile.

Unless pre-installed, the unique fire-safe heating element is then inserted into the profile and the electrical connection made at one end. The profile has a clever 'mirror image' design, so that it can be installed in either direction, left to right, top to bottom and vice versa without having to spin the profile around or reconfigure the wiring. Once clipped onto the brackets, the profile is then swung shut, creating a seamless, discreet heating system which can be colour matched to suit the wall or décor.

The profile has adjustable clip-on covers to hide the electrical connections and any corner joints.

### How is ThermaCurve controlled?

ThermaCurve can be activated by a conventional wall mounted thermostat with a 16A output rating, or the buildings BMS or the heating control system. The electrical power and earth connections are made in a secure compartment behind the profile, and once the AC voltage (220~250V) is applied, the profile starts to warm the room almost immediately.

A full range of suitable 'Thermiser' thermostats are available from DiscreteHeat.



The TherMiser TM6 WiFi enabled thermostat provides precise control.

### How energy efficient is ThermaCurve?

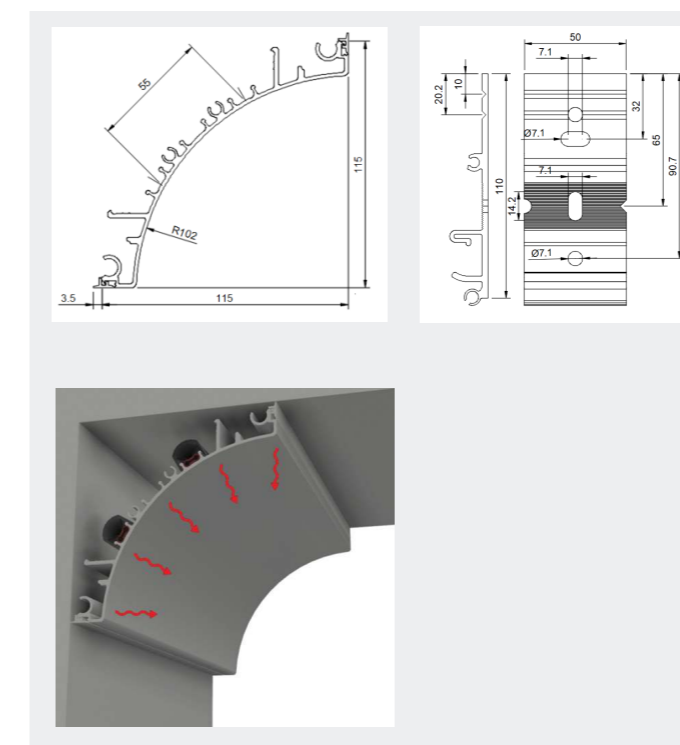
ThermaCurve is considered a radiant infra-red panel heater in the upcoming SAP10 and Future Homes Standard and thus 100% energy efficient at the point of use and with a '1' for responsiveness.

Where preferred, ThermaCurve can be connected via the ingenious Eco-Start™ PCB controller that can save up to 40% in energy consumption. The Eco-Start controller initiates in a ½ power mode for the 1st 5 minutes to ensure that when the room is hovering around the target temperature, only just enough energy is used to return the room back up to the desired setting. This contrasts with most conventional panel heaters that are either 'Off' or 'Full ON' which often leads to overheating and thus wasted energy. In tests, when using the Eco-Start PCB, 80% of the programmed operating times were either in the 'Off' or '½power' state, whilst maintaining the desired room temperature (21°C in these particular tests).

By creating an even, convection current-free warm environment, occupants can feel comfortable at lower set temperatures compared to conventional panel heaters. This means that the thermostat can be turned down and according to the Energy Saving Trust, turning the thermostat down by just 1°C can save up to 10% of your running costs.

If there is a concern about heat being lost into the ceiling void, then an Eco-Bubble reflective thermal insulation roll can be provided to create a U value below 0.25 in the void behind the profile.

### Technical specifications



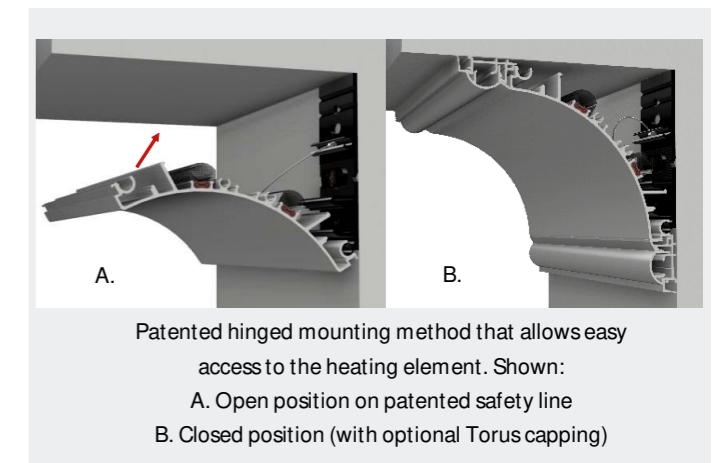
### Any other Advantages?

ThermaCurve has a useful void to run additional power and data services, as it is usually installed in the 'safe zone' for electrical wiring and is mechanically protected by the robust, earthed aluminium profile.

Optional decorative trims can be added to the top and bottom edges to create a more architecturally individual and interesting aesthetic.

A matching dummy profile is also available if the profile feature is required to continue onto other walls and not just the heated sections.

Bespoke colours and decorative trims are available to suit larger project requirements.



<b>Heat Output</b>	~130w/m (65w/m LST version)
<b>Power supply:</b>	220~250VAC
<b>Surface temp:</b>	65°~75°C (~43°C LST versions available if required)
<b>Lengths:</b>	1m ~ 6m (cut on site or factory cut to size) or 2.2~2.4m (adjustable)
<b>Material:</b>	Aluminium polymer alloy
<b>Surface finish:</b>	Epoxy Powder coat, semi-gloss finish RAL 9010 (other colours to order)
<b>Thermostat Requirement:</b>	16A switching Capacity (Wi-Fi enabled TM6 recommended)
<b>Eco-Start PCB:</b>	Optional (supplied with mounting bracket and fire retardant cover)
<b>Caulking &amp; decorative Trim &amp; seals:</b>	Flame retardant ABS.
<b>Installed Weight:</b>	1.65kg per M