



Thermatek®



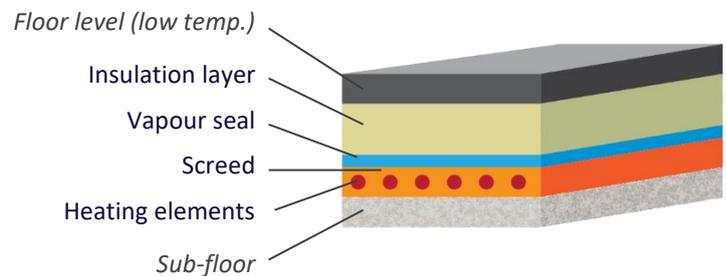
ThermaTrad – product information

ThermaTrad from Thermatek® is a dependable, cost and energy-efficient system for preventing frost heave and condensation beneath cold stores, freezers and cabinets used in a variety of industries such as food storage, catering and pharmaceutical operations. Its wire heating elements can be shaped to any space, making it ideal for larger cold rooms with irregular layouts.

Screed-encased system for cold store floors

It includes a system of heating elements, clipped to the sub-base of the floor and covered with a concrete screed. This is covered by further protective and insulating layers, followed by the finished flooring material.

ThermaTrad is a proven solution for preventing frost heave or condensation when a new cold store or freezer is built.



Custom product, ready to install

Thermatek® design and customise the ThermaTrad solution for each installation, with heating elements and power supply optimised for the size, temperature and situation of the cold store or freezer. We supply a complete installation kit (not insulation or concrete), including:

- ThermaTrad heavy gauge, stainless steel, sleeved heating elements
- External cold tail cables attached ready for connection to the Control box after installation
- Sensor probes in conduit
- Fixing Clips
- Low voltage transformer
- Electronic controls
- Fitting instructions, with scale diagram of the installation and electrical diagram
- Customer maintenance instructions

Thermatek - the company to warm to

Unit 5a, Station Yard, Station Road, Hungerford, RG17 0DY
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Highly efficient control system

All ThermaTrad systems are driven by our innovative Control Panel. It includes a smart energy system which provides just enough heat to maintain the protective thermal barrier, while minimising energy usage.



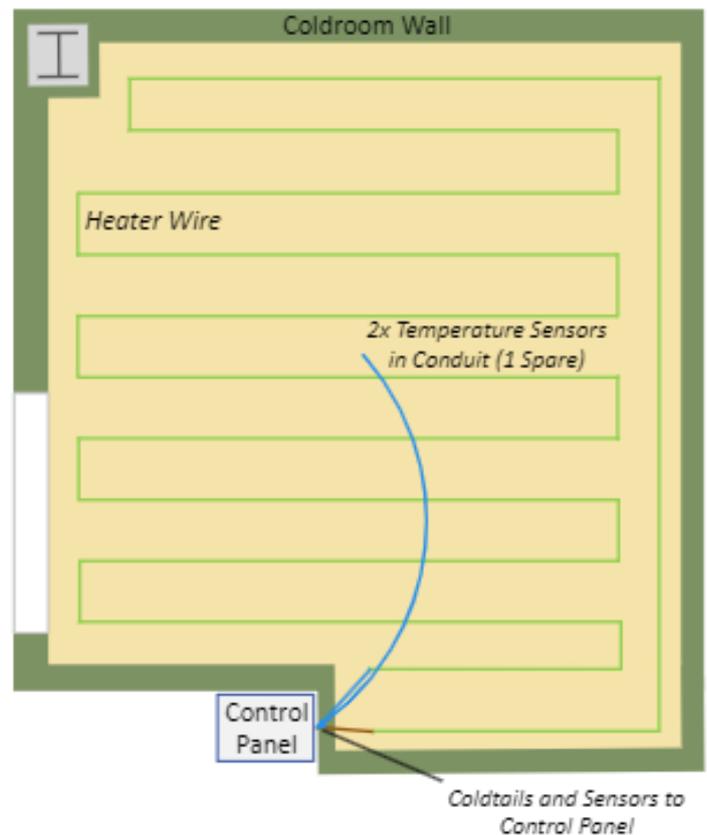
The Thermatek control panel has visual indicators to show the system is working properly and to display the current temperature of the heating mats. If required, the control panel can also be interfaced to building management systems for remote alarm detection.

A typical ThermaTrad installation

ThermaTrad can be fitted in cold stores or freezers of almost any size or shape. The diagram below shows a typical installation with heating elements protecting the entire surface area of the sub-floor, with sensor probes alongside.

The control panel (with low voltage transformer) is fitted in a suitable position outside the cold store or freezer.

Connection is made by simply routing the cold-tails and sensors to the Control Panel which is mounted outside of the freezer or cold room.



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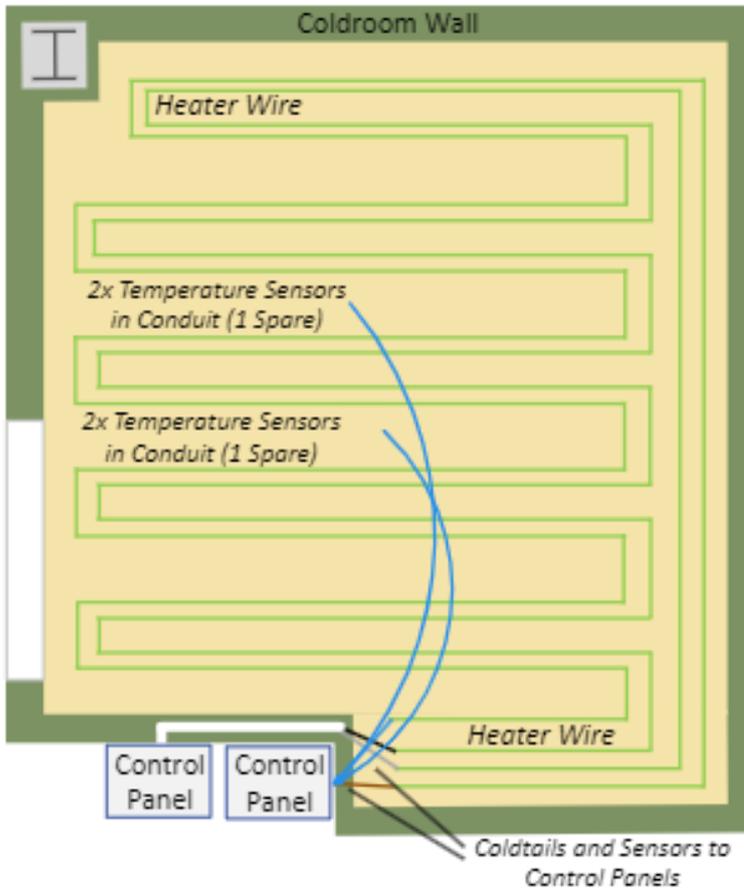
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Backup Options

ThermaTrad can be designed with backup options to suit business requirements. A ThermaTrad system can remain operational for over 30 years (as our experience has shown). However, occasionally an installation may become compromised or altered meaning that the primary system may not be able to deliver to its designed capacity. In order to mitigate this risk, some clients opt to have a backup ThermaTrad solution installed alongside the operational system.

A ThermaTrad installation may become unintentionally damaged (for example, by drilling into the floor) or maybe the freezer is repurposed and adjusted to a lower temperature, causing a heating requirement beyond designed parameters. Backup solutions can be designed so that, should these unlikely scenarios apply, business continuity is assured.



In a basic backup scenario, additional elements are installed when the system is laid, providing peace-of-mind that alternative elements can be used in the unlikely event that the first elements become unavailable.

A further backup option is available where Thermatek provide 100% backup (including sensors and Control Panels). The backup system is live, ready to begin heating, either to assist the primary system or to assume primary duties if required.

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Advantages of Low Voltage Heating

The life expectancy of a well-installed low voltage system is in excess of 30 years. The Thermatek design team have been involved with the design and manufacture of thousands of low voltage frost heave prevention mats. Therefore, we are confident that mats and controls installed to our drawings will have a very long service life.

Installation is easy too. Thermatek designs provide the ability to use conductors in lengths convenient to the job (rather than the necessity to 'lose' excess length, as with mains voltage heaters). Also, there are less demands during installation as there is no danger of the wire being weakened by sharp bending, or re-bending corners when adjusting the fit (unlike mains voltage heaters).

Next steps

To enquire about or order any of our products or to hear about our expert design service, please:

Email sales@thermatek.co.uk

or call **+44 1488 684 888**.

Specification of Heating Elements

Properties	Standards	Description	Unit	Value
Stainless Steel Wire	BS 1554 302 S31 EN10088-3:2005	Bright Annealed		
Wire Diameter		Round	mm	2.64
PVC Outer Sleeving	EN60811	Lime Green Flame retardant		
Outer Diameter	EN 1602		mm	4.5

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Specifications April 2022. Supersedes all previous versions and editions.

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