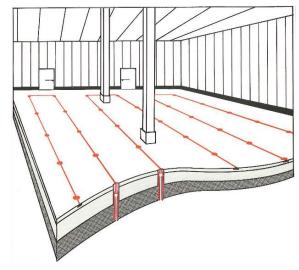
Thermatek®

Low voltage frost heave recovery

For cold stores that are already affected by frost heave, Thermatek has developed a low voltage frost heave recovery system to halt the process of frost heave and eventually eliminate it.

The Thermatek system is also a practical way to retrospectively install a frost heave prevention system into abandoned buildings which have been recommissioned or into chillers that are now upgraded to cold stores.



Vertical element heating system

The principle of the frost heave recovery system is based on the insertion, through any concrete floor, of fully insulated, low voltage heating elements.

These are placed directly into the sub-soil to gently start thawing the surrounding soil. No excavation is required other than the drilled-out floor cores. Any size floor area can be treated.

Copper 'cold-tail' cables are laid in connecting channels to link the heating elements.

Advantages of the system

The Thermatek system has three main advantages:

- 1. The action of frost heave is immediately halted, eventually reversed and finally eliminated.
- The vertical heating elements are simple to install through a matrix of equally spaced holes drilled through the floor.
- 3. There is no need to shut-down a cold store as the system can be fitted in stages across the floor.

Thermostatic control



As with Thermatek's other frost heave prevention systems, the vertical heating equipment can be thermostatically controlled to operate at a temperature of a few degrees above the freezing point.

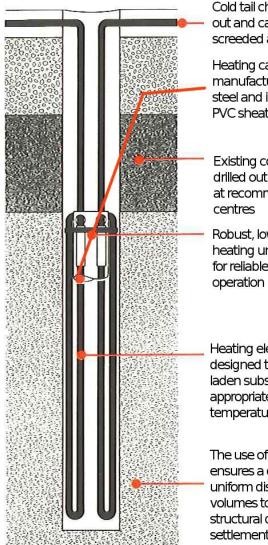
This safe and economical level of heating ensures a controlled dispersal of the ice layer to avoid serious structural damage during settlement.

Thermatek - the company to warm to

Unit 5a, Station Yard, Station Road, Hungerford, RG17 0DY Call +44 (0)1488 684 888 | sales@thermatek.co.uk Thermatek® is a registered trademark of Safeguard Electronic Systems Ltd.

Doc. Ref. MK-TM-2.4 Certificate No:14132701 Header and Footer Images courtesy of Freepik.com

9001 : 2015



Installation diagram (vertical)

Cold tail channel drilled out and cavity rescreeded after installation

Heating cables manufactured in stainless steel and insulated by PVC sheathing

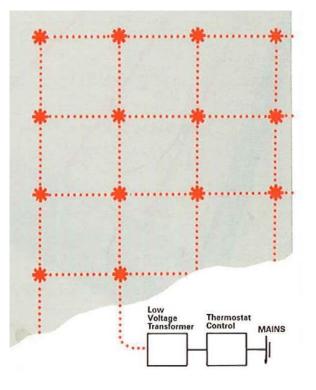
Existing concrete floor drilled out with holes at recommended centres

Robust, low voltage heating unit designed for reliable, long life operation

Heating elements designed to sit in ice laden subsoil of appropriate depth and temperature

The use of low voltages ensures a gradual and uniform dispersal of ice volumes to minimise structural damage during settlement

Installation diagram (plan view)



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 (0)1488 684 888.



Unit 5a, Station Yard, Station Road, Hungerford, RG17 0DY Call +44 (0)1488 684 888 | sales@thermatek.co.uk Thermatek[®] is a registered trademark of Safeguard Electronic Systems Ltd.

Doc. Ref. MK-TM-2.4 Certificate No:14132701 Header and Footer Images courtesy of Freepik.com

QMS

IS0

9001 : 2015

REGISTERED