Heat Mat
Ice & Snow Systems

Roof Protection

Gutter Protection

Driveway Protection

Trace Heating

Heat Mat PipeGuard

Prevention is better than cure

Heat Mat's range of Ice & Snow melting systems

INTERTEK BEAB Approved

17th EDITION COMPLIANT BS 7671 : 2008

Heat Mat Extended Warranties

EDA ELECTRICAL DISTRIBUTORS ASSOCIATION AFFILIATED MANUFACTURER

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Please see individual product pages for details of the independent approvals and warranties relating to each range.

Made in Denmark

Welcome to Heat Mat Ice & Snow Systems

Heat Mat PipeGuard

Protect pipes from freezing:

- Condensate boiler pipes
- External water pipes
- Simple to install and maintenance free

Roof and gutter protection

Ice & Snow melting for:

- Roofs, gutters and downpipes
- Lead valley and drainage channels
- Icicle and snowdrift prevention

Driveway de-icing and construction site solutions

Ice & Snow clearing for:

- Driveways, walkways and car parks
- Loading ramps and bridges
- Construction site thawing systems

Trace heating

Self-limiting cable for:

- Water and waste pipes
- Sprinkler systems
- Process temperature control

Heat Mat Ice & Snow Systems

Heat Mat Ice & Snow melting systems offer a variety of solutions for everyday problems of ice and snow buildup, ensuring businesses and homes remain safe and trouble free even in the coldest weather. In recent years the UK has experienced increasingly cold and snowy winters, and Heat Mat has a variety of systems to help you protect and winterise your property.

Condensate Pipe Heating

During the winter of 2010/11 more than 250,000 condensing boilers in the UK suffered leaving many people without heating over Christmas. Heat Mat PipeGuard is designed to prevent condensate pipes from freezing and this simple to install product provides automated protection from frozen pipes down to -25ºC.

Water Pipe Heating Systems

During prolonged cold weather even lagged water pipes can freeze as wind chill and sub-zero temperatures take effect. Our pipe heating systems are usually straightforward to retrofit onto water or waste pipes, and Heat Mat supply a variety of products including cut to length and pre-terminated trace heating and Heat Mat PipeGuard for this application.

OJ ELECTRONICS
taking comfort further

Heat Mat offer a wide range of alternative thermostats and sensors to control outdoor heating systems, all designed to minimise the energy consumption of the heating while still efficiently removing the ice and snow buildup.

Driveway and Walkway Heating

Driveway and walkway heating systems have been used on the continent for many years to keep areas clear of ice and snow during the winter, ensuring businesses can continue to trade throughout the year. Heat Mat offers a comprehensive range of automatic heating solutions to keep driveways, car parks, walkways and loading ramps free of ice and snow.

Roof and Gutter Heating

Over the last few winters the UK has experienced significant snowfall and cold temperatures. This has led to roof gutters being damaged from frozen water and there have also been a number of roof collapses caused by snow buildup. Our wide variety of Scandinavian designed systems help prevent gutters and downpipes from freezing up and to stop potentially dangerous ice and snow buildup on roofs of all types.

Trace Heating Systems

Trace heating cables are used for a variety of industrial purposes including protecting water and waste pipes from freezing and maintaining process temperatures in factories dealing with foodstuffs. Heat Mat offer a wide range of heating cables for these applications along with the various thermostats, junction boxes and fitting accessories that you may require. In addition to the standard ranges Heat Mat also supply innovative products, such as a silicon boot set for installing trace heating in areas where no ignition sources are allowed, and a ready wired 13 Amp frost protection thermostat with a double socket for emergency or temporary use.

Heat Mat Condensate Pipe Heater

Heat Mat PipeGuard

Designed to prevent frozen condensate and water pipes in the most extreme conditions, Heat Mat PipeGuard is a simple to fit solution which stops frozen, cracked and damaged pipes and ensures water keeps flowing down to -25ºC.

Once installed Heat Mat PipeGuard automatically ensures heat is applied to the pipe when the temperature drops close to freezing, and switches off again to save energy once the pipe has reached a safe temperature.

- Ready-made unit, simply connect to power supply
- Simple to install, can be quickly zip-tied in place
- Integrated thermostat to ensure energy efficiency
- Monitors pipe temperature, rather than air temperature, to minimise running costs
- Once covered with insulation the entire product is hidden from view, reducing potential damage or vandalism
- Maintenance free and supplied with a 10 year warranty
- Fully earthed for electrical safety
- Developed for use in Scandinavia where extreme winter conditions are a common occurrence

Choosing the right cable for your pipe

For pipes up to 22mm in diameter the cable can be run along the base of the pipe or spiralled around it. For larger pipes the cable must be spiralled around to provide even heat coverage. The table opposite shows the pipe lengths that each Heat Mat PipeGuard unit can protect.

Heat Mat PipeGuard	Suitable for 10-22mm pipes of the following lengths	Suitable for 23-38mm pipes of the following lengths
1.4m	0.7m-1.4m	0.7m-1.2m
2.0m	1.5m-2.0m	1.3m-1.8m
3.0m	2.1m-3.0m	1.9m-2.7m
4.0m	3.1m-4.0m	2.8m-3.6m
5.0m	4.1m-5.0m	3.7m-4.5m
8.0m	5.1m-8.0m	4.6m-7.2m
10.5m	8.1m-10.5m	7.3m-9.4m
14.0m	10.6m-14.0m	9.5m-12.6m
18.5m	14.1m-18.5m	12.7m-16.7m
22.5m	18.6m-22.5m	16.8m-20.2m
38.0m	22.6m-38.0m	20.3m-34.2m
45.0m	38.1m-45.0m	34.3m-40.5m

A Integrated frost protection thermostat.
B Supply cable, to be wired into an RCD protected supply.
C Heating cable zip tied in place.
D Pipe insulation zip tied in place.
E Heating system warning label.

Protection for Driveways and Car Parks

Automated Driveway and Car Park Heating

Heat Mat's Scandinavian designed Ice & Snow melting systems can be used beneath virtually any surface to ensure it remains free from dangerous ice and snow buildup. The robust heating wire systems are suitable to protect driveways, car parks, pathways, steps, loading ramps and bridges and when used in conjunction with intelligent thermostats they provide an energy efficient and fully automated heating system.

Custom made ice and snow melting thermostats monitor both the ground temperature and the moisture level to ensure that they only operate when they are really needed. The thermostats are fully programmable and can be set up for the specific local conditions as required.

In addition to ensuring that driveways and walkways remain free of dangerous ice and snow buildup the heating systems also prevent the need to use salt to keep areas clear, minimising costs and also ensuring both the road surface and the surrounding environment are not damaged or contaminated by salt buildup.

- Improved safety for vehicles and pedestrians as surfaces are automatically safe to drive and walk on
- Automated clearance of ice and snow, ensuring that Health and Safety requirements can be met and that the first person on site does not have to make the area safe
- Surfaces (particularly concrete) are not damaged by grit and salt, and are also protected from the normal freeze/thaw activity in winter
- The surrounding ground and waterways are protected from salt pollution
- A number of different sensors and timers can be combined to ensure that the system only operates when it is required, minimising energy usage
- Entirely maintenance free. Once the system is installed there is no requirement for any maintenance work and some systems include an automatic alarm warning if the system fails for whatever reason
- A tried and trusted system. These systems have been used in Scandinavia for more than a decade and have proved their worth in extreme temperatures and weather conditions

Construction Site Solutions

Heat Mat offer a range of products designed to allow construction and building work to carry on even in the depths of winter. These include reusable heating mats which can be rolled out to thaw frozen ground and aggregate, or they can be wrapped around drums or bales to prevent them from freezing or to thaw them out.

Concrete curing cables are used to deliver heat directly into a newly poured concrete layer to ensure the curing process can progress, and the water within the mix does not freeze. The cables provide an even heat profile and ensure the concrete does not suffer from carbonation as can happen with heated enclosure systems.

What goes up doesn't need to come down in Winter – protect your roof

Snow and ice buildup on roofs and in gutters can seriously damage property, as well as presenting a serious risk to people walking below. In addition to icicles and snow falling from gutters and roofs, there is also the risk that a substantial snow buildup can cause the roof to collapse which happened to a number of warehouses in the winter of 2010/11.

Heat Mat offer a range of Scandinavian designed systems, to ensure that both commercial and residential properties are protected against dangerous ice and snow buildup with fully automated heaters. Each system is designed by Heat Mat bespoke for the individual circumstances of the property, taking into account its location, the prevailing weather conditions and the roof and gutter materials. All roof heating systems are suitable for retrospective installation and a common reason for their requirement is to reduce potential snow loading of a roof so that additional items can be hung from the structure whilst keeping within its load carrying capacity.

Gutter Heating

Ice buildup in gutters and lead drainage valleys can lead to structural damage as well as presenting a hazard to anyone below. Heat Mat offers an extensive range of heating cables and fixing accessories suitable to protect any size of gutter from the smallest conservatory up to the largest factory buildings.

Roof Heating

In some circumstances it is necessary to limit the amount of snow that can buildup on a roof to prevent a situation where the load rises beyond the roofs capacity, causing the roof to collapse. Heat Mat offers a tailored solution for roof heating and can supply everything that is required from the heating cable and thermostats, through to the specialist cable fixings and adhesives required to ensure the systems longevity.

Snowdrift Prevention

When a new building is built abutting an existing one, there is often the risk that snowdrifts can accumulate on the older properties roof against the new walls. In these circumstances the older roof may not be structurally strong enough to support the weight of the snowdrifts, and Heat Mat offer specialist heating systems to ensure that these areas remain free from any snow. These systems are usually significantly less expensive to install than the alternative of structurally strengthening the existing roof.

Please contact Heat Mat to discuss your individual system requirements.

Heat Mat® 10 Year Warranty

Heat Mat Trace Heating Systems

Trace Heating cables provide focused and controllable heat to prevent pipes and gutters from freezing, or to maintain process temperatures. The major benefits of Trace Heating are that the specialist cables 'self-regulate' their temperature so they cannot overheat, and they can also be cut to length during installation to ensure the perfect fit, every time.

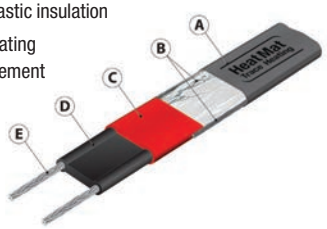
Heat Mat supply a wide variety of high quality European manufactured Trace Heating cables suitable for the vast majority of applications. These heating cables are backed up by a comprehensive range of Trace Heating thermostats, ice and snow melting thermostats and wiring accessories.

- Frost protection of water pipes and condensate/ drainage pipes
- Maintain process temperatures
- Ice and snow melting on roofs and in gutters
- Ice prevention in downpipes and waste pipes
- Temperature maintenance of air ducts extracting dust or of containers for dry food to prevent condensation buildup and blockages
- A wide variety of cable types and outputs to satisfy various applications
- Standard range from 12W to 27W per metre
- High quality junction boxes and thermostats provide a comprehensive and fast to install system
- A range of pre-wired and terminated lengths available
- Specialist in-pipe cables suitable for use in pressured water pipes
- EX approved cables for use in explosive environments
- 110V building site trace heating cables available

Intelligent Cables

Trace Heating cables are significantly more complicated than 'standard' heating cables. They are created by placing a self-regulating heating element between two bus wires, one live and one neutral. When power is connected to these bus wires the heating element receives 230V, causing it to heat up. Each element contains specialist compounds that change their resistance depending on their temperature, which leads to the power output of the heating element falling as the cable gets warmer.

A Thermoplastic overjacket
B Aluminium earth shield with drain wire
C Thermoplastic insulation
D Self-regulating heating element
E Bus wire



Heat Mat
Ice & Snow Systems

Heat Mat Ice & Snow melting systems.

- Condensate and water pipe protection
- Driveway and walkway heating
- Gutter and roof heating
- Trace heating systems

Call 01444 247020
or visit www.iceandsnowsystems.co.uk

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