SELF-REGULATING HEATING TAPE
G-TRACE - GTE

BACKER

Roof and gutter protection from snow and ice build up

- Automatically adjusts heat output in response
- to changes in ambient temperature
- Can be cut-to-length with no wastage
- Will not overheat or burnout, even when overlapped
- Full range of accessories available
- Optional fluoropolymer outer jacket for use in corrosive environments
- Available for 110-120VAC and 220-277 VAC

The problem

Snow that has built up on a roof will start to melt as a result of either exposure to the sun or from heat rising from the building below.

As the melted snow runs from the roof into cold gutters and drain pipes, it can re-freeze forming layers of ice that can continue to build up until the flow is blocked. This can result in damaged drains and gutters.

In addition, water can get into the roof and walls of the building, leading to expensive structural damage such as broken roof tiles, damaged plaster and facades, etc.

The solution

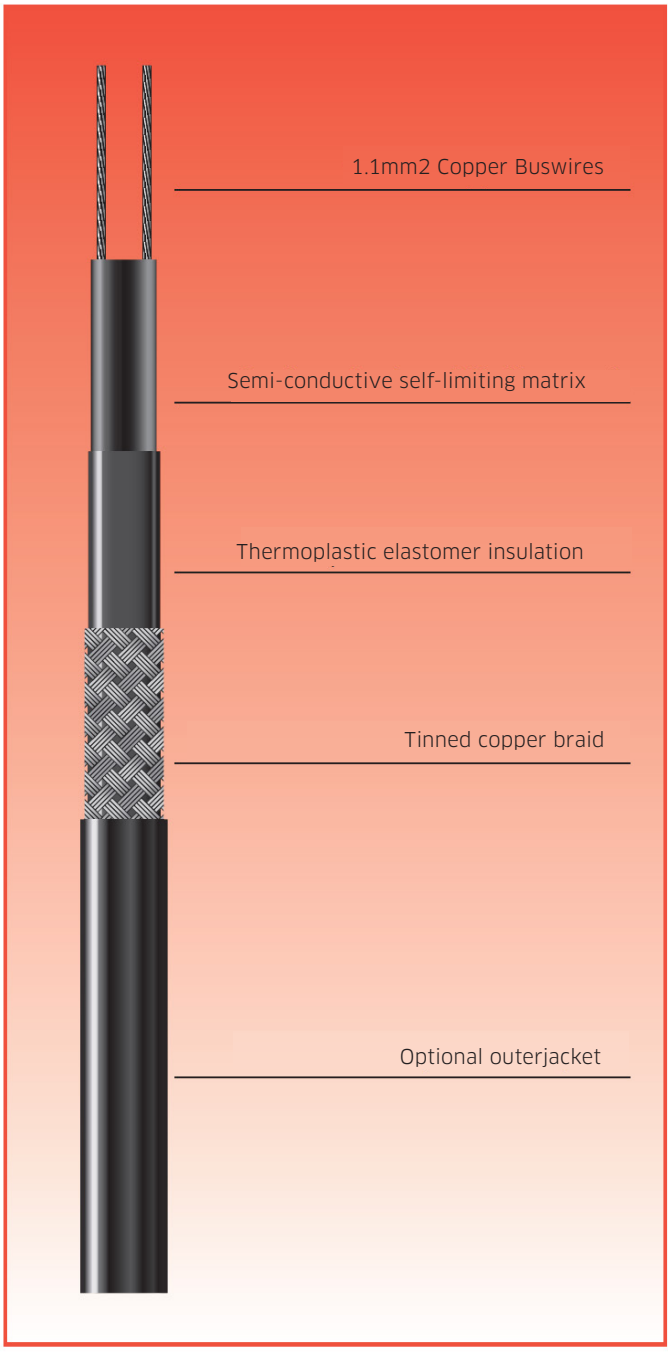
Heat Trace have the solution in the form of G-Trace.

The self-regulating characteristics of the heating tape means that the cable can adjust it's heat output in accordance with the ambient temperature.

In snow and icy water, the heating cable operates at full power. As the snow melts and the water drains away, G-Trace self-regulates to half power while it dries. As it gets warmer, so G-Trace gradually reduces it's output.

The G-Trace system is safe and reliable. As self-regulation prevents overheating, G-Trace can even be installed in plastic gutters and with the UV resistant outer jacket, the heating cable is protected from the sun's harmful rays – thus making it totally durable and reliable. G-Trace provides a cost effective, preventive maintenance solution to damaged roof tops and gutters and the system consumes no more power than it takes to prevent ice formation.

Design and installation of a G-Trace system is simple as there are no fixed lengths. The heating tape can be cut to length during installation. G-Trace is cut off the reel and placed in the gutter. The heating tape is hung down into the down pipe without the need for spacers. All systems - from the simplest to the most elaborate – use the same components, thereby providing maximum flexibility and ease of design.



Specification

MAX WITHSTAND TEMPERATURE	85°C (185°F)
MIN INSTALLATION TEMPERATURE	-40°C (-40°F)
POWER SUPPLY	110 – 120VAC, 220 – 277VAC
MAXIMUM RESISTANCE OF PROTECTIVE BRAIDING	18.2 Ohm/km

WEIGHTS AND DIMENSIONS

Type Ref	Nominal Dimensions (mm)	Weight kg/100m	Min. Bending radius
GTe	10.5 x 5.9	10.0	35mm

Ordering information

Example

GTe 2 - F

G- Trace heating tape
Supply Voltage 220 - 277 VAC
Optional Fluoropolymer Outerjacket

POWER OUTPUT

In ice at 0°C	36W/m
In air at 0°C	18W/m

COLD START DATA (300 Second Rating)

Start at °C	Start Current (A/m)
	230V
-20 °C	0.295
0 °C	0.259
+10 °C	0.236

Accessories

Heat Trace supply a complete range of accessories including termination/splice kits, end seals, junction boxes and controls. These items are recommended for the correct operation of
G-Trace heaters.

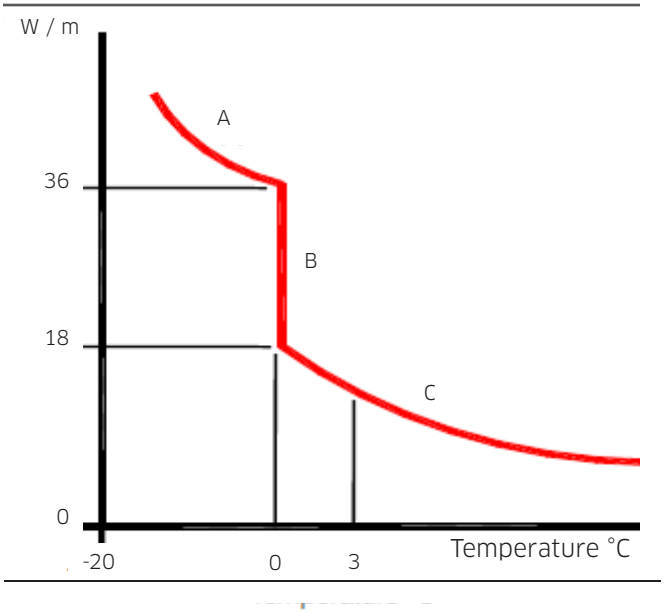
MAXIMUM LENGTH (m) vs. CIRCUIT BREAKER SIZE

CAT REF	START UP TEMP	230V 6A	10A	16A	20A	32A
GT	10 °C	26	42	68	84	90
	0 °C	24	38	62	78	86
	-20 °C	20	34	54	68	80
	-40 °C	16	28	46	56	74

For use with Type C curcuit breakers to BS EN60898: 1991

THERMAL RATINGS

Nominal output at rated voltage



Notes

A In snow and ice water, the heating tape will operate at full power.

B As the snow begins to melt and the water drains away, the heating tape self-regulates to half power while it dries.

C As it gets warmer, the heating tape will reduce its power output.

Further information

Please consult the appropriate termination instructions and the G-Trace Roof & Gutter Heating Design Guide (PDG020 07/11) for further details

G-Trace systems are energised at +5°C and de-energised at -10°C to -15°C when there is no possibility of melt water being present.