warm floor™

To keep frost away

Solution with heating cables

A comprehensive system with high standard guarantee from one company
The brand **warm floor**™ is a consortium of renowned manufacturing enterprises

Protection of:

- driveways to garages and pavements against black ice
- eaves gutters against falling icicles,
- pipes against freezing, and maintaining the temperature

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Protections of driveways to garages, pavements and stairs against snow and black ice

The system is fully automatic that guards safety of outer areas 24 hours a day. Even with the first snowflake falling, it recognises the danger and starts protecting the surfaces.

Benefits:

- Injury prevention
- Surfaces are always dry, without black ice and snow
- Low operating costs
- Everything is electronically controlled
- The modern system saves manual work
- It works fully automatically even at night

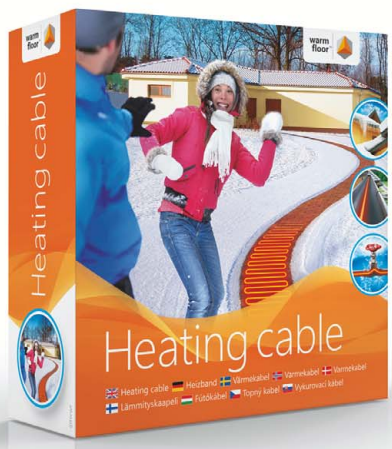
Basic technical data:

Each surface, which should be protected, is original, so heating cable or heating mat is selected exactly according to the design. Based on the research, we recommend installing 300 W/m^2.

Extended warranty for Line™T30 is 10 years.

Line™ T30. Double-core heating cables 30 W/m with braiding and 2 m cold lead (230 V). UV resistant, also convenient for protection of gutters.

Order code	Length (m)	Output (W)	Protected area
Line™T30-17m	17	510	1.7 m^2
Line™T30-46m	46	1 380	4.6 m^2
Line™T30-64m	64	1 920	6.3 m^2
Line™T30-92m	92	2 760	9.1 m^2
Line™T30-115m	115	3 450	11.5 m^2



Measure your surface to be protected and select appropriate cable length. You can put together a larger area as a Lego puzzle from several cables.

Another option is to use intelligent, self-regulating heating cables or heating mats with 300 W/m^2 output.

To fix the heating cables in place, mounting strips are used for quick installation.

Automatic regulation for protection of surfaces:

Automatic operation is provided by a comfortable, programmable unit with temperature and humidity sensors.

The system only comes on when the temperature of the protected surface reaches critical freezing level and humidity is detected. Otherwise, nature melts it by itself, for free.

For the whole system design contact your nearest specialist.

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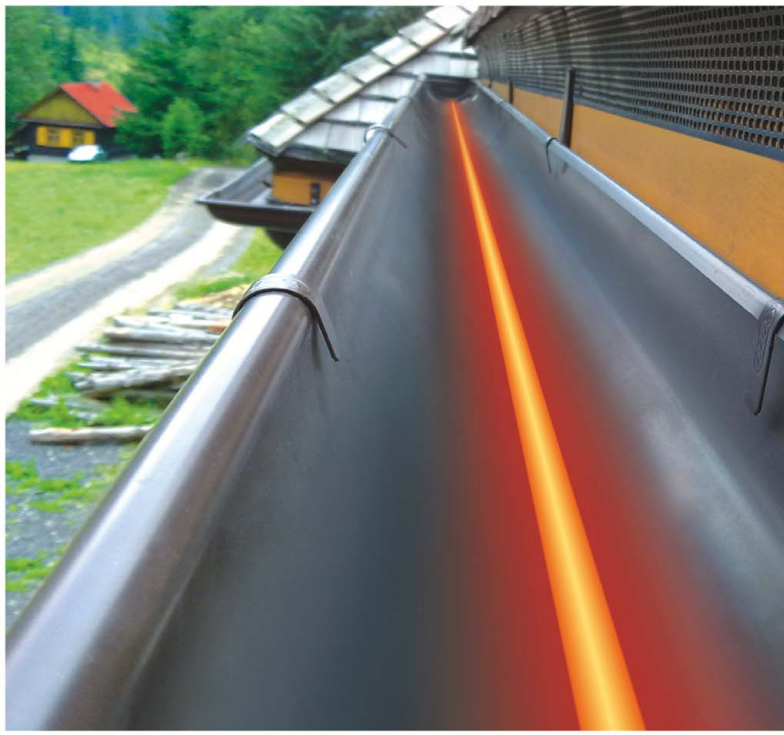
Protection of downpipes and gutters against snow and falling icicles

Benefits:

- The system enables smooth draining water, melting snow and ice in downpipes
- At the same time it prevents formation of dangerous icicles and overhangs
- It protects facades, gutters and drain pipes against damage, ice build-up due to frozen water

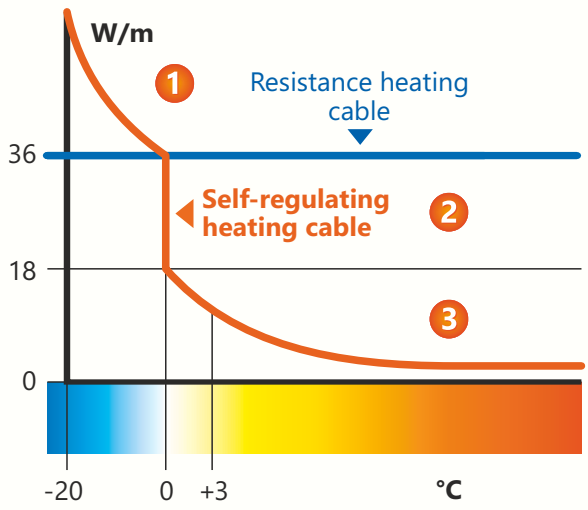


Basic technical data:

SPECIALITY: Intelligent cables are self-regulating based on the ambient temperature. Energy consumption is min. 40 % lower compared to resistance wires.

Why is intelligent cable so economic?

1) Intelligent cable increases output in snow or water
2) In contact with humidity, it immediately increases its output
3) If the cable is dry or the sun starts shining, it immediately decreases output and also energy consumption. It happens constantly and automatically



This self-regulating feature decreases consumption compared to classical resistance technology by at least 40 %.

Compared to classical resistance technology, it is affordable in terms of investments, because the investments come back in 4 years and then it will only save the costs.

The system does not overheat; therefore it is safe even in vertical downpipes. Leaves and dirt don't stay in the gutters, they are drained away. Assembly of this proven solution is quick and easy.

Regulation

Based on years of expertise in this field we recommend you to use adequate regulation for intelligent as well as resistance heating cables.

Comfortable regulation for gutters

Programmable unit will evaluate itself when the system must be protected, thus minimising energy consumption. It is thanks to cooperation between humidity sensor in the pipe and area sensor on the facade.
In small applications, up to 10 m, it is possible to use simple regulation.

Based on your plan assessment, we will gladly select the right thermostat for you.

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Protecting pipes from freezing, and their temperature maintaining

Benefits:

- Water runs in the pipes even at temperatures below 0 °C
- The pipes are protected against damage, thus preventing repair costs or costly outages in production
- Tested by many years of experience

Basic technical data:

Easy and comfortable installation
Quick layout of the right heating cable based on the chart.

- Intelligent, self-regulating cables for short lengths don't need thermostat
- Measure the length of the pipes and choose from the chart
- The cable will be fitted to the pipes by glass cloth tape

Self-regulating heating circuits: output 10 W/m at +5 °C with a 2 m long connecting lead and plug directly to the socket.

Length (m)	2	4	6	8	10	13	16	19	22	25
Output (W)	20	40	60	80	100	130	160	190	220	250

For longer pipes, we will be happy to design individual solutions for you.

Technological heating systems and protection of pipes

Our systems of industrial heating system **include a complete range of applications**
They range from protection of water piping against freezing in all industrial facilities, **including explosive environments,** to **keeping processing temperature / production temperature up to 800 °C.**

Keeping hot water temperature in rising pipes of apartment houses

It will immediately provide hot water in water faucets. By this we significantly reduce water consumption. Only one piping system is needed, and that's why heat losses are cut by half, which **saves operating costs** in comparison with classical water circulation with pump and secondary piping system.

Displej DIN 16P™ Electronic programmable DIN rail thermostat for switchboard

Four functions in one: heating, weekly programme, or without programme, temporary temperature change

Ideal use for:
Keeping temperature in industrial pipes
Protection of pipes against freezing
Protection of eaves gutters
Floor heating

Technical data:
I. Max.: 16 A / 230 V / +1 to +75 °C
Precision ± 0.5 °C / NTC sensor

Specialist's stamp of the brand **warm floor™**

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