

## Features

- Reliably prevents ice and snow formation
- Ensures safe movement of people and vehicles in winter
- Many fields of application (e.g. roofs, driveways)
- Saves the hassle of shoveling snow
- Easy to install
- UV-resistant

## Description

### Application

As an electric ice and snow melting system for roofs and drainage pipes (recommended nominal power 20 W/m) the EcoFROST heating circuits help minimize the risk of dangerous icicles or snow packs falling from the roof, as well as prevent damage and blockage of gutters and downspouts due to frozen melt water.

As a heating system for installation on open areas (recommended nominal power 30 W/m), the heating cables ensure safe movement for people and vehicles in private and public areas by removing ice and snow formations on e.g. driveways, sidewalks or parking lots or by preventing ice and snow reformation. Not only in winter, but also in case of e.g. over-freezing wetness in the transitional period. At the same time, it saves homeowners the hassle of shoveling snow and removing ice from relevant areas of the property with road salt or grit.

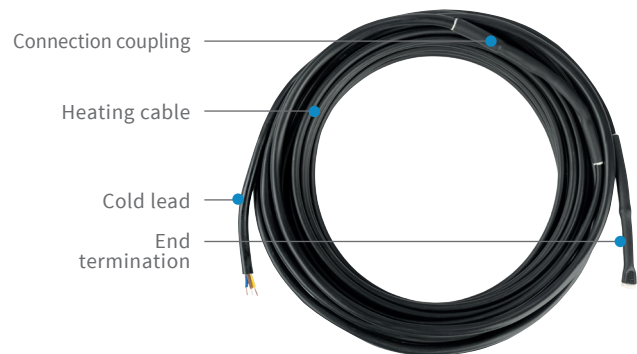
### Construction

The EcoFROST heating circuit consists of a series resistance heating cable with a UV-resistant polyolefin outer sheath and is equipped with a power-supply cable (5m length), a connection coupling and an end termination. The sheathing of the heating conductors with aluminum tape with 100% coverage inside the cable provides additional mechanical strength and, together with a copper drain wire, also serves as earth screen for safe use. The double-core construction with only one connection wire makes installation on site much easier.

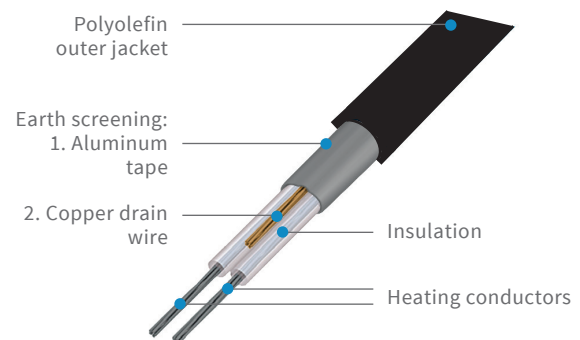
## Application

Application	Installation
Open area	● Concrete (sand embedding) ●
Roof	● Under hot asphalt (short-time)
Gutter & Drain pipe	● Open (UV resistant) ●
Pipes & Lines	●

## Design



## Cable design



## Technical data

Rated voltage	230 V AC, 50 Hz
Nom. power output	20, 30 W/m
Maximum operation temperature	+105 °C
Minimum operation temperature	-15 °C
Minimum storage temperature	-30 °C
Minimum installation temperature	-10 °C
Minimum bending radius at installation	6D (6-times heating cable diameter)
Cold lead length	5 m
Heating cable diameter	~ 6 mm
IP protection class	IPX7
Mechanical class	M2 (acc. IEC 60800)
Heating cable colour	black
Certifications	CE RoHS

## Ordering information

Heating section type	EcoFROST-20-13-260
Nom. power output, W/m	
Section length, m	
Power, W	

### Products

Frost protection heating cable for open areas EcoFROST, 20 W/m					
Type	Rated power, W	Nominal power output, W/m	Section length, m	Total resistance ( $\Omega$ ), Nom. @ +20°C (-5%, +10%)	Current, A
EcoFROST-20-7.5-150	150	20.0	7.5	352.6	0.65
EcoFROST-20-13-260	260	20.0	13.0	203.5	1.13
EcoFROST-20-19-380	380	20.0	19.0	139.3	1.65
EcoFROST-20-25-500	500	20.0	25.0	105.8	2.17
EcoFROST-20-30-600	600	20.0	30.0	88.2	2.61
EcoFROST-20-40-800	800	20.0	40.0	66.1	3.48
EcoFROST-20-50-1000	1000	20.0	50.0	52.9	4.35
EcoFROST-20-60-1200	1200	20.0	60.0	44.1	5.22
EcoFROST-20-70-1400	1400	20.0	70.0	37.8	6.09
EcoFROST-20-85-1700	1700	20.0	85.0	31.2	7.39
EcoFROST-20-100-2000	2000	20.0	100.0	26.4	8.70
EcoFROST-20-120-2400	2400	20.0	120.0	22.0	10.43
EcoFROST-20-135-2700	2700	20.0	135.0	19.6	11.74
EcoFROST-20-150-3000	3000	20.0	150.0	17.7	13.04
EcoFROST-20-170-3400	3400	20.0	170.0	15.6	14.78
EcoFROST-20-190-3800	3800	20.0	190.0	13.9	16.52

Frost protection heating cable for open areas EcoFROST, 30 W/m					
Type	Rated power, W	Nominal power output, W/m	Section length, m	Total resistance ( $\Omega$ ), Nom. @ +20°C (-5%, +10%)	Current, A
EcoFROST-30-6-180	180	30.0	6.0	293.9	0.78
EcoFROST-30-10-300	300	30.0	10.0	176.3	1.30
EcoFROST-30-15-450	450	30.0	15.0	117.6	1.96
EcoFROST-30-20-600	600	30.0	20.0	88.2	2.61
EcoFROST-30-25-750	750	30.0	25.0	70.5	3.26
EcoFROST-30-32-960	960	30.0	32.0	55.1	4.17
EcoFROST-30-40-1200	1200	30.0	40.0	44.1	5.22
EcoFROST-30-50-1500	1500	30.0	50.0	35.3	6.52
EcoFROST-30-60-1800	1800	30.0	60.0	29.4	7.83
EcoFROST-30-70-2100	2100	30.0	70.0	25.2	9.13
EcoFROST-30-80-2400	2400	30.0	80.0	22.0	10.43
EcoFROST-30-95-2850	2850	30.0	95.0	18.5	12.39
EcoFROST-30-110-3300	3300	30.0	110.0	16.0	14.35
EcoFROST-30-125-3750	3750	30.0	125.0	14.1	16.30
EcoFROST-30-135-4050	4050	30.0	135.0	13.1	17.61
EcoFROST-30-155-4650	4650	30.0	155.0	11.4	20.22