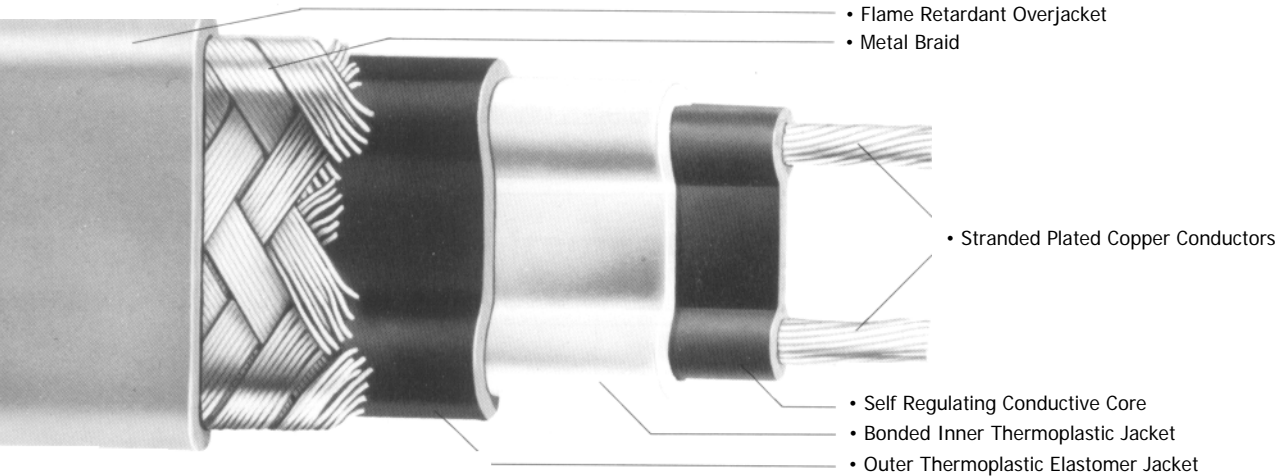


ROOF AND GUTTER DEICING HEATER CABLE

SPECIFICATION/APPLICATION INFORMATION



Description:

This roof & gutter deicing heating cable is a parallel circuit, self-regulating electric heater. An irradiated crosslinked conductive polymer core is extruded over two multi-stranded, tin-plated, 16-gauge copper buswires. The conductive core material increases or decreases its heat output in response

to temperature changes. Three jackets provide extra dielectric strength, moisture resistance, protection from impact or abrasion damage, and flame retardancy. The inner thermoplastic jacket is extruded over and bonded to the core material to prevent moisture penetration and wicking along the core. A waterproof

thermoplastic elastomer outer jacket is then extruded over the inner jacket for dielectric protection and additional moisture resistance. A tinned copper braid is installed over the second jacket providing a continuous ground path. A flame retardant, UV stabilized polyolefin overjacket is then extruded over the braid.

Application:

This type of heating cable provides a solution for ice dams that can build up and damage building roofs, gutters and downspouts.

During winter months, snow and ice accumulation on roofs can prevent proper drainage of water when normal melting occurs. Water stands on the roof and can be refrozen during cold nights resulting in expansion and

potential roof damage.

These ice melting heaters are designed for installation on roofs and gutters to melt a pathway for the drainage of water. The heating cable's self-regulating feature provides additional benefits as well.

• Lower Energy Consumption

The heater automatically

reduces its power output as drainage tunnels are formed in the ice and snow.

• High Temperature Protection

Because the heater self regulates its power output as a function of temperature, it cannot overheat and melt or damage temperature sensitive roof coatings.

Approvals:

UL
Ordinary Locations-



CSA
Ordinary Locations-



Performance And Rating Data:

	120 V	240 V		
Voltage (VAC)	120	208	240	277
Power Output in Ice (W/ft.)	11.1	9.8	11.1	12.3
Maximum Segment Length (ft.)	137	408	416	420
Minimum Installation Temp (°F)	-35°F	-35°F	-35°F	-35°F
Minimum Installation Temp (°C)	-37°C	-37°C	-37°C	-37°C
Current Load (A/ft.):				
At 20°F (-7°C) Start-up	.145	.064	.073	.081
At 0°F (-18°C) Start-up	.164	.072	.082	.091
At -20°F (-29°C) Start-up	.181	.080	.091	.101
At -40°F (-40°C) Start-up	.200	.088	.100	.111

Maximum Heater Length/Circuit Breaker Size:

Start-Up Temp.	Maximum Length (feet) Vs Circuit Breaker Size						
	120VAC			240VAC			
	15A	20A	30A	15A	20A	30A	40A
20°F (-7°C)	103	138	207	205	274	411	548
0°F (-18°C)	91	122	183	183	244	366	488
-20°F (-29°C)	83	110	166	165	220	330	440
-40°F (-40°C)	75	100	150	150	200	300	400

Notes:

1. Maximum segment length is the maximum continuous heater run with minimal voltage drop. For breaker loading, multiple heater segments can be installed in parallel providing no individual length is longer than the maximum published segment length. For voltages other than 240VAC, divide full breaker amperage rating by amps/foot @ start-up temperature to determine maximum total footage allowed.
2. Circuit breakers are sized per national electrical code.
3. National Electrical Codes require ground-fault equipment protection for fixed outdoor electrical deicing equipment. Electrical connections should be made by a licensed electrician.

Total Cable Requirements:

The total cable length for deicing is determined by including all elements of the roof system that need protection. Use the following tables to determine the total length of cable required.

TABLE 1		
Item	Feet of Cable/Ft. Item	Comments
Gutter	1'	1 Trace/6" gutter width
Downspout	2'	Unless downspout is on end of circuit, the cable is looped down and back
Roof Valley	6'	Per valley
Dormer	1'	1 ft. of cable/foot of dormer perimeter

Cable Footage Required for Roof Overhangs: (Feet of Cable per Foot of Roof)

TABLE 2			
Eave Overhang	Feet of Cable Loop Height	Shingle Roof	Metal Roof
12"	18"	1' -10"	2'-6"
24"	30"	2' -8"	3'-6"
36"	42"	3' -8"	4'-6"
48"	54"	4' -8"	5'-6"