

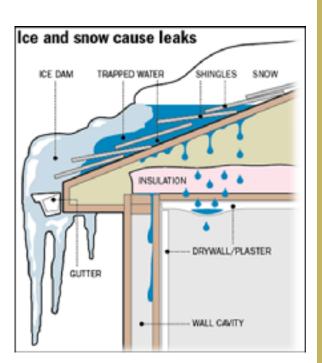
WHY USE A ROOF DEICING SYSTEM?

When snow piles up on a roof, gravity will take it to the roof edge and into the gutters where it gets stuck. From there, the freeze-thaw cycles of the days and nights will create a 'dam' of ice. Each time that dam grows, it adds more weight onto the gutters that will bend and possibly break.

This can happen in various parts of the roof. The ice can lift shingles and sheet metal during the freezing process, and when it then thaws during the day, water damage can occur. These damages on the roof and the subsequent water damage inside the house can be avoided with a well-designed roof deicing system.

Avoid:

- Hazards from falling ice / snow
- Bended gutters
- Damaged shingles
- Water infiltration
- Drywall damage
- Mold inside the house



WHAT ARE THE WARMUP SOLUTIONS

Warmup offers two types of systems to deice roofs and gutters: a DIY residential solution comprised of plug-in cables (constant wattage WRGH, page 5) and a more comprehensive Self-Regulating cable system for harsh climates (page 7) installed by professionals.

Constant Wattage cables maintain the same output and temperature regardless of the outdoor conditions. These are simpler to specify and install, but may not be suitable for more demanding climates and commercial environments.



Self-regulating cables are uniquely built for the harshest weather conditions as the cable will

increase its output as the temperature gets colder. The inner carbon matrix of the cable will expand and contract with ambient temperatures. The colder it gets, the more it contracts and allows the electricity to flow more rapidly between the conductor cables. While self-regulating, we still recommend connecting these cables to a controller in order to turn them off completely after the last spring frost.



For smaller systems such as a single roof line and downspout or a roof valley where the snow never melts, consider the simplicity of our **plug-in kits**.

What you'll need:

- An outdoor outlet to plug the cable in
- A kit of the right length
- Some roof clips (see Accessories page 8)

HOW TO MEASURE WHAT I NEED?

To determine the total length of cable needed, measure the various areas to protect. Measure:

- The linear gutters or roofline
- Any valleys (C)
- Any dormers (D)
- And the downspouts (A)

If the downspout is in line with a gutter run, double the length needed since you will be going down the spout and back up to continue the run (B).

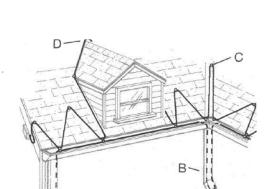
If your roof is prone to snow and ice accumulation or if your roof pitch is below 30 degrees (low pitch) we also recommend heating the overhang with "sharkteeth" along the roof line. This is particularly useful in breaking up the accumulated ice and snow and route it to the gutters and down the spouts.

To calculate what you need, take the depth of your overhang (the distance the gutter protrudes from the wall) and plan to run up the roof for 1.5x that distance. So if you have a 2ft overhang, you will go up the roof by 3ft (B) and do so every 2ft (A). Distance A is standard at 2ft but can be modified depending on the type of roof (metal, shingle, etc).

The overhang is unheated and that is why the ice tends to reform over that section of the roof. While the rest of the house is heated and melts the snow, the overhang remains below freezing temperature and requires this additional help to mitigate the ice damming.

To calculate the total amount of cable needed:

CABLE LENGTH = ROOFLINE (ft) / SPACING (ft) x OVERHANG (ft) x 3 + valleys, dormers, and downspouts (see above)



DIFFERENT ROOFS, DIFFERENT NEEDS

Different roof pitches and roofing materials will require appropriate configurations. Accessories like the SB-170 adhesive are also helpful to secure roof clips on metal and rubber roofs that do not allow screwing the clips down. There are many acceptable patterns and layouts for your roof project, but consider the below key principle:

Ensure there is a continuous path from roof to ground

This means that from dormer to valley to roofline and down the spout, you want to ensure the melted ice and snow is progressively removed from your roof. Downspouts should be traced all the way to the ground or below ground as necessary.

ACCESSORIES

Unless you purchase WRGH and SR plug-in kits, you will need an **SR-POWER-KIT** to connect the system to power. Account for one **SR-HANGER-KIT** for each downspout and about 1 bag of **ROOF-CLIP** (50/bag) for each 100ft of cable. Roof clips can be screwed under the shingles or applied with **SB-170 adhesive**. The latter is also the preferred method on non-standard roofs, metal roofs and rubber roofs.

ELECTRICAL PROVISIONS

Once you have determined your total cable length it possibly needs to be broken down in multiple circuits. For example, you can put up to 165ft of 5-watt cable on a 120 volt / 20A breaker, or up to 330ft of cable on a 240V/20A breaker. Refer to Spec Sheet WSC-0929 for maximum circuit runs based on voltage and amperage available.

Finally, Warmup highly recommends a controller to automatically turn off your system when temperatures are safely above freezing. This is to maintain a long product life and prevent unnecessary power usage during the warmer months. Common choices are the **ASE-DS8** or the **TRF-115** available on page 8.

For Plug-in Kits, automatic shut-off is also possible with the SR-PLUG.



PROJECT EXAMPLE

Roof Run Length	60′	60' of cable for the total Roof Run Length +
Overhang	2'	60' / 3' = 20, 20 x $3' = 60'$ of cable to make 20 3' triangles +
Number of Downspouts	3	15' x 2 = 30', 30' x 3 = 90' of cable to heat 3 15' downspouts =
Downspout Length	15′	210' of cable required per recommended heating guidelines





Warmup® Solutions





	SR	WRGH
Cable	SR-5W-1-250	WRG-120-1200
Control	ODC-ASE-DS8C	ODC-WRS-2
Accessories	Hanger kits, Power Kit, Roof Clips, and SB-170	Included with kit
Total Cost	\$ 2,528.00	\$ 452.50

ROOF & GUTTER DE-ICING SYSTEMS

Constant Wattage Plug-In Kits for Residential Applications

The Warmup WRGH is a constant wattage roof de-icing system supplied in pre-terminated plug-in kits. It is offered in sizes from 30ft to 240ft, from 150W to 1,200W. It is supplied with roof clips and spacers. WRGH kits are sold pre-assembled with a 3-prong plug in order to provide a simple, DIY solution to resolve ice dams and snow accumulation on roof lines.

While spacing will impact the eventual output, the WRGH cables are designed for residential use.

For heavy-duty and commercial applications, please refer to the SR product range from Warmup.

An optional WRS-2 Controller can be purchased to reduce usage and electrical draw when temperatures are above 40°F. It is highly recommended, to increase product life and to reduce risk of fires or burn outs.

TECHNICAL SPECIFICATIONS

- Not suitable for Pipe Freeze Protection
- Do not overlap or terminate cable
- Turn system off after the snow season
- Must be connected to GFCI protected outlet or breaker.













WRS-2 Controller

Code	Length in Feet	Wattage	Voltage	W/lin. ft	Canada	USA
WRGH-120-150	30	150	120	5	\$113.00	\$90.50
WRGH-120-300	60	300	120	5	\$145.00	\$116.50
WRGH-120-400	80	400	120	5	\$185.00	\$148.50
WRGH-120-500	100	500	120	5	\$205.00	\$164.50
WRGH-120-600	120	600	120	5	\$260.00	\$208.00
WRGH-120-800	160	800	120	5	\$304.00	\$243.00
WRGH-120-1000	200	1000	120	5	\$366.00	\$293.00
WRGH-120-1200	240	1200	120	5	\$399.00	\$319.00

Code	Description	Canada	USA
ODC-WRS-2	Moisture & Temperature Controller for Warmup WRG Roof & Gutter De-icing Kits.	\$159.00	\$133.50

ROOF AND GUTTER DE-ICING SYSTEMS

Self-regulating Cable for Harsh Climates and Demanding Environments

Warmup's self-regulating roof de-icing cables are heavy-duty cables that will ensure performance under the most challenging conditions. Ice dams can lead to water seeping and interior damage, falling ice and snow on sidewalks.

We have designed the right systems to protect your roofs, gutters and downspouts from damage or injury caused by ice.

Our self-regulating cable will vary its output based on ambient temperature. This reduces consumption costs by requiring just the amount of heat needed to get the job done.

With simple plug-in kits for residential use and large spools for engineered systems and commercial buildings, we look forward to being a part of your project.

FEATURES & RENEFITS

- Self-regulating cable for cost-efficient operation
- Automatic controls to trigger heating only when needed
- Fits on all roof types with a full range of accessories
- Carries a 10-year warranty

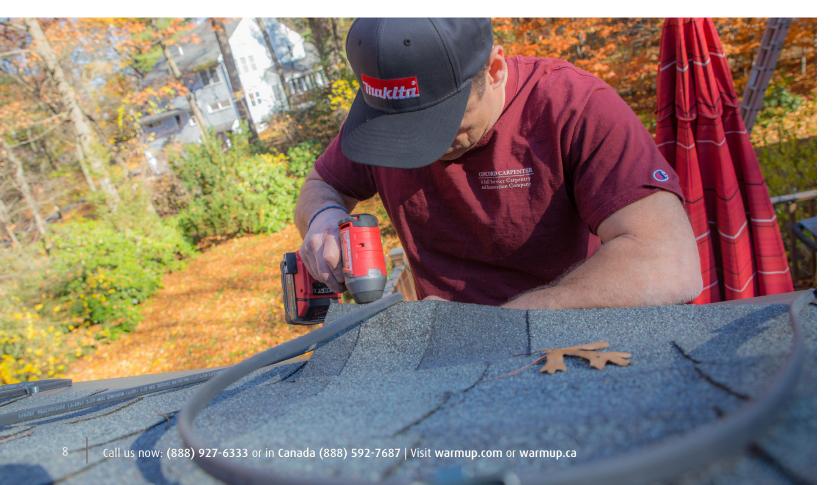






TECHNICAL SPECIFICATIONS

- · Commercial Grade, 16 AWG Buss Wire
- Standard Braid with overjacket for wet & dry locations
- · Circuit lengths up to 540ft
- 5W or 8W/ft output at 50°F
- Available in 120V and 208-277 Volts



	Code	Description	Canada	USA
	SR-5W-1-250	Self-Regulated 16GA Cable, 120V, 5W/linear foot. Sold in 250' length spools.	\$2,033.00	\$1,767.50
120V	SR-5W-1-500	Self-Regulated 16GA Cable, 120V, 5W/linear foot. Sold in 500' length spools.	\$4,064.50	\$3,534.25
	SR-5W-1-1000	Self-Regulated 16GA Cable, 120V, 5W/linear foot. Sold in 1000' length spools.	\$8,129.00	\$7,068.50
	SR-8W-1-250	Self-Regulated 16GA Cable, 120V, 8W/linear foot. Sold in 250' length spools.	\$2,093.00	\$1,819.50
	SR-8W-1-500	Self-Regulated 16GA Cable, 120V, 8W/linear foot. Sold in 500' length spools.	\$4,184.00	\$3,638.00
	SR-8W-1-1000	Self-Regulated 16GA Cable, 120V, 8W/linear foot. Sold in 1000' length spools.	\$8,368.00	\$7,276.00
	SR-5W-2-250	Self-Regulated 16GA Cable, 240V, 5W/linear foot. Sold in 250' length spools.	\$2,033.00	\$1,767.50
240V	SR-5W-2-500	Self-Regulated 16GA Cable, 240V, 5W/linear foot. Sold in 500' length spools.	\$4,064.50	\$3,534.25
24	SR-5W-2-1000	Self-Regulated 16GA Cable, 240V, 5W/linear foot. Sold in 1000' length spools.	\$8,129.00	\$7,068.50
	SR-8W-2-250	Self-Regulated 16GA Cable, 240V, 8W/linear foot. Sold in 250' length spools.	\$2,093.00	\$1,819.50
	SR-8W-2-500	Self-Regulated 16GA Cable, 240V, 8W/linear foot. Sold in 500' length spools.	\$4,184.00	\$3,638.00
	SR-8W-2-1000	Self-Regulated 16GA Cable, 240V, 8W/linear foot. Sold in 1000' length spools.	\$8,368.00	\$7,276.00
	SR-K6FT	Self Regulating Kit with Plug, 6ft	\$91.00	\$79.00
	SR-K12FT	Self Regulating Kit with Plug, 12ft	\$121.00	\$105.00
	SR-K18FT	Self Regulating Kit with Plug, 18ft	\$149.00	\$129.50
120V	SR-K24FT	Self Regulating Kit with Plug, 24ft	\$178.00	\$154.50
	SR-K50FT	Self Regulating Kit with Plug, 50ft	\$312.00	\$271.00
	SR-K75FT	Self Regulating Kit with Plug, 75ft	\$420.00	\$365.00
	SR-K100FT	Self Regulating Kit with Plug, 100ft (seen below)	\$511.00	\$444.00







CONTROLS AND ACCESSORIES

A wide variety of control options to fit any size roof and gutter heating project.

Controllers

Code	Description	Canada	USA
ODC-ASE-DS8C	Wall-mounted controller with built-in sensor and 1x30A capacity (240V). For Snow Melting.	\$969.00	\$775.00
ODC-ASE-DS9C	Wall-mounted controller with built-in sensor and 2x30A capacity (240V). For Snow Melting.	\$1,032.00	\$825.00
ODC-RESIBOX3	Automatic Snow Melting Panel with 3 x 30A switching capability and integrated GFEP protection. Requires AIRSENSE sensor.	\$4,973.00	\$3,978.00
ODC-AIRSS	Outdoor moisture and temperature sensor.	\$1,023.75	\$819.00
ODC-AIRSS-B	Mouting bracket for AirSense sensor.	\$259.00	\$207.00







Accessories

Code	Description	Canada	USA
HANGER-KIT	Downspout Hanger for Self-Regulating Cable and Roof/Gutter heaters.	\$27.00	\$21.00
POWER-KIT	Power Connection Kit for Self-Regulating Cable. Includes 2*warning labels and 1*END-KIT.	\$74.38	\$59.50
ROOF-CLIP	Metal single roof clips packaged and sold 50 per pkg. Secure to roof with screws or Everseal SB-170 adhesive or similar.	\$140.00	\$112.00
SB-170	Versatile adhesive to apply the Warmup ROOF-CLIP on a variety of roof structures. It is water and weather proof with a strength of 2,000 psi.	\$44.00	\$35.00
SR-SPLICEKIT	Splice/Tee Kit for Self-Regulating Cable.	\$57.00	\$45.00
END-KIT	End Seal Kit for Self-Regulating Cable.	\$29.00	\$22.50
CRDS-15-GFI	6ft lead with GFCI 3-prong molded plug, NEMA 5-15,15 amp, 14/3.	\$111.00	\$88.50

SpeedFit Accessories

Code	Description	Canada	USA
SR-SFIT-BOX	Power connection junction box (6x6x3) with Pipe-Mounting Bracket for Self-Regulating connections.	\$275.00	\$220.50
SR-SFIT-SPL	In-line splicing box for fast and weathertight connections in the field.	\$87.00	\$69.00
SR-SFIT-TEE	3-Way T-splice box for fast and weathertight connections in the field.	\$94.00	\$75.00
SR-SFIT-PRO	Non-Strip field connection box (see more on page 65).	\$465.31	\$372.25











SR-SFIT-TEE

SR-SFIT-PRO





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More information on

warmupedia.warmup.com

Warmupedia documents installation tips and troubleshooting guides for all Warmup products.