





# **COST EFFECTIVE WAY TO REMOVE ICE AND SNOW**

Sno\*Melter® electric mats are designed to be embedded in concrete, asphalt, or under pavers, either as part of a new installation or when repaving. Because the snow melting mats operate for relatively short periods each winter, operating costs are less than most other snow and ice removal methods.

Operating costs for your area will depend upon the total hours of snowfall and upon the heating capacity you specify. Our recommended nominal heat density of 538 Watts per square meter (50 Watts per square foot) provides quick response time, especially when used with automatic control. In most cases, snow will melt at a rate that keeps up with average snowfall, minimizing accumulation of snow on the heated surface. In a heavy snowfall, when snow accumulates at a faster rate, extra heating time will be required for complete removal. An automatic control, set to allow additional running time after snowfall stops, ensures dry pavement and minimizes icy spots.

Electric snow melting systems are a practical, economical way of preventing the buildup of ice and snow on steps, walkways, driveways, parking areas, loading docks and even roads.

Compare electric mats with traditional snow removal methods:

- No damage to concrete or asphalt from salt or other chemicals.
- 2. No messy buildup of sand.
- 3. No waiting for snow-clearing service personnel.
- No investment in snowblowers, shovels, plows, and other expensive equipment.
- 5. Minimal labor costs.
- 6. There are no moving parts.

Properly installed mats provide trouble-free service as long as the pavement or concrete in which they are embedded in is not disturbed or damaged.



Sno\*Melter Mats are available in sizes that cover, depending on the voltage available and configuration, from about 0.46 to 12.1 square meters (5 to 130 square feet) using a single mat. Mats can easily be combined and tailored to cover your unique walk, stair, patio and driveway configuration.



Electric mats provide reliable, convenient snow melting, providing a simpler and safer method of protection for homes and businesses.

City	State	Annual Days of Snowfall ①	Price/kWh ②	Annual Cost of Sno*Melter Cable Kits ③	Annual Cost of Traditional Snow Removal ④	Savings, \$	Savings, %
Boston	Massachusetts	22.1	\$0.15	\$98.12	\$663.00	\$564.88	85%
Buffalo	New York	61	\$0.18	\$331.23	\$1,830.00	\$1,498.77	82%
Chicago	Illinois	28.5	\$0.12	\$100.04	\$855.00	\$754.97	88%
Denver	Colorado	33.3	\$0.11	\$111.89	\$999.00	\$887.11	89%
Detroit	Michigan	36.4	\$0.13	\$141.96	\$1,092.00	\$950.04	87%
Minneapolis	Minnesota	37.3	\$0.11	\$121.97	\$1,119.00	\$997.03	89%
New York	New York	11.1	\$0.18	\$60.27	\$333.00	\$272.73	82%
Pittsburgh	Pennsylvania	39.6	\$0.13	\$156.82	\$1,188.00	\$1,031.18	87%
Salt Lake City	Utah	34.8	\$0.09	\$91.87	\$1,044.00	\$952.13	91%
Vancouver	British Columbia	7	\$0.08	\$16.80	\$210.00	\$193.20	92%
Toronto	Ontario	24	\$0.11	\$79.20	\$720.00	\$640.80	89%

① For U.S. cities — source: U.S. Census American Community Survey. According to the U.S. Census (usa.com)
For Canadian cities — source: Environment Canada. According to the Government of Canada (climate.weather.gc.ca)

② For U.S. cities —source: Energy Information Administration For Canadian cities — source: Canadian Energy Board

③ Calculations for Sno \*Melter Mats annual cost are based on 18.6 square meters (200 square feet)

<sup>4</sup> Snow Removal is estimated at \$30.00 (USD) per snow event

# **SNO\* MELTER ELECTRIC HEATING MATS**

Both Sno\*Melter and Custom Sno\*Melter mats are easy to install.

#### **ARCHITECTS' & ENGINEERS' SPECIFICATIONS**

The following description is provided to assist architects and engineers wishing to specify the installation of EasyHeat Sno\*Melter heating mats.

Sno\*Melter Mats are comprised of a single length of dual conductor heating cable formed into a predetermined shape and secured in this shape by polymer carrier strands fused to the cable.

The heating cable is rated at 90°C (+194°F) and is a resistive conductor core, insulated with thermoplastic compound and an inner nylon jacket. A copper mesh is braided over the inner nylon jacket to provide a means for grounding the heater. An additional jacket of polyvinyl chloride insulation is extruded over the copper braid. The heating cables have a minimum of 6 meters (20 feet) of cold lead, which has the same braiding and jacketing. The heating cable and the cold lead are factory assembled with a waterproof molded splice connection.

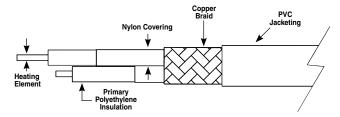
Sno\*Melter Mats comply to the standards specified by UL, CSA (Canadian Standards Association) and the manufacturer's specifications as Listed by UL. Installation is in accordance with the NEC (National Electrical Code) Failure to follow these specifications could result in a hazardous condition arising.

## **HOW THEY WORK**

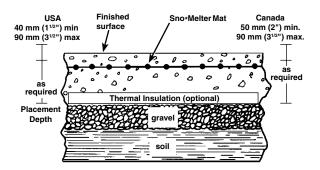
Sno\*Melter Mats install easily, attaching to welded wire mesh or re-bar and effectively heating their surroundings assuring an even distribution of low-temperature heat over the entire surface. This eliminates strips of snow or ice often left by cable systems with a heating pattern which is too wide.

### **DEPENDABLE PERFORMANCE FROM QUALITY MATERIALS**

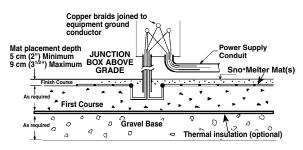
Electric heating mats are manufactured from quality materials to provide maximum performance under extreme weather conditions. Resistance wire and copper grounding braid are separated by XLPE insulation with a rugged PVC outer covering protecting the entire assembly.



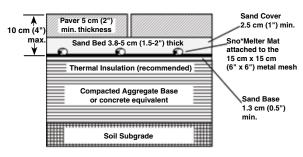
Sno Melter Mat Cable



Mat Installation in Concrete



Mat Installation in Asphalt



@ Residential Sidewalk, Driveway or Patio Installation under Pavers

# FLEXIBILITY FOR A VARIETY OF APPLICATIONS

Standard mat carrier strands can be cut so that the mat can be reconfigured to increase width, create corners, curves, or be placed around obstacles. Custom mats can be factory tailored into many shapes and configurations for a variety of applications.

#### SHAPE MATS AROUND CURVES AND OBSTACLES

Standard sized Sno\*Melter mats may be tailored to follow the contours of curves and other obstructions by making a series of cuts to the mat carrier strands. Extreme care should be exercised to prevent cutting the mat heater wire during this operation. You can easily cut carrier strands towards the cold lead side and manipulate the mat, making sure the heater wires do not overlap or touch. The number of cuts required will depend upon the length of the mat and the radius of the curve.

#### **CUSTOM HEATING MATS**

These are custom made to your design at the factory into virtually any shape using the same high quality heating cables, cold leads and connections in the standard mats and do not need to be reshaped during installation.

#### **SPECIFICATIONS**

- Maximum amperage per mat: 22 Amps
- Minimum area per mat:
  - 120-277 V: 0.46 square meters (5 square feet)
  - 347-600 V: 0.84 square meters (9 square feet)
- Maximum length: 7.62 meters (25 feet)
- Maximum width: 1.83 meters (72 inches)
  - (For widths over 1.83 meters (72 inches) up to 3.66 meters (144 inches), order mats twice as long, half as wide, cut and double back.)
- Max Voltage: 600 Vac
- Wattage: Up to 800 Watts per square meter (75 Watts per square foot).
  - All installations 592 Watts per square meter (55 Watts per square foot) and under do not require a thermostat
  - All installations 593-800 Watts per square meter (56-75 Watts per square foot) require a high limit Listed or Certified thermostat, set at maximum 5°C (+41°F).
- Mats are supplied with 6 meter (20 foot) cold leads as standard, longer lead lengths are optional

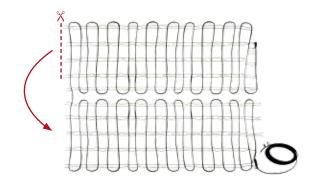
### **CAUTION**

Materials and worksmanship for the concrete/asphalt/pavers need to be of good quality to help ensure a safe and trouble-free installation.

# **FLEXIBILITY FOR A VARIETY OF APPLICATIONS**

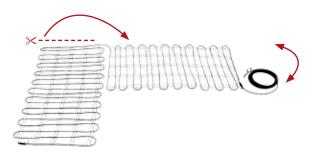
### **INCREASE WIDTH**

Increase width by cutting carrier strands and flipping the mat 180°, allowing the two sides to sit side by side.



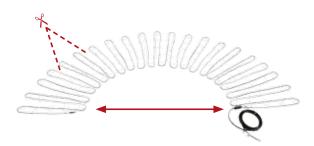
### **CORNERS**

Create corners by cutting carrier strands and rotating the mat 90°. Once this is done, flip the mat 180°.



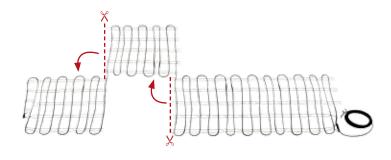
## **CURVES**

To make a curve, cut carrier strands between loops and fan left to right. The number of strand cuts will depend on the mat length and surface curvature.



## **AROUND OBSTACLES**

To allow mat to be placed around obstacles, first cut the carrier strands and flip the mat 90°. Then, cut the mat again and flip 180°.

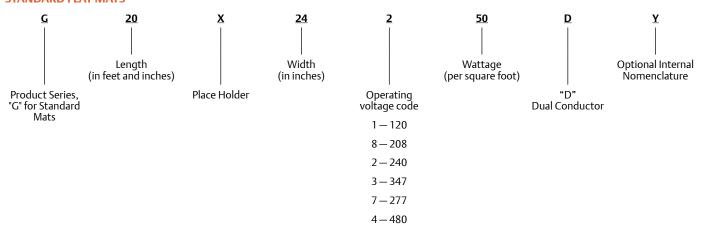


# **SNO\* MELTER STANDARD SIZE SPECIFICATIONS**

#### **SNO\*MELTER® G-MATS**

Sno\*Melter G-Mats are standard size snow and ice melting mats in 0.46 meter - 0.91 meter (18 inch and 36 inch) widths. They are engineered to provide 538 Watts per square meter (50 Watts per square foot). Mats are supplied with standard 6 meters (20 feet) cold leads. UL Listed and CSA Certified.

#### **STANDARD FLAT MATS**



Catalog Number	Length m (ft)	Width m (in)	Square Meters (Square Feet)	Vac	Amps	Watts
G05X18250D	1.52 (5)	0.46 (18)	0.7 (7.5)	240	1.6	375
G05X18850D	1.52 (5)	0.46 (18)	0.7 (7.5)	208	1.8	375
G05X18750D	1.52 (5)	0.46 (18)	0.7 (7.5)	277	1.4	375
G05X18450D	1.52 (5)	0.46 (18)	0.7 (7.5)	480	0.8	375
G06X18250D	1.83 (6)	0.46 (18)	0.84 (9.0)	240	1.9	450
G06X18850D	1.83 (6)	0.46 (18)	0.84 (9.0)	208	2.2	450
G06X18750D	1.83 (6)	0.46 (18)	0.84 (9.0)	277	1.6	450
G06X18450D	1.83 (6)	0.46 (18)	0.84 (9.0)	480	0.9	450
G07X18250D	2.13 (7)	0.46 (18)	0.98 (10.5)	240	2.2	525
G07X18850D	2.13 (7)	0.46 (18)	0.98 (10.5)	208	2.5	525
G07X18750D	2.13 (7)	0.46 (18)	0.98 (10.5)	277	1.9	525
G07X18450D	2.13 (7)	0.46 (18)	0.98 (10.5)	480	1.1	525
G08X18250D	2.44 (8)	0.46 (18)	1.11 (12.0)	240	2.5	600
G04X36250D	1.22 (4)	0.91 (36)	1.11 (12.0)	240	2.5	600
G08X18850D	2.44 (8)	0.46 (18)	1.11 (12.0)	208	2.9	600
G04X36850D	1.22 (4)	0.91 (36)	1.11 (12.0)	208	2.9	600
G08X18750D	2.44 (8)	0.46 (18)	1.11 (12.0)	277	2.2	600
G04X36750D	1.22 (4)	0.91 (36)	1.11 (12.0)	277	2.2	600
G08X18450D	2.44 (8)	0.46 (18)	1.11 (12.0)	480	1.3	600

Note: Other cold lead lengths available; To order, add "NL" to the part number, then specify desired length in feet and inches.

# **SNO\*MELTER STANDARD SIZE SPECIFICATIONS**

Catalog Number	Length m (ft)	Width m (in)	Square Meters (Square Feet)	Vac	Amps	Watts
G04X36450D	1.22 (4)	0.91 (36)	1.11 (12.0)	480	1.3	600
G09X18250D	2.74 (9)	0.46 (18)	1.25 (13.5)	240	2.8	675
G09X18850D	2.74 (9)	0.46 (18)	1.25 (13.5)	208	3.2	675
G09X18750D	2.74 (9)	0.46 (18)	1.25 (13.5)	277	2.4	675
G09X18450D	2.74 (9)	0.46 (18)	1.25 (13.5)	480	1.4	675
G10X18250D	3.05 (10)	0.46 (18)	1.39 (15.0)	240	3.1	750
G05X36250D	1.52 (5)	0.91 (36)	1.39 (15.0)	240	3.1	750
G10X18850D	3.05 (10)	0.46 (18)	1.39 (15.0)	208	3.6	750
G05X36850D	1.52 (5)	0.91 (36)	1.39 (15.0)	208	3.6	750
G10X18750D	3.05 (10)	0.46 (18)	1.39 (15.0)	277	2.7	750
G05X36750D	1.52 (5)	0.91 (36)	1.39 (15.0)	277	2.7	750
G10X18450D	3.05 (10)	0.46 (18)	1.39 (15.0)	480	1.6	750
G05X36450D	1.52 (5)	0.91 (36)	1.39 (15.0)	480	1.6	750
G15X18250D	4.57 (15)	0.46 (18)	2.09 (22.5)	240	4.7	1125
G15X18850D	4.57 (15)	0.46 (18)	2.09 (22.5)	208	5.4	1125
G15X18750D	4.57 (15)	0.46 (18)	2.09 (22.5)	277	4.1	1125
G15X18450D	4.57 (15)	0.46 (18)	2.09 (22.5)	480	2.3	1125
G20X18250D	6.10 (20)	0.46 (18)	2.79 (30.0)	240	6.3	1500
G10X36250D	3.05 (10)	0.91 (36)	2.79 (30.0)	240	6.3	1500
G20X18850D	6.10 (20)	0.46 (18)	2.79 (30.0)	208	7.2	1500
G10X36850D	3.05 (10)	0.91 (36)	2.79 (30.0)	208	7.2	1500
G20X18750D	6.10 (20)	0.46 (18)	2.79 (30.0)	277	5.4	1500
G10X36750D	3.05 (10)	0.91 (36)	2.79 (30.0)	277	5.4	1500
G20X18450D	6.10 (20)	0.46 (18)	2.79 (30.0)	480	3.1	1500
G10X36450D	3.05 (10)	0.91 (36)	2.79 (30.0)	480	3.1	1500
G30X18250D	9.14 (30)	0.46 (18)	4.18 (45.0)	240	9.4	2250
G15X36250D	4.57 (15)	0.91 (36)	4.18 (45.0)	240	9.4	2250
G30X18850D	9.14 (30)	0.46 (18)	4.18 (45.0)	208	10.8	2250
G15X36850D	4.57 (15)	0.91 (36)	4.18 (45.0)	208	10.8	2250
G30X18750D	9.14 (30)	0.46 (18)	4.18 (45.0)	277	8.1	2250
G15X36750D	4.57 (15)	0.91 (36)	4.18 (45.0)	277	8.1	2250
G30X18450D	9.14 (30)	0.46 (18)	4.18 (45.0)	480	4.7	2250
G15X36450D	4.57 (15)	0.91 (36)	4.18 (45.0)	480	4.7	2250
G20X36250D	6.10 (20)	0.91 (36)	5.57 (60.0)	240	12.5	3000
G20X36850D	6.10 (20)	0.91 (36)	5.57 (60.0)	208	14.4	3000
G20X36750D	6.10 (20)	0.91 (36)	5.57 (60.0)	277	10.8	3000
G20X36450D	6.10 (20)	0.91 (36)	5.57 (60.0)	480	6.3	3000
G30X36250D	9.14 (30)	0.91 (36)	8.36 (90.0)	240	18.8	4500
G30X36850D	9.14 (30)	0.91 (36)	8.36 (90.0)	208	21.6	4500
G30X36750D	9.14 (30)	0.91 (36)	8.36 (90.0)	277	16.2	4500
G30X36450D	9.14 (30)	0.91 (36)	8.36 (90.0)	480	9.4	4500

Note: Other cold lead lengths available; To order, add "NL" to the part number, then specify desired length in feet and inches.

# SNO\* MELTER CUSTOM SIZE SPECIFICATIONS

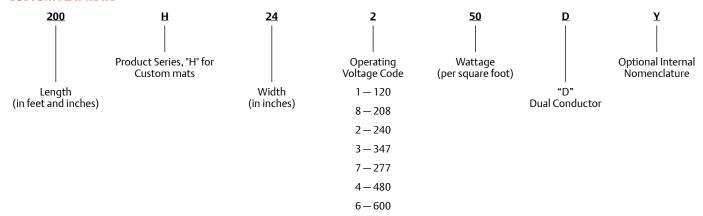
#### **SNO\*MELTER H-MATS**

H-mats are custom sized snow and ice melting mats. They are available in outputs up to 800 Watts per square meter (75 Watts per square foot) and in voltages up to 600 Vac. Mats are supplied with standard 6 meter (20 foot) cold leads, longer lengths are available. All installations 592 Watts per square meter (55 Watts per square foot) and under do not require a thermostat. All installations 593-800 Watts per square meter (56-75 Watts per square foot) require a high limit UL Listed and CSA Certified thermostat, set at maximum 5°C (+41°F).

Selection of snow melting mats is accomplished by determining the size of the area to be heated and the voltage available. This is achieved by doing the following:

- 1. Determine size of mats, allowing for expansion and construction joints, obstructions, etc.
- 2. Assign a part number for all mats as shown below.
- 3. Orders for modified mats must include scale drawings showing exact shape, size and point where leads exit.

#### **CUSTOM FLAT MATS**



# SNO\*MELTER STEP MAT SPECIFICATIONS

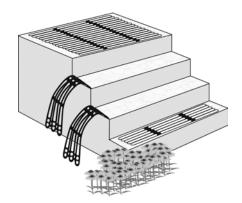
#### **SNO\*MELTER® STEP MATS**

Step mats can be used independently or in conjuction with standard mats to keep stairs free of snow and ice. These mats are available in 2 or 3 step models. For the step mats, risers are 0.2 meters (8 inches) unless otherwise specified.

Standard step mats are available in 0.91 or 1.83 meters (3 foot or 6 foot) tread width with 0.2 meter (8 inch) risers. Standard mats are engineered to provide 538 Watts per square meter (50 Watts per square foot) and are supplied with 6 meters (20 feet) cold leads.

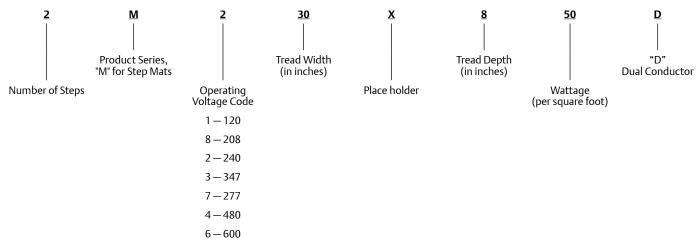
Custom step mats are available for nonstandard power densities up to 800 Watts per square meter (75 Watts per square foot), voltage, cold lead lengths and size needs. UL Listed and CSA Certified.

All installations 592 Watts per square meter (55 Watts per square foot) and under do not require a thermostat. All installations 593-800 Watts per square meter (56-75 Watts per square foot) require a high limit Listed or Certified thermostat, set at maximum 5°C (+41°F).



Cement Step Installation

### STANDARD AND CUSTOM STEP MATS



### STANDARD STEP MATS

Catalog Number	Step Width m (ft)	Step Depth m (in)	Watts	Amps	Vac	Catalog Number	Step Width m (ft)	Step Depth m (in)	Watts	Amps	Vac	
2 Steps						3 Steps						
2M830X850D	0.91(3)	0.20(8)	200	1	208	3M830X850D	0.91(3)	0.20(8)	300	1.4	208	
2M230X850D	0.91 (3)	0.20 (8)	200	0.8	240	3M230X850D	0.91 (3)	0.20 (8)	300	1.3	240	
2M730X850D	0.91(3)	0.20(8)	200	0.7	277	3M730X850D	0.91(3)	0.20(8)	300	1.1	277	
2M860X850D	1.83 (6)	0.20 (8)	400	1.9	208	3M430X850D	0.91 (3)	0.20(8)	300	0.6	480	
2M260X850D	1.83 (6)	0.20(8)	400	1.7	240	3M860X850D	1.83 (6)	0.20(8)	600	2.9	208	
2M760X850D	1.83 (6)	0.20(8)	400	1.4	277	3M260X850D	1.83 (6)	0.20(8)	600	2.5	240	
2M460X850D	1.83 (6)	0.20(8)	400	0.8	480	3M760X850D	1.83 (6)	0.20(8)	600	2.2	277	
						3M460X850D	1.83 (6)	0.20(8)	600	1.3	480	

Note: Other cold lead lengths available; To order, add "NL" to the part number, then specify desired length in feet and inches.



EasyHeat is our premium line of residential and commercial heating cable products under Appleton Group, a business unit of Emerson Industrial Automation.

Emerson Industrial Automation brings integrated manufacturing solutions to diverse industries worldwide. Our comprehensive product line, extensive experience, world-class engineering and global presence enable us to implement solutions that give our customers the competitive edge.

For over 150 years, our electrical product brands have been providing a rich tradition of long-term, practical, high quality solutions with applications ranging from the construction and safe operation of petrochemical and process plants to providing quality power that precisely controls automotive robotic production.

Engineers, distributors, contractors, electricians and site maintenance professionals around the world trust Emerson Industrial Automation brands to make electrical installations safer, more productive and more reliable.

Appleton Group is organized into three focused businesses that provide distributors and end-users expert knowledge and excellent service.

### **Electrical Construction Materials**

This group is made up of the Appleton, Nutsteel and O-Z/Gedney brands. They manufacture a broad range of electrical products including conduit and cable fittings, plugs and receptacles, enclosures and controls, conduit bodies and industrial and hazardous lighting. Whether the application is hazardous location, industrial or commercial, the electrical construction materials group has the products to meet your needs.

# **Power Quality Solutions**

The SolaHD brand offers the broadest power quality line, including uninterruptible power supplies, power conditioners, voltage regulators, shielded transformers, surge protection devices and power supplies.

### **Heating Cable Systems**

This group is made up of the EasyHeat and Nelson brands. They offer a broad range of electrical heating cable products for residential, commercial and industrial applications.

Asia/Pacific + 65.6891.7600

Australia + 61.3.9721.0348

Brazil — São Paulo/SP + 55.11.2122.5777

Brazil — Camaçari/BA + 55.71.3496.4427

Canada + 1.888.765.2226

China + 86.21.3418.3888

Europe + 33.3.2254.1390

Mexico/Latin America + 52.55.5809.5049

Middle East/Africa/India + 971.4.811.8100

United States + 1.800.621.1506

Appleton Grp LLC 9377 W. Higgins Road Rosemont, IL 60018 1.800.537.4732 easyheat.com

## **EASYHEAT**



Appleton Grp LLC d/b/a Appleton Group. The Easy Heat and Emerson logos are registered in the U.S. Patent and Trademark Office.
EasyHeat, Inc. is a wholly owned subsidiary of Appleton Grp LLC. All other product or service names are the property of their registered owners. © 2015, Appleton Grp LLC.
All rights reserved. 40500-002 Rev. 6

The Emerson logo is a trademark and a service mark of Emerson Electric Co. @2015 Emerson Electric Co.