# CONCRETE SNOW MELT SERGE BARIL

The use of Serge Baril CSM Concrete Snow Melt Cable is a reliable, efficient and economical way of preventing snow and ice accumulation on concrete, stone and paved surfaces of driveways, sidewalks, walkways, loading docks, parking ramps, hospital entrances and steps, toll plazas, etc.

#### SIMPLE SOLUTION:

Snow melting systems eliminate the traditional plowing and shoveling methods of snow removal as well as the older, less efficient hydronic systems. The use of electric power for snow removal also eliminates the need for salts and other chemicals that can result in environmental pollution and pavement damage.

## BY FAR - THE BEST SYSTEM

- Is specifically designed for direct burial in concrete.
- Regulates its own heat output in response to the ambient temperature. This provides greater energy efficiency and more uniform temperature.
- Can be cut to length for the projet.
- Very flexible, therefore easier to install.
- The CSM-2BA provides 25W/ft (80W/m) @ 32°F (0°C) in concrete.

## **GREAT ADVANTAGE: CUT TO LENGTH AT SITE**

Concrete Snow Melt

# Installation

- Ensure proper depth, min. 2" (50mm) of snow melting cable
- Determine spacing of the snow melting cable (see below)
- Mark obstructions and locate expansion Joints
- Mark the path of the snow melting cable
- Ensure cable lengths do not exceed maximum circuit lengths
- Confirm electrical requirements

For the complete installation instructions, please refer to our manual # HT-240

HEAT LOAD SUGGESTIONS								
Risk	Turical applications	Spa	cing	Wattage				
	Typical applications	in	cm	W/ft <sup>2</sup>	W/m <sup>2</sup>			
Minimun	Residential and commercial	12	30	25	270			
winimun	sidewalks and driveways	10	25	30	325			
Moderate	Commercial sidewalks and driveways, loading areas	8	20	40	430			
Critical	Loading areas, toll plazas, hospital entrances	6	15	50	540			

NOTE: ASHRAE puplishes a range of suggested heat loads for different North American cities. (see our manual HT-232-150510 or consult SBA)

#### FOR CONCRETE INSTALLATION:

- Lay out the snow melting cable
- Secure the snow melting cable
- Install expansion joint kits
- Install conduit and weatherproof junction boxes
- Install slab sensor (if applicable)
- Install power connection and end seal kits
- Pour the concrete

#### FOR PAVING STONE INSTALLATIONS:

Apply a base layer prior to the steps above and make sure that the snow melting cable is covered.

# Special Installation Considerations

Tire Tracks

Snow melting only the tire tracks of a driveway or path will reduce power consumption and electrical requirements while still proving efficient for the prevention of ice.

The typical width of each individual tire track is 18" (450mm) wide and will typically use two runs of snow melting cable per track.







When using SERGE BARIL CSM-2BA Concrete Snow Melt Cable for stair applications, special precautions need to be observed in order to ensure that the cable does not get damaged:

- Note the location of any rail posts to be installed.
- The snow melting cable must be at least 4" (10mm) away from the front edge of stairs and all rail post mounts.
- Stairs with run dimension/depth up to 12" (300mm) require two runs of snow melting cable. Use closer snow melting cable spacing than usual as the heat loss is greater on stairs.
- If the snow melting cable must go over sharp formed edges, round off the sharp stair edges to prevent damage to the snow melting cable.

MAXIMUM HEATER LENGTH VS CIRCUIT BREAKER SIZE																		
	Maximum Heater Lenght (feet and meters)																	
	Start-up Temperature		240V						208V									
Catalog Number			20	20A 30A		40A 50A		)A	20A		30A		40A		50A			
	٥F	°C	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m
CSM-2BA	50	10	125	38	177	54	233	71	285	87	108	33	154	47	203	62	249	76
	32	0	118	36	167	51	217	66	266	81	102	31	148	45	190	58	233	71
	14	-10	108	33	151	46	200	61	249	76	95	29	135	41	174	53	220	67

Caution: Both the National and Canadian Electrical Codes require the use of a ground fault protection device (GFPD) at all times in conjunction with the installation of all heat tracing cables.

## Components

Power seal boot and end seal kit Power seal boot
End seal kit
Expansion joint kit
Snow melting label
Caution plaque CSM

# Controls

This can be as simple as an ON/OFF switch or fully automated. Please consult SBA.

# Higher wattages, higher voltages, longer lengths

For higher wattages, higher voltages or longer lengths, Serge Baril recommends the use of the Incoloy 825 stainless steel mineral insulated (MI) heating cables. - Refer to our manual # HT-232-150510 or consult SBA.

# GENERAL NOTE:

The above are general suggestions for applications of our cables and are not meant to replace the normal requirements of local, construction, electrical, or other codes. The installer must verify the conformity to all applicable codes or standards.

We are pleased to offer suggestions on the use of our various products, nevertheless, there are no warranties given except such expressed warranties offered in connection with the sale of a particular product. There are no implied warranties of merchantability or of fitness for a particular purpose given in connection with the sale of any goods. In no event shall Serge Baril be liable for consequential, incidental or special damages. The buyer's sole and exclusive remedy and the limit of Serge Baril's liability for any loss whatsoever shall not exceed the original purchase price paid to SBA for the product or products for which a claim is made.

# Ten year extended warranty available

AVAILABLE AT:

#### SERGE BARIL HEAT TRACING

5310 des Laurentides Blvd., Laval QC Canada H7K 2J8 Tel: (450) 622-7587 Fax: (450) 622-7869 www. baril.ca serge@baril.ca

