

BriskHeat[®]

Your Heating Specialist Since 1949

RESIDENTIAL FREEZE PROTECTION PLANNING GUIDE & CHECKLIST



**RESIDENTIAL
EDITION**

Freeze Protection Planning Guide & Checklist



Introduction

Weather can be unpredictable, so it's important to prepare for extreme conditions, especially during our coldest months. Anticipating freezing conditions and protecting your property against freeze damage is a vital part of any annual home assessment. A good freeze protection plan includes steps for inspection, preventative maintenance, and corrective maintenance prior to the beginning of cold weather conditions.

This guide makes winterizing your home easy. Contact your local distributor or BriskHeat at 1-800-848-7673 (U.S. & Canada)/1-614-294-3376 (Worldwide) for additional assistance.

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(A) General Freeze Protection Preparation Steps

These are general freeze protection planning steps provided by application engineers and field experience notes. These steps are not all inclusive and we recommend that you consult a trained professional if you have additional questions.

	Item	Date Completed
	Roof and gutter: Inspect, remove debris, and patch/repair (if needed): roof drains, scuppers, canals, gutters, down spouts before first frost. Inspect and functionally test installed roof and gutter heat trace system. Apply heat in susceptible areas.	
	Identify and test main water supply cutoffs for your home. Ensure these areas are readily available to emergency personnel responding to a freeze/thaw incident. Apply heat in susceptible areas.	
	Check and place antifreeze used in cooling systems as necessary.	
	Protect heating system power and temperature controls against inadvertent deactivation.	
	Inspect insulation on piping. Look for damage and vulnerable areas that might be exposed to freezing conditions. Add or replace insulation as needed.	
	Identify areas where personal safety is at risk due to icy conditions. Develop a slip prevention maintenance plan. Apply heat in susceptible areas.	
	Have plan in place to remove emergency de-icing heaters after the cold weather season.	

Tip: Think about materials that might be delivered during the cold season in unheated vehicles. BriskHeat offers plug-and-play portable heaters that easily wrap around and heat drums, pails, and tanks to thaw frozen or slow-flowing materials.

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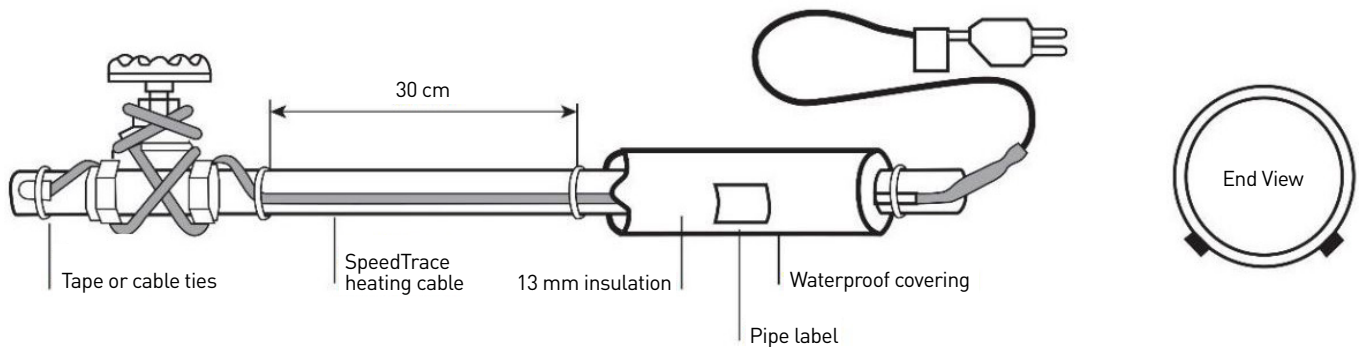
(B) Pipe Lines and Valves Exposed to Freezing Conditions

Use this checklist to identify the pipe lines and valves that need heat. Your local distributor or BriskHeat will help you determine the proper type and amount of heat, insulation, and accessories necessary for your application.

Pipe Line/Valve Checklist

Pipe/Valve Location Where Heat is Needed	Length of Pipe or Size of Valve Where Heat is Needed	Outside Diameter of Object to Be Heated	Insulation is Needed? (Y/N) Insulation Thickness?

Heating Cable Installation



Click [here](#) to download our SpeedTrace heating cable instruction manual for installation guide.

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Recommended Solutions for Pipe Lines and Valves



INSUL-LOCK® Closed Cell Pipe Insulation

- Easy to install with locking adhesive flap
- Double seal technology
- Mold and mildew resistant, non-porous, fiber-free foam insulation



Silicone Rubber Heating Blanket with Control

- Easy-to-apply industrial strength pressure-sensitive adhesive backing option
- Built-in temperature control for plug-and-play operation
- Moisture, chemical, and radiation resistant



SpeedTrace

- Ideal for freeze protection and thawing metal or plastic pipes and valves
- Pre-assembled with a choice of plug
- Safe to overlap and insulate



RKP XtremeFlex Silicone Heat Tape

- Ideal for freeze protection and process control heating
- Pre-assembled with a choice of plug with built in pre-set temperature control
- For indoor & outdoor use



Cloth Removable Insulators

- Ideal for freeze protection and thawing metal or plastic pipes and valves
- Pre-assembled with a choice of plug
- Safe to overlap and insulate

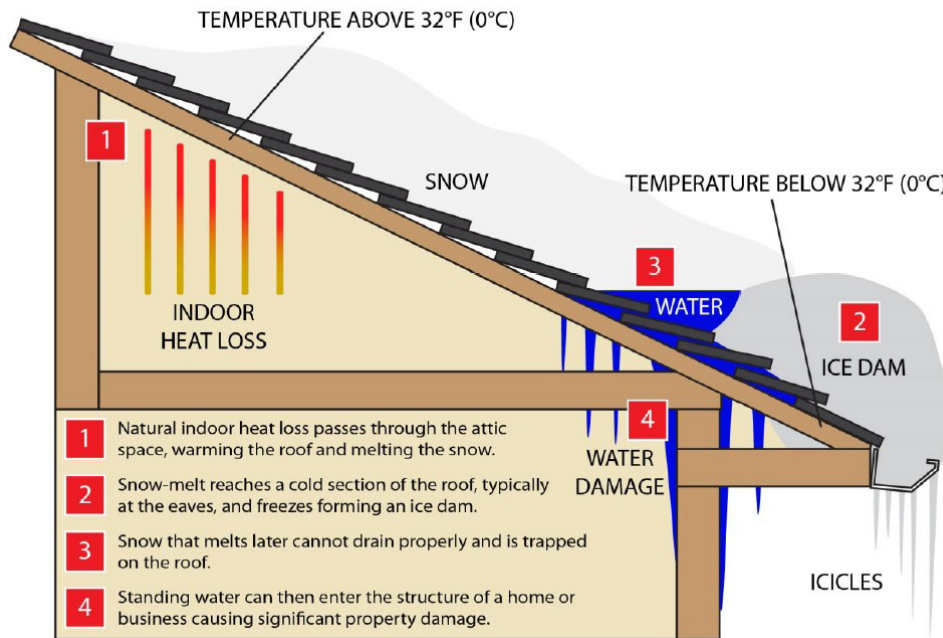
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(C) Roof & Gutter De-icing

When gutters and downspouts freeze, major damage can occur to your building's roof and façade. We recommend roof and gutter self-regulating heating cable as the solution.

What is an Ice Dam?

Illustration By
BriskHeat
Corporation



BriskHeat's SpeedTrace Roof & Gutter De-icing Kits are designed to prevent the formation of ice dams on rooftops by using an electric self-regulating heating cable system. The heating cable melts away excessive ice and snow from the roof, gutters, and downspouts to ensure proper draining.

Kits include: SpeedTrace Roof & Gutter Heating Cable (pre-assembled with power plug), Heavy-Duty Roof Clips, Downspout Hanger Brackets, and UV Resistant Cable Ties.

Measuring Heating Cable Length for Roof & Gutter De-icing? Use the equation below to calculate heating cable length:

Cable Required for Roof = (R x M) + G + D

- (R) Roof Edge Length (linear length of roof to protect)
- (M) Multiplier from table below
- (G) Gutter Length
- (D) Downspout Length
- (x2 if heating cable returns back to gutter)

Roof Overhang (Eave/Soffit)	Standard Roof	Standing Seam Roof, 18 in (45 cm) Seam	Standing Seam Roof, 24 in (60 cm) Seam
None	2.0	2.5	2.0
12 in (30 cm)	2.5	2.8	2.4
24 in (60 cm)	3.0	3.6	2.9
36 in (90 cm)	4.0	4.3	3.6

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(C) Roof and Gutter De-icing continued

Complete kit includes everything you need!



Durable, long lasting professional-grade self-regulating heating cable that is suitable for residential, commercial, and industrial roofing applications. Ideal for melting snow and de-icing roofs, gutters, and downspouts.

Roof and Gutter Kits:

Qty Needed	Part No. 110 -120 VAC	Part No. 208 -277 VAC	Cable Length ft (m)	Kit Includes			
				Roof Clips	Down-spout Hangers	Cable Ties	Caution Labels
	FFRG15-50	FFRG25-50	50 (15.2)	30	2	15	2
	FFRG15-75	FFRG25-75	75 (22.8)	50	4	20	2
	FFRG15-100	FFRG25-100	100 (30.4)	60	4	25	2
	FFRG15-125	FFRG25-125	125 (38.1)	80	4	30	2
	FFRG15-150	FFRG25-150	150 (45.7)	100	6	40	2

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(D) Emergency/Backup De-icing Heaters

It is always a good idea to have a few flexible multi-purpose heaters on hand in the event of emergency de-icing. XtremeFLEX® flexible heating tapes with built-in adjustable temperature controls (MSTAT and HSTAT series) are ideal to prevent freezing or thaw frozen valves, pipes, and many other objects. Unlike dangerous blow torches, these heaters are safe, make direct contact with the object to be heated, are moisture and chemical resistant, and can be run unsupervised.

Do not be left without a few of these lifesavers in the toolbox when freezing occurs.



Easy-to-use adjustable thermostat

Tips:

- Circle Part Number to indicate voltage preference
- Choice of two temperature ranges: Up to 160° F (71° C) [MSTAT series] and up to 425° F (218° C) [HSTAT series]
- Have at least one of each size on hand so that you have the right size when you need it. Shorter lengths are typically used for valves, bearings, pumps, and actuators. Longer lengths are typically used for pipe runs.
- When estimating heating tape lengths, keep in mind that the heating tape cannot be overlapped upon itself. That will cause damage to the heater.

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MSTAT XtremeFLEX® Heating Tapes with Adjustable Thermostat Controls - up to 160°F (71°C)

Part Number (120V)	Part Number (240V)	Heating Tape Width	Heating Tape Length	Wattage
MSTAT101002	MSTAT102002	1in (25 mm)	2 ft (0.6 m)	144
MSTAT101004	MSTAT102004	1in (25 mm)	4 ft (1.2 m)	288
MSTAT101006	MSTAT102006	1in (25 mm)	6 ft (1.8 m)	432
MSTAT101008	MSTAT102008	1in (25 mm)	8 ft (2.4 m)	576
MSTAT101010	MSTAT102010	1in (25 mm)	10 ft (3.1 m)	720
MSTAT101020	MSTAT102020	1in (25 mm)	20 ft (6.0 m)	1200
MSTAT101030*	MSTAT102030*	1in (25 mm)	30 ft (9.1 m)	1440
MSTAT101040*	MSTAT102040*	1in (25 mm)	40 ft (12.2 m)	1440
MSTAT101050*	MSTAT102050*	1in (25 mm)	50 ft (15.2 m)	1440

Other widths and lengths are available upon request.

HSTAT XtremeFLEX® Heating Tapes with Adjustable Thermostat Controls - up to 425°F (218°C)

Part Number (120V)	Part Number (240V)	Heating Tape Width	Heating Tape Length	Wattage
HSTAT101002	HSTAT102002	1in (25 mm)	2 ft (0.6 m)	144
HSTAT101004	HSTAT102004	1in (25 mm)	4 ft (1.2 m)	288
HSTAT101006	HSTAT102006	1in (25 mm)	6 ft (1.8 m)	432
HSTAT101008	HSTAT102008	1in (25 mm)	8 ft (2.4 m)	576
HSTAT101010	HSTAT102010	1in (25 mm)	10 ft (3.1 m)	720

Other widths and lengths are available upon request.

To view MSTAT/HSTAT product page and ordering information click on product name above.



BriskHeat offers a full range of surface and immersion heating products, controllers, insulators, and accessories for a wide variety of applications.

BriskHeat products include heating tapes, cables, blankets, drum and tote heaters, cloth jackets, tubular heaters, band and cartridge heaters, composite curing systems, and more. Since 1949, BriskHeat has provided quality heating and temperature control solutions to countless industries including semiconductor, chemical, food processing, biotech, aviation, laboratory, and power generation.

BriskHeat has a broad range of experience with applications including freeze protection, viscosity control, condensation prevention, and process heat. We also offer expert application support and custom engineering.

Large or small projects, high or low volume, domestic or worldwide, BriskHeat stands by to help you solve your application issues. With a ready staff of sales and application engineers to help you find the most economical solution for your needs, BriskHeat is your heating specialist.

BriskHeat®

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