

Residential



A VALIN owned company

ADVANCED PROTECTION

for

EXTREME CLIMATES

Commercial

Industrial

Comm



RESIDENTIAL CATALOG

www.heattracespecialists.com

ONE STOP SHOPPING

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Roof & Gutter Data Sheet

Cable Length Calculation: Eave Overhang : _____
(Depth)

Voltage Available: _____

Roof: X X 1.1111 =
Roof Length Ft of cable (Table 1)

Valleys: X X 2.15 =
Number of length

Gutters: X 1.1111 =
Length

Downspouts: X X 2.15 =
Number of Length

Downspout Hangers use 1 or 2 per gutter, depending on passes of cable. 1 pass = 1 hanger 2 passes = 2 hangers.

Total Cable Length

Roof Clips: X 1.5 =
Roof Length Total Clips Needed

Table 1

Eave Overhang	Cable length per foot of roof edge	loop length Metal
1'	2.25	**
2'	3.25	**
3'	4.25	**
4'	5.25	**

120 VAC Breaker Size VS Max Circuit length (FT)

Energized	20A	30A	40A
2806-1@40°F	200	250	250
2806-1@0°F	130	190	250
2806-1@-20°F	115	170	225

240 VAC Breaker Size VS Max Circuit length (FT)

Energized	20A	30A	40A
2806-2@40°F	260	450	450
2806-2@0°F	230	340	450
2806-2@-20°F	190	285	385

240 VAC cable

Power Factor Adjustment

Part No.	208 Volt	277 Volt
2806-2	0.86	1.16

* For valleys, measure length X 2.15, cable goes up valley

* Clips go on the top and each side of the valley

* 1.1111 or 2.15 Service factor to accommodate drip loops, terminations & measurement variations

** Consult HTS for Details

Snofree™ Heated Panel System

Heat Transfer on the Nose

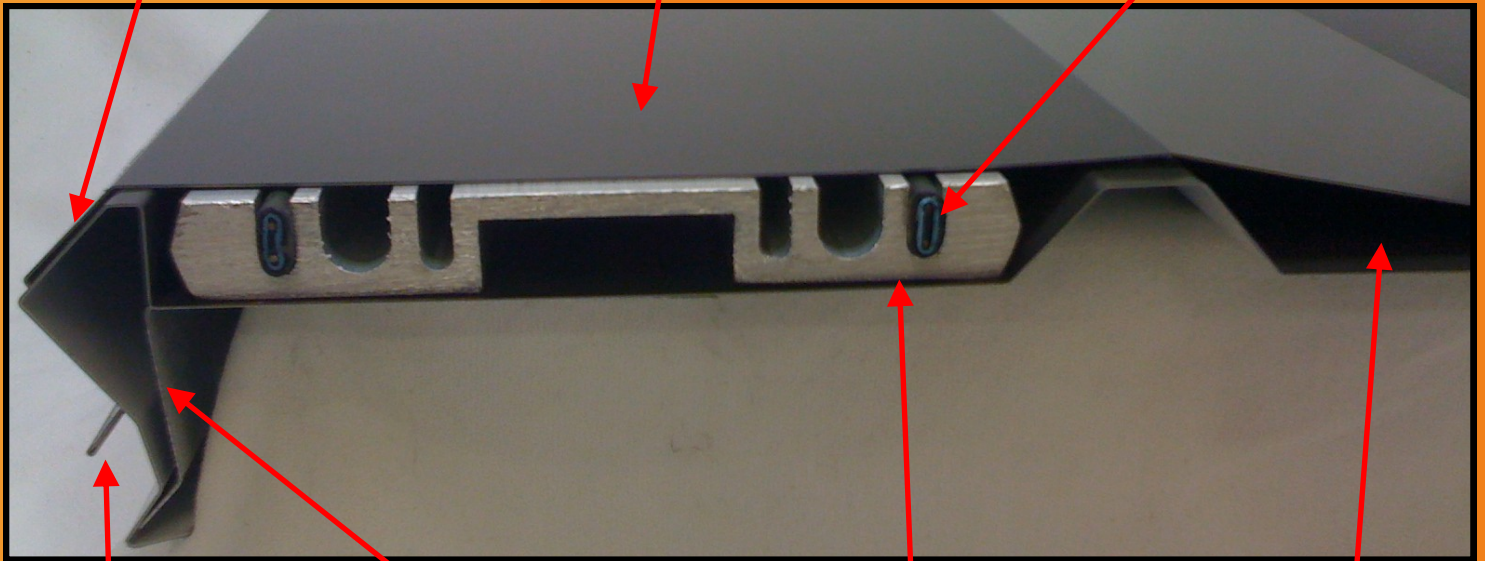
Constant heat transfer throughout the entire nose of the system, effectively eliminating ice dams from your roof edge

Durable Exterior Finish

Kynar finish on the cover and base, Ensures the system will continue to give your project the professional look you deserve. Also available in Aluminum, Copper, or Cor10 Materials.

Minimal Passes of Cable

Fewer passes of cable reduces energy consumption while providing efficient ice dam prevention.



SNAP2LOCK

Our system is simple to access and maintain, with our easy snap in place cover.

Cleated Installation

Our cleated installation allows for minimal roof penetrations, protecting your investment from water damage.

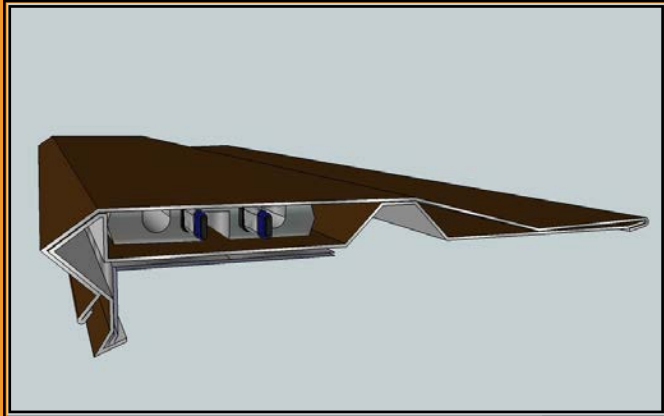
Solid Mass Core

Our aluminum core efficiently transfers the heat to the metal cover.

Convective Oven Effect

Air channels throughout the system allow for convective oven effect that helps with ice control.

Our Snofree™ Panel Eaves System

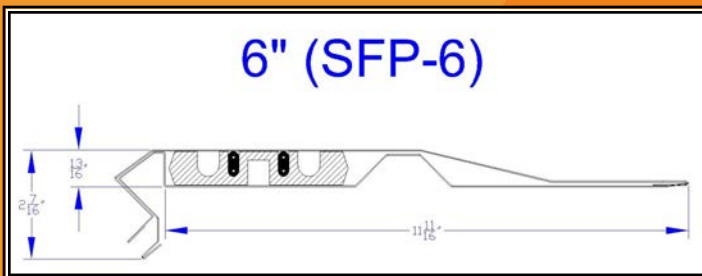


SFP-6

- * Effectively controls Ice and Snow with 2 Passes of Cable
- * Heats more than 6" up the roof deck
- * Comes with a 30 Year protective Kynar finish.
- * Sheet metal pieces come in 48" widths for ease of handling.
- * An economical and beautiful option to control ice dams.

* System Parts List:

- 1—4" Aluminum Extrusion
- 1—SFP 24 ga. Kynar Steel Base
- 1—SFP Cleat Drip Edge
- 1—SFP 24 ga. Kynar Steel Cap
- 1—SFP 24 ga. Kynar Steel Expansion Joint



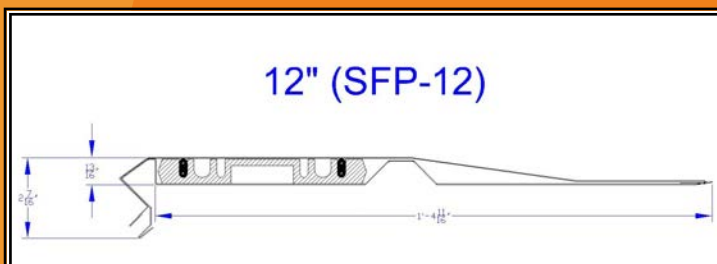
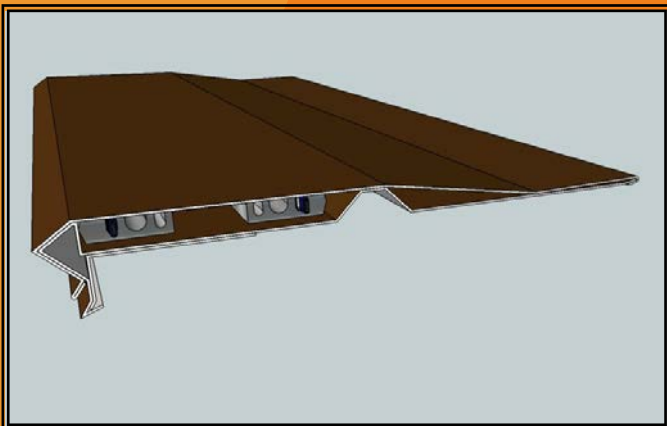
6" (SFP-6)

SFP-12

- * Effectively controls Ice and Snow with 2 Passes of Cable
- * Heats more than 12" up the roof deck
- * Comes with a 30 Year protective Kynar finish.
- * Sheet metal pieces come in 48" widths for ease of handling.
- * An economical and beautiful option to control ice dams for 12" eave overhangs.

* System Parts List:

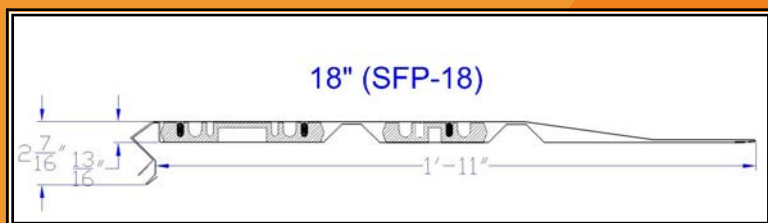
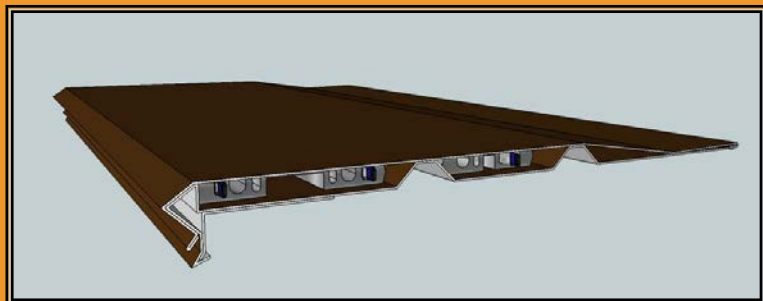
- 1—6" Aluminum Extrusion
- 1—SFP 24 ga. Kynar Steel Base
- 1—SFP Cleat Drip Edge
- 1—SFP 24 ga. Kynar Steel Cap



12" (SFP-12)

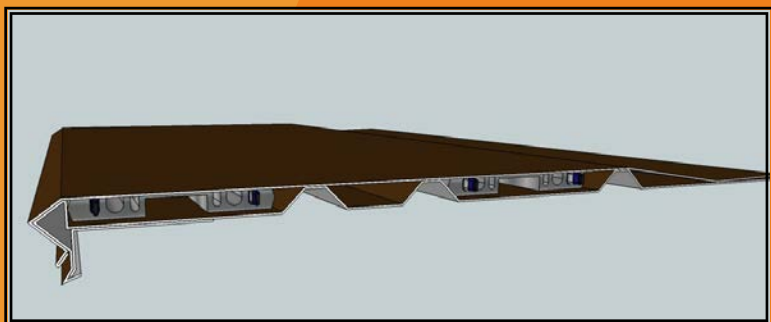
Our Snofree™ Panel Eaves System

SFP-18



- * Effectively controls Ice and Snow with 3 Passes of Cable
- * Heats more than 18" up the roof deck
- * Comes with a 30 Year protective Kynar finish.
- * Sheet metal pieces come in 48" widths for ease of handling.
- * An economical and beautiful option to control ice dams for 18" eave overhangs.
- * System Parts List:
 - 1—4" Aluminum Extrusion
 - 1—6" Aluminum Extrusion
 - 1—SFP 24 ga. Kynar Steel Base
 - 1—SFP Cleat Drip Edge
 - 1—SFP 24 ga. Kynar Steel Cap
 - 1—SFP 24 ga. Kynar Steel Expansion Joint

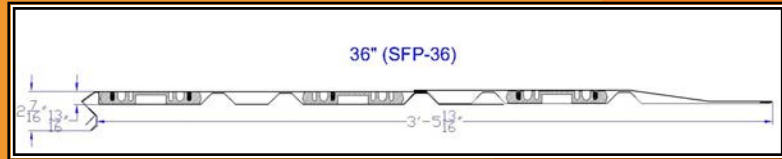
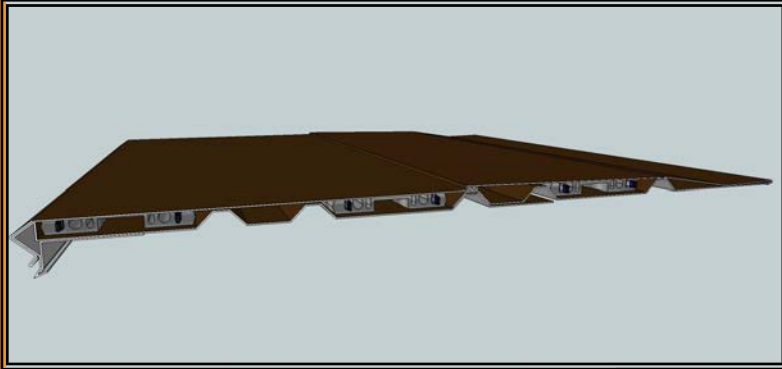
SFP-24



- * Effectively controls Ice and Snow with 4 Passes of Cable
- * Heats more than 24" up the roof deck
- * Comes with a 30 Year protective Kynar finish.
- * Sheet metal pieces come in 48" widths for ease of handling.
- * An economical and beautiful option to control ice dams for 24" eave overhangs.
- * System Parts List:
 - 2—6" Aluminum Extrusion
 - 1—SFP 24 ga. Kynar Steel Base
 - 1—SFP Cleat Drip Edge
 - 1—SFP 24 ga. Kynar Steel Cap
 - 1—SFP 24 ga. Kynar Steel Expansion Joint

Our Snofree™ Panel Eaves System

SFP-36

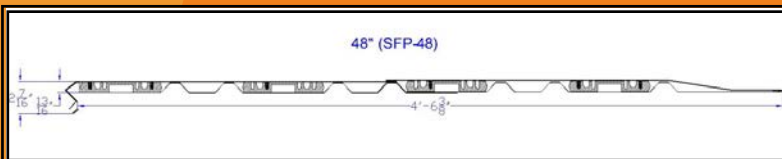
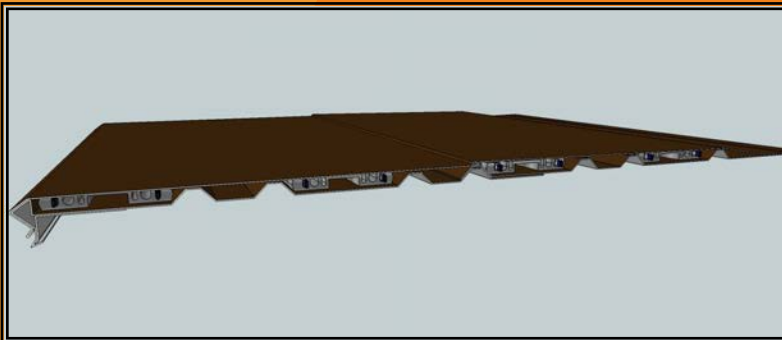


- * Effectively controls Ice and Snow with 5 Passes of Cable
- * Heats more than 36" up the roof deck
- * Comes with a 30 Year protective Kynar finish.
- * Sheet metal pieces come in 48" widths for ease of handling.
- * An economical and beautiful option to control ice dams for 36" eave overhangs.

* System Parts List:

- 3—6" Aluminum Extrusion
- 1—SFP 24 ga. Kynar Steel Lower Base
- 1—SFP 24 ga. Kynar Steel Upper Base
- 1—SFP Cleat Drip Edge
- 1—SFP 24 ga. Kynar Steel Lower Cap
- 1—SFP 24 ga. Kynar Steel Upper Cap
- 1—SFP 24 ga. Kynar Steel Lower Exp. Joint
- 1—SFP 24 ga. Kynar Steel Upper Exp. Joint

SFP-48



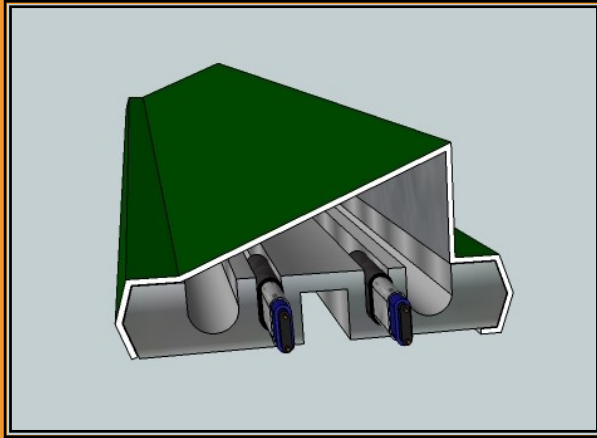
- * Effectively controls Ice and Snow with 6 Passes of Cable
- * Heats more than 48" up the roof deck
- * Comes with a 30 Year protective Kynar finish.
- * Sheet metal pieces come in 48" widths for ease of handling.
- * An economical and beautiful option to control ice dams for 48" eave overhangs.

* System Parts List:

- 4—6" Aluminum Extrusion
- 1—SFP 24 ga. Kynar Steel Lower Base
- 1—SFP 24 ga. Kynar Steel Upper Base
- 1—SFP Cleat Drip Edge
- 1—SFP 24 ga. Kynar Steel Lower Cap
- 1—SFP 24 ga. Kynar Steel Upper Cap
- 1—SFP 24 ga. Kynar Steel Lower Exp. Joint
- 1—SFP 24 ga. Kynar Steel Upper Exp. Joint

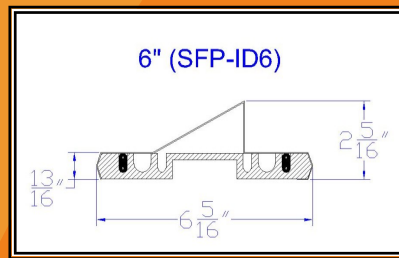
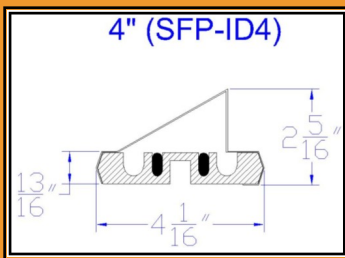
Our Snofree™ System Accessories

HEATED SNOW RAILS



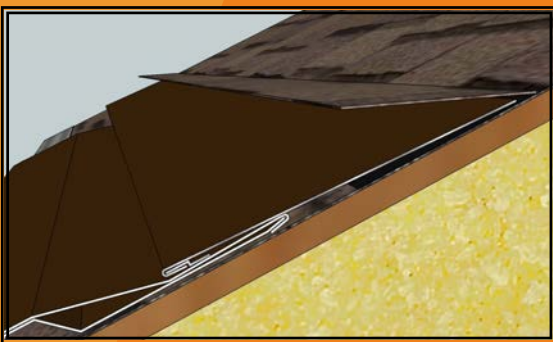
SFP-SR 4 or SFP-SR 6

- * Effectively reduces ice shelves above heated panels.
- * Cable requirements as recommended.
- * Comes with a 30 Year protective Kynar finish.
- * Sheet metal pieces come in 48" widths for ease of handling.
- * Recommended installation with TRA-MAGE Standing Seam clips or S-5 Mini Clips for smaller roofs.
- * System Parts List:
 - 1—Aluminum Extrusions (4" or 6")
 - 1—SFP 24 ga. Kynar Steel Snowguard



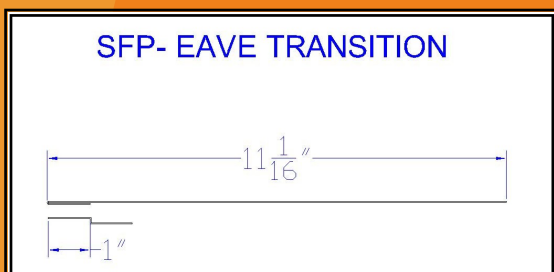
Not recommended as a structural snow fence

Install our Eave Panel system over existing shingles
with these simple accessories

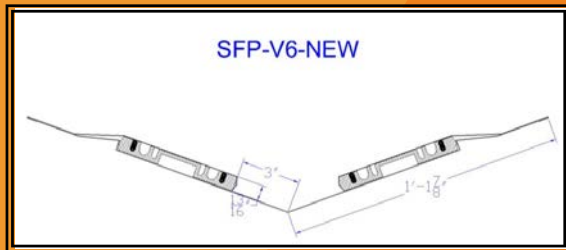
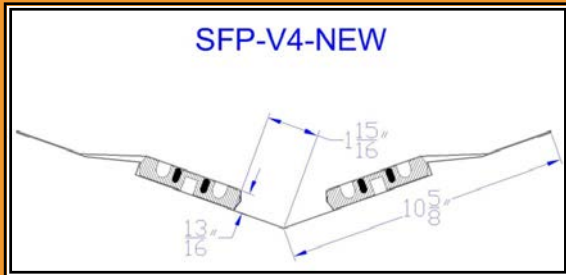


SFP-TRANSITION and Z METAL

- * Installs with existing asphalt shingles.
- * Comes with a 30 Year protective Kynar finish.
- * Sheet metal pieces come in 48" widths for ease of handling.
- * Not recommended for wood shake roofs or tile roofs.
- * 14" wide transition for easy installation and trimming to desired size.
- * System Parts List:
 - 1—24 ga. Kynar Steel Z Metal flashing
 - 1—24 ga. Kynar Steel Transition



Our Snofree™ Panel Valley Systems



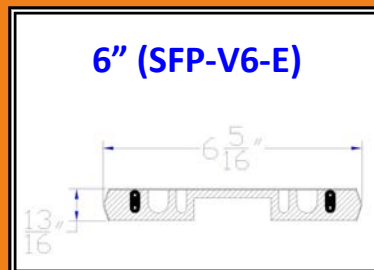
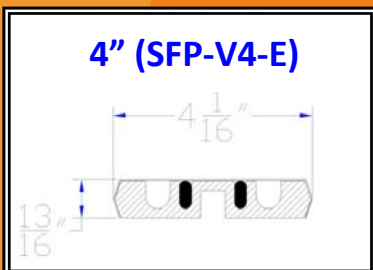
SFP-V4-N or V6-N

- * Effectively controls Ice and Snow with 4 Passes of Cable
- * Cable requirements as recommended.
- * Heats more than 10" of each side of the valley.
- * Comes with a 30 Year protective Kynar finish.
- * Sheet metal pieces come in 48" widths for ease of handling.
- * Minimal exposed fasteners for better roof membrane protection.
- * System Parts List:
 - 2—Aluminum Extrusions (4" or 6")
 - 1—SFP 24 ga. Kynar Steel Base
 - 1—SFP 24 ga. Kynar Steel Valley Connector
 - 2—SFP 24 ga. Kynar Steel Caps
 - 2—SFP 24 ga. Kynar Steel Expansion Joint

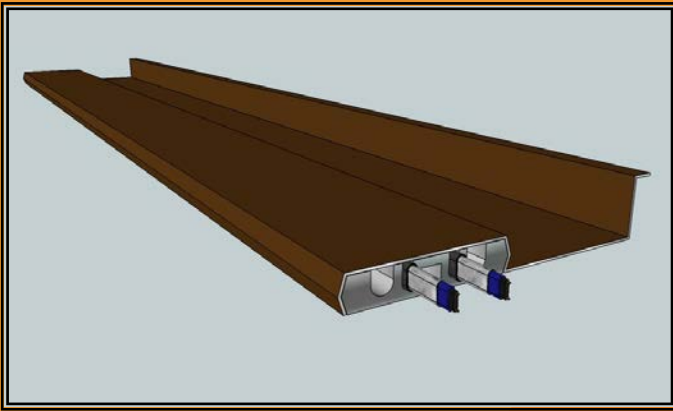


SFP-V4-E or V6-E

- * Effectively controls Ice and Snow with 2 Passes of Cable
- * Opens a pathway for water to run to the eave.
- * Comes with a 30 Year protective Kynar finish.
- * Sheet metal pieces come in 48" widths for ease of handling.
- * An economical product to alleviate ice dams in existing valleys, without the need to re-roof.
- * System Parts List:
 - 1—Aluminum Extrusion (4" or 6")
 - 1—SFP 24 ga. Kynar Steel Cover
 - 1—SFP 24 ga. Kynar Steel Expansion Joint



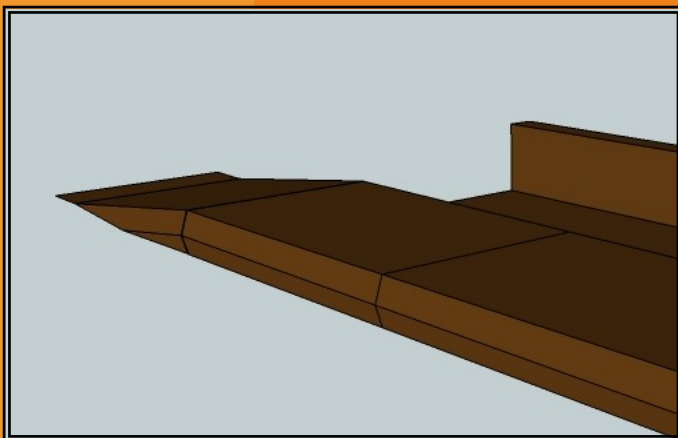
Our Snofree™ Panel System for Standing Seam Roofs



Also available in 6" Wide &
Non-penetrating clips available

SFP-SSP-4

- * Effectively controls Ice and Snow with 2 Passes of Cable
- * Heats an effective path up the ribs of standing seam roofs to desired length.
- * Comes with a 30 Year protective Kynar finish.
- * An economical and beautiful option to control ice dams for standing seam roofs without penetrations into the metal surface.
- * Our heated Snow fence is highly recommended to be installed above this system.
- * System Parts List:
 - 1—4" Aluminum Extrusion
 - 1—SFP 24 ga. Kynar Panel
 - 1—SFP V Expansion Joint

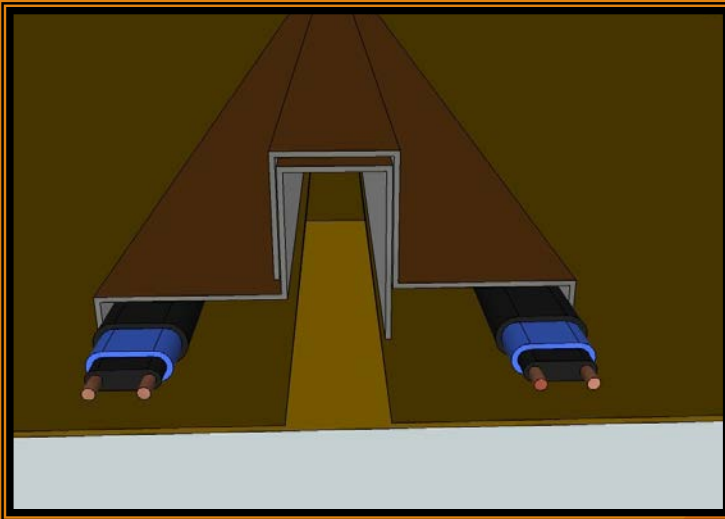


SFP-SSP-RAMP

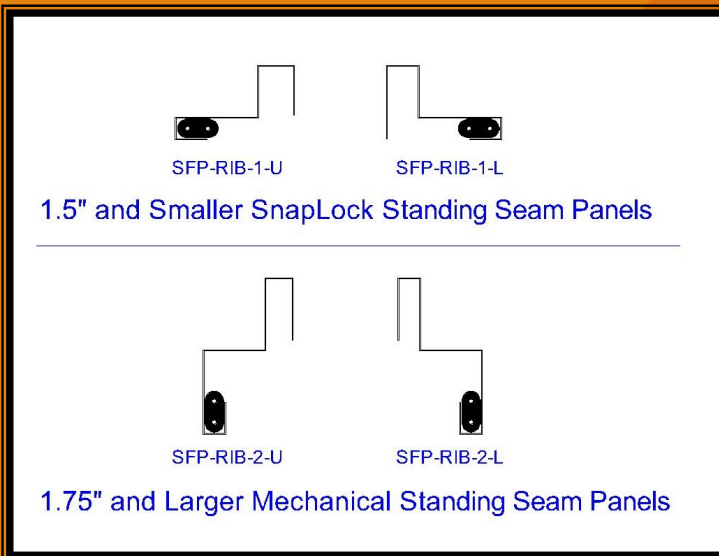
- * Allows a minimal surface area for ice to slide over the heated extrusion holder.
- * Easily attaches over the top of the SFP-SSP panel, Recommended to adhere with exterior adhesive for metal surfaces.
- * Comes with a 30 Year protective Kynar finish
- * An economical and beautiful option to control standing seam roof ice dams.
- * Our heated Snow Rail is highly recommended to be installed above this system.
- * System Parts List:
 - 1—SFP 24 ga. Kynar Ramp
 - 1—SFP 24 ga. Kynar Ramp Clip

Standing Seam Heated Rib System

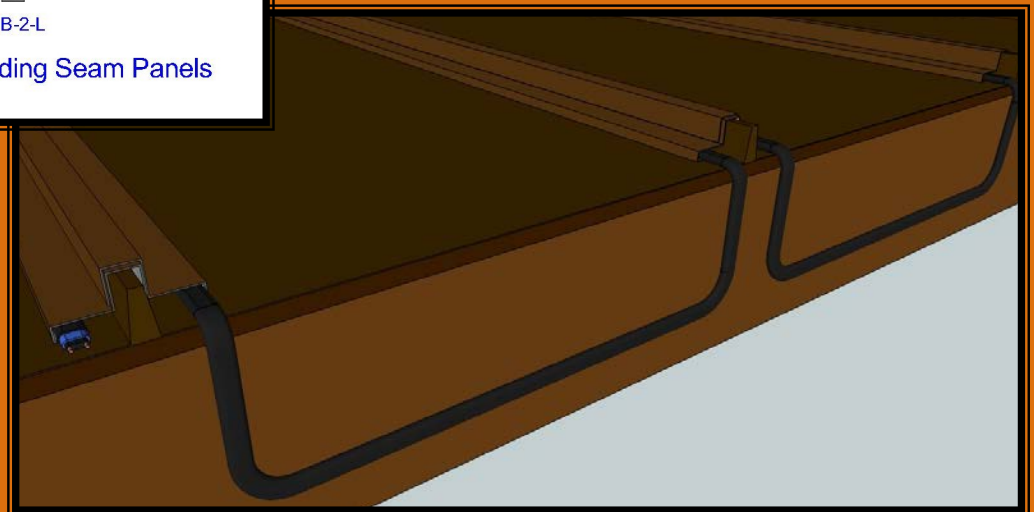
SFP-RIB



- Beautifully heats your standing seam metal roof eaves.
- Simple to access.
- Attractive and completely hides the wiring along the rib.
- Simple to Install
- Built to match standing seam roof color.
- Available for all types of Standing Seam roofing.
- Available in Steel, Aluminum, Copper, Cor10, etc.

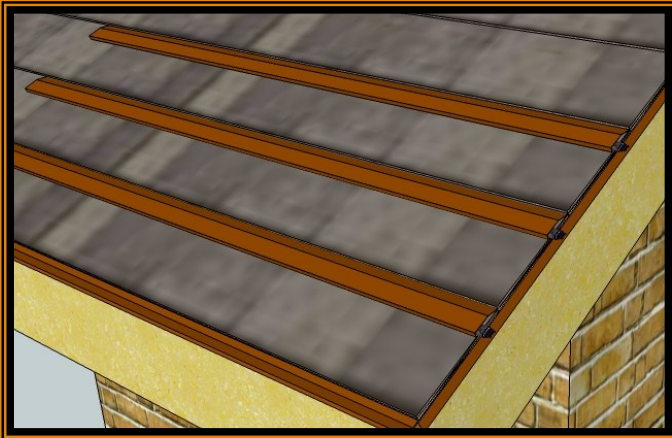


★ This system requires information about the specific manufacturer and model number of the roof material.



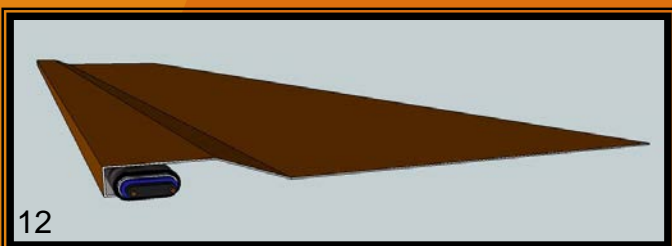
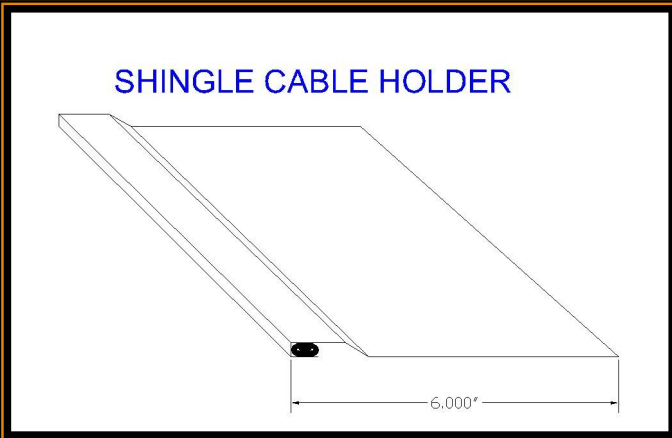
Shingle Cable Holder

SFP-SCH



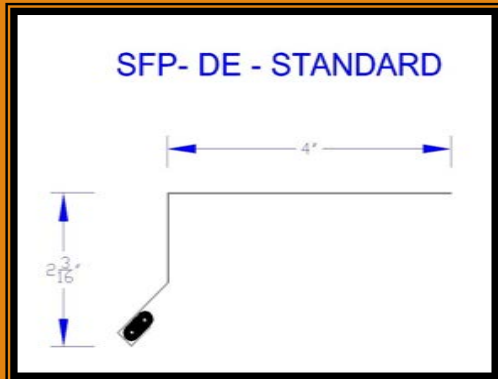
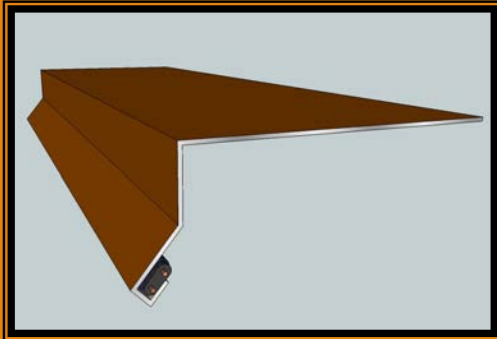
- Beautifully heats the roof while keeping the intended look of the roof.
- Simple to access.
- Attractive and completely hides the heat cable for added protection.
- Simple to Install
- Available in 24 ga. Kynar Steel, Aluminum, Cold Roll Steel, Copper, Etc.
- Works great for Valleys.

★ For best ice dam prevention, ensure every layer of shingle from the drip edge until 1' above the heated wall is covered. This product should also be used in conjunction with the SFP-Drip Edge systems.



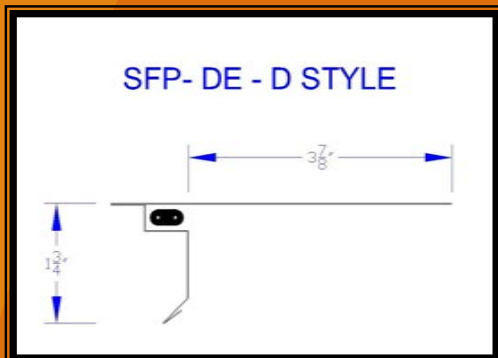
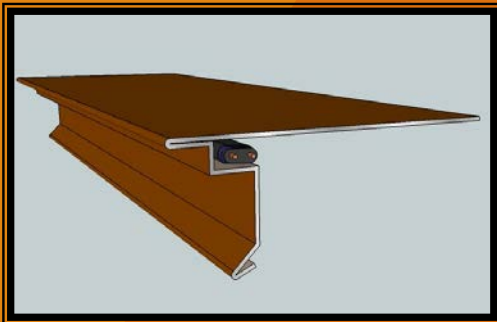
Heated Drip Edge System

SFP – DE – Standard



- Works efficiently to reduce icicles on roof edges with no gutters.
- Simple to install
- Attractive and completely hides the wiring along the drip edge.
- Built to match common roofing colors.
- Available in Steel, Aluminum, Copper, Cor10, etc.

SFP – DE – D Style



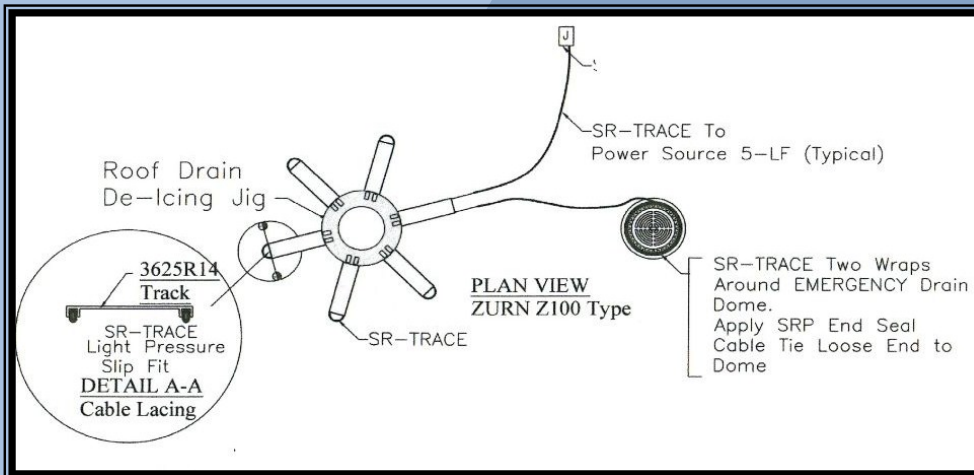
- Works efficiently to reduce icicles on roof edges with no gutters.
- Simple to install
- Attractive and completely hides the wiring along the drip edge.
- Built to match common roofing colors.
- Available in Steel, Aluminum, Copper, Cor10, etc.

Roof Drain Heater System

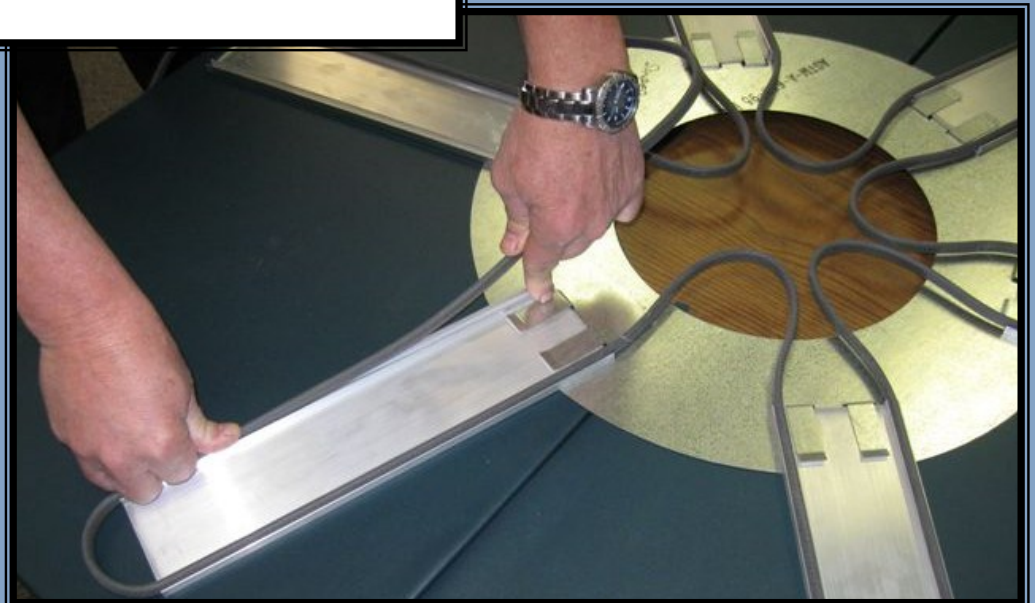
RDHS



- Effectively opens pathways to flat roof drains and scuppers.
- Simple to access.
- Evenly spaced arms to protect cable.
- Simple to install.
- Available in several sizes and expandable.
- GSA Building approved.
- No adhesive required.



★ 4 point jig and 6 point jig available.
Additional Universal Clamping Collars available for drains installed below insulation depth.



Dam Ice-B-Gone Heated Blankets

Dam Ice-B-Gone



- Tie it down, Plug it in, and return later to find your ice dam gone.
 - Effectively eliminates existing ice dams.
- Perimeter Grommets make installation in cold conditions simple.
 - Fully insulated to better hold the heat.
- Connect 2 or more together to melt extra large ice dams.
 - Rugged Water Resistant canvas construction.
- Available in 3 Standard Sizes: 2' x 6', 2' x 10', and 3' x 6'



Standard 120V Exterior rated 30mA GFI power cord, 20 Feet in length.



Evenly spaced grommets for easy access to tie down onto the roof.



Before



After

HTS-6

Self-Regulating Heating Cable

Performance Ratings

Output Wattage

6 W/ft @ 40°F

Supply Voltages

HTS-6-1R: 120V

HTS-6-2R: 208 V - 277 Vac

Continuous Maintenance Temperature

150°F (65°C) max

Intermittent Exposure Temperature

185°F (85°C) max

Braid Resistance

Tinned copper 0.003 /ft with modified Polyolefin Jacket

Approvals/Certifications

CSA

Ordinary locations

Type 2E, 3A, 3B, 3C



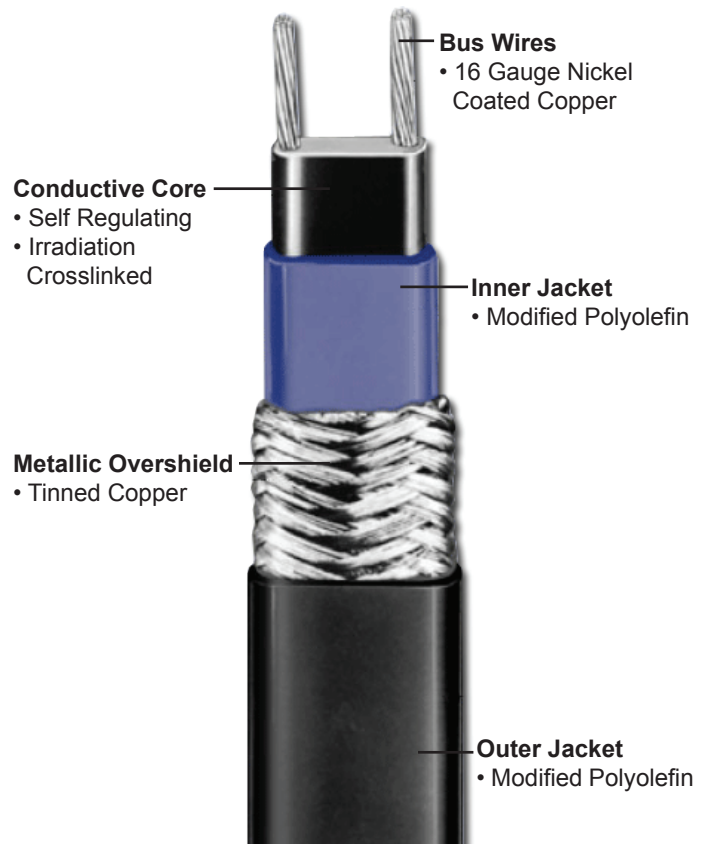
Pipe Heating Cables

Industrial and Commercial

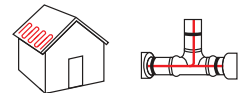
Description

The HTS-6 commercial grade heater cable offered by Heat Trace Specialists is designed for use in both indoor and outdoor locations as well as for residential and commercial freeze protection on water pipes and drain pipes. In roof and gutter applications the HTS-6 provides a pathway for flowing water on the roof or in gutters and downspouts to safely distance itself from the building before the opportunity to re-freeze and cause damage.

The HTS-6 cable is the ideal cable for the Snofree™ Panel systems offered by Heat Trace Specialists.



Applications for the HTS-6 Self-Regulating Heating Cable:



Typical HTS-6 heater cable applications include:

- Roof and gutter protection
- Freeze protection
- Temperature maintenance

HTS-6

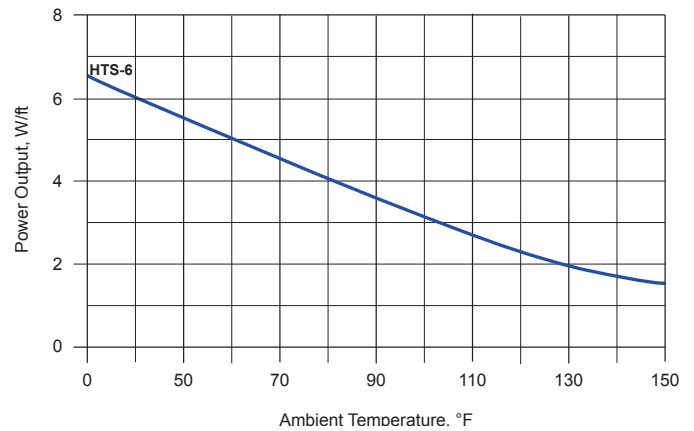
Self-Regulating Heating Cable

HTS-6 Part Numbers

HTS-6-1R (6=6 Watts 1=120V R=Polyolefin)

HTS-6-2R (6=6 Watts 2=240V R=Polyolefin)

Power Output Curve - HTS-6



HTS-6-1R (120 Volt)

Max Circuit length (FT)

Minimum TEMP (DEG F)	20A	30A	40A
-20	115	170	225
-10	120	180	230
-5	125	185	240
0	130	190	250
10	145	205	250
15	165	220	250
30	195	250	250
40	200	250	250

HTS-6-2R (208 to 277 Volts)

Max Circuit length (FT)

Minimum TEMP (DEG F)	20A	30A	40A
-20	190	285	385
-10	210	310	405
-5	220	325	425
0	230	340	450
10	260	370	450
15	290	395	450
30	350	450	450
40	260	450	450

Power Adjustment Factor

Part No.	208 Volts	277 Volts
HTS-6-2R	.86	1.16

Pre-Terminated Cable Assemblies



- Ready to plug-in
- 30 mA trip breaker DGFI (National Electric Code required)
- End seal professionally assembled
- 10 Year Warranty

Standard Heated lengths are:

- 50'
- 100'
- 150'
- 200'

Custom sizes available.

Not including the exterior SO cord. The cord is 20'.

120 Volt DGFI cords are commonly 14 gauged Wire

240 Volt DGFI cords are commonly 12 gauged Wire

		120 VOLT													
		25'	50'	75'	100'	125'	150'	175'	200'	225'	250'	275'	300'	325'	350'
15 AMP		★	★	★	★	★	★	✗	✗	✗	✗	✗	✗	✗	✗
20 AMP		★	★	★	★	★	★	★	★	✗	✗	✗	✗	✗	✗
		240 VOLT													
		25'	50'	75'	100'	125'	150'	175'	200'	225'	250'	275'	300'	325'	350'
15 AMP		★	★	★	★	★	★	★	★	★	★	✗	✗	✗	✗
20 AMP		★	★	★	★	★	★	★	★	★	★	★	★	★	★

* Based on 40° Start up Temperature

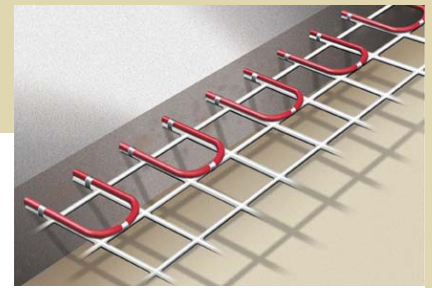
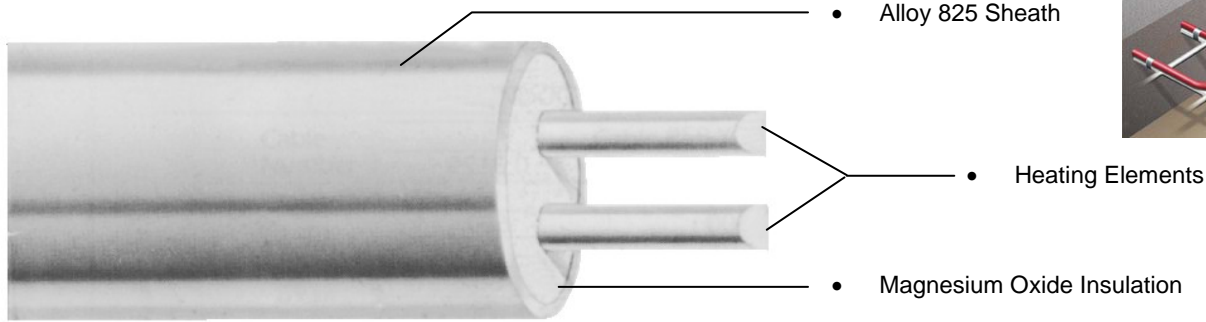
★ = Acceptable

✗ = Not Recommended

*** All accessories are available for a complete installation.
Roof Clips, Gasketed Screws**

Mineral Insulated Cable

Heated Driveways, Sidewalks & Ramps



Description:

Mineral Insulated cable is metal sheathed cable that uses a metallic conductor as the heating element. The conductor is electrically insulated from the metal sheath with magnesium (MgO). Mineral insulated cable is a series resistance heater that generates heat by passing current through the electrical conductor. Power output per unit length of the cable therefore varies with the applied voltage and the resistance of the conductor.

Mineral Insulated cables are available with either one or two conductors. The one conductor cable is available in the "E" Form when a cold splice is provided at both cable ends for electrical connection. The two-conductor cable is available in two forms. The "A" Form provides an out-and-back circuit with a single cold splice connection at one end. The "E" Form provides cold splices at both ends of the cable.

Outer sheath construction is Alloy 825, a high temperature corrosion resistant alloy with superior flexibility. Two cable diameters are available. The "K" cable diameter is 0.187" and the "B" cable diameter is 0.312". A unique manufacturing process provides for a thin wall construction which improves flexibility and ease of installation. This process also allows the use of high performance alloy conductors for high temperature applications.

Principle of Operation:

The series conductor generates heat when voltage is applied as a result of current passing through the conductor. Power output per unit length varies with the applied voltage and circuit resistance. The circuit resistance, in turn, varies with cable length. MI cables are available with a wide selection of conductor resistances. Based on voltage and desired cable length, a specific conductor is selected with a cable resistance that provides the desired power output.

Application:

Nelson MI Cable is high performance, industrial grade heat tracing cable used for applications requiring:

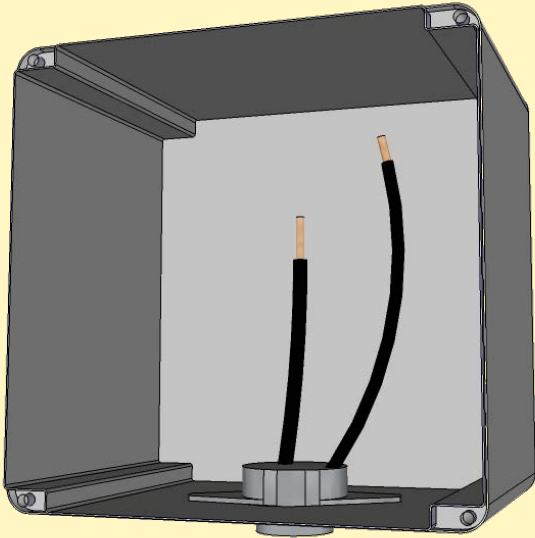
- High Temperature Exposure
- High Maintain Temperature
- High Power Output
- Rugged Cable Construction
- Constant Power Output Over Entire Heater Length
- Extended Heater Life
- Immunity to Stress Corrosion
- Snow Melt Systems
- Floor Warming Systems
- Undertank Heating (Cryogenic Tanks)

MI Cable is custom designed and fabricated for specific applications.

HTS-AT

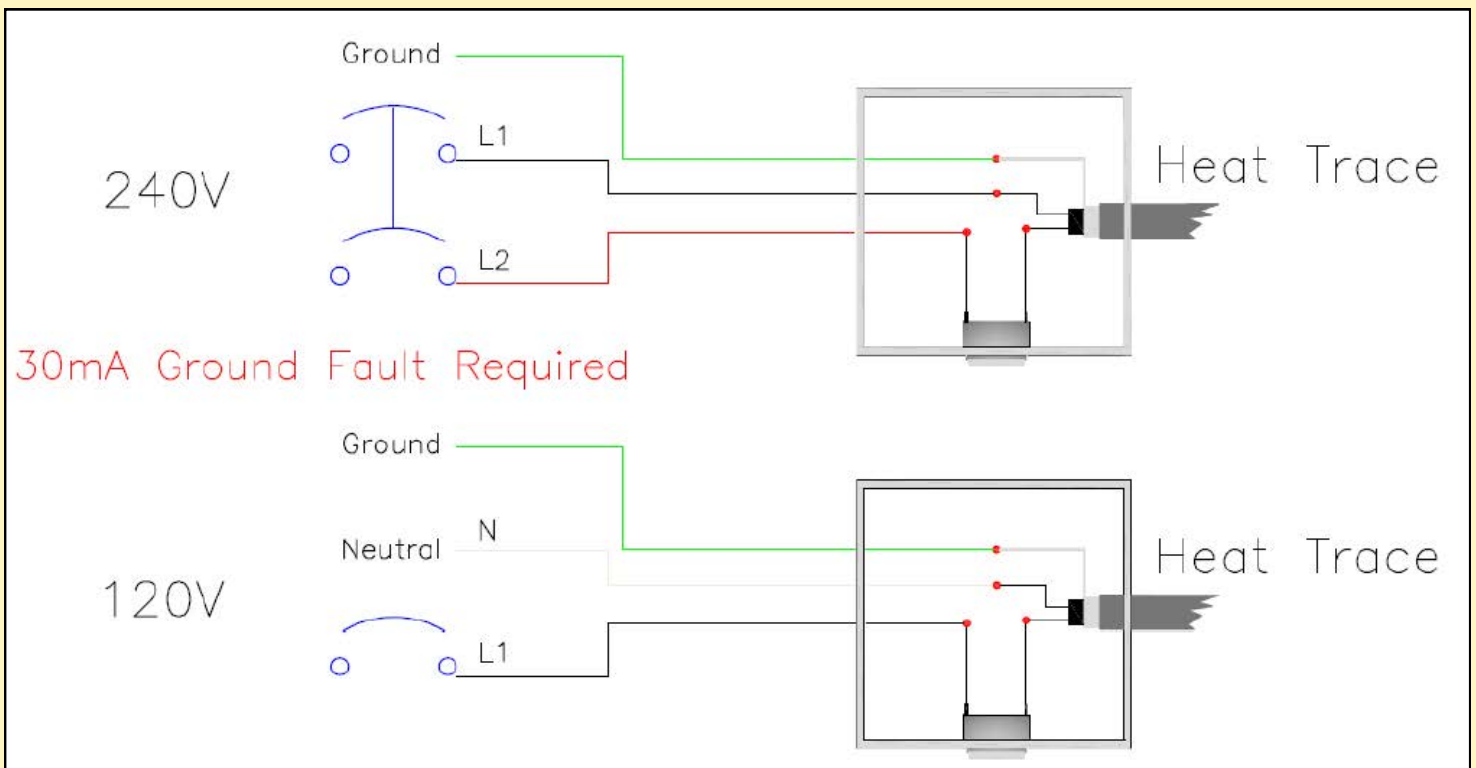
Ambient Thermostat

Heat trace on at 35°F temperature controlled switch



Thermostat Switch - Circuit On At 35°F and Off At 45°F

- UL Approved up to 250 VAC and 25 AMP resistive load.
- Rated for environmental conditions up to 350°F.
- Snapdisc thermal control opens on temperature rise:
Open 45°F Close 35°F (+/- 5°F)
- Temperature switch will last for over 100,000 operations under normal usage.
- Mounted in a 4X4X2 PVC junction box with surface mounting tabs
- Comes with two #10 soldered leads



TF4X40 Thermostat



Enclosure

Molded Fiberglass Polyester

Classifications

NEMA Type 4X IP66

Temperature Range

Fixed Range

22°C (40°F)

Capillary

Length	Material	Max. Bulb Temp.
0.9m(3ft.)	copper	60°C (140°F)

Electrical Data

CSA Rating and UL Rating
22 amp Resistance 250Vac

Calibration Accuracy

2.2°C (4°F) Environmental

Switch Type

Single Pole Single Throw

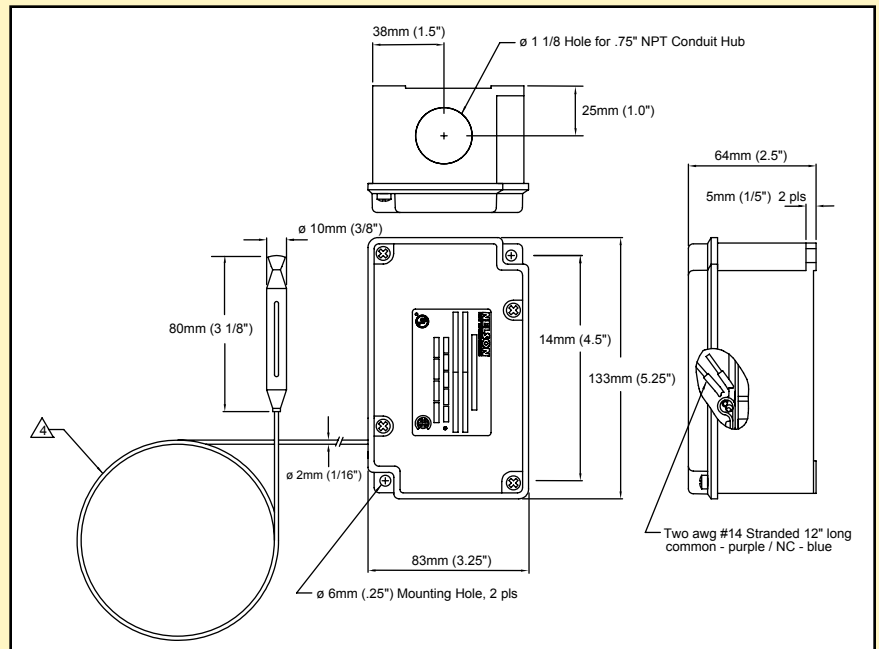
These thermostats are used for controlling heat tracing system in ordinary locations. The capillary bulb should be mounted on the side of the pipe.

Annual Maintenance:

1. Remove Cover
2. Spray a coat of lubricant and rust preventative such as CRC stor and Lube, electrical grade, on the thermostat body.
3. Replace Cover

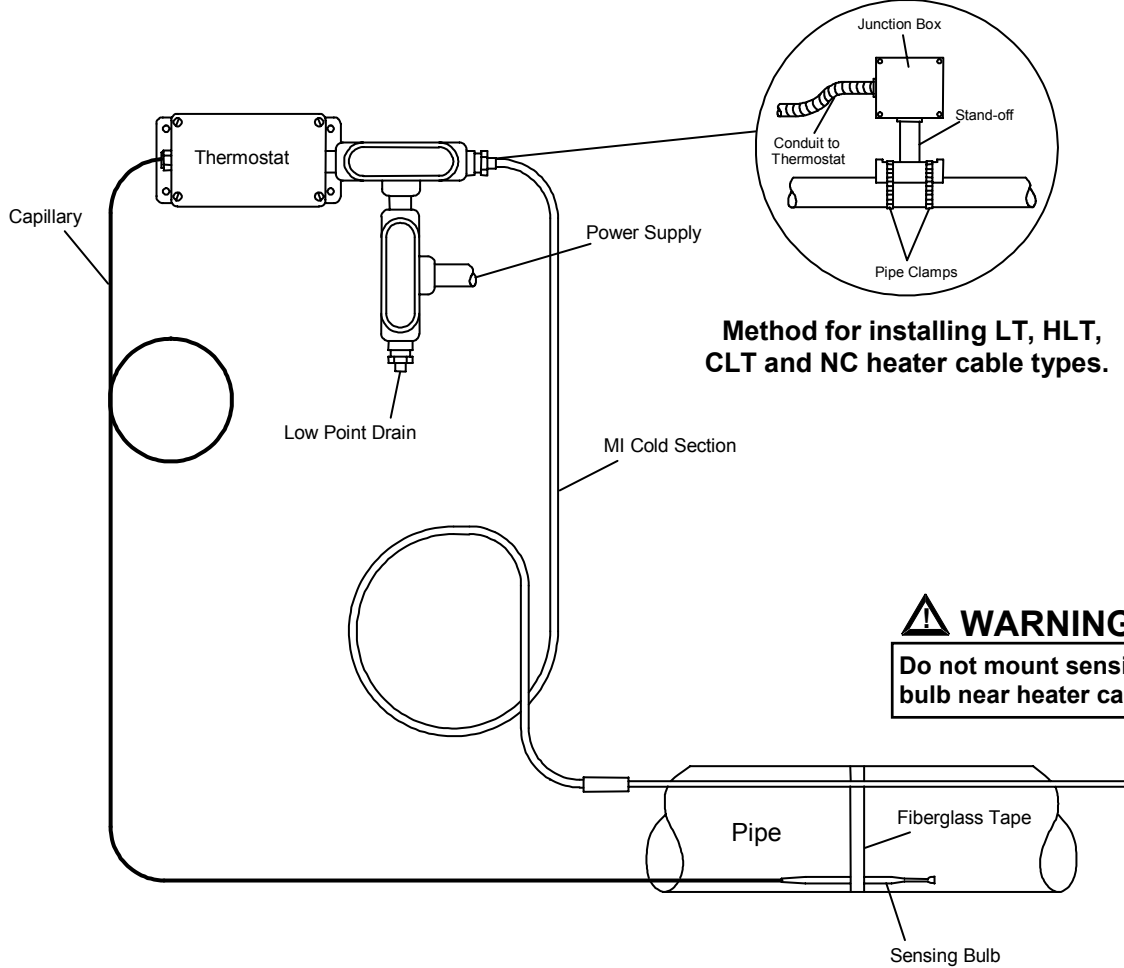
Approvals:

Federal Locations
UL-E50023 CAS - LR52088-4 CE

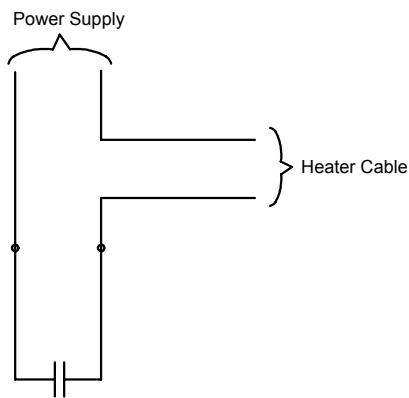


TF4X40 Thermostat

INSTALLATION



WIRING DIAGRAM



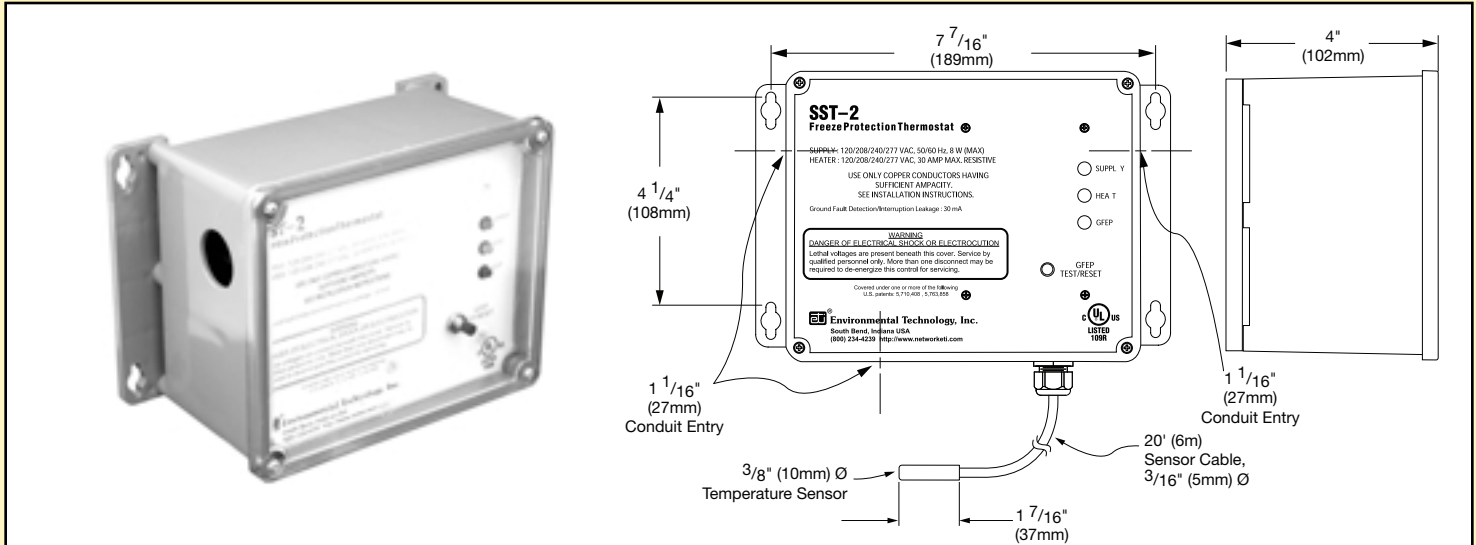
Low Cost Electronic Thermostat with Ground Fault Equipment Protection

SST-2 Freeze Protection Thermostat



Features & Benefits

- Automatic freeze protection
- 40°F (4.4°C) set point
- Automatic supply voltage selection
- Two-pole contactor switches up to 30 AMP heater loads
- Alarm relay with isolated contact
- C-UL-US listed
- Simple to install and operate
- Minimum energy costs



Description

The C-UL-US listed SST-2 Freeze protection thermostat replace electromechanical thermostats in cost-sensitive applications requiring ground fault equipment protection (GFEP). The SST-2 is listed by Underwriters Laboratories to Standard UL 873 for Temperature-Indicating and Regulating Equipment.

The SST-2 operate heaters at temperatures below 40° F (4.4°C) and turn them off above 42°F (5.5°C). The external temperature sensor (supplied) is a NEC Class 2 device rated for wet locations.

The SST-2 feature a built-in 30 mA GFED that is digitally filtered to minimize false tripping, A ground fault must be manually reset with the TEST/RESET switch before heater operation can be resumed. The GFED function is automatically tested along with the heaters whenever power is applied and once every 24 hours thereafter for additional safety.

The SST-2 includes an alarm relay with an isolated SPDT 1 AMP contact. The alarm relay is reverse acting and is normally closed unless there is a ground fault condition, GFED circuitry fails a test, or when there is a bad temperature sensor.

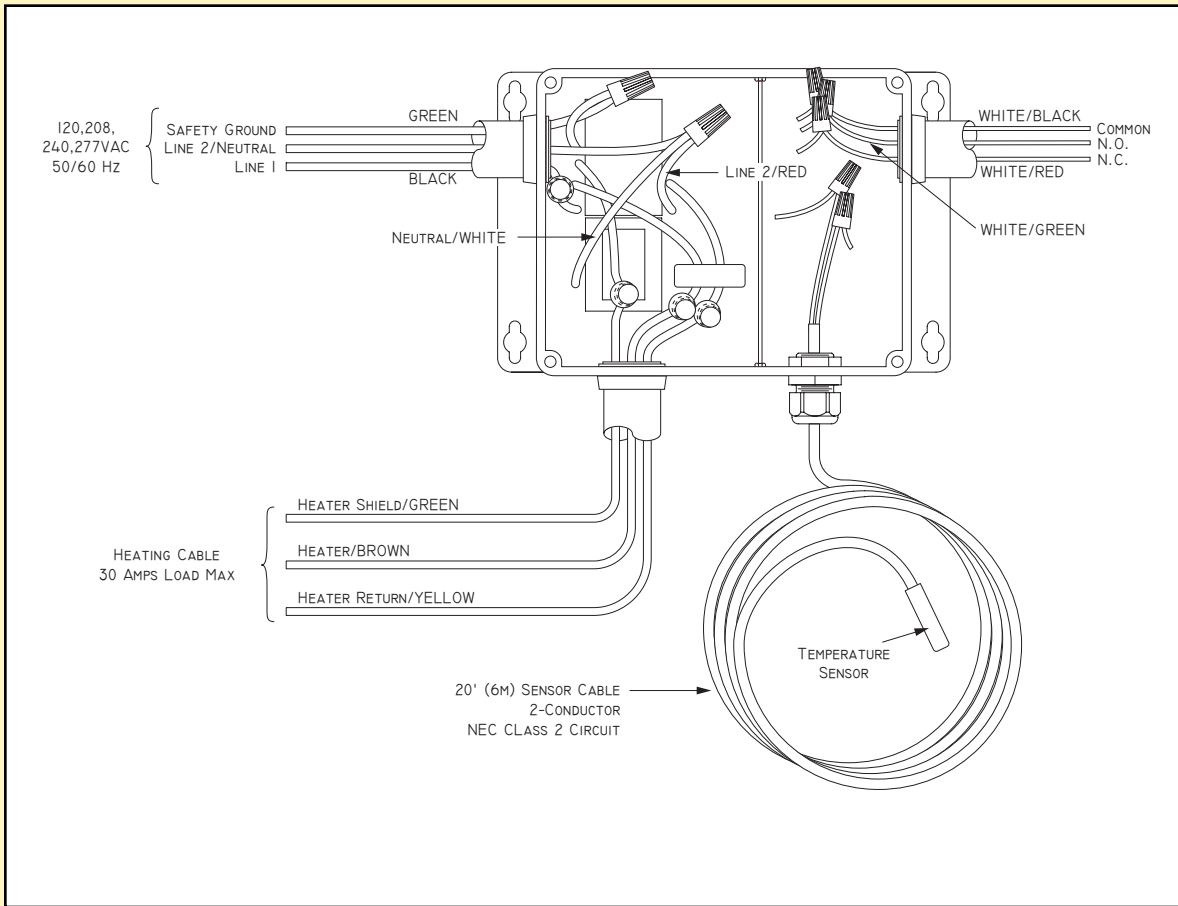
The SST-2 Freeze Protection thermostats operate from automatically selected operating voltages of 120,208,240,or 277 volts, Single-phase. They control heater loads of up to 30 amps while consuming less than 2 watts when idling. The temperature sensor is an NEC Class 2 device that can be located up to 2,000' (610 m) away from the SST. They operate in non-hazardous environments in a temperature range extending from -40° to 131° F (-40° to 55°C). The rugged non-metallic enclosure is appropriate for installation in indoor or outdoor locations suitable for NEMA 4X applications.

For complete information describing its application, installation and features, please contact Customer Service.

Specifications

Area of use	Nonhazardous locations
Approval	UL Listed Type 873 Temperature Regulating Equipment
Enclosure	
Protection	NEMA 4
Cover attachment	Polycarbonate cover, machine screws
Entries	1 X 3/4" entries (bottom right) for NEC Class 2 connections 3 X 1-1/16" entries (bottom left and left) for supply and load power
Material	Polycarbonate
Mounting	Wall mounted
Front Panel Interface	
Status indicator	SUPPLY (green) power applied SUPPLY (green, flashing) bad thermistor HEAT (yellow) call for heat GFEP (red) ground fault condition GFEP (red, flashing) failed GFEP (red, flashing, rapid) GFEP test in progress
Remote Interface (SST-2 only)	
Alarm relay	Isolated SPDT 1 AMP Class c contact
Summary alarms	No Power Ground Fault Condition GFEP function test failure Bad or missing thermistor
Control	
Supply voltage	120, 208, 240 or 277 volts, single phase (automatically selected)
Contact type	Two Form A DPST
Maximum ratings	Voltage: 277 VAC Current: 30 amps
High Limit thermostat	
Set point	40°F (4.4°C)
Dead band	2°F (1°C)
Sensor type	Thermistor network
Circuit type	NEC Class 2
Lead length	Up to 2,000' (610m) using 12 AWG 2-wire jacketed cable Up to 500' (152m) using 18 AWG 2-wire jacketed cable
Ground Fault Equipment Protection(GFEP)	
Set point	30 mA
Automatic self-test	Mode A: Verifies GFEP function before contactors operate Mode B: Verifies GFED function every 24 hours
Manual test/reset	TEST/RESET switch of front panel
Environmental	
Operating temperature	-40°F to 130°F (-40°C to 55°C)
Storage temperature	-67°F to 167°F(-55°C to 75°C)

Typical Installations for the model SST-2 Freeze protection thermostat



Limited Warranty

Eti's two year limited warranty covering defects in workmanship and materials applies. Contact customer service for complete warranty information.

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LCD-8 Snow Switch

Features & Benefits

- Automatic snow and ice melting controller minimizes operating costs
- Automatic voltage selection operates from 100VAC-240VAC
- 24VAC model available for hydronic and building automation applications
- Adjustable hold-on time and temperature set point provides flexibility for a wide range of applications

- Rated for up to 3 amp inductive loads for pilot duty applications and resistive loads up to 16 amps
- Weather-resistant NEMA 3R enclosure
- Hold-on timer continues heater operation after snow stops to ensure complete melting
- Sno-Test automatic testing and manual heater cycle for system testing
- Simple four-wire installation
- C-UL-US listed for Temperature Regulating Equipment



Description

The Snow Switch Model LCD-8 configurable aerial snow melting controller makes automatic snow melting a cost effective alternative in even the smallest applications. Heaters operate at temperatures below the set point, 38°F (3.3°C) default, only when required. The adjustable hold-on period, 3 hours default, continues heater operation after snow stops to ensure complete melting. The LCD-8 controller includes an internal magnetic reed switch used for manual heater cycling, as well as configuring the temperature set point and the hold-on time.

The LCD-8 controller operates from either an automatic selecting 100VAC – 240VAC or from 24VAC. These two voltage options combine with the configurable hold-on time and temperature set point to meet the need of a wide number of applications using just two part numbers. It controls heater loads up to 16 amps resistive or 3 amps inductive. The operating temperature range extends from –40°F to 140°F (–40°C to 60°C). The redesigned, patent pending, rugged polycarbonate enclosure provides excellent protection at temperature extremes, while allowing snow to shed to prevent iglooming over the moisture sensor. The internal magnetic reed switch allows for both configuration and manual heater operation without the need for external switches—which are susceptible to damage—or the need to open the enclosure. Verifying system functionality after installation or when troubleshooting used to require spray circuit cooler or ice for controller activation. The Sno-Test feature eliminates this need by performing a self-test after power application, and operating heaters in a unique pattern for a few seconds. Reading the test results takes only an AC voltmeter or clamp-on ammeter.

Specifications



General

Area of Use Nonhazardous locations
Approval UL Listed Type 873 Temperature Regulating Equipment

Enclosure

Protection NEMA 3R
Cover attachment Polycarbonate with machine screws
Entries 1 X 3/4" entry (bottom)
Material Polycarbonate
Mounting Pole mount
Dimensions 4.6" (W) x 6.1" (H) / 117mm (W) x 155mm (H)

Control

Supply voltage ETI Part 24619: 100VAC - 240VAC; 50/60 Hz
ETI Part 24781: 24VAC; 50/60 Hz
Load 3 amp maximum inductive
16 amp maximum resistive
Heater hold-on timer 0, 1, 3 (default) or 5 hours; configured by magnetic reed switch
Set point temperature Off (moisture only), 36°F, 38°F (default), 40°F; configured by magnetic reed switch

Interface

Status indicator Supply (green): Power on; will flash while in configuration mode
HEAT(yellow): Heating cycle in progress

Wire and Cable Ratings

Power Cable Size for heater load (16 amps maximum)
Heater cable Size for maximum heater load

Environmental

Operating temperature -40°F to 104°F (-40°C to 40°C)
Storage temperature -67°F to 167°F (-55°C to 75°C)

Ordering Information

24619 LCD-8, 120VAC - 240VAC
24781 LCD-8, 24VAC

Limited Warranty

Eti's two year limited warranty covering defects in workmanship and materials applies. Contact customer service for complete warranty information.

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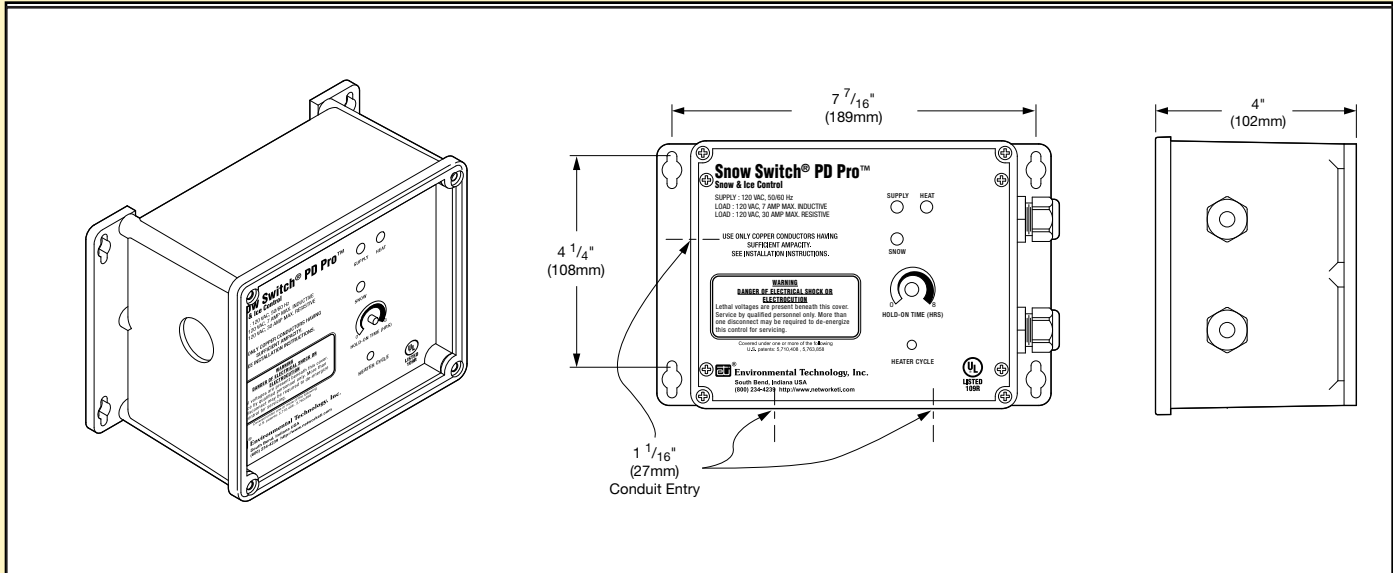
Snow Switch Model PD PRO

Automatic Snow/Ice Melting System Control Panel



Features & Benefits

- Automatic snow/ice melting control minimizes operating costs
- Rated for up to 7 amp inductive loads for pilot duty applications and resistive loads up to 30 amps
- Weather-resistant NEMA 4X enclosure
- UL Listed for Temperature Regulating Equipment
- Adjustable Hold-On timer continues heater operation after snow and ice stop to complete melting
- Dual sensor capability to meet site performance requirements
- Automatic and manual-override operator controls for changing environmental conditions
- Optional remote control operation for added convenience



Description

The Snow Switch Model PD Pro is an automatic snow and ice melting control system. Utilizing standard Environmental Technology snow and ice sensors (sold separately), applications include snow and ice detection and melting for pavement, sidewalks, loading docks, roofs, gutters and downspouts in commercial and residential environments.

The PD Pro interfaces with up to two standard environmental Technology sensors to meet site requirements. The CIT-1, Git-1, and Sit-6 sensors reliably detect snow and ice melting in gutter and pavement applications. The CIT-1 aerial snow sensor detects falling or blowing precipitation before snow or ice begin to form, allowing the control to begin managing the system. The CIT-1 sensors may be roof or mast mounted and can be paired with the GIT-1 sensors for gutter applications or the SIT-6E sensor for pavement applications. All three sensor detect precipitation as snow at temperature below 38° F (3.3°C). The PD Pro is signaled only if moisture occurs below this temperature, saving energy and ensuring thorough snow and ice melting. Since 1968, these sensors have been the industry's most versatile and cost-effective automatic snow melting control sensors.

The PD Pro features automatic and manual-override operator controls. The adjustable hold-On timer continues heater operations up to 8 hours after snow or ice conditions end to ensure complete melting. The heater cycle control button allows manual initiation or cancelation of a heating cycle. The optional RCU-3 remote control unit can be located for convenient monitoring and control. These flexible control options provide complete snow melting and water evaporation at low operating cost.

The PD Pro weighs only 3 pounds and measures 5 1/2" (L) x 8 8/8" (W) x 4 3/8" (H). Comprehensive instruction manuals simplify installation and operation. These products are also supported by environmental Technology Technical Support.

The PD Pro is a capable snow and ice control for medium-sized applications whose features and power requirements do not require an APS or EUR Series control panel.

Specifications

Enclosure	Nonhazardous locations
Approval	UL Listed Type 873 Temperature Regulating Equipment
Enclosure	
Protection	NEMA 4X
Cover attachment	Polycarbonate with machine screws
Entries	2 x 3/4" entry (bottom right) for NEC Class 2 connections 3 x 1-1/16" entries (bottom left) for supply and load power
Material	Polycarbonate
Mounting	Wall mounted
Dimensions	5 1/2" (L) x 8 1/8" (W) x 4 3/8" (H) x 140mm (L) x 207mm (W) x 112mm (H)
Control	
Supply voltage	120 VAC: 50/60Hz
Load	7 amp maximum inductive 30 amp maximum resistive
Contact type	2 Form A
Weight	3 Pounds (not including sensors)
Maximum ratings	Voltage: 120 VAC Current: 30 amps
Heater hold-on timer	0 to 8 hours; actuated by snow stopping or toggle switch
System Test	Switch toggles the heater contact on and off, If temperature exceeds optional high limit thermistor (45°F), heater shuts off to reduce costs and prevent damage.
Front Panel Interface	
Status indicator	Supply (green): Power on HEAT (yellow): Heating cycle in progress SNOW (yellow): Sensor(s) detect snow
Snow/Ice Sensors	
Maximum quantity	2 ETI sensors
Circuit type	NEC Class 2
Lead length	Up to 500' (152m) using 18 AWG 3-wire jacketed cable up to 2,000' (609m) using 12 AWG 3-wire jacketed cable
Wire and Cable Ratings	
Power Cable	Size for heater load (30 amps maximum)
Sensor wiring	#18 AWG jacketed, 3-conductor
Heater cable	Size for maximum heater load
Remote wiring	#22 AWG jacket, 2-conductor
Environmental	
Operating temperature	-31°F to 130°F (-35°C to 55°C)
Storage temperature	-61°F to 167°F (-55°C to 75°C)

Limited Warranty

Eti's two year limited warranty covering defects in workmanship and materials applies. Contact customer service for complete warranty information.

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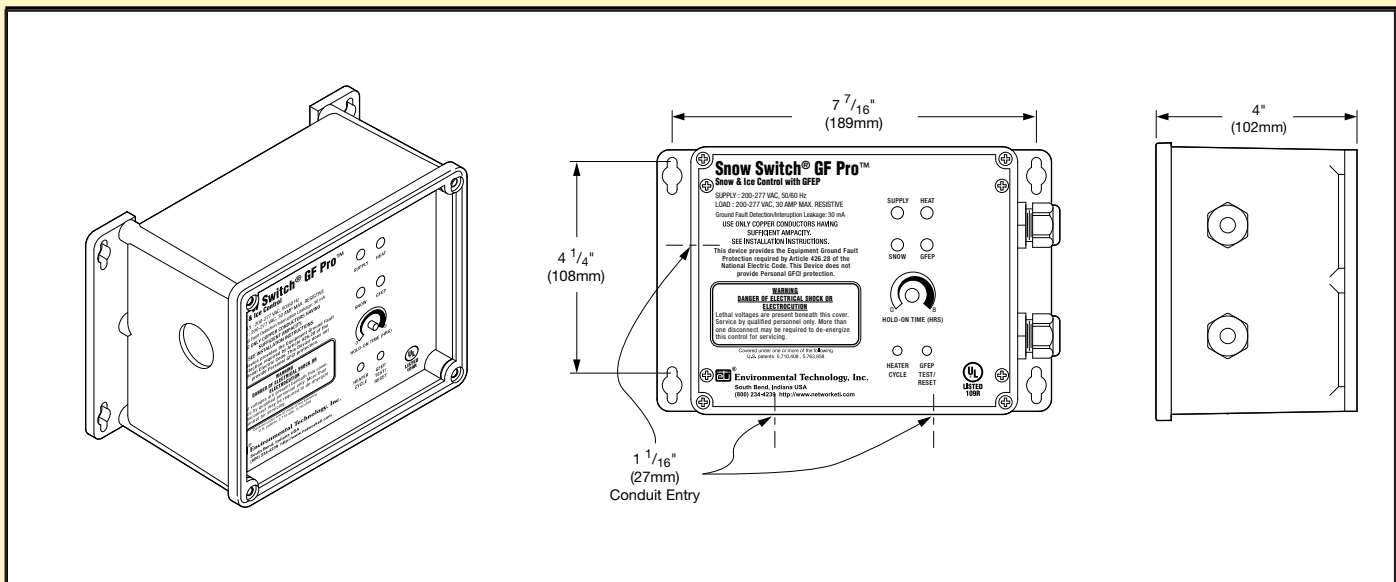
Snow Switch Model GF PRO

Automatic Snow/Ice Melting System Control Panel



Features & Benefits

- Automatic snow/ice melting control minimizes operating costs
- Rated for up to 30 amp resistive loads
- Integral 30mA of Ground Fault Equipment Protection (GEFP)
- Weather-resistant NEMA 4X enclosure
- UL Listed for Temperature Regulating Equipment
- Adjustable Hold-On timer continues heater operation after snow and ice stop to complete melting
- Dual sensor capability to meet site performance requirements
- Automatic and manual-override operator controls for changing environmental conditions
- Optional remote control operation for added convenience



Description

The Snow Switch Model GF Pro is an automatic snow and ice melting control system. Utilizing standard Environmental Technology snow and ice sensors (sold separately), applications include snow and ice detection and melting for pavement, sidewalks, loading docks, roofs, gutters and downspouts in commercial and residential environments.

The GF Pro interfaces with up to two standard environmental Technology sensors to meet site requirements. The CIT-1 sensors may be roof or mast mounted and can be paired with the GIT-1 sensors for gutter applications or the SIT-6E sensor for pavement applications. All three sensors detect precipitation as snow at temperatures below 38° F (3.3°C), saving energy and ensuring thorough snow and ice melting. Since 1968, these sensors have been the industry's most versatile and cost-effective automatic snow melting control sensors.

The GF Pro features built-in 30mA, self-testing Ground Fault Equipment Protection (GFEP), digitally filtered to minimize false tripping. A ground fault condition must be manually reset using the test/reset switch before heater operation can continue.

The GF Pro uses both automatic and manual-override operator controls. The adjustable Hold-On timer continues heater operations up to 8 hours after snow or ice conditions end to ensure complete melting. The heater cycle control button allows manual initiation or cancelation of a heating cycle. The optional RCU-4 remote control unit can be located for convenient monitoring and control. These flexible control options provide complete snow melting and water evaporation at a low operating cost.

The GF Pro weighs only 3 pounds and measures 5 1/2" (L) x 8 7/8" (W) x 4 3/8" (H). Comprehensive instruction manuals simplify installation and operation. These products are also supported by environmental Technology Technical Support.

The GF Pro is a capable snow and ice control for medium-sized applications whose features and power requirements do not require an APS or EUR Series control panel.



Specifications

Enclosure	Nonhazardous locations
Approval	UL Listed Type 873 Temperature Regulating Equipment
Enclosure Protection	IP 66, NEMA 4X
Cover attachment	Polycarbonate with machine screws
Entries	2 x 3/4" entry (bottom right) for NEC Class 2 connections 3 x 1-1/16" entries (bottom left) for supply and load power
Material	Polycarbonate
Mounting	Wall mounted
Dimensions	5 1/2" (L) x 8 1/8" (W) x 4 3/8" (H) x 140mm (L) x 207mm (W) x 112mm (H)
Control	
Supply voltage	200 - 277 VZC: 50/60 Hz
Load	30 amp maximum resistive
Contact type	2 Form A
Weight	3 Pounds (not including sensors)
Maximum ratings	Voltage: 277 VAC Current: 30 amps
Heater hold-on timer	0 to 8 hours; actuated by snow stopping or toggle switch
System Test	Switch toggles the heater contact on and off, If temperature exceeds optional high limit thermistor (45°F), heater shuts off to reduce costs and prevent damage.
Front Panel Interface	
Status indicator	Supply (green): Power on HEAT (yellow): Heating cycle in progress SNOW (yellow); Sensor(s) detect snow GFEP (red): Ground Fault condition GFEP (red, flashing): Failed GFEP (red, rapid flashing): GFEP test in progress
Snow/Ice Sensors	
Maximum quantity	2 ETI sensors
Circuit type	NEC Class 2
Lead length	Up to 500' (152m) using 18 AWG 3-wire jacketed cable up to 2,000' (609m) using 12 AWG 3-wire jacketed cable
Wire and Cable Ratings	
Power Cable	Size for heater load (30 amps maximum)
Sensor wiring	#18 AWG jacketed, 3-conductor
Heater cable	Size for maximum heater load
Remote wiring	#22 AWG jacket, 2-conductor
Ground Fault Equipment Protection (GFEP)	
Set point	30mA
Automatic self-test	GFEP verified before contactors operate: GFEP runs on start-up and every 24 hours
Manual Test/Reset	Test/Reset switch on front panel
Environmental	
Operating temperature	-31°F to 130°F (-35°C to 55°C)
Storage temperature	-61°F to 167°F (-55°C to 75°C)

Limited Warranty

Eti's two year limited warranty covering defects in workmanship and materials applies. Contact customer service for complete warranty information.

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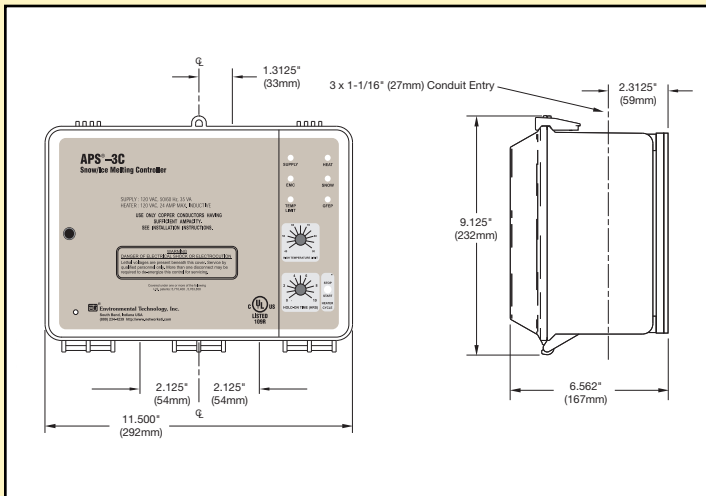
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APS-3C Snow Switch Automatic Snow/Ice Melting System Control Panel



Features & Benefits

- Automatic snow/ice melting control
- Operates electrically-and mechanically- held contactors for pilot duty applications
- Energy management computer (EMC) interface
- Accommodates MI, constant wattage and self-limiting heaters
- Multiple sensor capability
- Heater hold-on and test capabilities
- C-UL-US
- Simple to install and operate
- Low system costs
- Minimum energy costs



Description

The APS-3C snow switch when used with compatible sensors automatically controls snow/ice melting heaters, ensuring minimum operating costs. Typical applications include pavement, sidewalk, loading dock, roof, gutter and downspout snow/ice melting. The APS-3C is interchangeable with earlier APS-3 models.

The adjustable hold-on timer continues heater operation for up to 10 hours after snow stops to ensure complete melting. The optional RCU-3 Remote Control Unit can be located where system operation can be conveniently observed. It duplicates many of the controls and indicators on the APS-3C front panel. It is used to clear tracked and drifting snow that may not land on a sensor.

The Calibrated 40°F to 90°F (4°C to 32°C) high limit thermostat prevents excessive temperatures when using constant wattage and MI heaters. It also permits safe testing at outdoor temperatures too high for continuous heater operation. The temperature sensor is included.

The APS-3C provides a relay closure interface for use with energy management computers (EMC). This feature can also be used for general purpose remote control and annunciation and other advanced applications. All sensor and communications wiring is NEC Class 2. This simplifies installation while enhancing fire and shock safety. The APS-3C can interface up to six sensors from the CIT-1 product family. More sensors provides superior performance by better matching the controller to superior performance requirements. The APS-3C is an exceptionally capable deicing controller.

Specifications

Enclosure	Nonhazardous locations
Approval	UL Listed Type 873 Temperature Regulating Equipment
Enclosure	
Protection	NEMA 3R
Cover attachment	Hinged polycarbonate cover, lockable
Entries	3X1-1/6" entries
Material	Polycarbonate
Mounting	Wall mounted
Control	
Supply	120 VAC, 50/60 Hz, 35VA 208-240 VAC, 50/60 Hz, 35 V
Load	120 VAC, 24 amp max, inductive 240 VAC, 24 amp max, inductive
Contact type	Form C
Maximum Ratings	Voltage: 240 VAC Current: 24 amps
Heater hold-on timer	0 to 10 hours; actuated by snow stopping or toggle switch
System Test	Switch toggles the heater contact on and off, If temperature exceeds high limit, heater cycles to prevent damage.

Snow/Ice Sensors

Sensor type	Up to 6 sensors from the CIT-1 product family
Circuit type	NEC Class 2
Lead length	Up to 500' (152m) using 18 AWG 3-wire jacketed cable up to 2,000' (609m) using 12 AWG 3-wire jacketed cable

High Limit Thermostat

Adjustment range	40° F to 90° F (4°C to 32°C)
Dead band	1° F (0.6°C)
Sensor type	Thermistor network
Circuit type	NEC Class 2
Lead length	Up to 500' (152m) using 18 AWG 2-wire jacketed cable up to 1,000' (609m) using 12 AWG 2-wire jacketed cable

Energy Management Computer (EMC) Interface

Inputs	OVERRIDE ON (10 mA dry switch contact) OVERRIDE OFF (10 mA dry switch contact)
Outputs	SUPPLY (10 mA dry switch contact) SNOW (10 mA dry switch contact) HEAT (10 mA dry switch contact) HIGH TEMP (10 mA dry switch contact) ALARM (10 mA dry switch contact)

Environmental

Operating temperature	-40°F to 160°F (-40°C to 71°C)
Storage temperature	-50°F to 180°F (-45°C to 82°C)

Limited Warranty

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GIT-1 Gutter Ice Sensor



Benefits

- Reduces operating cost
- Reliable Automatic deicing control

Features

- Senses both moisture and temperature
- Gutter-mounted for accuracy
- Avoids ice bridging
- Rugged housing
- Simple low cost installation
- Field proven reliability

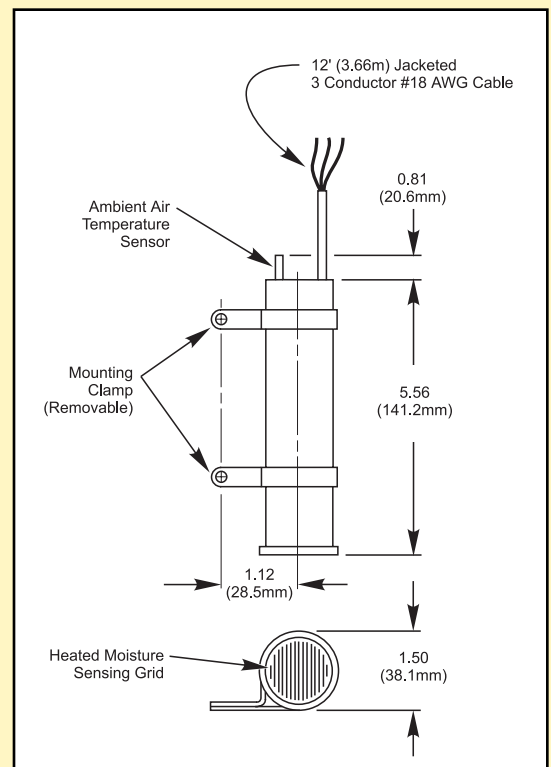
Description

An automatic control system for gutters and downspouts, interfaces one or more GIT-1 Gutter Ice Sensor with either an APS-3C, APS-4C, GF Pro or PD Pro control panel. Heaters operate only if moisture occurs at temperatures below 38°F (3.3°C), thus saving energy and ensuring reliable ice melting.

Since the GIT-1 mounts in gutters and downspouts it senses actual environmental conditions. This improves sensing accuracy. Solid state moisture and temperature sensors provide the sensitivity required for effective automatic control.

Ice bridging occurs if incomplete melting occurs near the heater or sensor leaving an air space. The air insulates thus preventing effective heater and sensor operation, The GIT-1's unique microcontroller design frees its moisture sensor from ice bridging. Additional features prevent heater operation under conditions favorable to heater ice tunneling.

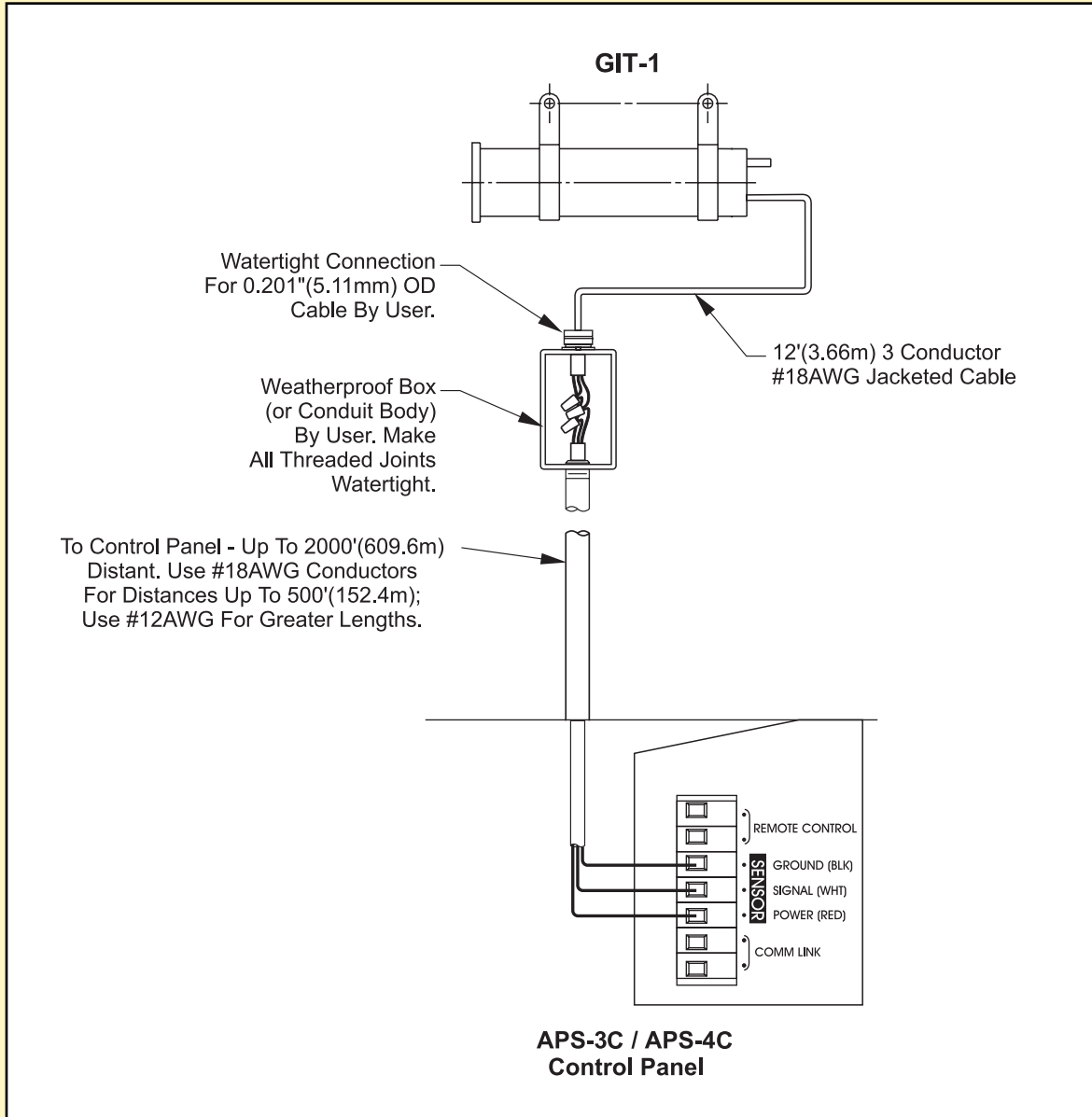
Low voltage operation simplifies installation. Sensors can be located up to 2,000' away from the control panel.



Installation

Gutters: Position sensor within 1/4' (6.4m) of gutter bottom with moisture sensing grid facing downstream (ambient air temperature sensor facing upstream). Sensor may be fastened to the fascia using the mounting clamps and gasketed screws (not furnished).

Downspouts: Fold cable back parallel to sensor body and secure with mounting clamps. Suspend sensor in downspout with moisture sensing grid facing up (ambient air temperature sensor facing down).



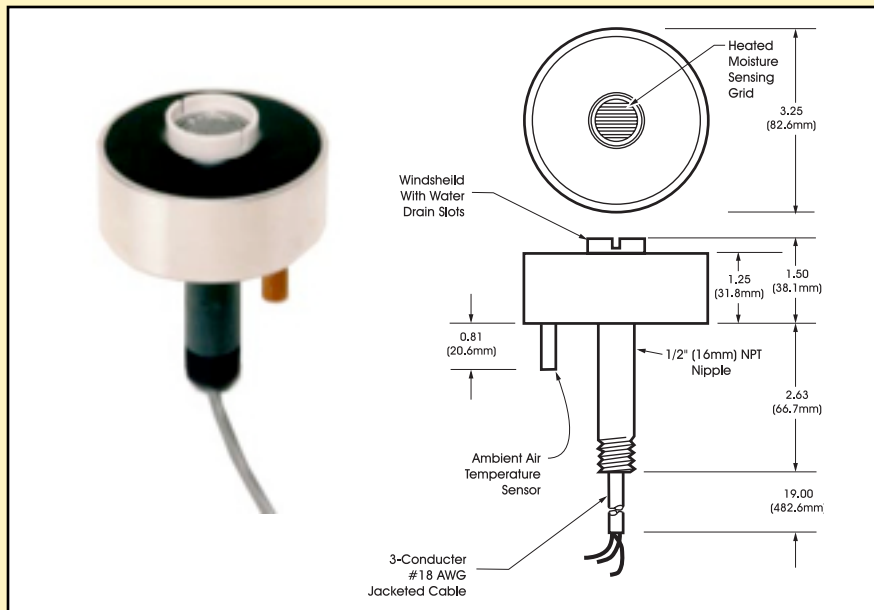
Limited Warranty

Eti's two year limited warranty covering defects in workmanship and materials applies. Contact customer service for complete warranty information.

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CIT-1 Snow Sensor



Benefits

- Minimum snow melting costs
- No supervision required

Features

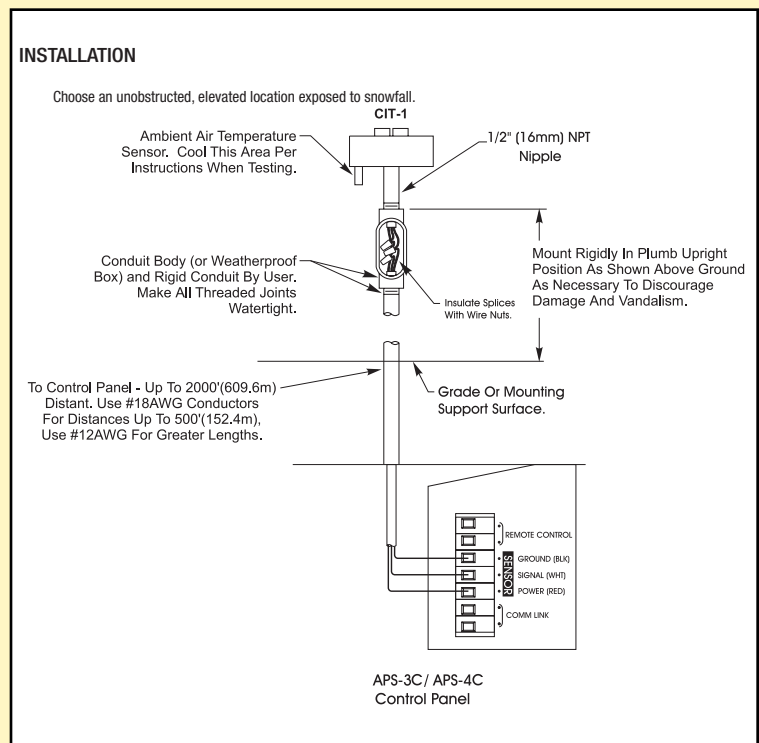
- Reliable snow sensing
- Senses both temperature and precipitation
- Application flexibility
- Simple installation
- Field proven in thousands of installations

Description

The CIT-1 Snow Sensor detects falling or blowing precipitation as snow at temperatures below 38°F (33°C). The CIT-1 provides the industry's most versatile and cost effective automatic snow melting control when used with an APS-3A, APS-3B, APS-4 control panel.

Reliability and sensitivity are key CIT-1 features. The solid state design, combined with a rugged aluminum housing and epoxy potting, ensure many years of trouble free service. Precision precipitation and temperature sensors assure snow detection accuracy.

Typical applications include controlling snow melting systems for sidewalks, doorways, stairs, loading docks, ramps, for the physically challenged and parking garages. Easy installation is another key CIT-1 feature. Low voltage operation, up to 2000' (609.6m) separation from the control panel, mast or roof mounting, and noncritical extension wiring are just a few of the features making this possible.



Limited Warranty

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AP 3550 - 10" Thermostat Extension Cable



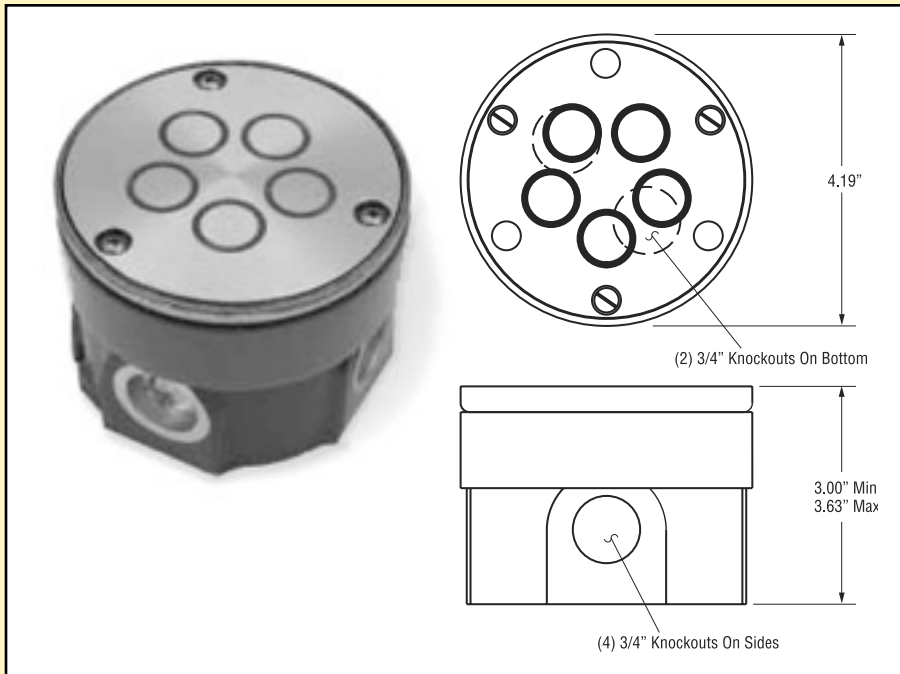
Benefits

- 15 Amps
- 120Volt Only
- Perfect for plug and play systems
- Built for protected exterior conditions

Description

This thermostat will automatically turn on when the temperature drops below 35°F. The Thermostat Extension Cable is simple to use. Plug one end directly into any 120v outlet. The Thermostat Extension Cable has an LED indicator that illuminates when the thermostat is activated. It will remain activated until the ambient temperature rises above 50°F.

SIT-6E Pavement-Mounted Snow & Ice Sensor



Features & Benefits

- Control based upon pavement conditions
- Rugged construction
- Simple installation
- Low voltage operation
- Reliable snow melting
- Minimum energy cost
- Long trouble-free life

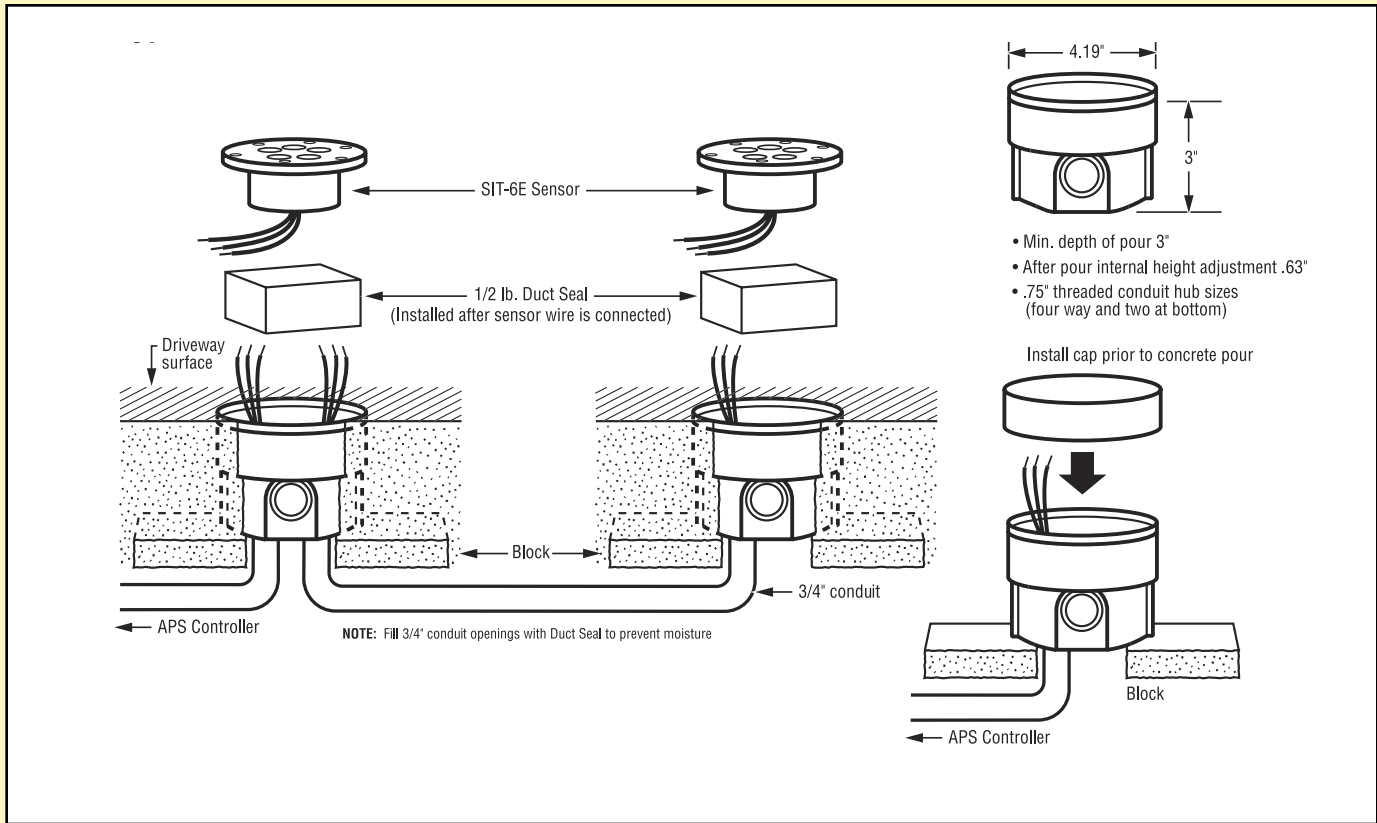
Description

The SIT-6E, which replace the SIT-5E, reliably detects snow and ice conditions on pavement surfaces when used with any APS series or EUR-5A control panel. This ensures that deicing heaters operate only while needed, which minimizes energy costs without sacrificing snow melting effectiveness. A built-in hold-on timer keeps heaters operating for an hour after snow stops to help ensure complete snow melting.

The SIT-6E accurately measures pavement temperature by compensating for its internal heating. This eliminates the cost and complexity of a separate pavement temperature sensor. For improved efficiency, the SIT-6E mounts closely to the deicing heaters to ensure that pavement and sensor become dry at about the same time.

The new mounting system helps align the SIT-6E with the pavement surface. Six available conduit locations add to installation flexibility and simplicity. The sensor subassembly is field replaceable without disturbing the pavement. The SIT-6E is a NEC class 2 low voltage device which simplifies installation.

Only brass, epoxy and stainless steel are exposed to the pavement surface. Precision machining gives these products a handsome appearance that will please the building owner, engineer, and architect.



Note: The output signal of an SIT-6E pavement sensor is not a contact closure- it is a solid state switch compatible only with ETI's APS series and EUR-5A control panel. If a contact closure is desired for an output signal, please select from our HSC series of pavement sensors.

Limited Warranty

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UL 508A PANEL SHOP

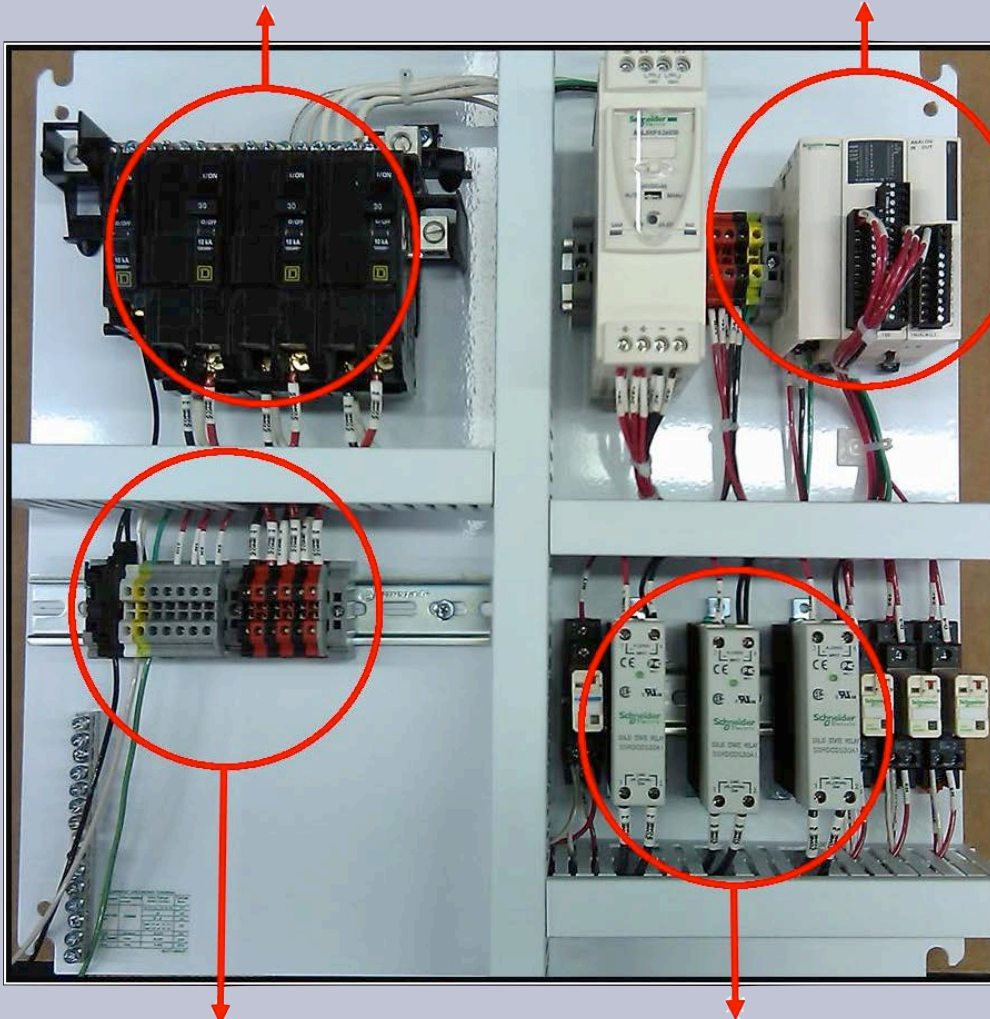


- Hazardous Areas
- Touch Screen Control
- PLC Based
- Wireless Communications
- Heat & Control Panels
- Custom Panels
- Professional
- Competitive



Clean and Organized Load Center with 30 Milliamp Breakers

Programmable Logic Control system for efficiency and total system accountability.

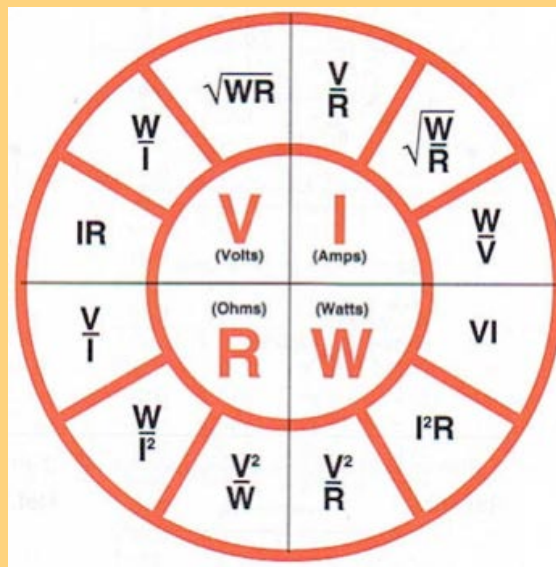


Organized and labeled terminal blocks for ease of installation.

30 Amp Solid State Relay Contactors for years of heavy use.

OHM'S LAW

Volts = Watts/Amperes
Volts = Amperes X Ohms
Amperes = Volts/Ohms
Amperes = $\sqrt{\text{Watts/Ohms}}$
Ohms = Volts/Amperes
Ohms = Volts²/Watts
Ohms = Watts/Amperes²
Watts = Volts²/Ohms
Watts = Amperes²/Ohms
Watts = Volts X Amperes



Temperature Scales

Degrees Fahrenheit to Degrees Celsius - $T_c = 5/9 (T_f - 32)$
Degrees Celsius to Degrees Fahrenheit - $T_f = 9/5 (T_c + 32)$
Degrees Celsius to Kelvin - $T_k = T_c + 273.15$

Engineering Constants:

1728 Cu. In. = 1 Cu. Ft. = 7.48 Gal
1" = 2.54 Cm
3412 Btu = 1 Kwh = 1.34 Hp Hour
491 Btu/Ft.² = 1 Watt Hour/In.² = Heat Density
1 Btu/Lb. °F = 1 Gram-Cal./Gram °C = Specific Heat
231 Cu. In. = 1 Gal
1 BTU = 252 Calories = .293 Watt-Hours
1 BTU/Lb. = 1.8 Calories/Gram
1 HP = 745.2 Watts
1 Gal. Water = 8.3 Lbs.
1 Gal. = 231 Cu. In. = 3.785 Liters = 1.227 Cu. Ft
1 Cu. Ft. = 1728 Cu. In. = .03704 Cu. Yd. = 7.481 Gal.
3 Phase Amps = Total Watts/Volts x 1.73
Wattage varies directly as ratio of voltages squared:
 $W^2 = W^1 \times (E^2/E^1)^2$

Safety

1. Ensure adherence to all applicable building codes for your area. Heat Trace Specialists recommends complying with the appropriate National Electrical Code rules including the use of a 30 mA trip breaker.
2. Ensure only qualified professionals perform electrical modification, repairs, upgrades or installations.
3. Wear safety glasses and appropriate personal protective equipment when installing any heat trace system or components.
4. Be aware of, and avoid all overhead power and phone lines.
5. When using ladders or any other equipment, ensure it is placed securely on safe and level surfaces.

Heavy Duty Heated Stair Mats

Product Specifications

Surface

Total Thickness	1/2"
Grommet Size (Inner Diameter)	3/8"
Material	Reinforced SBR Rubber

Heating Element

Voltage	120Vac or 240Vac
Power Density	37 Watts/SF
Snow Melt Rate	2" per hour

In-line Safety Device/Power Cord

Service Voltage	120Vac or 240Vac
Circuit breaker rating	15A
ELCI trip level	30mA
Cord lead length	6 ft
Cord length between stairs	18"
Cord guage	14/3 SJTW



Each Stair Mat is sold individually but can connect to additional Stair Mats to form a set. See below.

Model	Size	Volt	Watts	Amps	Weight
HRT11-36	11" x 36"	120	67	0.6	6 lbs.
HRT11-36B	11" x 36"	240	67	0.3	6 lbs.
HRT11-48	11" x 48"	120	93	0.8	8 lbs.
HRT11-48B	11" x 48"	240	93	0.4	8 lbs.
HRT11-60	11" x 60"	120	120	1.0	12 lbs.
HRT11-60B	11" x 60"	240	120	0.5	12 lbs.
HRT11-72	11" x 72"	120	147	1.2	13 lbs.
HRT11-72B	11" x 72"	240	147	0.6	13 lbs.
HRT11-84	11" x 84"	120	173	1.4	14 lbs.
HRT11-84B	11" x 84"	240	173	0.7	14 lbs.
HRT11-96	11" x 96"	120	200	1.7	15 lbs.
HRT11-96B	11" x 96"	240	200	0.8	15 lbs.

Heavy Duty Heated Walkway Mats

Product Specifications

Surface

Total Thickness	1/2"
Grommet Size (Inner Diameter)	3/8"
Material	Reinforced SBR Rubber

Heating Element

Voltage	120Vac or 240Vac
Power Density	38-40 Watts/SF
Snow Melt Rate	2" per hour

In-line Safety Device/Power Cord

Service Voltage	120Vac or 240Vac
Circuit breaker rating	15A
ELCI trip level	30mA
Cord lead length	6 ft
Cord gauge	14/3 SJTW



Standard cord location - lower right on the length side of the mat

Model	Size	Volt	Watts	Amps	Weight
HTM24-5	24" x 5'	120	300	2.5	20 lbs.
HTM24-5B	24" x 5'	240	300	1.3	20 lbs.
HTM24-10	24" x 10'	120	633	5.3	39 lbs.
HTM24-10B	24" x 10'	240	633	2.6	39 lbs.
HTM24-15	24" x 15'	120	967	8.1	59 lbs.
HTM24-15B	24" x 15'	240	967	4.0	59 lbs.
HTM24-20	24" x 20'	120	1,300	10.8	78 lbs.
HTM24-20B	24" x 20'	240	1,300	5.4	78 lbs.
HTM36-5	36" x 5'	120	480	4.0	33 lbs.
HTM36-5B	36" x 5'	240	480	2.0	33 lbs.
HTM36-10	36" x 10'	120	1,013	8.4	66 lbs.
HTM36-10B	36" x 10'	240	1,013	4.2	66 lbs.
HTM36-15	36" x 15'	120	1,547	12.9	75 lbs.
HTM36-15B	36" x 15'	240	1,547	6.4	75 lbs.
HTM36-20B	36" x 20'	240	2,080	8.7	100 lbs.
HTM48-6	48" x 6'	120	807	6.7	60 lbs.
HTM48-6B	48" x 6'	240	807	3.4	60 lbs.

HEAT TRACE ACCESSORIES FOR SNOW MELT



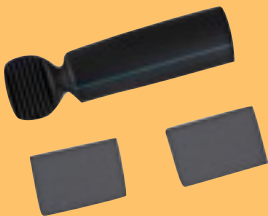
DC-8 (8 FOOT CORD)
8 foot cord for heat trace cable.



DGFI (120 & 240 VAC GROUND FAULT CIRCUIT BREAKER)
Ground fault circuit breaker of self-regulating heater cable. Total length 20 feet



DSK-1 Splice kit
For self-regulating heater cable. This kit is used to splice two heat trace cables together. Heat shrink for a moisture tight seal.



DES-1 End Seal Kit
For self-regulating heater cable. This is used to seal off the end of the cable so that no moisture will get into the cable.



DPEST Power and End Kits
Kit includes power connection and end seal components.
Dpest 50 = 1/2" entry gland
Dpest 75 = 3/4" entry gland

HEAT TRACE ACCESSORIES FOR SNOW MELT



DTEK-2 or 3 T Splice and End Termination Kit

For Self-regulating heater cable. This kit is used to T splice a cable run. Available in a two leg or three leg unit.



RCK-1 Roof Clips

These can be used as a double clip or easy to break apart for the use as a single clip. Sold in bags of 10 single clips.



S-5 Mini Clamp

Clamp for standing seam metal roofing to hold serpentine cable on rib.



Belt Loop Clips

Rubber coated roof clips. 1/2", 3/8" or 5/8" ID. 100 per bag.



RDK-1 Downspout Hanger.

Effectively supports heater cable in the downspout to avoid damage.



Screws

1 1/2" Self Piercing Screws



Self Tapping Screws with Neoprene washer



Silicone

To seal all penetrations on roof applications.

Recommended with primer to be installed above 40° F

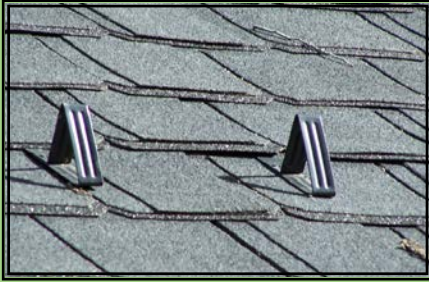
SNOW GUARDS

For Concrete Tile and Clay Roof



- For concrete roofs and Clay tile roofs
- Designed to lock into the roof system with no penetrations.
- Available in many sizes and options.

For Asphalt Shingle Roofs



- For asphalt shingle and wood Shake Roofs.
- Designed to attach with protected fasteners underneath the row of shingles.
- Available in many sizes and options.

For Corrugated Metal Roofs

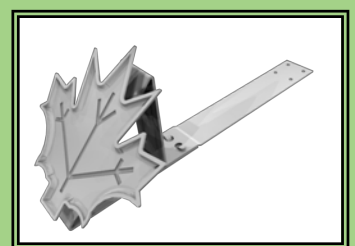


- For corrugated metal roofs.
- Easily mounts between the corrugated ribs of the roof.
- Available in many sizes and options.

For Slate and Simulated Tile

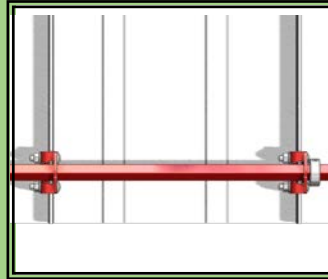
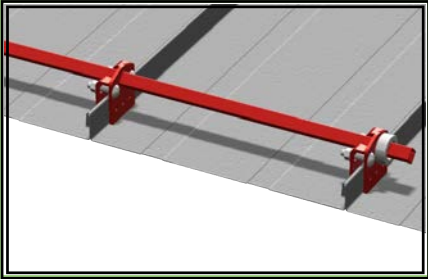
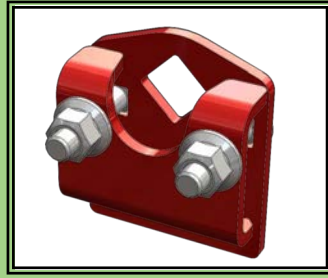
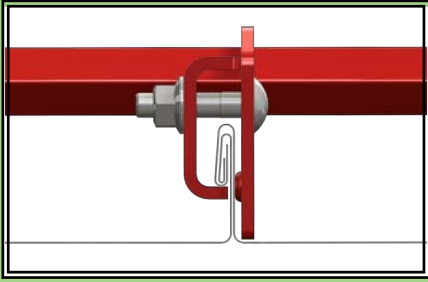


- For Slate, Shakes, Standing Seam, and Simulated Slate.
- Designed to lock into the roof system.
- Fastener cover included.



Decorative Cleats also available

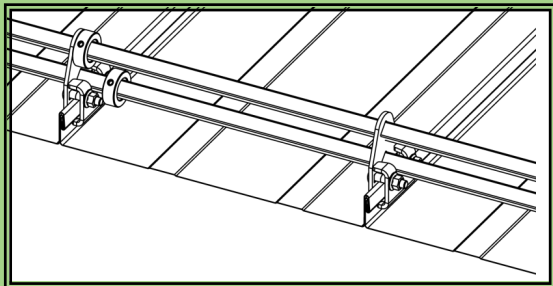
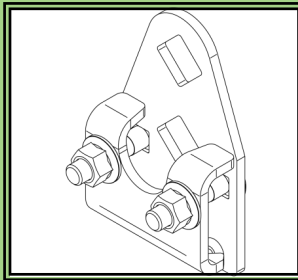
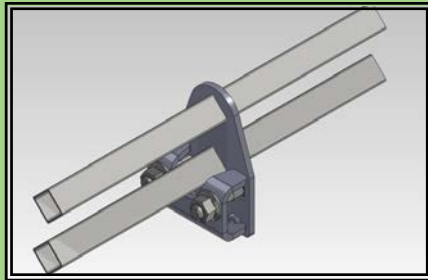
SNOW FENCES



Single Rail Snow Fence

For Mechanically Seamed Metal Roofs

- Engineered to attach with no penetrations into the metal roof.
- Superior Strength for snow retention to reduce sliding ice damage.
- Accepts 1 Pass of Heater Cable to efficiently reduce ice shelves on metal roofs.



Double Rail Snow Fence

For Mechanically Seamed Metal Roofs

- Engineered to attach with no penetrations into the metal roof.
- Superior Strength for snow retention to reduce sliding ice damage.
- Accepts 2 Passes of Heater Cable to efficiently reduce ice shelves on metal roofs.





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ADVANCED PROTECTION

for

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