HEATIT 8PLSR

HEATIT 8PLSR Self-Regulating Heat Cable User Manual (18 ft, 120V, 8W/ft)

Model: 8PLSR | Brand: HEATIT

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of your HEATIT 8PLSR Self-Regulating Heat Cable. This product is designed to provide frost protection for water pipes and assist with snow melting on roofs and gutters. Please read this manual thoroughly before installation and retain it for future reference.

Image 1.1: The HEATIT 8PLSR Self-Regulating Heat Cable, coiled, featuring its lighted plug indicator. This cable is designed for efficient frost protection and de-icing applications.
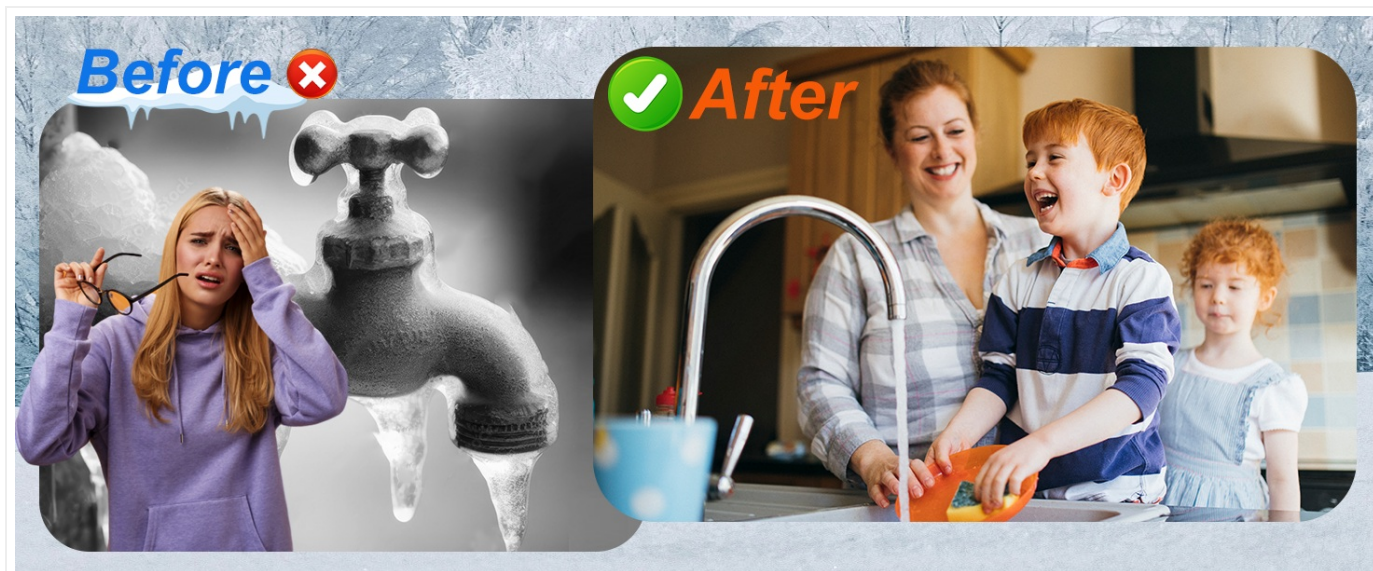
2. SAFETY INFORMATION

WARNING: Failure to follow these safety instructions may result in electric shock, fire, or serious injury.

- Always disconnect power before installing or servicing the heat cable.
- Do not cut or splice the heating cable.
- Do not use the cable if it is damaged. Inspect for cuts, abrasions, or other damage before installation.
- Ensure the cable is properly grounded.
- This product is intended for use with a 120V AC power supply.
- Consult local electrical codes and a qualified electrician for proper installation.
- The lighted plug indicates power is present, but not necessarily that the cable is actively heating. The cable heats only when the ambient temperature drops below a certain threshold.

Image 2.1: Illustration clarifying that the lighted plug indicates power is on, but the cable only heats when the thermostat senses low temperatures.

2.1 Certifications

The HEATIT 8PLSR Self-Regulating Heat Cable is fully ETL and UL certified, ensuring compliance with North American safety standards. This comprehensive certification covers the entire cable for reliable performance.

Image 2.2: Display of UL and ETL certification marks, indicating the product meets recognized safety standards.

3. INSTALLATION INSTRUCTIONS

The HEATIT 8PLSR cable is designed for flexible installation on various pipe and roof types. It is self-regulating, pre-assembled, and can be overlapped without risk of overheating.

Image 3.1: Visual representation of flexible installation options for the heat cable, including spiral, straight, and wrapped configurations.

3.1 Pipe Freeze Protection

This cable is suitable for use on both plastic (Pex, ABS, PVC) and metal (Copper, Steel, Galvanized) water pipes. Ensure pipes are clean and dry before application.
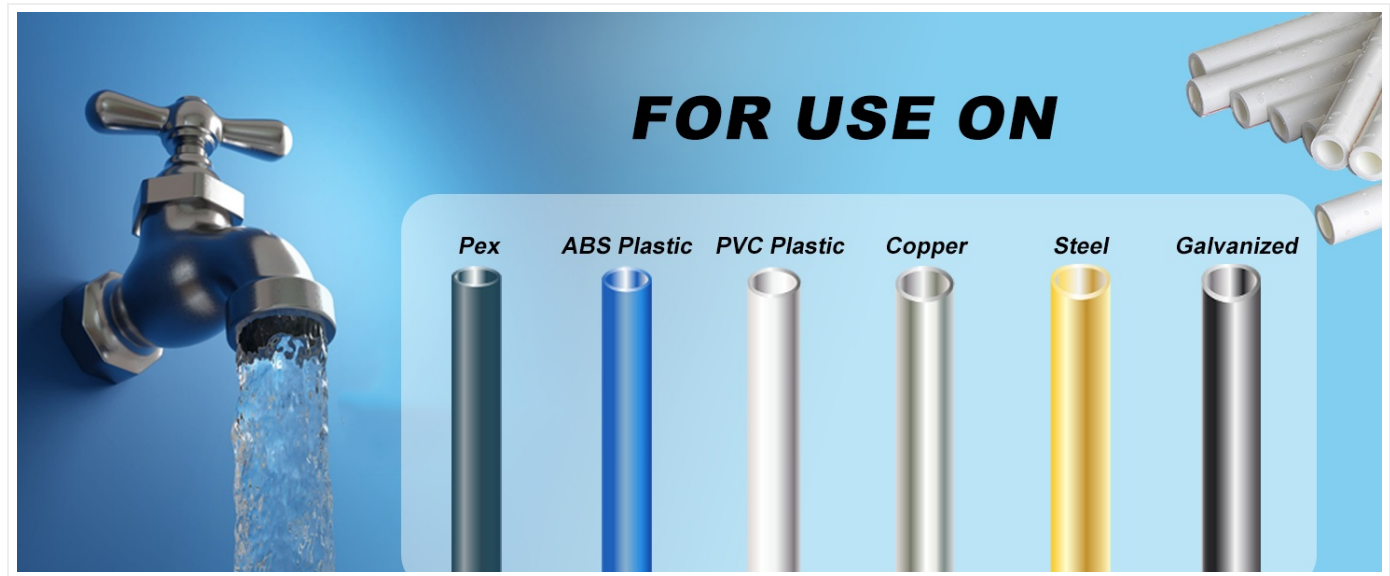

Image 3.2: Types of pipes compatible with the HEATIT 8PLSR heat cable for freeze protection.

For optimal performance and energy efficiency, it is recommended to insulate the pipes after installing the heat cable. Use fiberglass insulation or foam pipe covers.

Installation Steps for Pipes:

1. **Clean Surface:** Ensure the pipe surface is clean, dry, and free of sharp edges.
2. **Attach Cable:** Secure the heat cable along the length of the pipe using electrical tape or cable ties at intervals of approximately 12 inches (30 cm). For plastic pipes, ensure the cable does not exceed 8W/ft.
3. **Spiral or Straight:** The cable can be run straight along the bottom of the pipe or spiraled around it for increased heat output on larger diameter pipes or in colder conditions. Refer to the "Heating Cable Selection for Pipe Freeze Protection" table in the Specifications section for guidance on cable length per pipe diameter and temperature.
4. **Insulate:** Apply appropriate insulation over the pipe and heat cable.
5. **Connect Power:** Plug the cable into a grounded 120V outlet. The lighted plug will illuminate to indicate power is present.

3.2 Roof and Gutter De-icing

The HEATIT 8PLSR cable can be used on various roof types, including metal, slate, stone, rubber, asphalt, ceramic, wood, and composite roofs, to prevent ice dams and facilitate snow melting.

USE TO ROOFS **PROTECT YOUR ROOF** FROM DAMAGE AND LEA KING

Image 3.3: Illustration of a roof with snow, highlighting the potential for ice dam formation and associated damage, which the heat cable helps prevent.

Image 3.4: Examples of different roof materials compatible with the HEATIT 8PLSR heat cable for de-icing.

Installation Steps for Roofs and Gutters:

1. **Plan Layout:** Determine the areas prone to ice dam formation, typically roof edges, valleys, and gutters.
2. **Secure Cable:** Use appropriate roof clips or fasteners (not included) to secure the cable in a zigzag pattern along the roof edge and inside gutters. Ensure the cable is not damaged during fastening.
3. **Calculate Length:** Refer to the "Heating Cable Selection for Roof & Gutter De-icing" table in the Specifications section to calculate the required cable length based on roof edge length, gutter length, and downspout length.
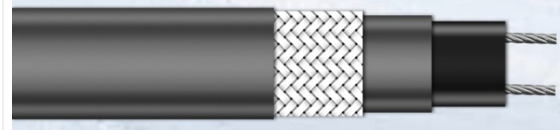4. **Connect Power:** Plug the cable into a grounded 120V outlet.

4. OPERATING INSTRUCTIONS

The HEATIT 8PLSR is a self-regulating heat cable. This means it automatically adjusts its heat output along its entire length based on the ambient temperature. It will produce more heat in colder sections and less heat in warmer sections, optimizing energy consumption and preventing overheating.

- Once plugged into a 120V power source, the integrated lighted plug will illuminate, indicating that the cable is receiving power.
- The cable will begin to heat when the temperature drops to a level where frost protection or de-icing is required.
- No manual adjustment is needed for temperature control.
- The self-regulating design allows the cable to be overlapped without causing hot spots or damage.

Image 4.1: Comparison illustrating the advantages of self-regulating heating cables, such as energy efficiency and the ability to overlap.

5. MAINTENANCE

The HEATIT 8PLSR heat cable requires minimal maintenance due to its durable construction and self-regulating properties.

- **Annual Inspection:** Before the cold season, visually inspect the entire length of the installed cable for any signs of damage, wear, or loose connections.
- **Cleanliness:** Ensure the cable and surrounding area are free from debris, leaves, or other materials that could impede heat transfer.
- **Power Check:** Verify that the lighted plug illuminates when connected to power. If it does not, check the power source.
- **Avoid Damage:** Take care during roof cleaning or other maintenance activities to avoid cutting or damaging the cable.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Cable not heating / Lighted plug off	No power to the outlet; Faulty outlet; Damaged cable or plug.	Check circuit breaker/GFCI. Test outlet with another device. Inspect cable for visible damage. If damaged, replace the cable.
Cable not heating sufficiently	Ambient temperature not low enough for full activation; Insufficient insulation; Incorrect cable length for application.	Verify ambient temperature is below freezing. Ensure pipes are adequately insulated. Review installation guidelines and cable length calculations.
Ice dams still forming on roof	Incorrect cable layout; Insufficient cable length; Extreme weather conditions.	Ensure cable is installed in a proper zigzag pattern. Verify sufficient cable length using the calculation table. Consider additional cable or professional assessment for extreme conditions.

If troubleshooting steps do not resolve the issue, contact HEATIT customer service for assistance.

7. SPECIFICATIONS

- **Model:** 8PLSR
- **Voltage:** 120 Volts
- **Power Output:** 8 Watts/Ft
- **Material:** Copper conductor
- **Certifications:** ETL & UL Listed
- **Minimum Installation Temperature:** -76°F (-60°C)
- **Maximum Exposure Temperature:** 185°F (85°C)
- **Cable Length:** 18 ft (This manual refers to the 18 ft variant, other lengths available)
- **Color:** Black
- **Item Weight:** 2.31 pounds (for 18 ft variant)
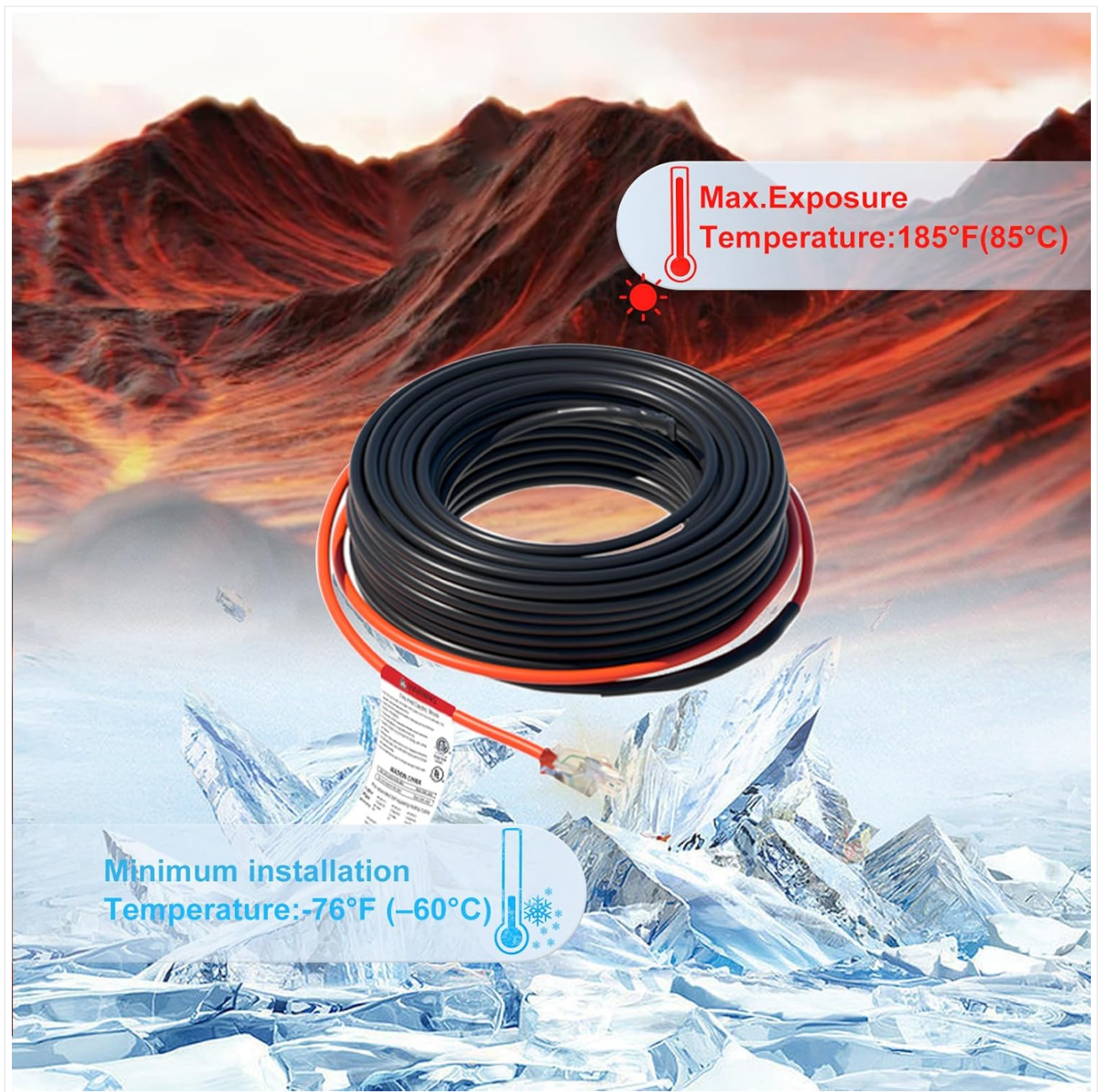- **Package Dimensions:** 9.09 x 8.86 x 2.64 inches (for 18 ft variant)

Image 7.1: The HEATIT 8PLSR heat cable's operational temperature range, from minimum installation to maximum exposure temperatures.

7.1 Heating Cable Selection for Pipe Freeze Protection

The following table provides guidance on the recommended cable length multiplier for different pipe diameters and lowest expected temperatures. This helps determine the total length of cable needed for effective pipe freeze protection.

HEATING CABLE SELECTION FOR PIPE FREEZE PROTECTION

| Diameter	Water filled Rigid Plastic pipe						Water filled Metal pipe					
	½"	¾"	1"	1¼"	1½"	2"	½"	¾"	1"	1¼"	1½"	2"
Lowest expected Temperature	(12.70mm)	(19.05mm)	(25.40mm)	(31.75mm)	(38.10mm)	(50.80mm)	(12.70mm)	(19.05mm)	(25.40mm)	(31.75mm)	(38.10mm)	(50.80mm)
+20°F (-7°C)	1	1	1	1	1	1	1	1	1	1	1	1
0°F (-18°C)	1	1	1	1	1	1	1	1	1	1	1	1
-20°F (-29°C)	1	1	1	1	1	1.2	1	1	1	1	1	1
-40°F (-40°C)	1	1	1.1	1.3	1.4	1.7	1	1	1	1	1.1	1.2
-60°F (-51°C)	1.1	1.2	1.3	1.6	1.9	2.1	1	1	1.1	1.2	1.3	1.5

Image 7.2: Guide for selecting appropriate heating cable length for pipe freeze protection based on pipe material, diameter, and minimum ambient temperature.
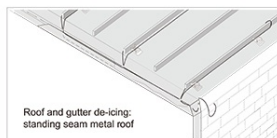
7.2 Heating Cable Selection for Roof & Gutter De-icing

Use the following table and formula to calculate the total heating cable length required for roof and gutter de-icing applications.

Heating cable selection for roof & gutter de-icing
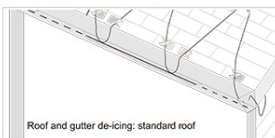
Roof and gutter de-icing: standard roof

Roof and gutter de-icing: standing seam metal roof

Heating Cable Multiplier Table

Eave Overhang	Standard Roof	Metal Roof 18" Seam	Metal Roof 24" Seam
None	2.0	2.5	2.0
12"	2.8	2.8	2.4
24"	3.8	3.6	2.9
36"	4.8	4.3	3.6

Calculate the amount of total heating cable length required:

Length=A+B+C+D

A Roof edge length (ft) x Length of cable per foot of roof edge(ft)

B Roof extension: Roof edge (ft) x 0.5 *

C Roof gutter: Total gutter length (ft)

D Downspout: Total downspout length (ft) +1 (ft) [double if looping]

= Total heating cable length (ft)

*Roof extension: This length allows the heating cable to extend into the gutter to provide a continuous drain path, or where no gutters are present, extends beyond the roof edge to form a drip loop.

Image 7.3: Instructions and table for calculating the required heating cable length for roof and gutter de-icing, considering roof type and eave overhang.

8. WARRANTY AND SUPPORT

8.1 Warranty Information

HEATIT products are backed by a commitment to quality. Specific warranty details are typically provided with the product packaging. Please retain your proof of purchase for warranty claims.

8.2 Customer Service

For any questions, technical assistance, or support regarding your HEATIT 8PLSR Self-Regulating Heat Cable, please contact HEATIT customer service. Our dedicated team aims to provide professional feedback within 24 hours. Contact information can typically be found on the product packaging or the official HEATIT website.
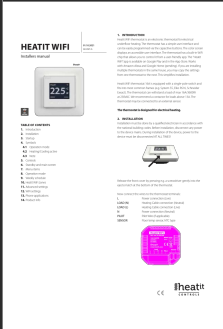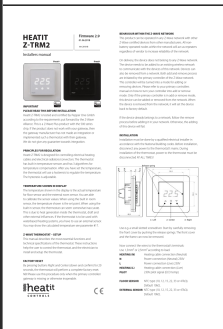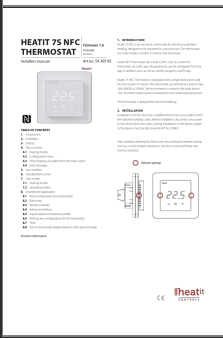
9. PRODUCT VIDEOS

No official product videos from the seller were provided in the available data to embed in this manual.

Related Documents - 8PLSR

[Heatit WiFi Thermostat Installer's Manual: Installation, Features, and Technical Specifications](#)
Comprehensive installer's manual for the Heatit WiFi Thermostat, detailing installation, features, operation modes, WiFi settings, and technical specifications for underfloor heating systems.

[Heatit DIN Smart Thermostat Z-Wave Installers Manual](#)
Comprehensive installer manual for the Heatit DIN Smart Thermostat, covering Z-Wave installation, configuration, features, and troubleshooting for residential and industrial applications.

[Heatit Z-TRM2 Thermostat Installer's Manual and Technical Specifications](#)
Comprehensive installer's manual for the Heatit Z-TRM2 Z-Wave Plus thermostat. Covers installation, setup, programming, error codes, and technical data for smart home heating control.

[Heatit 7S NFC Thermostat Installer's Manual - Installation and Operation Guide](#)
Comprehensive installer's manual for the Heatit 7S NFC thermostat, covering installation, setup, user modes, and smartphone application control via NFC.

[Heatit WiFi6 Thermostat - Installers Manual & Technical Guide](#)
Comprehensive installer's manual for the Heatit WiFi6 electronic thermostat. Covers installation, configuration, features, technical specifications, error codes, and troubleshooting for smart home heating control.

[Heatit Z-TRM3 Installer's Manual: Z-Wave Plus Thermostat for Floor Heating](#)
A comprehensive installer's manual for the Heatit Z-TRM3, a Z-Wave Plus certified electronic thermostat designed for electrical floor heating. This guide covers installation, setup, programming, sensor choices, and configuration parameters for seamless integration into smart home automation systems.