

## HEATIT JHSF

# HEATIT JHSF Self-Regulating Pipe Heating Cable User Manual

Model: JHSF (50ft, 120V 3W/FT)

## 1. PRODUCT OVERVIEW

The HEATIT JHSF Self-Regulating Pipe Heating Cable is designed to prevent water pipes from freezing in cold temperatures. This cable features advanced self-regulating technology and an integrated thermostat for efficient and safe operation. It is suitable for both metal and plastic pipes.

### Key Features:

- **Self-Regulating Technology:** Automatically adjusts heat output based on ambient temperature, preventing overheating and optimizing energy use.
- **Integrated Thermostat:** Activates at 38°F (3°C) and deactivates at 50°F (10°C) for precise temperature control.
- **Wide Compatibility:** Suitable for various pipe materials including Pex, Galvanized, ABS Plastic, Steel, Copper, and PVC Plastic.
- **Durable and Safe:** ETL and UL certified for North American safety standards, ensuring reliability and peace of mind. Backed by a \$2 million product liability insurance policy.
- **Easy Installation:** Pre-assembled and ready to install, adaptable for straight, spiral, or overlapped applications.
- **Freeze Protection:** Maintains water flow in temperatures as low as -40°F (-40°C).



Image: The HEATIT JHSF Self-Regulating Pipe Heating Cable, showing the coiled cable, power plug with indicator light, and the integrated thermostat. This cable is designed for pipe freeze protection.

## WHY NEED PIPE HEAT TAPE?



**Keep Water Flowing**  
During Cold Winter



**Avoid Pipe Bursts** (Frozen  
pipes can burst when thawing)



**Save Money**  
(Prevent expensive repairs)

Image: Diagram explaining the necessity of pipe heating cables, highlighting benefits such as continuous water flow, prevention of pipe bursts, and cost savings from avoiding repairs.



Image: A visual representation of the wide range of applications for the HEATIT pipe heating cable, including garden hoses, outdoor faucets, various pipes, palm tree frost protection, RVs, and farm use.

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Video: This video demonstrates various applications for the HEATIT pipe heating cable, showcasing its versatility in different environments for freeze protection.

## 2. SAFETY INFORMATION AND CERTIFICATIONS

Your safety is paramount. Please read and understand all safety instructions before installation and operation.

### Important Safety Guidelines:

- Always ensure the heating cable is fully ETL certified for superior safety and quality.
- The power plug is UL certified, confirming adherence to strict safety standards.
- Do not cut or shorten the heating cable.



- Ensure the cable is properly installed and secured to the pipe.
- Use appropriate insulation materials as recommended to maximize efficiency and safety.
- Plug into a 120V AC ground-fault protected outlet.

## Certifications:

The HEATIT JHSF Self-Regulating Pipe Heating Cable is fully ETL certified, ensuring compliance with rigorous industry standards for electrical, mechanical, and chemical products. The plug is UL certified for additional safety.

**ETL approved**, ensuring our water line heat tape meets the highest quality and safety standards. Additionally, the cable is backed by a **\$2 million insurance** policy, providing quality, safety, and peace of mind.



To prevent risks of overheating or fire, always select heating cables that have safety **certifications** and product liability insurance.

Image: Display of ETL certification documents, highlighting the product's adherence to safety standards and the inclusion of a \$2 million product liability insurance policy for user assurance.

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Video: This video emphasizes the importance of choosing fully certified heating cables for safety, showcasing HEATIT's ETL certification for the entire cable and UL certification for the plug.

### 3. INSTALLATION INSTRUCTIONS

The HEATIT JHSF heating cable is pre-assembled for easy installation. Follow these steps for proper setup:

#### Pre-Installation Functionality Test:

1. Uncoil the heating cable completely.
2. Plug the cable into a 120V AC ground-fault protected outlet. The indicator light on the plug should illuminate.
3. Place the thermostat (the small black sensor) into an ice bucket or wrap it tightly with a frozen ice pack for a few minutes.
4. After a few minutes, carefully touch the heating cable. You should feel a slight warmth, indicating it is functioning correctly.
5. Unplug the cable from the outlet.

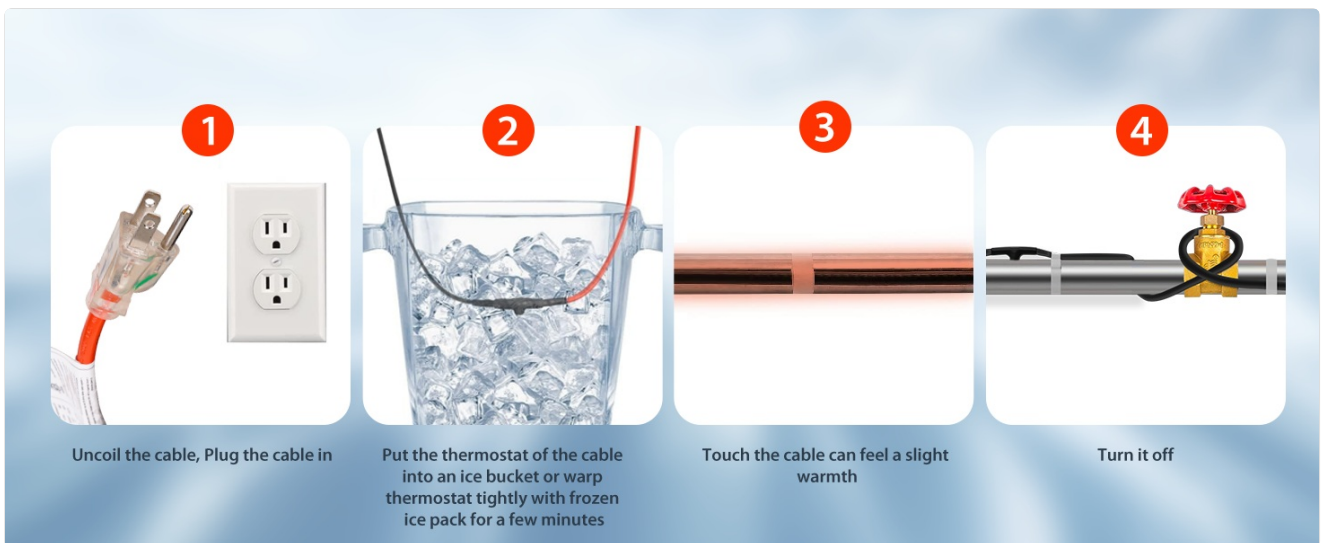



Image: A four-step visual guide demonstrating how to test the heating cable before full installation, including plugging it in, exposing the thermostat to cold, checking for warmth, and unplugging.

#### Cable Installation:


1. **Determine Proper Length:** Refer to the cable selection tables (often found in the product packaging or online) to calculate the required cable length based on pipe diameter, material, and lowest expected temperature. Add 1ft (0.3m) of cable for each valve or support.
2. **Fix Thermostat:** Position the thermostat at the pipe's coolest point, ensuring direct contact with the pipe.
3. **Fix Cable:** Affix the heating cable onto the pipe. It can be installed in a linear arrangement, spiraled around the pipe, or overlapped. Use the provided glass cloth tape to secure the cable every 10 feet or as needed.
4. **Apply Insulation:** Encase the entire pipe, cable, and thermostat in HEATIT insulation tape (available separately) specifically designed for pipe applications. This improves efficiency and protection.
5. **Plug and Play:** Plug the cable into a 120V AC ground-fault protected outlet. The indicator light on the plug will turn on, confirming power.



Diameter Lowest expected Temperature	Water filled Rigid Plastic pipe						Water filled Metal pipe					
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	(12.70mm)	(19.05mm)	(24.40mm)	(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	1.3	1.6	1.8	2.1	1	1	1	1.1	1.2	1.5
- 20°F (- 29°C)	1.5	1.7	2	2.3	2.5	3	1	1.1	1.3	1.6	1.8	2.2
- 40°F (- 40°C)	2	2.3	2.7	3.2	3.6	4.3	1.3	1.5	1.8	2.1	2.4	2.8
- 60°F (- 51°C)	2.4	2.9	3.3	4.1	4.7	5.4	1.7	2	2.4	2.9	3.2	3.9



ETL CERTIFICATION



**STEPS TO DETERMINE THE PROPER LENGTH**

- Determine the diameter and material (plastic or metal) of the pipe.
- Refer to the Cable Selection Tables to find the cable length calculation factor.
- Multiply the length of the pipe by the factor to determine the required cable length.
- Add 1ft (0.3m) of cable for each valve or support.
- Choose a cable length that meets or exceeds the calculated length.

**EXAMPLE**

- Measure the length of your pipe, which is 20ft in this case.
- Check the chart to find the factor for your pipe diameter and the lowest ambient temperature in your area, which is 1.3 for a 1" diameter pipe and -20°F temperature.
- Multiply the length of your pipe by the factor to get the required cable length, which is 26ft in this case.
- Add an extra 1ft of cable for each valve or support along the pipe.
- Choose the closest length of our JHSF preassembled heating cable to the required length, which is 30ft in this case.

Image: A cable selection table and a step-by-step guide to determine the proper heating cable length based on pipe diameter, material, and expected minimum temperatures.

# NO OVERHEAT OR BURN



For better freeze protection, insulation material is recommended, and sold separately



**spiral tracing**



**35FT**  
**Glass Cloth Tape**



Tie with glass cloth tape



**Straight tracing**



**Overlap**



Image: Illustration of different installation methods (spiral tracing, straight tracing, overlap) for the heating cable, highlighting the use of glass cloth tape and the recommendation for insulation to prevent overheating.

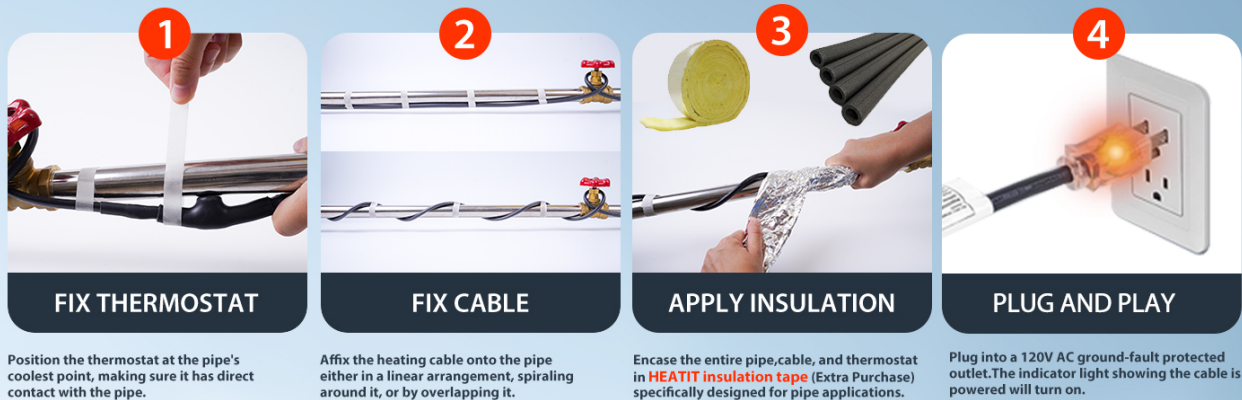


Image: A detailed four-step installation guide, covering how to fix the thermostat, secure the cable, apply insulation, and finally plug in the unit for operation.

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Video: An unboxing video of the HEATIT JHSF Pipe Heating Cable, showing the contents of the package including the cable, user manual, and glass cloth tape.

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Video: This video provides a step-by-step guide on how to install the HEATIT heat tape, including compatible pipe types and proper application techniques.

## 4. OPERATING INSTRUCTIONS

Once installed, the HEATIT JHSF heating cable operates automatically to provide reliable freeze protection.

### Automatic Operation:

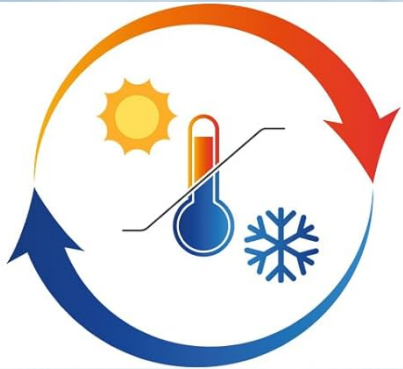
- The built-in thermostat monitors the ambient temperature around the pipe.
- When the temperature drops to 38°F (3°C) or below, the heating cable automatically activates.
- When the temperature rises to 50°F (10°C) or above, the heating cable automatically deactivates.
- The self-regulating core adjusts its heat output: generating more heat in colder conditions and less heat as temperatures rise, ensuring energy efficiency and preventing overheating.
- The indicator light on the plug confirms the cable is receiving power.



# AUTOMATIC POWER ADJUSTMENT



Say goodbye to concerns about **freezing or overheating**



50°F/10°C  
**Heat Off**

37°F/3°C  
**Heat On**

## Keeps Water Flowing at -40°F (-40°C).

Image: A diagram illustrating the automatic power adjustment feature, showing the thermostat activation and deactivation temperatures, and the cable's ability to maintain water flow down to -40°F (-40°C).

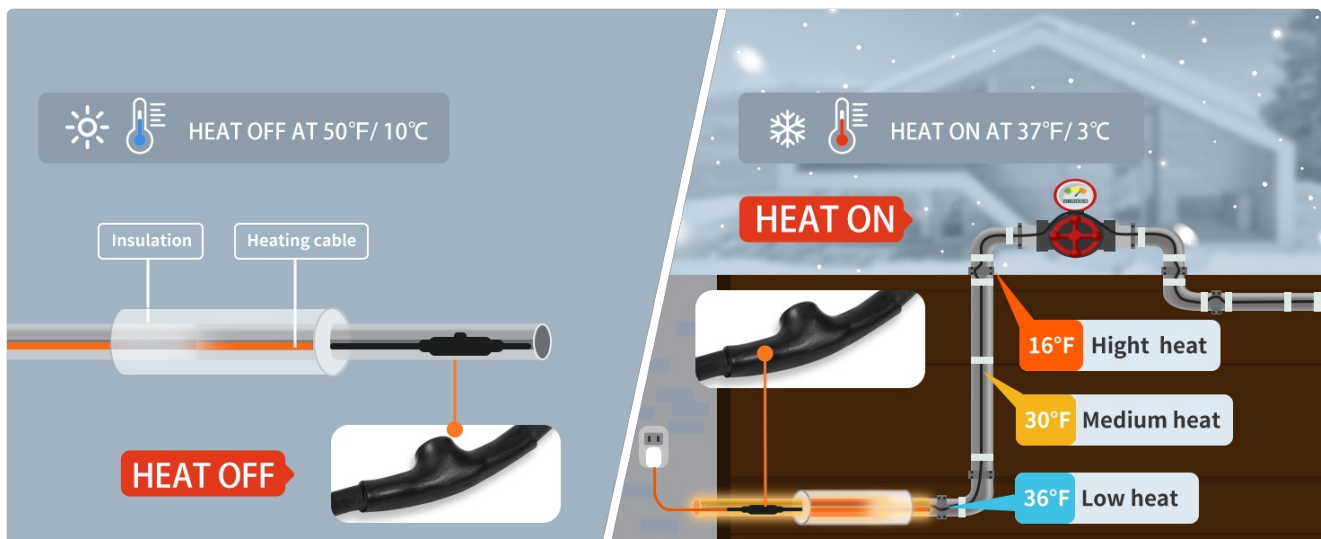


Image: Diagram detailing the HEATIT cable's operational logic, showing when it turns on and off based on temperature thresholds, and how it provides varying levels of heat (high, medium, low) as needed.



# SELF-REGULATING



The cable adjusts its power output accurately to the ambient temperature

CLIMATE  
PLEDGE  
FRIENDLY



**Hot**

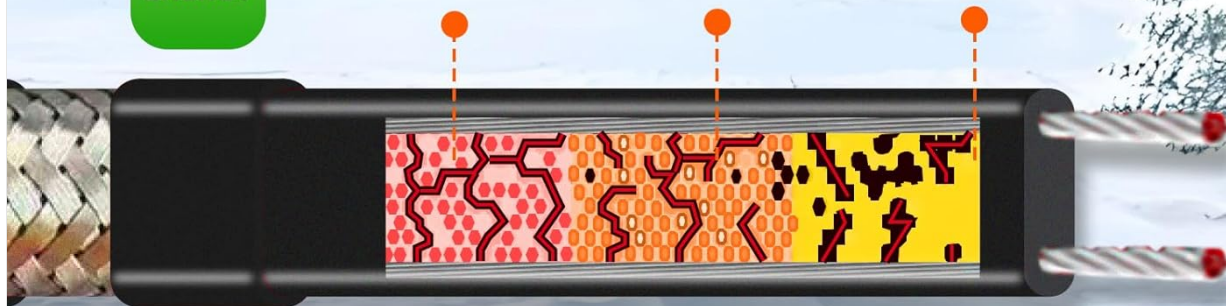
Min Heat Output

**Warm**

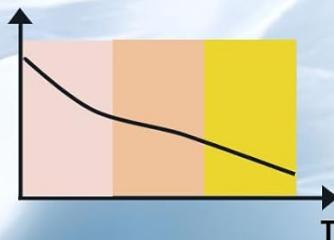
Moderate Heat Output

**Cold**

High Heat Output



P



**Low temperature**

**High power output**



**High temperature**

**Low power output**

Image: A cross-section diagram illustrating the self-regulating mechanism, showing how the cable's heat output varies (Hot, Warm, Cold) in response to ambient temperature changes.

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Video: This video explains the self-regulating technology of the pipe heat cable, demonstrating how it intelligently adjusts its heat output for smart freeze protection and energy efficiency.

## 5. MAINTENANCE

The HEATIT JHSF heating cable requires minimal maintenance. Regular checks ensure continued optimal performance.

- **Visual Inspection:** Periodically inspect the cable and its connections for any signs of damage, wear, or loose tape.
- **Insulation Check:** Ensure that the pipe insulation remains intact and covers the entire heating cable and thermostat. Replace any damaged insulation.

- **Functionality Test:** Before the onset of cold weather each season, perform the pre-installation functionality test (Section 3.1) to confirm the cable is heating properly.
- **Cleanliness:** Keep the area around the cable and thermostat free from debris, dirt, or anything that could interfere with its operation.

## 6. TROUBLESHOOTING

If your HEATIT JHSF heating cable is not performing as expected, refer to the following common issues and solutions:

Problem	Possible Cause	Solution
Cable not heating / No indicator light	No power to outlet, faulty outlet, damaged plug/cable.	Check power supply. Test outlet with another device. Inspect plug and cable for damage. If damaged, discontinue use and contact support.
Cable not heating in cold temperatures	Thermostat not in direct contact with pipe, insufficient insulation, ambient temperature above activation threshold.	Ensure thermostat is firmly against the pipe. Add or improve insulation. Verify ambient temperature is below 38°F (3°C).
Cable overheating (unlikely due to self-regulation)	Improper installation (e.g., excessive overlap without proper insulation), thermostat not sensing ambient temperature correctly.	Review installation for correct spacing and insulation. Ensure thermostat is exposed to ambient temperature. If issue persists, discontinue use and contact support.

If you encounter issues not listed here or if the suggested solutions do not resolve the problem, please contact HEATIT customer support.

## 7. PRODUCT SPECIFICATIONS

- **Model:** JHSF
- **Length:** 50 ft (Available in lengths from 3 ft to 160 ft)
- **Power Output:** 3 W/ft
- **Voltage:** 120V
- **Power Cord Length:** 2 ft
- **Thermostat Activation:** 38°F (3°C)
- **Thermostat Deactivation:** 50°F (10°C)
- **Minimum Operating Temperature:** -40°F (-40°C)
- **Compatibility:** Metal and Plastic Water Pipes (Pex, Galvanized, ABS Plastic, Steel, Copper, PVC Plastic)
- **Certifications:** ETL Listed, UL Certified Plug
- **Manufacturer:** Zhukeshi

- **Item Weight:** 2.93 pounds
- **Package Dimensions:** 10 x 9.72 x 2.64 inches



**Light indicator** ✓



**Thermostatic Controller** ✓



**Self-Regulating Heating Cable** ✓



**Waterproof End Seal** ✓

# DETAILS

**Energy Saving**

## 2Ft-160Ft Heating Cable 3Ft Power Cord

**ETL certification ensures compliance with North American safety standards.**



**UL certified, ensuring top safety and quality**

Image: Detailed breakdown of the HEATIT cable's components and features, including the light indicator, thermostatic controller, self-regulating core, waterproof end seal, and its ETL/UL certifications.





Image: Visual representation of the cable's core features, such as its high-tech self-regulating capability, smart temperature controller, light indicator plug, waterproof end seal, and rapid heating performance.

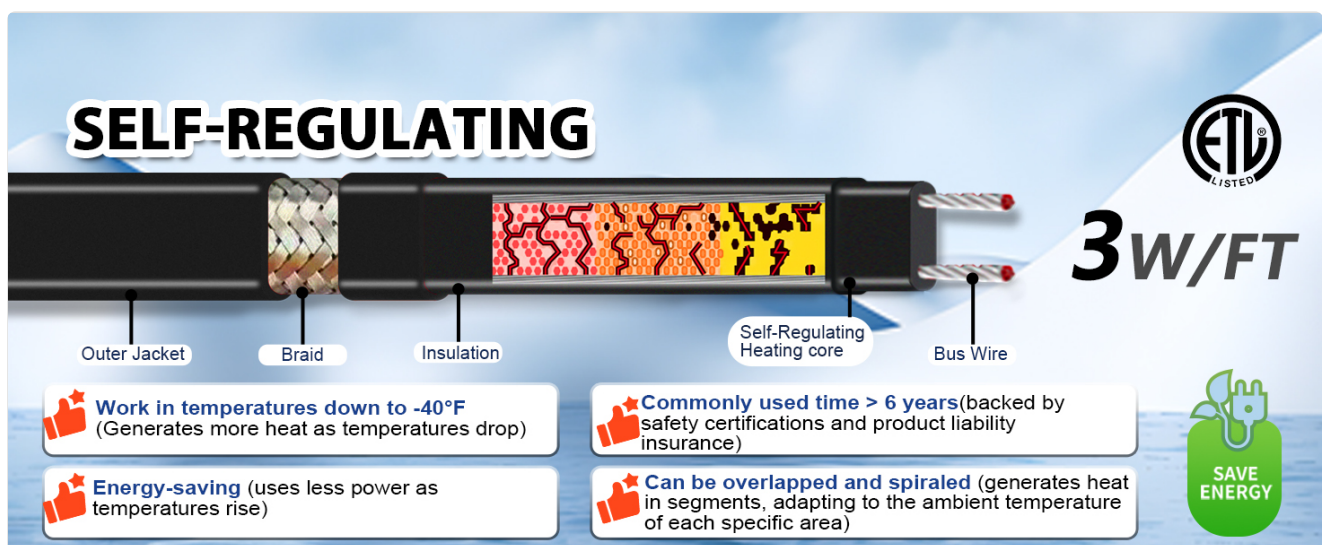


Image: A cross-section diagram of the self-regulating cable, illustrating its internal structure and highlighting benefits such as operation down to -40°F, energy savings, and a lifespan of over 6 years.

## 8. WARRANTY AND SUPPORT

HEATIT is committed to providing high-quality products and customer satisfaction.

- **Product Liability Insurance:** This product is backed by up to USD 2 million in product liability insurance, providing you with added peace of mind and security.
- **Transparency Program:** Each HEATIT product features a unique Transparency code, enabling you to authenticate its genuineness and ensuring product quality.
- **Customer Support:** For any questions, concerns, or technical assistance, please refer to the contact information provided in your product packaging or visit the official HEATIT website.

## ETL Certification

ETL certification assures top-notch quality and safety standards for our water line heat tape. Trust in our reliable pipe heat cables for superior freeze protection.

Don't compromise; invest in ETL-certified excellence!

## \$2 Million Insurance

Opt for security with our insured products, backed by a \$2 million policy—ensuring quality, safety, and your peace of mind. Protect your choice with us.

## Transparency

The Transparency Program safeguards this product, enabling you to authenticate its genuineness. Each of our products features a unique Transparency code. This program assures the purchase of authentic brand products and underscores HEATIT's promise to product quality and customer satisfaction.



Image: Information regarding HEATIT's ETL certification, \$2 million insurance policy, and the Transparency program, all designed to ensure product quality and customer trust.