

The world's **best-selling** floor heating brand™



Installation Manual for the

# SELF REGULATING HEATING CABLE FOR ROOF AND GUTTER

Technical Helpline

US:1-888-927-6333

CA:1-888-592-7687

#### **IMPORTANT!**



You MUST read this manual before attempting to install your Warmup product(s). Incorre installation could damage the heating system and will invalidate your warranty.

Complete and submit your warranty form online at www.warmup.com or www.warmup.



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### Safety Warning





### **SAFETY WARNING**

#### **ELECTRIC SHOCK HAZARD**

Disconnect all power before installing or servicing heating cable and accessories. A qualified person must perform installation and service of heating cable and accessories. Heating cable must be effectively grounded in accordance with the National Electrical Code. Failure to comply can result in personal injury or property damage.

Make all electrical connections in compliance with the National Electrical Code (NFPA 70) and local Authorities Having Jurisdiction (AHJ). If you have questions concerning the installation or application, contact Customer Service.

#### ADDITIONAL INFORMATION

More information is regularly made available through our website, www.Warmup.com. Please visit us online for Data Sheets, Manuals, White Papers, technical articles, and more. The most current and up to date version of this and every other manual for our products can be found in Acrobat (pdf) format to view online or to print. This is to assist you in installing and using our products to the best effect possible. If you have any comments about this or any other product from Warmup, please contact us.

### About WSR SR Roof & Gutter

#### **DESCRIPTION**

The Warmup WSR SR self-regulating heating cable is a versatile, safe solution for all roof types—including rubber, metal, clay, and asphalt shingles. Featuring our proprietary PTC core that adjusts heat output based on temperature, eliminating the need for a thermostat. Available in various spool sizes, it can be cut to length on-site for a precise fit, won't overheat or burn out even when overlapped, and is suitable for non-hazardous, hazardous, and corrosive environments. With a full line of accessories like Power Connection, Splice, Tee, and End Seal Kits, plus a 10-year warranty, it ensures reliable, efficient performance for diverse roofing applications.

#### PRE-INSPECTION INSPECTION

Open package and visually check for breaks or nicks in the cable jacket. Call Warmup Customer Experience Team if any damage is found.

Never energize the cable when it's coiled or on a reel. Test only when it is laid out straight.

After removing the cable from the carton or wrapping, check the insulation resistance of the unit from buss wires to braid with a 1,000VDC megger to assure the cables have not been damaged during shipping and handling.

**ELECTRIC SHOCK HAZARD.** Verify insulation resistance of 50 megohms or greater before installing. Contact Warmup if cable is less than 50 megohms.

#### **SPECIFICATIONS**

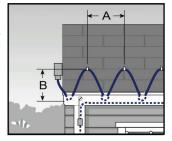
| Nominated Voltages:                        | 120Vac, 208Vac - 277Vac |
|--|-------------------------|
| CSA certificate, max. circuit size:        | 20A for roof & gutter   |
| Maximum maintenance temperature:           | 150°F (65°C)            |
| Maximum intermittent exposure temperature: | 185°F (85°C)            |
| Temperature classification:                | т5/т6                   |
| IP level:                                  | IP66/67                 |
| Minimum installation temperature:          | -40°C (-40°C)           |
| Minimum bending radius:                    | 1.18 in. (30 mm)        |
| Approval Mark:                             | C UL US                 |

### **Calculations**



- 1. Obtain the following roof information: roof edge length, roof overhang, total gutter length, total downspout number and breaker rating.
- 2. Calculate the amount of cable required by:
  - A. Multiplying the roof edge length by the roof overhang factor found in Table 1.
  - B. Add the total gutter length plus the total downspout length to the result obtained in Part A to determine the total length of cable required.

| TABLE 1: SPACING FACTOR |                    |                     |                |  |  |
|-------------------------|--------------------|---------------------|----------------|--|--|
| Roof Overhang           | A<br>Heating Width | B<br>Heating Height | Spacing Factor |  |  |
| 12"                     | 2 ft               | 18"                 | 2              |  |  |
| 24"                     | 2 ft               | 30"                 | 3              |  |  |
| 36"                     | 2 ft               | 42"                 | 4              |  |  |



**TABLE 2 - ESTIMATING THE CABLE LENGTH** 

| AREA       | WHAT TO MEASURE                              | HOW TO CALCULATE                                |
|------------|--|---|
| Along Roof | Overhang (A) and<br>Length of Roof (B)       | Length of roof (B) x Overhand Multiplier        |
| Dormer     | Distance around dormer                       | Number of dormers x Distance around dormers     |
| Valley     | Number of valleys                            | Number of valleys x 6 feet (1.8m)               |
| Downspout  | Number of downspouts<br>Length of downspouts | Number of downspouts x Length of downspouts x 2 |

3. Calculate the number of brach circuits required by dividing the total length of cable required by the maximum heater length allowed for the breaker rating from the table on page 6.

| TABLE 3: WSR SR_ROOF & GUTTER [Ice and Snow] |                         |   |                  |                   |                   |  |  |
|--|-------------------------|---|------------------|-------------------|-------------------|--|--|
| Drook  | Start Up @              | Branch Circuit Maximum Length [In Feet] |                  |                   |                   |  |  |
| Break-<br>er                                 | Water<br>[Ice and Snow] | WSR 9W<br>120Vac                        | WSR 9W<br>240Vac | WSR 12W<br>120Vac | WSR 12W<br>120Vac |  |  |
| 10A  | 32 °F                   | 157                                     | 314              | 100               | 200               |  |  |
| 15A  | 32 °F                   | 236                                     | 471              | 150               | 301               |  |  |
| 20A  | 32 °F                   | 238                                     | 476              | 190               | 380               |  |  |
| 30A  | 32 °F                   | 238                                     | 476              | 190               | 380               |  |  |
| 40A  | 32 °F                   | 238                                     | 476              | 190               | 380               |  |  |
| 50A  | 32 °F                   | 238                                     | 476              | 190               | 380               |  |  |

4. Branch-Circuit Sizing: The ampacity of the branch circuit conductor and the rating or setting of overcurrent devices shall not be less than 125% of the ampere load of the cable or units. Example: A load of 24A x 1.25 (125%) = 30A breaker.

### **Max Branch Circuit Size**



| Breaker | Min<br>Start<br>Temp | WSR 5/9W<br>9W Roof & Gutter<br>[Nominal 5W @ 32°F] |      |        | WSR 8/12W<br>12W Roof & Gutter<br>[Nominal 8W @ 32°F] |        |        |        |        |
|---------|----------------------|---|------|--------|---|--------|--------|--------|--------|
|         | °F                   | 120Vac  | 208v | 240Vac | 277Vac  | 120Vac | 208Vac | 240Vac | 277Vac |
|         | 50                   | 173   | 318  | 346    | 374   | 110    | 200    | 220    | 240    |
|         | 32                   | 157   | 289  | 314    | 339   | 100    | 182    | 200    | 218    |
| 10A     | 14                   | 145   | 267  | 291    | 314   | 92     | 167    | 184    | 200    |
|         | -4                   | 134   | 246  | 268    | 289   | 85     | 154    | 170    | 185    |
|         | -40                  | 116   | 213  | 232    | 250   | 74     | 134    | 147    | 160    |
|         | 50                   | 249   | 459  | 499    | 538   | 165    | 301    | 330    | 360    |
|         | 32                   | 236   | 434  | 471    | 509   | 150    | 273    | 301    | 328    |
| 15A     | 14                   | 218   | 401  | 436    | 471   | 138    | 251    | 276    | 300    |
|         | -4                   | 201   | 370  | 402    | 434   | 127    | 232    | 255    | 277    |
|         | -40                  | 174   | 320  | 347    | 375   | 110    | 201    | 221    | 241    |
|         | 50                   | 249   | 459  | 499    | 538   | 198    | 361    | 397    | 433    |
|         | 32                   | 238   | 438  | 476    | 514   | 190    | 346    | 380    | 415    |
| 20A     | 14                   | 228   | 419  | 456    | 492   | 182    | 331    | 364    | 397    |
|         | -4                   | 220   | 404  | 440    | 475   | 170    | 309    | 339    | 370    |
|         | -40                  | 203   | 374  | 407    | 439   | 147    | 268    | 294    | 321    |
|         | 50                   | 249   | 459  | 499    | 538   | 198    | 361    | 397    | 433    |
|         | 32                   | 238   | 438  | 476    | 514   | 190    | 346    | 380    | 415    |
| 30A     | 14                   | 228   | 419  | 456    | 492   | 182    | 331    | 364    | 397    |
|         | -4                   | 220   | 404  | 440    | 475   | 174    | 316    | 348    | 379    |
|         | -40                  | 203   | 374  | 407    | 439   | 162    | 295    | 325    | 354    |
|         | 50                   | 249   | 459  | 499    | 538   | 198    | 361    | 397    | 433    |
|         | 32                   | 238   | 438  | 476    | 514   | 190    | 346    | 380    | 415    |
| 40A     | 14                   | 228   | 419  | 456    | 492   | 182    | 331    | 364    | 397    |
|         | -4                   | 220   | 404  | 440    | 475   | 174    | 316    | 348    | 379    |
|         | -40                  | 203   | 374  | 407    | 439   | 162    | 295    | 325    | 354    |
|         | 50                   | 249   | 459  | 499    | 538   | 198    | 361    | 397    | 433    |
|         | 32                   | 238   | 438  | 476    | 514   | 190    | 346    | 380    | 415    |
| 50A     | 14                   | 228   | 419  | 456    | 492   | 182    | 331    | 364    | 397    |
|         | -4                   | 220   | 404  | 440    | 475   | 174    | 316    | 348    | 379    |
|         | -40                  | 203   | 374  | 407    | 439   | 162    | 295    | 325    | 354    |

### Installation



#### PRE-INSTALLATION REQUIREMENTS

The minimum allowable installation temperature for the heating cable system is -40°C (-40°F). Ensure ambient conditions meet this requirement prior to commencing installation. Ground-Fault Equipment Protection (GFEP) is required for the system to ensure safety and compliance with electrical standards.

Open package and visually check for breaks or nicks in the cable jacket. Call Warmup Customer Experience Team if any damage is found.

Never energize the cable when it is coiled or on a reel. Test only when it is laid out straight.

After removing the cable from the carton or wrapping, check the insulation resistance of the unit from buss wires to braid with a 1,000VDC megger to assure the cables have not been damaged during shipping and handling.

**ELECTRIC SHOCK HAZARD.** Verify insulation resistance of 50 megohms or greater before installing. Contact Warmup if reading is less than 50 megohms.

#### SECTION 1: STARTING & POSITIONING THE HEATING CABLE ON THE ROOF

- 1. Choose a starting point
  - Select the starting point of your system by locating the desired placement of the outdoor electrical outlet or the junction box routing to the controller. Make sure to use caution and avoid high traffic areas, restrict general access to the cable and stay away from windows, doors and other obtrusions.
    - Note that the heating cable is specifically intended for problem areas and does not need to be installed on all areas of the roof. In some instances, on high-pitched roofs (over 40 degree slope) and on roofs with minimal overhang, no cable on the actual roof line may be required. However, always ensure to create a path for the ice to melt from the roof to the ground, placing cable on the roof, in the gutters and in the downspouts as necessary. Extend the cable about 1' out of the bottom of the downspout (surface) or about 1' below the frost line. As a reference, the frost line in cold areas is typically 20" to 30" deep.
- 2. Overhang Installation:
  - Attach the heating cable on the roof overhang, defined as the portion extending beyond the building's exterior wall.
  - Form loops with the heating cable, ensuring each loop extends into the gutter to maintain an unobstructed drainage path.
  - Extend the cable to a point 6 inches (15.2 cm) above the junction of the wall and roof.
  - Space loops at 2-foot (61 cm) intervals along the overhang.
  - · Maintain a minimum bending radius.
- 3. Flat Roof Installation:
  - Arrange the heating cable on flat roofs with spacing adjusted to establish effective drainage paths as required by the roof configuration.

#### **SECTION 2: SECURING THE HEATING CABLE**

- Use Warmup roof clip kits specific to the roof and gutter system.
- · Overhang Loops: Secure the loop extending over the gutter edge with two clips and the loop at the top of the

### Installation Cont'd



- overhang with one clip.
- Flat Roofs: Affix the heating cable with one clip every 3 feet (91.4 cm).
- Refer to the accompanying clip instruction sheet for detailed application procedures.
- Protective Barrier (recommended): Install snow/fence above the heating cable to prevent damage from ice slides. Optionally, attach the cable to the barrier using Warmup roof clips (see Roof Clip user guide).

#### SECTION 3: INSTALLING THE HEATING CABLE IN GUTTERS AND DOWNSPOUTS

- Gutter Placement
  - Run the heating cable along the gutter length without attaching it to the gutter bottom.

    Use a Warmup roof clip at entry and exit points to prevent cable abrasion (refer to Roof Clip User Guide).
- 2. Downspout Installation:
  - Install the heating cable flush with the end of the downspout.
  - Loop the cable within the downspout where practical (e.g., when not at the end of a run). Note: Tee splices are prohibited and will void agency approvals.
  - Employ a Warmup downspout hanger to protect the cable from sharp edges and provide strain relief.
  - Safeguard any heating cable protruding beyond the lower downspout opening.

#### **SECTION 4: INSTALLING ACCESSORIES**

- Install all end seals and splices before connecting to power.
- Use only Warmup Installation Accessories (Power Connection Kit, Roof Clip Kit, Splice Kit, and Hanger Kit) as specified in the respective product literature. Non-compliance with these kits or their instructions voids UL certification and warranty.
- Connect power using only UL Listed weather-proof junction boxes.

#### **SECTION 5: SYSTEM STARTUP REQUIREMENTS**

- 1. Labeling:
  - Affix the two caution labels provided in the Power Connection Kit: one at the circuit breaker panel and one on or adjacent to the ON/OFF control.
- 2. Pre-Energization Inspection:
  - Verify the heating cable is free from mechanical damage (e.g., nicks, cuts) and thermal damage (e.g., solder marks, overheating).
  - Visually inspect all power connections, splices, and end seals for integrity.
- 3. Megger Testing:
  - Conduct a 1000 VDC Megger test at the power connection end between the buss wire and grounding braid.
  - Minimum acceptable resistance: 50 megohms.
  - If the test fails, examine end seals, splice connections, and the cable sheath for damage or contact between the grounding braid and buss wires/conductive core.
  - If no physical damage is identified and the issue persists, remove and replace the entire circuit with new Warmup roof and gutter heating cable.

#### **COMPLIANCE NOTICE**

Failure to follow the designated Warmup accessories, procedures, or UL Listed components, including the required GFEP protection, will lead to non-compliance with UL standards. To ensure system integrity and safety, all steps must be adhered to exactly as specified.

### Installation Cont'd



#### **SECTION 6: CONTROLLING YOUR ROOF & GUTTER CABLE INSTALLATION**

The Warmup Roof & Gutter De-Icing Cable performs best when paired with an automatic thermostat and sensing device, which monitors moisture and temperature to turn the system on and off for efficient de-icing.

#### **SECTION 7: ELECTRICAL PROVISIONS FOR THE SYSTEM**

The electrical connections to the De-Icing Cables shall be in accordance with the National Electrical Code (in the USA) or Canadian Electrical Code (in Canada) or Authorities Having Jurisdiction (AHJ).

### Maintenance



#### INITIAL INSTALLATION AND TESTING

Warmup recommends verifying the integrity of the heating annually.

- 1. Insulation Resistance Test:
  - Use a 2,500VDC Megger to measure the insulation resistance of the heating cable sheath.
  - Take the reading at the power connection end of the cable, between one bus wire and the grounding braid.
  - The minimum acceptable reading is 50 megohms.
  - · Record the value for future reference.

#### PRE-WINTER PREPARATION

To ensure optimal performance of your roof and gutter heating cable system prior to the winter season, follow these steps:

Clear Debris: Remove all leaves, dirt, and other debris from gutters and downspouts to prevent blockages and ensure proper drainage.

Perform the following checks each Fall to ensure the system remains in good working condition:

- 1. Megger Test:
  - Repeat the insulation resistance test as outlined in the "Initial Installation and Testing" section. Record the reading and compare it to previous values.
- 2. Visual Inspection:
  - Examine the heating cable and all connections for signs of physical damage, such as cuts, abrasions, or exposed wires.
- 3. Repairs for Physical Damage:
  - If physical damage is identified, replace the affected sections of the heating cable and any damaged connections.
- 4. Replacement for Failed Megger Test:
  - If the system fails the Megger test (reading below 50 megohms) and no physical damage is visible, remove and replace the entire heating cable circuit with new roof and gutter heating cable.

#### PRECAUTIONS DURING ROOF REPAIRS

To protect the heating cable system during roof maintenance or repairs:

- Remove the heating cable prior to any roof repairs to prevent accidental damage.
- Do not expose the cable to chemical sealants applied to the roof surface.
- Store the cable away from the work area while sealants cure.
- After repairs are complete and sealants have fully cured, reinstall the heating cable.
- Inspect the cable and connections for signs of physical damage.
- Replace any damaged sections or connections as needed.

#### **SAFETY AND PERFORMANCE NOTES**

- Always follow local electrical codes and manufacturer guidelines during installation, testing, and repairs.
- Contact a qualified professional if you are unsure about any aspect of the installation or maintenance process.
- Retain records of all Megger test results and maintenance activities for warranty and troubleshooting purposes.

### **Installation Examples**



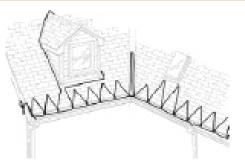


Figure 1: Typical pattern allong roof line and in gutters/downspowers.

TIP: If you will be working directly on the roof during the installation, you may want to mark the cable pattern with chalk before attaching the cable. If working from a ladder, you will probably want to lay out the pattern as you attach the cable with the clips. Making a drawing of your roof and your planned pattern on paper is recommended.

Pattern for the roof line: The cable laid along the roof line is arranged in a triangular pattern (see Figure 2). The cable MUST extend above the overhang into the attic section of the roof. To determine the height of the triangles, multiply the roof edge length by the spacing factor found in Table 1 on page 5.

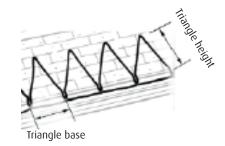


Figure 2: Triangle Pattern along the roof line.



Figure 3: Triangle pattern near sky light

Pattern for the sky lights: Problem sky light areas are also treated with the "triangle pattern" approach (see Figure 3).

Pattern for valleys: If a valley exists in a problem area of your roof, you must route cable up and back down the valley a minimum of 3 feet, as shown in Figure 4. Extend the cable higher if the warm area of your roof is higher.



Figure 4: Cable pattern in valley



Pattern for dormers: To treat a problem dormer area, the cable should be arranged up and around the dormer as shown in Figure 5.

### Installation Examples Cont'd



Pattern for other special roof areas - Other problem roof areas not previously described may also be treated with the de-icing cable to prevent ice dam formation. Triangles - similar to those used for the roof line can also be used to treat these special areas. In treating these special problem areas, the height of the triangles may be greater than those used at the roof edge. Keep the triangle base at 15 inches, and height at least one shingle row (5½ inche s) into the warm roof section.

#### **ROUTING OF CABLES IN DOWNSPOUTS**

"Full Length Loop Run" Downspouts: Route cable down and back up inside the downspout—do not wrap it around the outside. Measure length (double the downspout's length) using a weighted string, tape measure, or the cable itself (inspect for damage if used). Install the heating cable flush with the end of the downspout.

"End of Run" Downspouts: Route cable down the inside only, not back up. Use a weighted string to pull it through, ensuring it's flush with the bottom and doesn't extend out. No building penetration

allowed.

Excess or Shortage: For excess, route back up, enlarge roof triangles (up to 5 ft), extend valley loops, or terminate with an end kit. For shortage, reduce triangle height in low-risk areas.

Gutter to Downspout: Use a hanger clip to prevent chafing—follow clip instructions.

Larger Applications: For larger residential roofs (4"-6" gutters) in areas with heavy snow and ice buildup—such as eaves, valleys, and downspouts—install double or triple runs of de-icing cables in a zigzag pattern, spaced evenly (e.g., 2-3 inches apart) along gutters and downspouts to ensure efficient ice melting.

#### FINAL INSTALLATION STEP

Check to be sure that the cable has NOT shifted from its intended position.

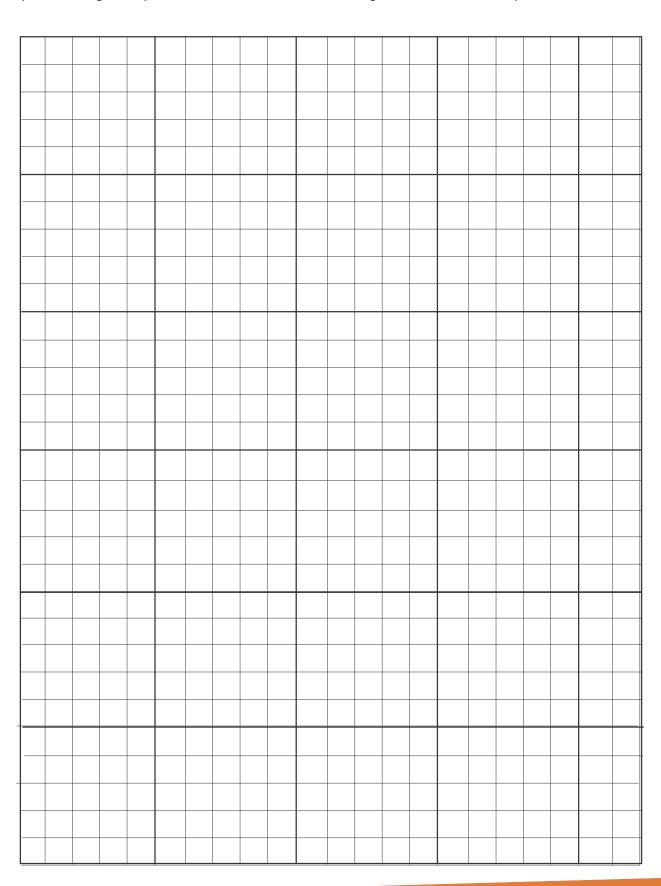
The heated portion of the cable MUST be positioned entirely on the roof, gutter or downspout.

Remember to place the labels for the Circuit Breaker / Fuse Panel near the appropriate circuit breaker / fuse so that they are clearly visible to current and future users.

# **Planning Your Layout**

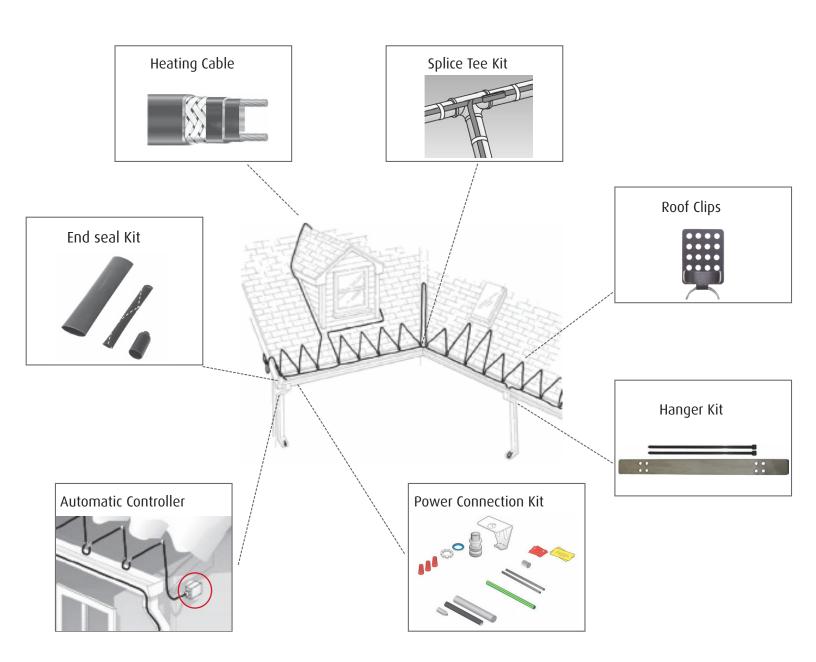


Draw a plan showing the layout and location of the snow melting cables below and keep it for future reference.



### **Accessories Overview**





# **Product Listing**



| Product Code         | Description   | Roof &<br>Gutter |
|----------------------|---|------------------|
| WSR Heating Cables   |   |                  |
| WSR-5/9W-1-250-CR    | Self-Regulated cable, 120V, 5 Watts per linear foot. Sold in 250-foot spools.   | <b>✓</b>         |
| WSR-5/9W-1-500-CR    | Self-Regulated cable, 120V, 5 Watts per linear foot. Sold in 500-foot spools.   | <b>✓</b>         |
| WSR-5/9W-1-1000-CR   | Self-Regulated cable, 120V, 5 Watts per linear foot. Sold in 1000-foot spools.  | <b>✓</b>         |
| WSR-5/9W-2-250-CR    | Self-Regulated cable, 208-277V, 5 Watts per linear foot. Sold in 250-foot spools.   | <b>✓</b>         |
| WSR-5/9W-2-500-CR    | Self-Regulated cable, 208-277V, 5 Watts per linear foot. Sold in 500-foot spools.   | ✓                |
| WSR-5/9W-2-1000-CR   | Self-Regulated cable, 208-277V, 5 Watts per linear foot. Sold in 1000-foot spools.  | ✓                |
| WSR-8/12W-1-250-CR   | Self-Regulated cable, 120V, 8 Watts per linear foot. Sold in 250-foot spools.   | ✓                |
| WSR-8/12W-1-500-CR   | Self-Regulated cable, 120V, 8 Watts per linear foot. Sold in 500-foot spools.   | <b>✓</b>         |
| WSR-8/12W-1-1000-CR  | Self-Regulated cable, 120V, 8 Watts per linear foot. Sold in 1000-foot spools.  | <b>✓</b>         |
| WSR-8/12W-2-250-CR   | Self-Regulated cable, 208-277V, 8 Watts per linear foot. Sold in 250-foot spools.   | <b>✓</b>         |
| WSR-8/12W-2-500-CR   | Self-Regulated cable, 208-277V, 8 Watts per linear foot. Sold in 500-foot spools.   | <b>V</b>         |
| WSR-8/12W-2-1000-CR  | Self-Regulated cable, 208-277V, 8 Watts per linear foot. Sold in 1000-foot spools.  | <b>✓</b>         |
| Accessories          |   |                  |
| CRDS-15-GFCI         | GFCI cord set for SR cable series. NEMA 5-15p, 15 amp rated, 14/3 Ga, 120V. rating, Max Cable length 125ft.   | <b>~</b>         |
| SR-END-KIT           | End Seal Kit for for Self-Regulating Cable  | <b>~</b>         |
| SR-END-KIT           | End Seal Kit for for Self-Regulating Cable  | <b>~</b>         |
| SR-HANGER-KIT        | Downspout Hanger for Self Regulating Cable and Roof/gutter heaters Warmup Brand #HANGER-KIT   | <b>~</b>         |
| SR-LENDCAP           | Lit End Cap for NAMSR Cable   | <b>~</b>         |
| SR-POWER-KIT         | Power Connection Kit for Self-Regulated Cable. Includes pipe mounting bracket and an End Kit.   | <b>~</b>         |
| SR-ROOF-CLIP(50/BAG) | Metal single roof clips packaged and sold 50 per pkg. Secure to roof with screws or Everseal SB-190 adhesive or similar.                              | <b>~</b>         |
| SR-TAPE-AL           | Aluminum Foil Tape for Self Regulating Cable or FOIL, 90 ft Roll.   | <b>~</b>         |
| SR-SFIT-BOX-S        | Power Connection Junction Box (Square) for NAMSR cables used in Pipe Freeze Protection applications. Includes pipe-mounting bracket and junction box. | <b>~</b>         |
| SR-SFIT-SPL          | In-line connection box for NAMSR, WODH and WSM/M cables. Used to join two runs of NAMSR or as an in-line repair kit for WSMM installations            | <b>~</b>         |
| SR-SFIT-TEE          | Weather tight 3-way Tee-Splice for NAMSR cable applications on Roofs and Pipe Freeze installations  | <b>~</b>         |
| SR-SPLICE-KIT        | Splice/Tee Kit for Self-Regulated Cable. Includes (2) end caps.   | <b>~</b>         |
| WRGH-SB-170 SEALANT  | The SB170 is a versatile adhesive to apply the Warmup ROOF-CLIP (1 tube per 50 clips recommended). Min Application Temp of -20F                       | <b>~</b>         |

### Warranty



Warmup provides a 10-Year Warranty (from date of purchase) for the Roof and Gutter De-Icing cables for the material and workmanship under normal operating conditions.

In case of defective material, Warmup's obligation will be limited to the repair or supply of new material, free of charge to the customer.

The Warranty does NOT cover installations made by unqualified personal or faults caused by incorrect design by others; misuse; damage caused by others; damage in transit; incorrect installation and any other subsequent damage that may occur. Cost related to repair/replacement will be fully chargeable to the customer if the damage is due to any of the above reasons.

Warmup is under no circumstances liable for consequential damages or losses including without limitations the loss or profit arising from any cause whatsoever. The warranty is a material warranty only and does NOT cover labor. A qualified electrician MUST connect the heating system.

#### **EXCLUSIONS**

Warmup, Inc. shall in no event be liable for incidental or consequential damages, including but not limited to extra utility expenses or damages to property. This Warranty is null and void if:

- 1. The covering over the heater(s) is damaged, lifted, replaced, drilled into or repaired.
- 2. The heater fails due to damage caused during installation, unless damage is caused directly by an employee of Warmup. It is therefore essential to check that the heater is working (as specified in the installation manual) prior and during installation.
- 3. Damage as a result of floods, fires, winds, lightning, accidents, corrosive atmosphere or other conditions beyond the control of Warmup, Inc.
- 4. Use of components or accessories is not compatible with Warmup heaters.
- 5. Warmup products are installed outside the United States.
- 6. Parts not supplied or designated by Warmup, Inc.
- 7. Damage or repair required as a result of any improper use, maintenance, operation or servicing.
- 8. Failure to start due to interruption and/or inadequate electrical service.
- 9. Any damage caused by frozen or broken pipes in the event of equipment failure.
- 10. Changes in the appearance of the product that does not affect its performance.
- 11. The owner, or his/her designated representative, attempts to repair the product without receiving prior authorization from Warmup.
- 12. Upon notification of a repair problem, Warmup, Inc. will issue an Authorization to Proceed under the terms of this Warranty. If Warmup is required to inspect or repair any defects caused by any exclusions referenced above, all work will be fully chargeable at Warmup's inspection and repair rates then in effect.

WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. WARMUP, INC. FURTHER DISCLAIMS ANY RESPONSIBILITY FOR SPECIAL, INDIRECT, SECONDARY, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING FROM OWNERSHIP OR USE OF THIS PRODUCT, INCLUDING INCONVENIENCE OR LOSS OF USE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE FACE OF THIS DOCUMENT. NO AGENT OR REPRESENTATIVE OF WARMUP, INC. HAS ANY AUTHORITY TO EXTEND OR MODIFY THIS WARRANTY UNLESS SUCH EXTENSION OR MODIFICATION IS MADE IN WRITING BY A CORPORATE OFFICER.

DUE TO DIFFERENCES IN BUILDING AND FLOOR INSULATION, CLIMATE AND FLOOR COVERINGS, WARMUP, INC. MAKES NO REPRESENTATION THAT THE FLOOR TEMPERATURE WILL ACHIEVE ANY PARTICULAR TEMPERATURE OR TEMPERATURE RISE. UL STANDARD LISTING REQUIREMENTS LIMIT THE HEAT OUTPUT OF WARMUP UNDERTILE HEATING, AS SUCH, USERS MAY OR MAY NOT BE SATISFIED WITH THE FLOOR WARMTH THAT IS PRODUCED. WARMUP DOES WARRANT THAT ALL HEATERS WILL PRODUCE THE RATED WATT OUTPUT LISTED ON THE HEATER NAMEPLATE, WHEN OPERATED AT THE RATED VOLTAGE.

#### TERMS AND CONDITIONS

#### Shipping Discrepancies:

Incoming materials should be inventoried for completeness and for possible shipping damage. Any visible damages or shortages must be noted prior to accepting the material. Any discrepancy concerning type or quantity of material shipped, must be brought to the attention of your Warmup® reseller within 15 days of the shipping date entered on the packing slip for the order.

#### Miscellaneous:

The terms of this Limited Warranty are exclusive and supersede any other warranty or terms and conditions relating to the subject matter whether included in a purchase order for this product or in any other document or statement.

### **Contact Information**



#### REMINDER

Register your Warmup warranty at www.warmup.com or www.warmup.ca

Warmup Offices in North America:
USA: Warmup Inc | 52 Federal Road Unit 1F Danbury CT 06810
Tel 1-888-927-6333 | Fax 1-888-927-4721
E-mail us@warmup.com | Web www.warmup.com

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