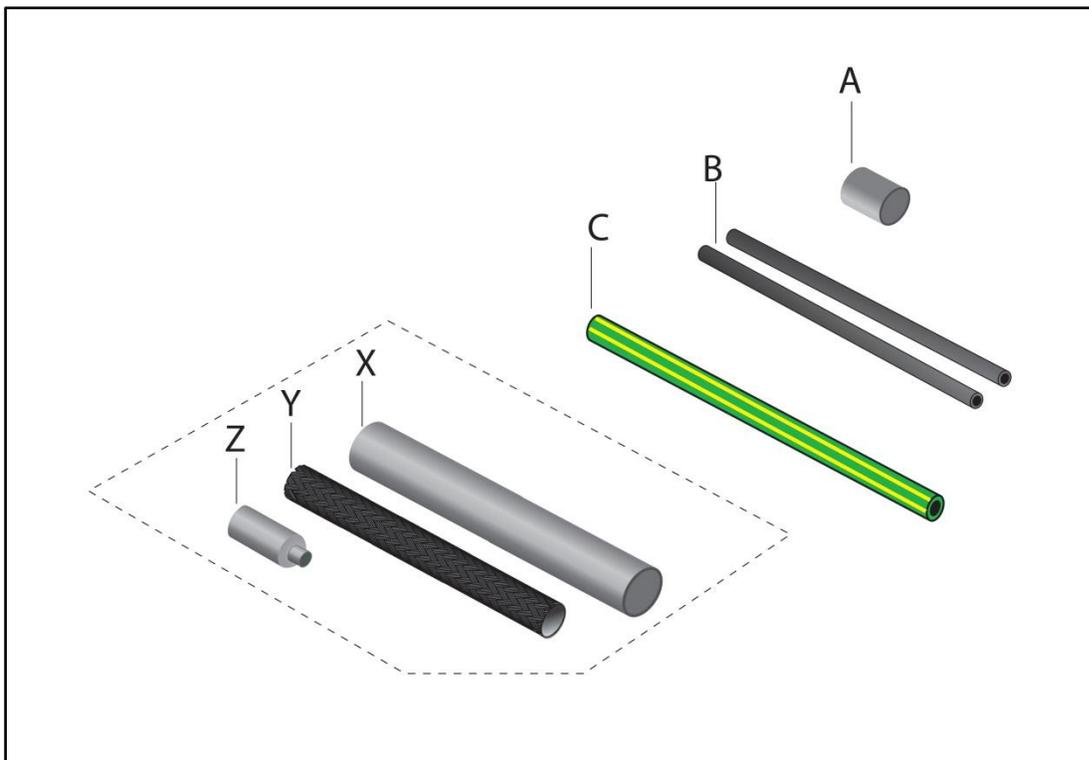


Installation, Operation and Maintenance Instructions

IMPORTANT: Save These Instructions!



Item	Qty	Description
A	1	Black heat shrink tube (1/2" dia. x 1" length)
B	2	Black heat shrink tubes (1/8" dia. x 5-1/2" length)
C	1	Green/Yellow heat shrink tube (1/4" dia. x 6" length)
X	1	Black heat shrink tube (3/4" dia. x 5" length)
Y	1	Woven braid sleeve (1/2" dia. x 4" length)
Z	1	Black heat shrink cap (1/2" dia. x 1-1/4" length)

DESCRIPTION:

SR self-regulating heating cables are designed for a variety of pipe freeze protection as well as roof and gutter deicing applications. The heat output (wattage) increases and decreases based on the temperature, so the cable adjusts automatically to varying climate conditions. This unique feature ensures maximum energy efficiency by increasing the heat output only when it is needed. No thermostat is required.



DESCRIPTION

The SRK02 hard wire power connection kit is to be used with King SR self regulating heating cables only. The kits are not approved to be used with other brands of heating cable. The kit contains enough material for making one hard wire power connection and one end seal. King SR cables are approved for both pipe freeze protection and roof and gutter deicing applications. The kit is to be used with copper wire only, do not use aluminum power supply wires

ADDITIONAL MATERIALS REQUIRED

- UL Listed junction box
- A weather proof junction box is required when used outdoors.
- The application may require additional accessories; for example, SRK03 application tape for pipe applications or SRK13 roof clips and/or SRK15 downspout hangers for roof and gutter deicing.

TOOLS REQUIRED

- Adjustable wrench or pliers, needle nose pliers, diagonal cutters, utility knife, screwdriver, propane torch or heat gun.



WARNING

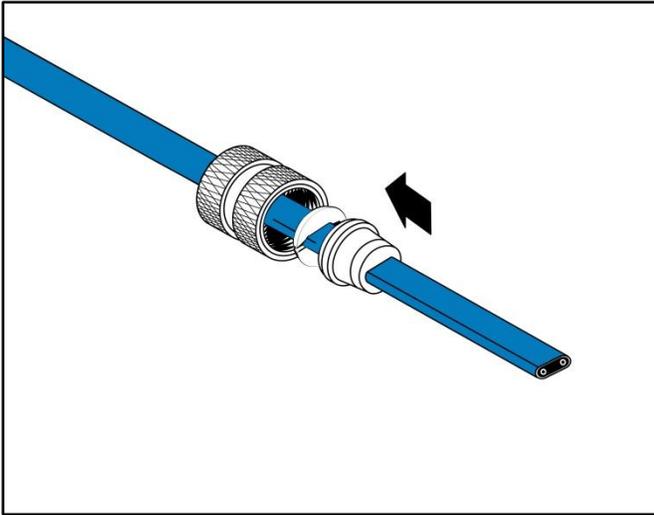
Fire and shock hazard. Improperly installed heating cable can cause electrical shock, arcing, and fire. Carefully follow all the instructions provided read the cautions and warnings.

1. Heating cables must be installed in compliance with the national electric code (NEC) in addition to state, provincial and local codes. Check with your local inspector for specific code requirements (or regulations or standards) in your area.
2. Save these instructions and transfer them to future owner(s).
3. Never install on pipes that could potentially exceed 150° F, (65° C).
4. Do not substitute components or use or use vinyl electrical tape.
5. Not for use with indoor pipes. Cable should not run through the building walls, ceilings or floors.
6. For safety, King recommends that all heating cables are placed on a Ground Fault Equipment Protection (GFEP) circuit. Consult your local electrical inspector to determine the specific requirements in your area.
7. The black heating core is conductive and can short. It must be properly insulated with heat shrink tubing.
8. Keep components and heating cable ends dry during installation.
9. Damaged bus wires can overheat or cause an electrical short. Do not energize cable if the bus wires are damaged.
10. Do not break the braid or bus wire strands when stripping the jacket or conductive core.
11. Bus wires will short if they come in contact with each other. Never splice the bus wires together, they must remain separate.
12. Heat-damaged components can short, the use a heat gun is preferred. Use a torch with a soft, yellow, low-heat flame, not a high heat blue focused flame. Keep the flame moving to avoid overheating, blistering, or charring the heat-shrinkable tubes. Avoid heating other components and replace any heat damaged parts prior to energizing the cable.
13. Use only fire-resistant insulation materials such as fiberglass wrap.
14. Do not twist the cable during installation.
15. De-energize all supply power circuits before installation or servicing.
16. Do not embed the heating cable.
17. Post warning labels supplied with the cable at the power supply and along the pipe on the outside of the insulation.
18. Do not bend the cable to less than a 1/2" radius.
19. Do not install cable on shingle roofs in freezing temperatures; as this may cause damage to the shingles.
20. Cables are intended for freeze protection of water pipes only. Not intended for use with other liquids or hazardous materials.
21. Install cable in accessible areas only.

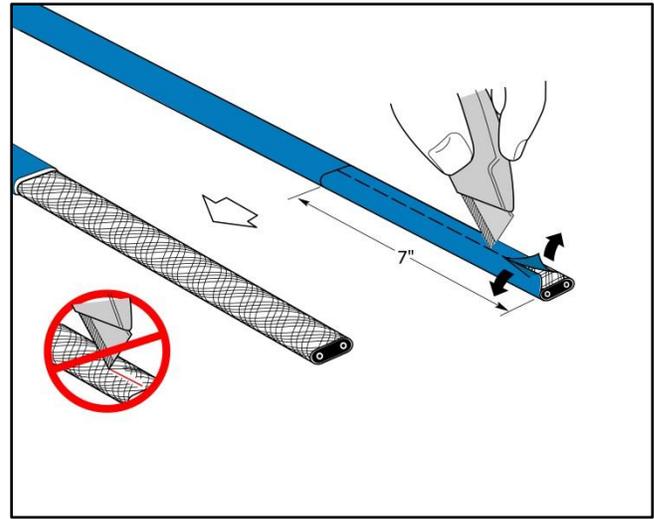
Caution: Charring or burning the heat-shrinkable tubes in this kit will produce fumes that may cause eye, shin, nose, and throat irritation. Ensure proper ventilation during installation to avoid this health risk.

Important: For the warranty to be valid, installer must comply with all requirements outlined in these guidelines. All design information provided here is based upon a standard installation with heating cable fastened to an insulated pipe.

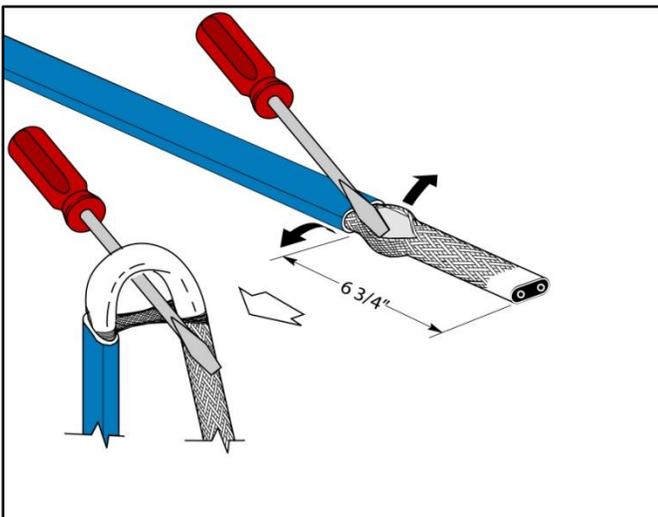
Electrical codes: Article 427 of the National Electrical Code and Section 62 of CAN/CSA-C22.1, Canadian Electrical Code govern the installation of King SR heating cable for pipe freeze protection.



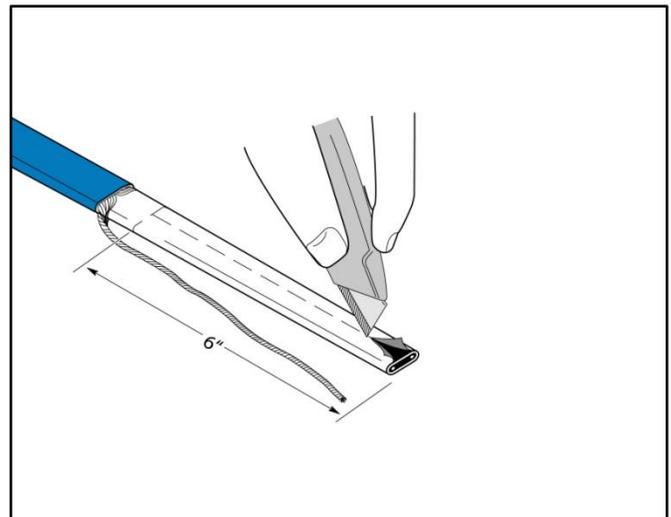
1 If using a weatherproof seal tight fitting (not provided with kit), slide the fitting onto the end of the cable as shown above.



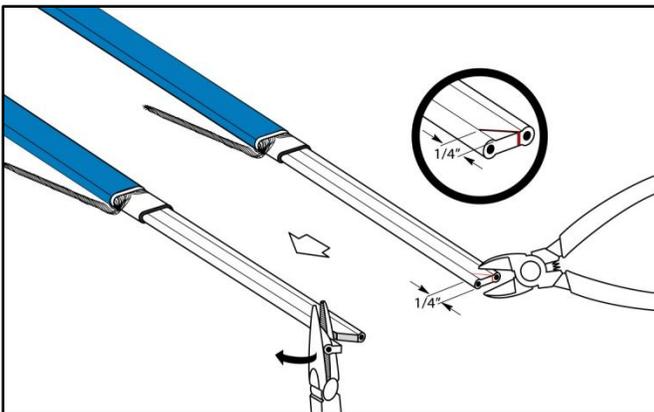
2 Lightly score completely around and then down outer jacket a distance of 7". Do not cut braid or inner jacket. Bend heating cable to break jacket at score, then peel off outer jacket!.



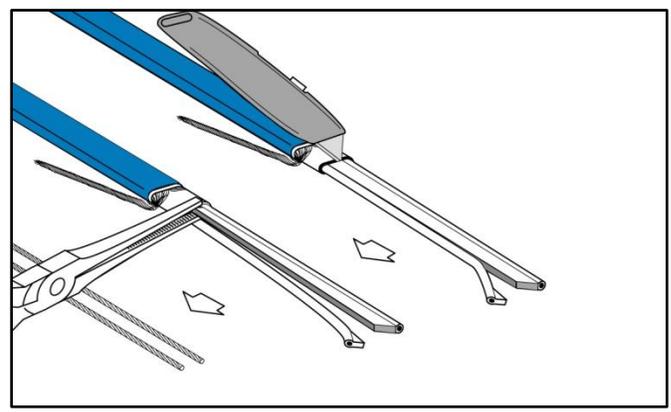
3 Cut the braid and push it back to loosen it as shown. Bend the cable and gently pull it through the braid.



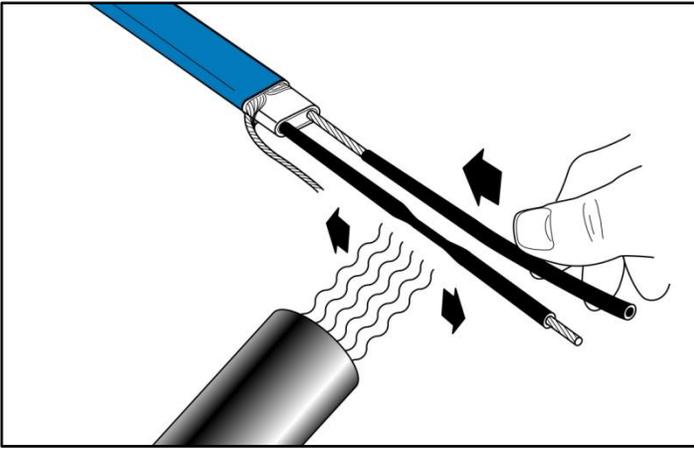
4 Twist and position the braid to one side of heating cable and then cut the insulating jacket back 6". Lightly score the inner insulating jacket and then bend the cable to break the jacket and peel it off.



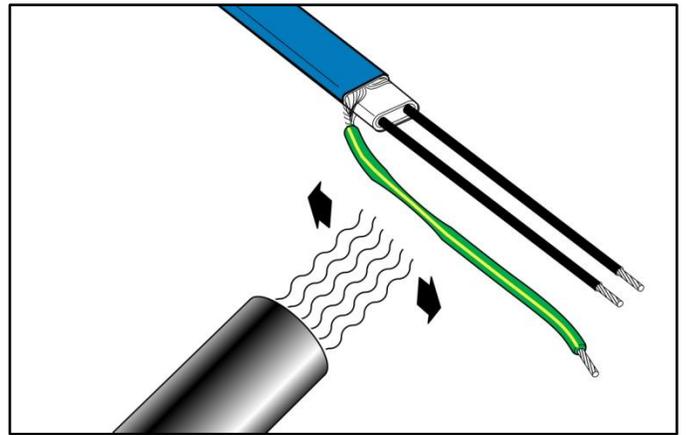
5 Notch the conductive core at the end and twist it back to peel the bus wires from the core.



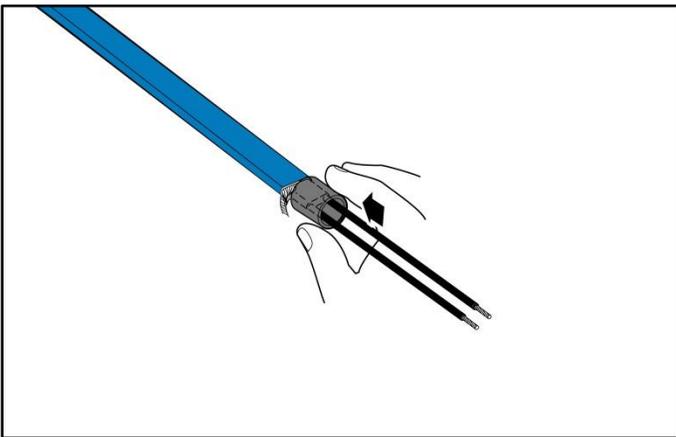
6 Score between the bus wires and bend the core to break it free and peel the core material away from the bus wires.



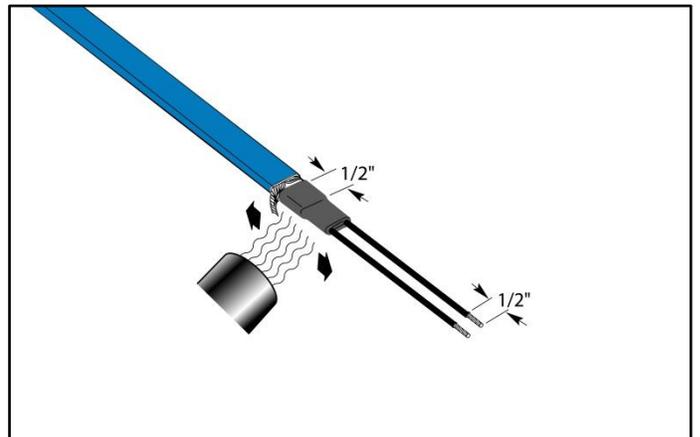
7 Slide the black 5 1/2" x 1/8" heat shrink tubes over the bus wires and apply heat.



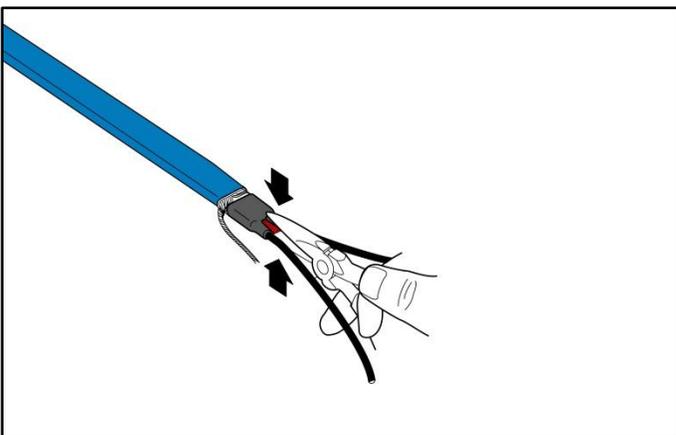
8 Slide the green/yellow 5 1/2" x 1/8" heat shrink tube over the grounding braid and apply heat.



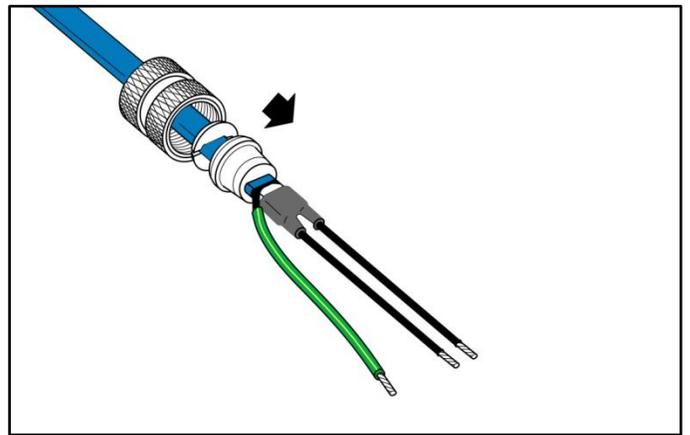
9 Place the 1/2" x 1" heat shrink tube over the cable as shown.



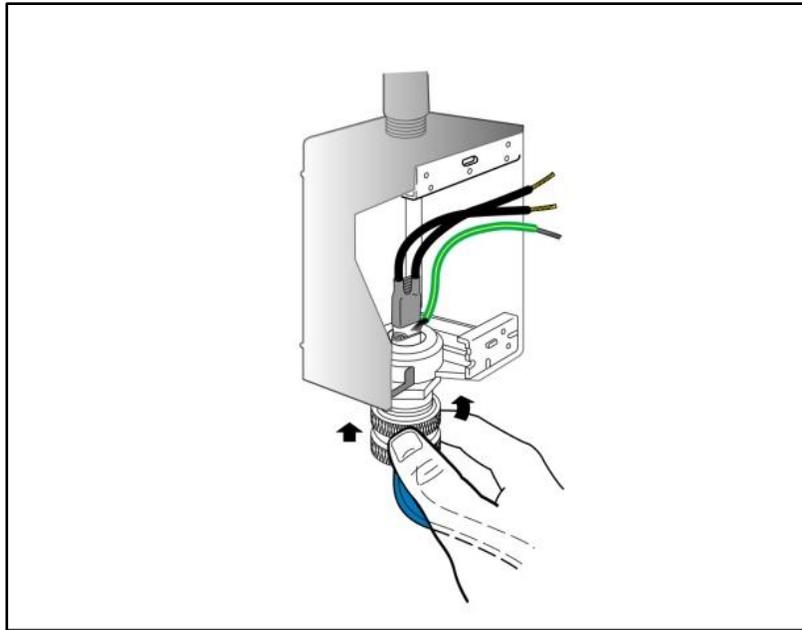
10 Make sure the heat tube overlaps the outer jacket by 1/2" as shown and then apply heat to shrink the.



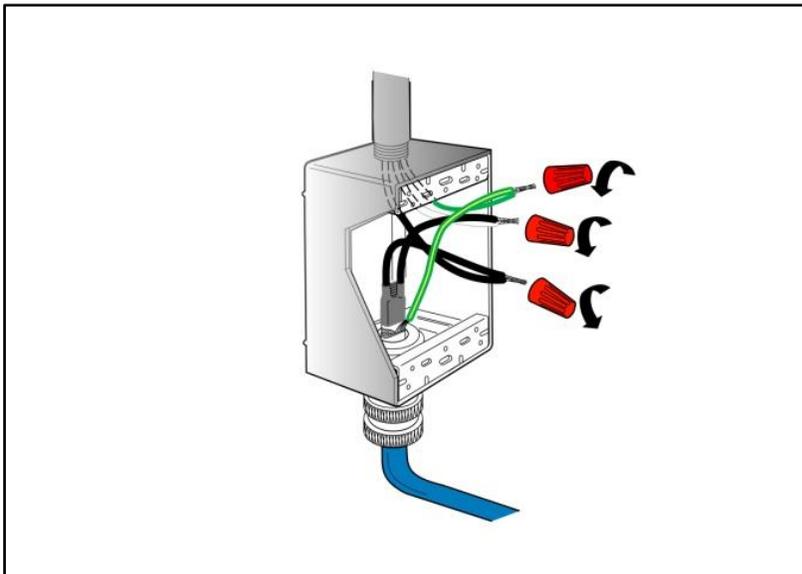
11 Immediately pinch the tube with pliers between the bus wires while it is still hot and hold for 10 seconds



12 Slide the junction box fitting (not provided in kit) to the end of the cable as shown.



13 Insert cable and tighten junction box fitting.



14 Use wire nuts (not included in kit) to make connections between supply wires and heating cable wires, in addition to the ground wires. Not intended for use with aluminum wire.

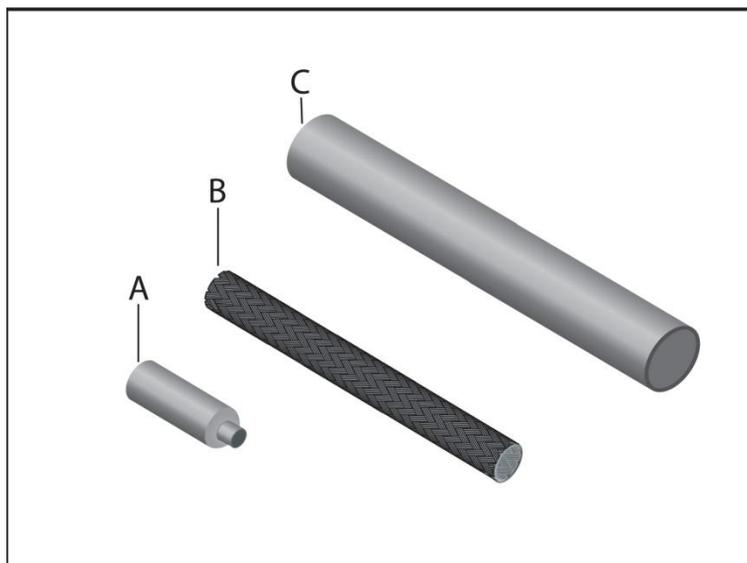
ELECTRICAL CODES

Article 426 of the National Electrical Code (NEC), and Part 1, Section 62 of the Canadian Electrical Code (CEC), govern the installation of SRP heating cables for roof and gutter deicing and must be followed.

IMPORTANT: For the warranty to be valid, the installer, customer and user must comply with all the requirements outlined in these guidelines. All design information provided in these instructions are based on a “standard” shake or shingle and metal roof applications. For any other application or method of installation, consult a design specialist.

Installation, Operation and Maintenance Instructions

IMPORTANT: Save These Instructions!



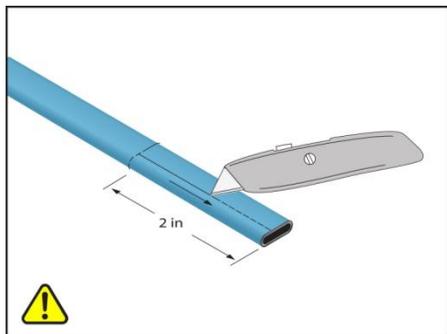
DESCRIPTION:

SR self-regulating heating cables are designed for a variety of pipe freeze protection as well as roof and gutter deicing applications. The heat output (wattage) increases and decreases based on the temperature, so the cable adjusts automatically to varying climate conditions. This unique feature ensures maximum energy efficiency by increasing the heat output only when it is needed. No thermostat is required.

⚠ WARNING: ELECTRIC SHOCK HAZARD
 Disconnect all power before installing or servicing the heating cable and accessories. SR heating cable must be grounded properly in accordance with the National Electrical Code (NEC). Failure to comply can result in personal injury or property damage. Only a qualified licensed electrical contractor shall install and service of SR heating cable and accessories, otherwise the warranty is voided.

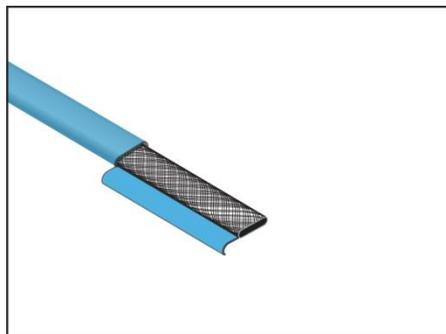
Item	Qty	Description
A	1	Black heat shrink tube (3/4" dia. x 5" length)
B	1	Woven braid sleeve (1/2" dia. x 4" length)
C	1	Black heat shrink cap (1/2" dia. x 1-1/4" length)

Note:-All electrical wiring, including Ground Fault Circuit Interrupters (GFCI), must be done according to the NEC and local codes by a qualified installer. Article 426 of ANSI/NFPA 70 of National Electrical Code (NEC section 62 of CAN/CSA-C22.1, Canadian Electrical Code, Part I(CEC) governs the installation of this heat systems

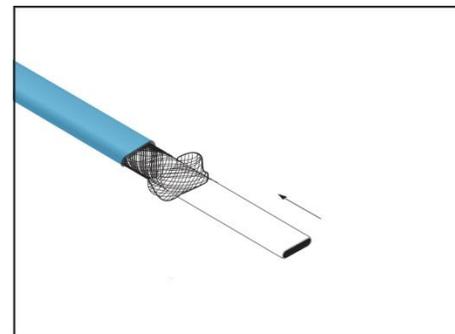


1 Score the outer jacket 2" from the end of the cable.

CAUTION: When removing the outer jacket, be careful not to damage the braid or the inner core insulation.

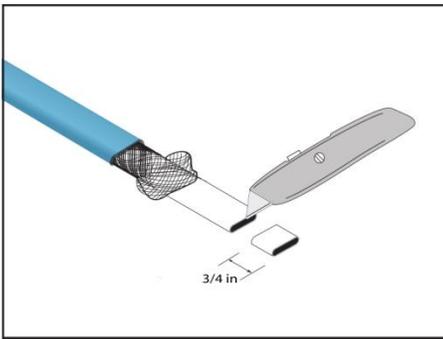


2 Remove the outer jacket to expose the braid.

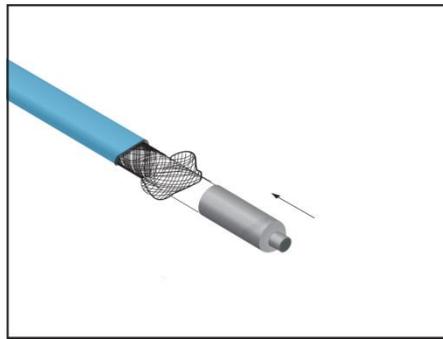


3 Push the braid back off the end of the cable.

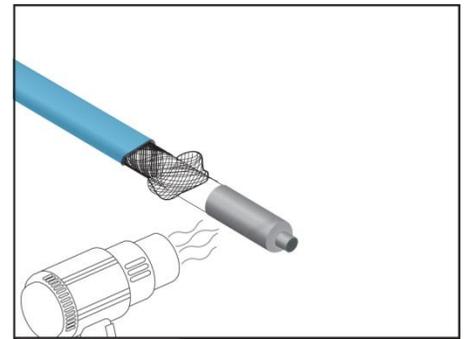
WARNING: ELECTRIC SHOCK HAZARD
 Do not connect the bus wires together. Keep braid out of heat shrink cap.



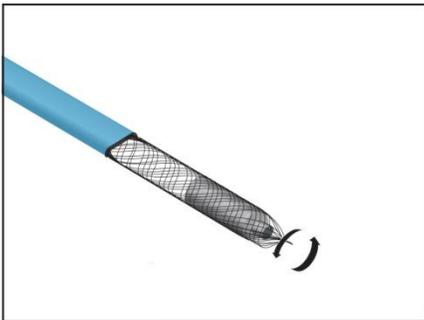
4 Push back the braid and cut 3/4" off the end of the cable..



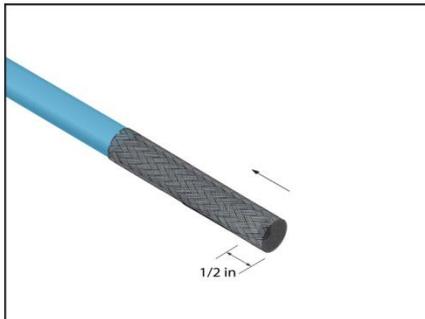
5 Push back the braid and slide the heat shrink cap over the end of the cable..



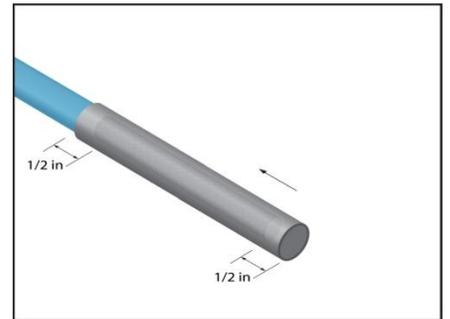
6 Apply heat evenly until the cap shrinks around the cable.



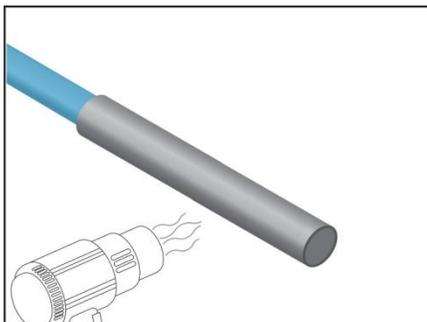
7 Pull the braid back over the end cap and twist the braid end together.



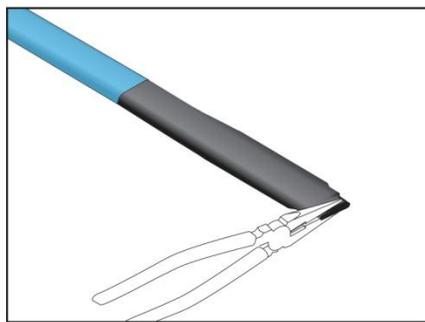
8 Slide the 4" woven braid sleeve over the cable, allowing 1/2" to extend past the end.



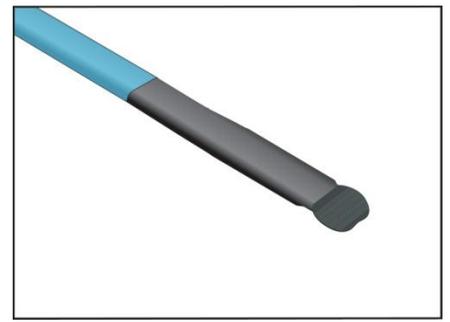
9 Slide the 5" heat shrink tube over the woven braid, allowing it to extend 1/2" past the end of the woven sleeve just applied.



10 Apply heat evenly to the heat shrink tube until it shrinks around the cable



11 While the shrink tubing is still hot, gently squeeze the end with pliers and hold it until it has cooled.



12 The end must remain sealed after the pliers are removed. If the tube does not remain sealed, then repeat steps 7 and 8.

Warranty Information:

King Electrical Mfg. Company will repair or replace, without charge to the original owner, any heating cable found to be defective or malfunctioning within the 2 year warranty. **In Case of Product Failure:** Contact King Electrical Mfg. Co. at 800.603.5464. The owner will be required to provide, within the designated warranty period, the following information: model number, date of purchase, and a complete description of the problem encountered with product. Upon receipt of the aforementioned, the company will reply to the owner within a period not to exceed fifteen (15) working days, and will provide the action to be taken by owner. **Terms:** This warranty requires the owner or his agent install the equipment in accordance with the National Electrical Code, any other applicable heating or electrical codes and the manufacturer's installation instructions. It further requires that reasonable and necessary maintenance be performed on the unit. Failure of proper maintenance by owner will void the warranty in its entirety. The company is not liable for any actions it deems to be abuse or misuse of the product. The customer shall be responsible for all costs incurred in the removal or reinstallation of products, including, but not limited to, labor costs, and shipping costs incurred to return products to King Manufacturing. At their discretion, King Manufacturing will decide to either repair or replace the product, with no charge to the owner, with return freight paid by King. The Company shall not be liable for consequential damages arising with respect to the product, whether based upon negligence, tort, strict liability or contract. No other written or oral warranty applies, nor any warranties by Representatives, Dealers, Employees of King or any other person. King Manufacturing can be contacted by phone at 206.762.0400, fax 206.763.7738 or website www.king-electric.com. The company's minimum liability shall not in any case exceed the list price for the product claimed to be defective.