STW Pre-Terminated Cable

Order as a Safe-T-Cover heat cable #30 (18 feet long)

**GENERAL**

Safe-T-Wrap preassembled and pre-terminated cables are intended for use on metal or plastic water pipes for freeze protection of these pipes in residential, mobile home or other ordinary area installation applications. The cables are provided in 6, 12, 18, 24, and 50 foot lengths which include a factory sealed power connection with 30 inch power cord and plug, and a factory sealed end termination.

**Package Contents -**
1 Safe-T-Wrap preassembled electric heating cable

**Other Items Required for Proper Installation -**
- Thermal Insulation - fi" Fiberglas® or equivalent
- Weatherproof covering for the insulation
- Glass cloth tape to fasten cable to piping
- Cable tie for power cord strain relief
- GFI protected power receptacle

**Tools Required -**
- Utility Knife - used to cut insulation, weather barrier and glass cloth tape
- 2500 VDC meggar - used to test electric heating cable insulation resistance

**Approvals -**
- Safe-T-Wrap preassembled heating cables are UL Listed for use in residential and mobile home pipe freeze protection applications. UL files - E68611 and E174357.

**Conditions of Use -**
Safe-T-Wrap cables are designed for use in residential, mobile home or other ordinary area installation applications on the outside of metal or plastic piping only. This electric heating cable is designed to be used in conjunction with suitable thermal insulation and protective weather barrier - the cable will not provide sufficient heat on its own to prevent pipe freeze-up. Clean, dry, fire-proof thermal insulation is necessary to provide a complete and functional installation. Please review the following cautions related to the use of the STW preassembled cable.

**CAUTION**

**ELECTRIC SHOCK AND/OR FIRE HAZARD.**

1. Do NOT use STW cable in classified hazardous areas. This product is approved for ordinary area use only.
2. Do NOT use STW cable for underground or buried pipe applications.
3. Do NOT use STW cable for vinyl garden hose applications. This product is approved for use on fixed metal and plastic piping only.
4. Do NOT use STW cable for flexible hose or flexible piping applications. This product is approved for use on fixed metal and plastic piping only.
5. Do NOT use STW cable for piping installations - behind walls, in ceilings, through flooring or any other inaccessible locations.
6. Do NOT use STW cable directly INSIDE pipes - This product is approved for use installed on the OUTSIDE of metal and plastic pipes only.
7. Do NOT install STW cable without use of proper thermal insulation and protective weather barrier.
8. Do NOT use STW cables on piping that may exceed 90 deg F.
9. Do NOT use STW cables on piping that contains fluids other than water - This product is approved for use on pipes containing water only.
10. Do NOT use an extension cord with STW cables.
GENERAL

**WARNING**

**ELECTRIC SHOCK HAZARD.** This product is an electrical device that must be properly installed to prevent electric shock and/or fire. Read and understand these important safety warnings and follow all installation instructions.

GFI Circuit Protection - To minimize danger from possible sustained electrical arcing due to damaged or improperly installed heating cable, and to comply with agency certifications and the National Electric Code (Article 427) - Ground Fault Equipment Protection must be used on each heating cable branch circuit. Arcing may not be stopped by conventional circuit protection. Contact a qualified electrician for installation if GFI is not available.

**ELECTRIC SHOCK AND/OR FIRE HAZARD.** If cable is damaged, remove from service. Do not attempt to repair. There are no user serviceable parts. Replace damaged cable with new assembly.

KEEP INSTRUCTIONS FOR FUTURE REFERENCE.

**CABLE SELECTION**

Use the tables below to select the proper STW preassembled heating cable for your application. Use the metal pipe table for metal pipes and the plastic pipe table for plastic pipes only.

**IMPORTANT NOTES ON CABLE SELECTION -**

1. All cable selection tables are based on standard installation - cable fastened to pipe and covered with thermal insulation and weather barrier. For any "non-Standard" installations please contact Chromalox at 1-800-443-2640.

2. The tables assume a minimum ambient temperature of 0 deg F and a thermal insulation of 1/2" thick Fiberglas® wrap or equivalent. For protection to -20 deg F minimum ambient use 1” thick Fiberglas® wrap or equivalent.

3. Add 1 foot of heating cable for every valve or spigot in the pipeline - make sure to apply this extra cable at each valve / spigot when installing.

4. If your pipe diameter does not appear in the table, round up to the next pipe size.

5. If your selected cable length is longer than your pipe length, spiral the cable evenly along the length of pipe.

**STW Pre-terminated Cable Selection Charts**

**METAL PIPE**

(for freeze protection to 0 deg F minimum ambient with 0.5” insulation or -20 deg F with 1” insulation)

<table>
<thead>
<tr>
<th>Pipe Diameter</th>
<th>3'</th>
<th>6'</th>
<th>9'</th>
<th>12'</th>
<th>15'</th>
<th>18'</th>
<th>21'</th>
<th>24'</th>
<th>27'</th>
<th>30'</th>
<th>40'</th>
<th>50'</th>
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<td>.5’</td>
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<td>B</td>
<td>B</td>
<td>C</td>
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Note - NR = not recommended - consult factory for further design information

**PLASTIC PIPE**

(for freeze protection to 0 deg F minimum ambient with 0.5” insulation or -20 deg F with 1” insulation)

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10. Do NOT use an extension cord with STW cables.
11. Prior to installing cable, remove any sharp surfaces from the pipe that may damage heating cable jacket.
12. Connect to outlets that have been installed in accordance with all local and national codes and that have been protected from rain or other sources of water/moisture.
13. Connect to outlets that are ground fault equipment protected outlets.

INSTALL IN ACCORDANCE WITH ALL CAUTIONS AND WARNINGS PER THE ILLUSTRATIONS BELOW -

**MEGOHMMETER TESTING PROCEDURE -**

Use only 2500VDC megohmmeter for this test.

Check insulation resistance between each lead of the heating cable and the round ground lug on the power cord plug. Perform the test by placing one lead of the megohmmeter on the round ground lug and the other on one of the rectangular power lugs. You should read 1000 megohms minimum. Perform the test again by checking the opposite rectangular power lug. Again the reading should be 1000 megohms minimum. If you read less than 1000 megohms on either lead the cable needs to be replaced. Do not attempt to repair the unit. Replace with new product.

The installer should record these megohm readings on these installation instructions and record the date of the test. End user of the system must keep instructions.

This Megohm test should be performed at least once per season, preferably before energizing the system each fall or winter, or immediately after any work has taken place on the piping system.

**WARNING**

**ELECTRIC SHOCK AND/OR FIRE HAZARD.**

Damaged heating cable can cause electrical shock and/or fire. Do not attempt to repair or energize damaged heating cable. Remove damaged cable immediately and replace with new product.
Limited Warranty:
Please refer to the Chromalox limited warranty applicable to this product at http://www.chromalox.com/customer-service/policies/termsofsale.aspx.

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