

°STELPRO

SSFP SELF-REGULATING FREEZE PROTECTION
PREASSEMBLED CABLE

OWNER'S MANUAL



INS-SSFP_0519

THANK YOU FOR YOUR PURCHASE!
NEED ASSISTANCE? CONTACT °STELPRO'S CUSTOMER SERVICE.

WWW.STELPRO.COM
1-844-STELPRO



IMPORTANT INSTRUCTIONS

Please read and make sure you understand all instructions and safety warnings. Electrical cables, if not installed correctly or are damaged, can cause a fire, shock and arcing hazard.

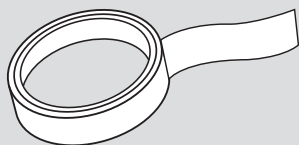
1. Installation must be in compliance with National Electrical Codes (NEC) and the Canadian Electrical Code (CEC).
2. Use 30-mA ground fault protection (GFCI) on each heating cable branch circuit for maximum protection.
3. Use only fire-resistant insulation, such as fiberglass or preformed foam. Do not embed heating cable in the insulation.
4. Use fiberglass or aluminum adhesive foil tape when attaching cable to pipe. Do not use wire or metal clamps.
5. Before installing or servicing, disconnect power at service panel.
6. Do not twist cable during installation.
7. Do not install this heating cable under roofing material.
8. Do not expose this heating cable to temperatures above 185°F (85°C), as this will damage the cable.
9. Do not use extension cords.

**WARNING: Do not use damaged heating cables, power cord or plug.
Remove and replace immediately to prevent a fire, shock or arcing hazard**

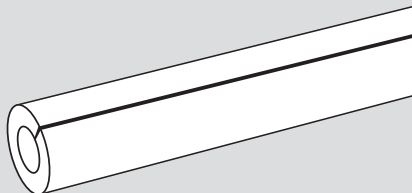
SAVE THESE INSTRUCTIONS

INSTALLATION PIPE

ACCESSORIES REQUIRED



SSFR-ALUTAPE
Aluminum adhesive foil tape



Insulation

NOTE: Accessories are sold separately.

1

CABLE SELECTION

Letters A-J in the chart represent all SSFP series models.

PIPE DIA. (IN.)	TYPE OF PIPE	PIPE LENGTH (FT)																								
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120	130	140	150
1/2	Metal	A	B	C	D	E	E	E	F	F	F	G	G	G	G	H	H	H	H	H	I	I	J	J	J	
	Plastic	A	B	C	D	E	E	E	F	F	F	G	G	G	G	H	H	H	H	H	I	I	J	J	J	
1	Metal	A	B	C	D	E	E	E	F	F	F	G	G	G	G	H	H	H	H	H	I	I	J	J	J	
	Plastic	B	B	C	D	E	E	E	F	F	G	G	G	G	H	H	H	H	H	I	I	I	J	J	-	
1½	Metal	A	B	C	D	E	E	E	F	F	F	G	G	G	G	H	H	H	H	H	I	I	J	J	J	
	Plastic	B	C	D	E	E	F	F	G	G	G	H	H	H	I	I	I	J	J	J	-	-	-	-	-	
2	Metal	A	B	C	D	E	E	E	F	F	G	G	G	G	H	H	H	H	H	I	I	J	J	J	-	
	Plastic	B	C	E	F	F	G	G	G	H	H	I	I	J	J	-	-	-	-	-	-	-	-	-	-	
2½	Metal	A	B	C	D	E	E	E	F	F	G	G	G	G	H	H	H	H	I	I	I	J	J	J	-	
	Plastic	B	D	E	F	G	G	G	H	H	I	I	J	J	-	-	-	-	-	-	-	-	-	-	-	

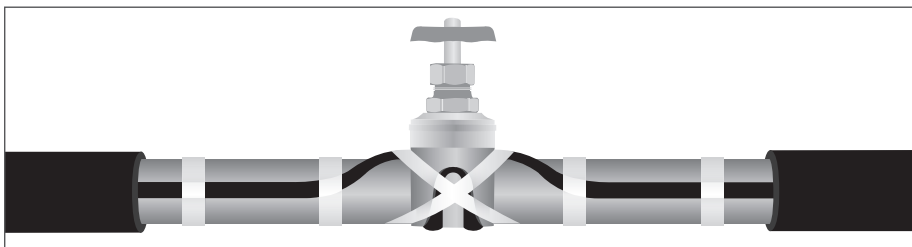
	PRODUCT	LENGTH	VOLTAGE
	CODE	FT	VOLTS
A	SSFP1W05L0006	6	120
B	SSFP1W05L0012	12	120
C	SSFP1W05L0018	18	120
D	SSFP1W05L0024	24	120
E	SSFP1W05L0036	36	120
F	SSFP1W05L0050	50	120
G	SSFP1W05L0075	75	120
H	SSFP1W05L0100	100	120
I	SSFP1W05L0125	125	120
J	SSFP1W05L0150	150	120
E	SSFP2W05L0036	36	240
F	SSFP2W05L0050	50	240
G	SSFP2W05L0075	75	240
H	SSFP2W05L0100	100	240
I	SSFP2W05L0125	125	240
J	SSFP2W05L0150	150	240

NOTE: For each valve or spigot on the pipe, an additional foot of cable is needed. When the cable is longer than the pipe, spiral the excess cable around the pipe length evenly.

2

ATTACHING CABLE TO PIPE

1. Before installing the cable, make sure that all piping is dry and free of any sharp surfaces and edges.
2. Attach heating cable to pipe with straight, spiraling or multiple tracing.
3. If the heating cable is the same length as the pipe, run it straight along the bottom of the pipe. If two cables are required, position them in the 4 and 8 o'clock positions. If three cables are required, position them in the 11 o'clock or 1 o'clock positions and 4 and 8 o'clock positions.
4. If the cable is less than double the pipe length, spiral the cable over the pipe length.
5. Any excess cable remaining at the end of the pipe can be doubled back along the pipe.
6. Make sure to include any additional heating cable required for valves, spigots, etc.
7. Secure the heating cable to the pipe with fiberglass adhesive tape (SSFR03). Do not use vinyl tape, metallic products or wire. On plastic pipes, secure the full length of cable with aluminum foil tape (SSFR-ALUTAPE).



3

INSTALLING THERMAL INSULATION

1. Before insulating, inspect the cable to make sure that it is free of mechanical damage, such as gouges or cuts, etc.
2. Cover the pipe, cables, connections and valves with at least 1/2 in. (12.7 mm) thick fiberglass insulation or equivalent. DO NOT leave the cables exposed. For a protection down to -20 °F/-29 °C, increase insulation to 1 in. (25.4 mm) thick.
3. Use fire-resistant materials such as fiberglass wrap. Make sure the insulation is waterproofed (with polyethylene or other vapor barriers) in areas where water may come in contact with the insulation.
4. Place the two warning labels on the outer surface of the pipe insulation where clearly visible and at suitable locations to indicate the presence of electric heating cable.
5. After installation is complete, turn the circuit breaker on to power the cable. The water inside the pipe should feel warm within one hour.

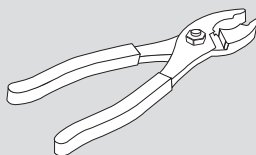
INSTALLATION

ROOFS, GUTTERS AND DOWNSPOUTS

TOOLS REQUIRED



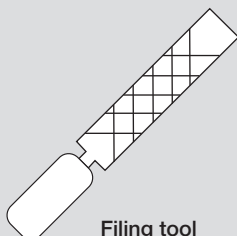
Tape measure



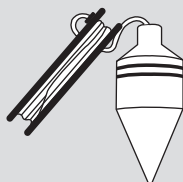
Tongs



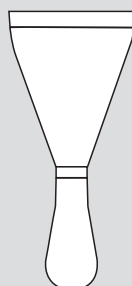
Marking chalk



Filing tool



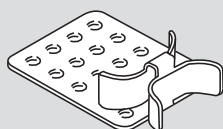
Weighted String*



Putty Knife

*The string should be at least as long as the longest downpipe.

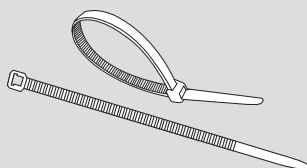
ACCESSORIES REQUIRED



SSFR13 (x10) | SSFR14 (x50)
Roof clips for
SSFP/SSFR cables



SSFR15
Downspout cable hanger bracket
for SSFP/SSFR cables



Ties*

*For shingle roof

NOTE: Accessories are sold separately.

1

CABLE SELECTION

1. Determine the total length of cable needed by adding the total roof edge length (ft.) x feet of heating cable per foot of roof edge (see table below) roof edge length x 0.5 (for the roof extension factor), the total gutter length (ft.) and the total downspout length (ft. plus 1).

NOTE: The roof edge length (ft.) x feet of heating cable required per foot of roof edge equals the total roof edge cable length required.

NOTE: The roof extension factor is the length of cable required to reach the cable in the gutter from the roof edge.

2. For shingle roofs, add 1 foot (30 cm) of heating cable for each foot (30 cm) of gutter.
3. Add 1 foot (30 cm) of heating cable per foot (30 cm) of downspout.
4. When the downspout is between the gutter ends, double the length of the downspout to determine the length of cable needed.
5. For roof valleys, measure the distance two thirds of the way up and double it. Add this additional length to the overall cable length.

ROOF OVERHANG	LENGTH OF HEATING CABLE		CABLE LOOP HEIGHT	
	SHINGLE ROOF	METAL ROOF (24 IN. / 60 CM)	SHINGLE ROOF	METAL ROOF
None	1.9 ft / 58 cm	2.5 ft / 76 cm	18 in. / 46 cm	18 in. / 46 cm
12 in. / 30 cm	2.0 ft / 61 cm	2.5 ft / 76 cm	18 in. / 46 cm	24 in. / 60 cm
24 in. / 61 cm	2.7 ft / 82 cm	3.5 ft / 107 cm	30 in. / 76 cm	36 in. / 90 cm
36 in. / 91 cm	3.6 ft / 110 cm	4.5 ft / 137 cm	42 in. / 107 cm	48 in. / 122 cm
48 in. / 122 cm	4.5 ft / 137 cm	5.5 ft / 168 cm	54 in. / 137 cm	60 in. / 152 cm

EXAMPLE (SHINGLE ROOF):

- Roof edge length: 15 ft. (with roof overhang of 1 ft.)
- Gutter length: 15 ft.
- Downspout length: 12 ft.

Length of heating cable required:

Roof edge length	15 ft. x 2 (see table) =	30 ft.
Gutter length		15 ft.
Roof extension	15 ft. x 0.5 =	7.5 ft.
Downspout length	12 ft. + 1 =	13 ft.

Total

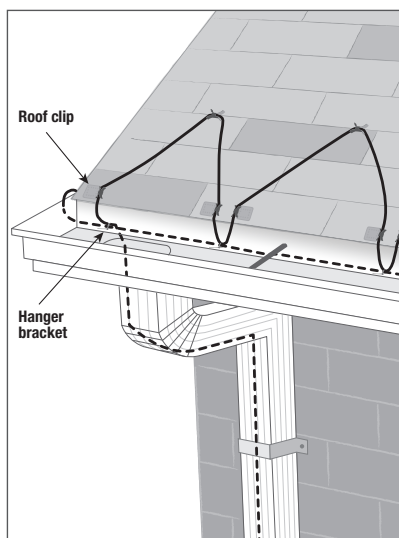
66 ft.

2

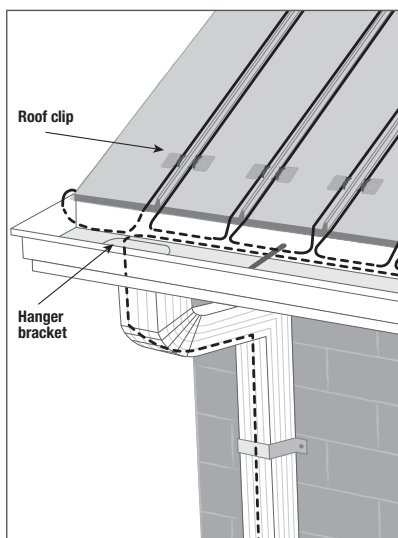
INSTALLING CABLE

1. Determine the best route for the heating cable on roofs and gutters.
2. Route the heating cable to avoid mechanical damage from ladders, etc.
3. Before installing the heating cable, make sure the roof, gutter and downspouts are free from debris, leaves, pine needles or any combustibles.
4. Check the maximum exposure temperature rating of all roof, gutter and downspouts, and select a heater that will not exceed their temperature ratings.
5. Use a downspout cable hanger bracket (SSFR15) to support the heating cable where it enters a downspout to prevent cable from being damaged by the gutter's edge. It also can be used as a spacer in wider gutters.
6. Run heating cable over top of hanger and secure it using UV resistant cable ties.
7. Use roof clips for SSFP/SSFR cables (SSFR13 – SSFR14) to attach the heating cable to the roof.
8. For roof valleys, measure two thirds of the distance of the way up and double it. Add this additional length to the overall cable length.
9. Attach the two warning labels (included with the heating cable). The labels must be clearly visible on the premises.

SHINGLE ROOF



METAL ROOF



OPERATION AND MAINTENANCE

WARNING: Only qualified persons should service or install the system.

Check yearly for any damage to the heating cable and check any ground fault protection device for proper operation. If any damage to cable is found, DO NOT operate until it is replaced.

°STELPRO LIMITED WARRANTY

This limited warranty is offered by °STELPRO Design Inc. ("°STELPRO") and applies to the following product made by °STELPRO: model **SSFP**. **Please read this limited warranty carefully.** Subject to the terms of this warranty, °STELPRO warrants its products and their components against defects in workmanship and/or materials for the following periods from the date of purchase: **2 years**. This warranty applies only to the original purchaser; it is non-transferable and cannot be extended.

CLAIM PROCEDURE

If at any time during the warranty period the unit becomes defective, you must cut off the power supply at the main electrical panel and contact 1) your installer or distributor, 2) your service center or 3) °STELPRO's customer service department. In all cases, you must have a **copy of the invoice** and provide the **information written on the product nameplate**. °STELPRO reserves the right to examine or to ask one of its representatives to examine the product itself or any part of it before honoring the warranty. °STELPRO reserves the right to replace the entire unit, refund its purchase price or repair a defective part. Please note that repairs made within the warranty period must be authorized in advance in writing by °STELPRO and carried out by persons authorized by °STELPRO.

Before returning a product to °STELPRO, you must have a °STELPRO authorization number (RMA). To obtain it, call the customer service department at: **1-844-°STELPRO**. The authorization number must be clearly written on the parcel or it will be refused.

CONDITIONS, EXCLUSIONS AND DISCLAIMER OF LIABILITY

This warranty is exclusive and in lieu of all other representations and warranties (except of title), expressed or implied, and °STELPRO expressly disclaims and excludes any implied warranty of merchantability or implied warranty of fitness for a particular purpose.

°STELPRO's liability with respect to products is limited as provided above. °STELPRO shall not be subject to any other obligations or liabilities whatsoever, whether based on contract, tort or other theories of law, with respect to goods or services furnished by it, or any undertakings, acts or omissions relating thereto. Without limiting the generality of the foregoing, °STELPRO expressly disclaims any liability for property or personal injury damages, penalties, special or punitive damages, damages for lost profits, loss of use of equipment, cost of capital, cost of substitute products, facilities or services, shutdowns, slowdowns, or for other types of economic loss or for claims of a dealer's customers or any third party for such damages. °STELPRO specifically disclaims all consequential, incidental and contingent damages whatsoever.

This warranty does not cover any damages or failures resulting from: 1) a faulty installation or improper storage; 2) an abusive or abnormal use, lack of maintenance, improper maintenance (other than that prescribed by °STELPRO) or a use other than that for which the unit was designed; 3) a natural disaster or an event out of °STELPRO's control, including, but not limited to, hurricanes, tornadoes, earthquakes, terrorist attacks, wars, overvoltage, flooding, water damages, etc. This warranty does not cover any accidental or intentional losses or damages, nor does it cover damages caused by negligence of the user or owner of the product. Moreover, it does not cover the cost of disconnection, transport, and installation.

The warranty is limited to the repair or the replacement of the unit or the refund of its purchase price, **at the discretion of °STELPRO**. Any parts replaced or repaired within the warranty period with the written authorization of °STELPRO will be warranted for the remainder of the original warranty period. This warranty will be considered null and void and °STELPRO will have the right to refuse any claims if **products have been altered** without the written authorization of °STELPRO and if the nameplate numbers have been removed or modified. This warranty does not cover scratches, dents, corrosion or discoloration caused by excessive heat, chemical cleaning products and abrasive agents. It does not cover any damage that occurred during the shipping.

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages and some of them do not allow limitations on how long an implied warranty lasts, so these exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state or from province to province.