HOW TO INSTALL SYSTEM

Each component in the Freeze Free system includes complete and well-illustrated instructions. Follow these instructions closely when installing the system. Remember to use only Easy Heat Freeze Free components. You may wish to consult your local electrical code.

Step One

The first step is to prepare the cable for installation. Easy Heat's special *Freeze Free* end seal must be installed to protect the end of the cable.







USA

2 Connecticut South Drive East Granby CT 06026 TEL 800/537-4732 FAX 800/541-7451

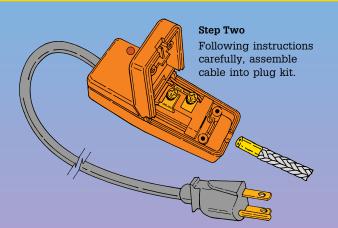
Canada

99 Union Street Elmira ON N3B 3L7 TEL 800/794-3766 FAX 519/669-6419



Self Regulating
Pipe Heating System

For 120 VAC





Step Three

Apply the cable to the pipe. If a spiral is required, the distance between the spirals will ensure that the pipe has the appropriate coverage. See Chart 1 or 2 inside.



Step Four

Secure the cable to the pipe using the *Freeze Free* HCA tape or a high quality electricians tape.

Step Five

Wrap the entire pipe and cable with insulation. Complete the installation with the weatherproof wrap and the caution signs.



PRODUCT SELECTION GUIDE

CABLE (m	aximum cable length: 75 feet per application)
2102	100 feet of Freeze Free cable
2302	300 feet of Freeze Free cable
2502	500 feet of Freeze Free cable

ACCESSORIES

10802	Connection Kit (plug & end seal), clamshell individual or 10-pack tray
10803	Connection Kit, polybagged 25 count
HCA	30 feet of application/caution tape
EH38	Thermostat for automatic operation
GWI-25	1/2" x 3" x 25' Insulation
GWI-35	1/2" x 3" x 35' Insulation
GWI-65	1/2″ x 6″ x 35′ Insulation

KITS

10805	Includes 5' of cable with plug and end seal
10815	Includes 15' of cable with plug and end seal

Easy Heat products are provided with a limited warranty: see owner's manual or contact Easy Heat for complete terms and conditions.



Application Guide



- Power indicator light
- Built-in, fast-reaction fuse
- Easy to install

Stop Pipe Freeze-up

WITH A FREEZE FREE PIPE HEATING SYSTEM

Easy Heat, the leader in residential pipe freeze protection, presents the *Freeze Free* pipe heating system. Using self-regulating technology, this cable actually produces only the heat that is needed, where and when it is needed, to prevent pipe freeze-up.

This system, cUL_{US} Listed, can be installed with confidence and with the assurance that it will operate for years without requiring service.

A Freeze Free system is easy to install and includes all the materials needed for a safe and proper installation. This product is suitable for use on plastic and metal water pipes. Use the Freeze Free system to make sure your pipes don't freeze.

COLLECT THE FOLLOWING NECESSARY INFORMATION:

■ Pipe Size	EXAMPLE
outside diameter. length.	
■ Lowest expected air temperature	20°F
■ Number of valves and spigots 1 l	oall valve
■ Distance from pipe to electrical outlet	2 feet

Freeze Free plugs come with a 30° cord-set to bridge the gap between the pipe and the electrical outlet.

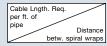
REFER TO THE LENGTH SELECTION CHARTS

These charts will tell you the length of the cable you need per foot of pipe and also the recommended distance to leave between each spiral wrap of cable on the pipe.

HOW TO USE THE LENGTH SELECTION CHART

Choose either Chart #1 or Chart #2 for your type of pipe (plastic or metal). Read down to find your pipe diameter, then read across to the box below your lowest expected temperature. The first number appearing in the box will tell you the length (feet) of cable you need per foot of pipe. The second number indicates the recommended distance between each spiral wrap of cable on the pipe.

The abbreviation "str" indicates that the cable should be run in a straight line instead of spiral wrap.



High Output Outp

HOW IT WORKS

A special self-regulating core is at the center of the Freeze Free cable. This core is conductive and adjusts according to the surrounding temperatures. When it is cold, the cable's core has many conductive paths that generate enough heat to keep the water flowing in the pipe. As the surrounding temperature warms, there are fewer conductive paths and less heat is generated. This self-regulating technology ensures the right amount of heat when and where it is needed.

Chart #1: Length Selection for Plastic Pipes (based on the use of 1/2" insulation)

Pipe Dia.	Lowest Expected Temperature				
Fipe Dia.	+20°F	0°F	-20°F	-40°F	-60°F
1/2″	1' str.	1' str.	1.5′ 2 3/8″	2' 1 1/2"	2.4' 1 1/4'
3/4″	1' str.	1.1 ['] 7 1/4"	1.7′ 2 3/8″	2.3′ 1 5/8″	2.9 ⁷ 1 1/4 ⁸
1″	1′ str.	1.3′	2 3/8"	2.7′ 1 5/8″	3.3′ 1 3/8′
1 1/4″	1′ str.	1.6′ 4 1/4″	2.3′ 2 1/2″	3.2′ 1 3/4″	4.1′ 1 3/8′
1 1/2″	1′ str.	1.8'		3.6′ 1 3/4″	4.7′ 1 3/8′
2″	1' str.	2.1′ 4″	3'	4.3'	5.4′ 1 1/8′

Chart #2: Length Selection for Metal Pipes (based on the use of 1/2" insulation)

Pipe Dia.	+20°F	Lowest E	xpected Te -20°F	mperature -40°F	-60°F
1/2″	1' str.	1' str.	1' str.	1.3′ 3 1/8″	1.7′
3/4″	1' str.	1′ str.	1.1 ['] 7 1/4"	1.5′	2"
1″	1' str.	1' str.	1.3′ 5″	1.8′ 2 3/4″	2.4′ 1 7/8″
1 1/4″	1' str.	1.1'	1.6′ 4 1/4″	2.1′ 2 7/8″	2.9′ 1 7/8″
1 1/2"	1' str.	1.2' 9"	1.8′	2.4' 2 3/4"	3.2′ 1 7/8″
2″	1' str.	1.5' 6 5/8"	2.2' 3 3/4"	2.8′ 2 7/8″	3.9'

CALCULATE THE EXACT HEATER LENGTH YOU NEED

• Multiply the cable length required per foot of pipe by the length of your pipe. Add one extra foot for each valve located in your line. Maximum cable length is 75 feet.

Cable length required per foot of pipe x pipe length + one foot for each valve or spigot

= total cable length

EXAMPLE

- Your pipe diameter is 1½"
- Your lowest expected temperature is -20°F
- Your pipe length is 12 feet

From Chart #1:

 You need 2.5 feet of cable per foot of pipe for plastic pipes

From Chart #2:

 You need 1.8 feet of cable per foot of pipe for metal pipes

EXAMPLE

You Have: 12 feet of plastic pipe length

one ball valve

You Need: 2.5 feet of cable per foot of plastic pipe

Calculate: (12 feet x 2.5) + 1 foot for ball valve

Total cable length = 31 feet





