



120V Preassembled Heating Cables ORF-R, ORF-P and OSR-PI Series



120V Preassembled Constant Wattage Heating Cable ORF-P Series

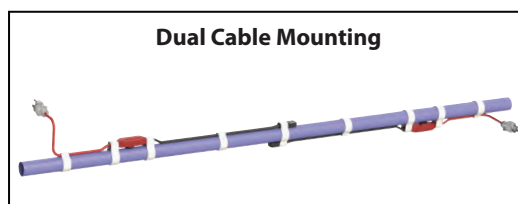
Pipe Tracing for Freeze Protection

- 7 Watts per foot.
- For indoor and outdoor applications.
- Built-in bi-metal thermostat energizes the cable when the temperature falls below 4 °C (40 °F).
- Do not use more than ½ inch of insulation.
- For metallic and non-metallic pipes.
- Grounded 3-pronged plug with indicator light to show when the cable is on.
- Must be plugged into a 120V outlet fitted with ground fault protection device (GFCI).



Select the proper heating cable(s)

Pipe length	Pipe diameter				
	1/2"	3/4"	1"	1.25"	1.5"
4'	3	3	3	3 + 3	3 + 3
5'	3	3	3 + 3	3 + 3	3 + 3
6'	6	6	6	6	6
7'	6	6	6	3 + 6	3 + 6
8'	6	6	6	3 + 6	3 + 6
10'	9	9	9	9	6 + 6
11'	9	9	9	6 + 6	6 + 6
13'	12	12	12	12	6 + 9
14'	12	12	12	6 + 9	6 + 9
15'	15	15	15	15	15
16'	15	15	15	15	9 + 9
17'	15	15	15	9 + 9	9 + 9
20'	18	18	18	18	9 + 12
22'	12 + 12	12 + 12	12 + 12	12 + 12	12 + 12
26'	24	24	24	12 + 15	12 + 15
28'	12 + 15	12 + 15	12 + 15	12 + 15	12 + 18
35'	18 + 18	18 + 18	18 + 18	18 + 18	18 + 18
45'	18 + 24	18 + 24	18 + 24	18 + 24	24 + 24
50'	24 + 24	24 + 24	24 + 24	24 + 24	12 + 40
55'	24 + 30	24 + 30	24 + 30	24 + 30	18 + 40
65'	6 + 60	6 + 60	6 + 60	6 + 60	6 + 60
70'	30 + 40	30 + 40	30 + 40	30 + 40	12 + 60
75'	15 + 60	15 + 60	15 + 60	15 + 60	15 + 60



Example :

- 3 means you need one 3' heating cable.
- 3 + 3 means you need two 3' heating cables.
- 3 + 6 means you need one 3' heating cable with one 6' heating cable.
- For pipe sizes minimum or for more information, contact Technical Support.
- This design guide is based on the generally accepted maintenance temperature (4°C /40°F) for freeze protection.
- This design guide is calculated based on 1/2" fiberglass insulation.
Closed-cell flexible foam insulation may also be used.

*This chart should only be used as a reference and does not guarantee any results.
Always refer to the installation manual.*

120V Preassembled Constant Wattage Heating Cable ORF-R Series

Roof and Gutter De-icing

- 5 Watts per foot.
- For outdoor applications only.
- Do not use on roofs with wooden shingles, rubber roofs or composite (tar and gravel) roofs.
- Do not use this product on wooden gutters or downspouts.
- Roof clips for cable and spacers included.
- Grounded 3-pronged plug with indicator light to show when the cable is on.
- Must be plugged into a 120V outlet fitted with ground fault protection device (GFCI).



Select the proper heating cable(s)

- 1 Measure the roof overhang and choose the right multiplier (Figure 1).
- 2 Measure the roof line (Figure 2, A) where the cable will be applied and multiply by the applicable factor.
- 3 Measure the valleys (Figure 2, B) and multiply the measurement by 2/3.
- 4 Measure the dormers (Figure 2, C).
- 5 Measure the gutters and downspouts (Figure 2, D) and multiply by 2 if you install the cable in parallel (Figure 3).

Figure 1

Overhang length (cm)	Multiplier with gutter (A)	Multiplier without gutter (A)
0	3.9	3.0
30	3.9	3.0
61	5.3	4.5
91	6.8	6.0
122	8.2	7.4

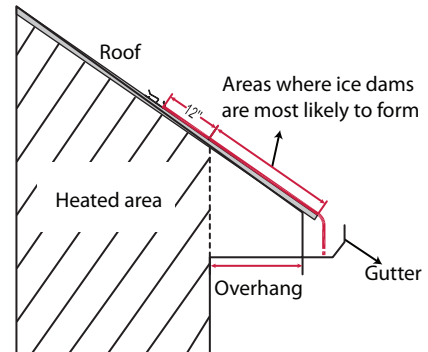
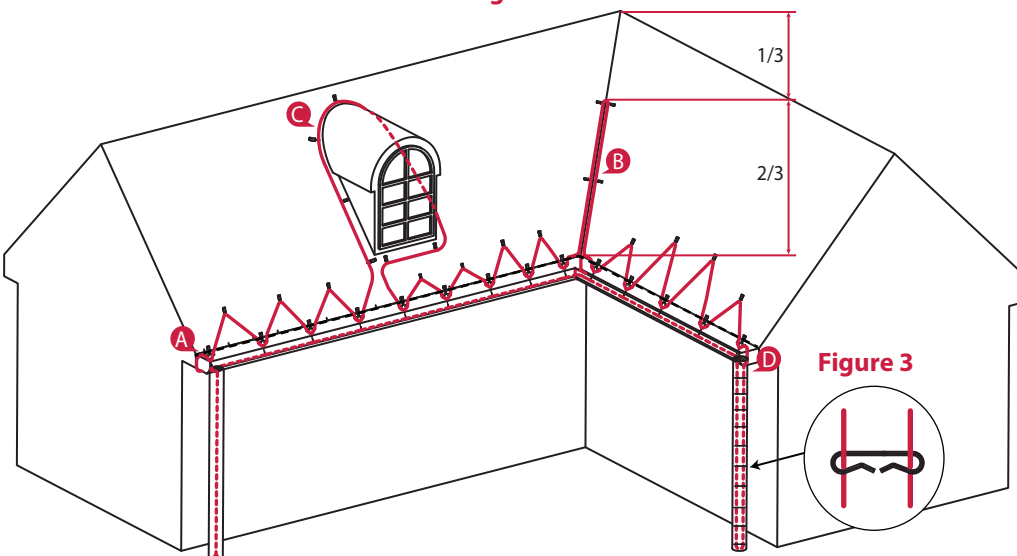


Figure 2



$$\begin{aligned}
 &\text{Cable length required for roof line area (A)} \\
 &+ \\
 &\text{Cable length required for valleys (B)} \\
 &+ \\
 &\text{Cable length required for dormers (C)} \\
 &+ \\
 &\text{Cable length required for downspouts (D)} \\
 &\hline
 &= \text{Total cable length required}
 \end{aligned}$$

Always refer to the installation manual.

120V Preassembled Self-Regulating Heating Cable OSR-PI Series

Roof and Gutter De-icing

- 7 Watts per foot at 5 °C (40 °F)¹.
- For indoor and outdoor applications.
- Suitable for shingle, Rubber/tar, wood, metal and plastic roofs
- Suitable for wood, metal and plastic gutters.
- Must be plugged into a 120V outlet fitted with ground fault protection device (GFCI).



¹ Because of the cable's self-regulating properties, the power density can reach up to 11 Watts per foot when buried in snow or ice: "wet density". In this situation, use of a 15 Amp. circuit breaker is valid for all models.

Selection of the right cable length

Section	Calculation	Length
a) Roof edge	Roof line length (ft.) x multiplier (Table 1 or 2)	_____ ft.
b) Drain path/drip loops	Roof line length (ft.) x 0.5	_____ ft.
c) Gutters	Total gutter length (ft.)	_____ ft.
d) Downspouts	Downspout length (ft.) x 2, plus 1 ft. for end termination	_____ ft.
e) Valleys	Valley length (ft.) x 0.67, x 2	_____ ft.
TOTAL HEATING CABLE REQUIREMENT:		_____ ft.

a) Roof edge

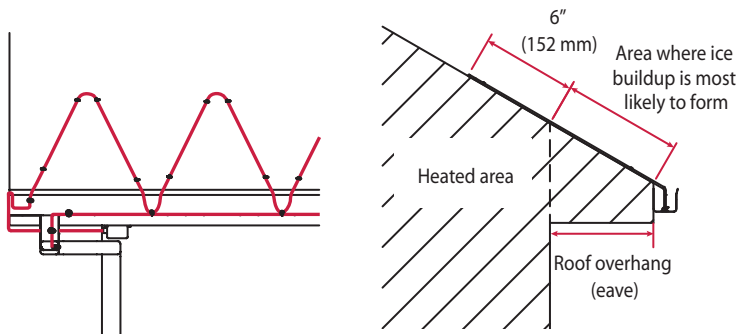


Table 1: For shingle roof overhang

Roof overhang (eave)	Multiplier
6" (152 mm)	2.0
12" (305 mm)	2.5
24" (610 mm)	3.6
36" (915 mm)	4.8

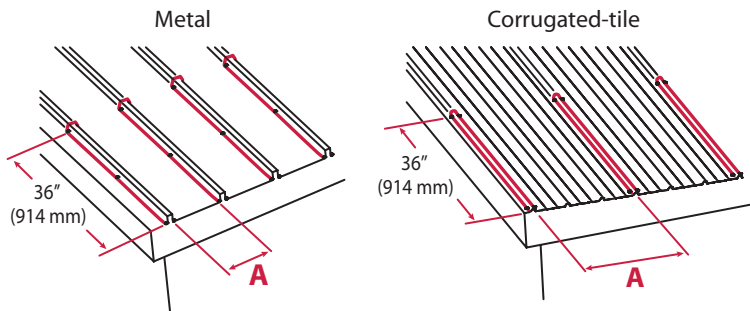


Table 2: For metal/and corrugated-tile roofs

Roof overhang (eave)	Roof seam distance	
	18" (Multip.)	24" (Multip.)
12" (305 mm)	2.5	2.2
18" (455 mm)	3.1	2.6
30" (760 mm)	3.6	3.2
42" (1065 mm)	4.2	3.8

A Roof seam distance

Always refer to the installation manual.

120V Preassembled Self-Regulating Heating Cable OSR-PI Series

Pipe Tracing for Freeze Protection

- 7 Watts per foot.
- For indoor and outdoor applications.
- For metallic and non-metallic pipes.
- Must be plugged into a 120V outlet fitted with ground fault protection device (GFCI).

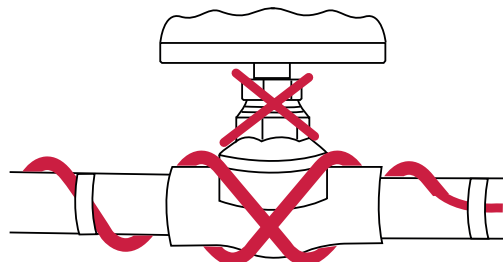


Use the table below as a guide to select the correct length of heating cable.

Pipe diameter	Pipe length						
	5'	10'	15'	25'	50'	75'	100'
Metal							
1/2"	6'	12'	18'	25'	50'	75'	100'
1"	6'	12'	18'	25'	50'	75'	100'
1 1/2"	6'	12'	18'	25'	50'	75'	100'
2"	6'	12'	18'	25'	50'	75'	100'
2 1/2"	6'	12'	18'	25'	50'	75'	100'
Plastic							
1/2"	6'	12'	18'	25'	50'	75'	100'
1"	6'	12'	18'	25'	50'	75'	100'
1 1/2"	6'	12'	18'	25'	50'	75'	100'
2"	12'	18'	25'	50'	75'	100'	-
2 1/2"	12'	18'	25'	50'	75'	100'	-

The recommended lengths in the table are based on an installation on pipe with an outside temperature of -18°C (0°F) if 1/2 in. insulation is used and up to -29°C (-20°F) if 1 in. insulation is used.

Add foot to the cable length per faucet.



For any installation on a pipe of a diameter greater than 2 1/2 inches, please refer to our technical support team at 1 800 463-7043.

This chart should only be used as a reference and does not guarantee any results.

Always refer to the installation manual.

ORF-R Models

Product #	Length		Watts
	ft.	m	
ORF-R020	20	6.1	100
ORF-R030	30	9.1	150
ORF-R060	60	18.3	300
ORF-R080	80	24.4	400
ORF-R100	100	30.5	500
ORF-R120	120	36.6	600
ORF-R140	140	42.7	700
ORF-R160	160	48.8	800
ORF-R180	180	54.9	900
ORF-R200	200	61.0	1000
ORF-R240	240	73.2	1200

ORF-P Models

Product #	Length		Watts
	ft.	m	
ORF-P003	3	0.9	21
ORF-P006	6	1.8	42
ORF-P009	9	2.7	63
ORF-P012	12	3.7	84
ORF-P015	15	4.6	105
ORF-P018	18	5.5	126
ORF-P024	24	7.3	168
ORF-P030	30	9.0	210
ORF-P040	40	12.2	280
ORF-P060	60	18.3	420
ORF-P080	80	24.4	560

OSR-PI Models

Product #	Length		Nominal power output in air condition at 5 °C (40 °F) ¹
	ft.	m	
ECK-7AO-006	6	1.8	42
ECK-7AO-012	12	3.6	84
ECK-7AO-018	18	5.5	126
ECK-7AO-025	25	7.6	175
ECK-7AO-050	50	15.2	350
ECK-7AO-075	75	22.9	525
ECK-7AO-100	100	30.5	700

¹ Because of the cable's self-regulating properties, the power density can reach up to 11 Watts per foot when buried in snow or ice: «wet density». In this situation, use of a 15 Amp. circuit breaker is valid for all models.