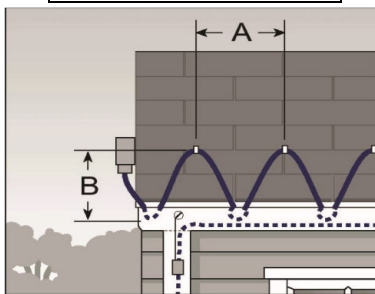


## Cable

| Step 1 - Record Measurements |                         |
|------------------------------|-------------------------|
| A                            | Roof Overhang:          |
| B                            | Roof Length:            |
| C                            | Gutter Length:          |
| D                            | Downspout Length:       |
| E                            | Number of Downspouts:   |
| F                            | Distance Around Dormer: |
| G                            | Number of Dormers:      |
| H                            | Number of Valleys:      |
| I                            | Breaker Rating:         |

| Roof Overhang | A Heating Width | B Heating Height | Spacing Factor |
|---------------|-----------------|------------------|----------------|
| 12 in         | 24 in           | 18 in            | 2              |
| 24 in         | 24 in           | 30 in            | 3              |
| 36 in         | 24 in           | 42 in            | 4              |

\*Regardless of overhang, these are standard measurements.



| Step 2 - Determine Spacing Factor |  |
|-----------------------------------|--|
| J                                 | Determine Your Roof's Spacing Factor Found in Table 1 (Left) |

| Step 3 - Complete Calculations |   |
|--------------------------------|---|
| K                              | Multiply Roof's Spacing Factor (J) by Roof Length (B)             |
| L                              | Multiply Number of Dormers (G) by Distance Around Each Dormer (F) |
| M                              | Multiply Number of Valleys (H) by 6 ft (1.8 m)                    |
| N                              | Multiply Number of Downspouts (E) by Downspout Length (D) by 2    |

| Step 4 - Find Total Cable Length Needed |  |
|---|--|
| O                                       | Add Figure from C (Gutter Length), K (Roof Calculation), and N (Downspout Calculation) |

## Circuits

| Step 5 - Circuit Calculations |  |
|-------------------------------|--|
| P                             | Determine the Maximum Heater Length for Your Breaker Rating Found in Table 3 (Below) |
| Q                             | Divide Total Cable Length (O) by Maximum Heater Length Above (P)                     |

|                  | 120V   |        |        |
|------------------|--------|--------|--------|
|                  | 15A    | 20A    | 30A    |
| Start Up @ 0°F   | 90 ft  | 120 ft | 175 ft |
| Start Up @ -20°F | 75 ft  | 100 ft | 150 ft |
|                  | 240V   |        |        |
|                  | 15A    | 20A    | 30A    |
| Start Up @ 0°F   | 135 ft | 185 ft | 275 ft |
| Start Up @ -20°F | 120 ft | 160 ft | 250 ft |