

## **Low-voltage RoofHeat Roof De-Ice System – Installation Instructions**

System designs are explained in a snowmelt quotation. These designs specify for each piece of element, the length, the amperage, the maximum wire length between the element and the transformer(s), and a worksheet that explains how each piece of element will fit on its respective transformer.

These instructions assume that your system was designed by Warmzone, and that the installer has the quote, worksheets, and drawing (if applicable) supplied by us.

For a quotation and system design, contact Warmzone at 888-488-9276 or visit our website at [www.warmzone.com](http://www.warmzone.com) for more information.

**NOTE:**

Special care must be taken to not short out the elements with fasteners. Any fasteners that pierce the element and a metal drip edge, metal flashing, or metal clips for metal roofing or any other metal can short the elements and causing the system to not work properly, or not at all.

1. Install any water and ice shielding membrane, and any drip edges.
2. Install Felt (or comparable/recommended) underlayment.

**NOTE:**

Roofing underlayments designed to create an air space between the bottom of the finished roof surface and the top of the roof sheathing are not compatible with RoofHeat Snowmelt.

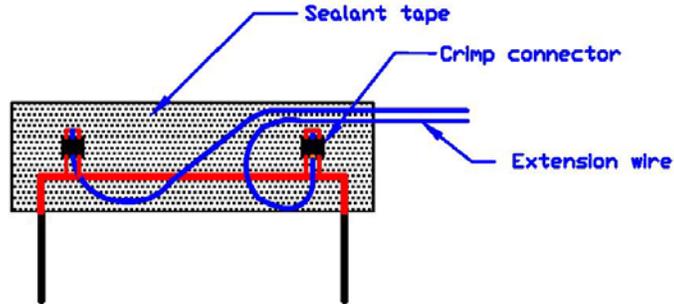
3. Cut elements, with a pair of scissors, to the lengths specified on the worksheets/drawing(s) provided by Warmzone.

**NOTE:**

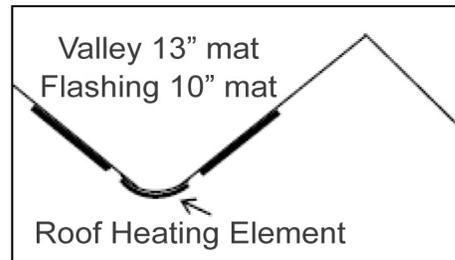
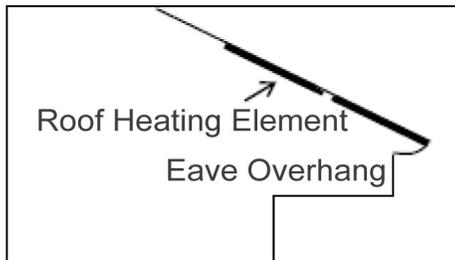
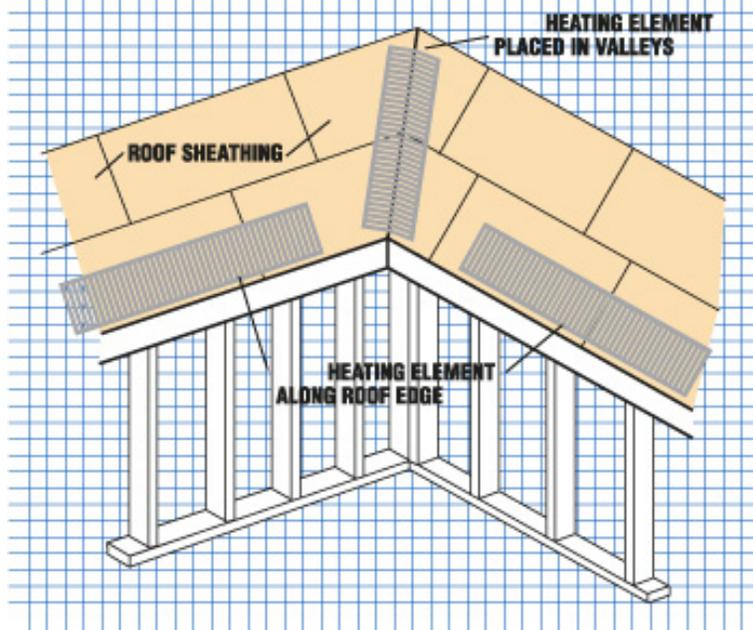
Elements can be cut shorter than specified if necessary. If conditions require an element to be longer than is specified in the design, contact Warmzone at 888-488-9276.

4. Using the scissors, make a diagonal relief cut up to both sides of each bus braid wire and pull element material away from bus braid, ensuring that none of the element material sticks to either side of the bus braid.
5. Attach supplied tin-copper lead wires to elements with the supplied tin-copper crimps and route lead wires to transformer location.
6. Cut a 1.5” piece of the electrical moisture sealant tape (provided with connectors in the CT-10 packages) for each crimped connection and fold it evenly in half over each crimp so that it covers any exposed wire or crimp. Any cut end that will not have lead wires connected can remain undressed.

7. Leaving a 5" loop of wire in the vinyl enclosure, seal the cut ends of the vinyl enclosure with the supplied electrical moisture sealant tape (supplied in 8' rolls).



8. Place elements at eaves, as close as possible to the roof edge and secure to roof sheathing through the welded seam at the edges of the vinyl enclosure.



**NOTE:**

If installing a metal roof with clips, leave enough space between elements for the clips. If installing an asphalt shingle, space elements to have about 1" to 2" between them.

9. Place elements in valleys and secure to the substrate through the welded seams.
10. Install any valley flashing.

NOTE:

Do not fasten through any metallic flashing and the element with the same fastener.  
Fastening through both the metal flashing and the element will short the element.

11. Install finished roof surface.

NOTE:

All elements should be resistance tested before the finished roof surface is applied/installed.

Element resistance values:

VEP-30-2-32W-24V = 55ohms per foot

VEP-23-2-36W-24V = 50ohms per foot

Divide the ohms per foot by the length of the element to get the ideal resistance of an element (values at 68 degrees F – ohms may vary slightly depending on temperature at time of installation).