

# ET13 Roof Clip(10)

# ET14 Roof Clip(50)

# ET15 Hanger Bracket

## Description

The ET13 and JSR 14 Roof Clip Kit and the ET15 Hanger Bracket Kit are suitable for use with PSL/PSLL series heating cables. Do not use other hardware or techniques which may damage the heating cable and cause electrical hazard, risk of fire or poor performance. risk of fire or poor performance.

### ET13/ET14

The ET13 and ET14 roof clips are used to secure PSL/PSLL series heating cables to shingle and metal seam roofs and gutters. For applications where nails and screws will be used to install dips, go to page2. For applications where adhesive will be used to install dips, go to page3. The ET13 is a bag of 10 clips and the ET14 is a box of 50 dips.

### ET15

The ET15 hanger bracket is used to provide mechanical protection to the PSL/PSLL series heating cables as it goes oversharp edges and to hold the heating cable in place at the top of downspouts. Refer to page3 for instruction on how to install the ET15 hanger bracket.

**Tools Required**(Installed per NFPA70, National Electrical Code (NEC), Article 426)

1. screwer
2. Pliers
3. Caulking Gun

### Recommended Adhesives for Metal Roofs

1. SpeedBonder®H3300(Methacrylate Adhesive)
2. SpeedBonde H4800 (Methacrylate Adhesive)
3. Plexus®MA300 (Methacrylate Adhesive)
4. Plexus MA310 (Methacrylate Adhesive)

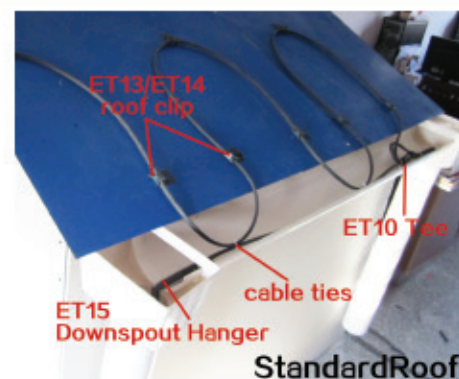


Figure 1

5. DGE® Grey RTV 167 Adhesive (Neutral-cure Silicone Adhesive)

### Approvals



460V PIPE HEATING CABLE &  
4FB1 DE-ICING AND SNOW  
MELTING EQUIPMENT

## kit contents

### ET13 Contents

Item	Qty	Description
A	10	Roof Clips

### ET14 Contents

Item	Qty	Description
A	50	Roof Clips

### ET15

Item	Qty	Description
B	1	Hanger bracket

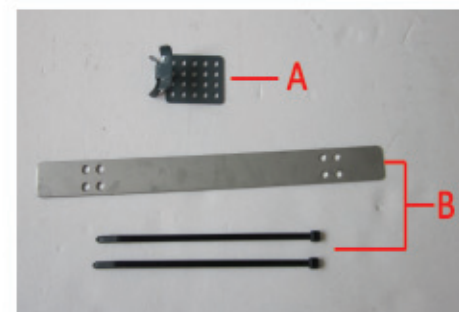


Figure 2

# ET13 Roof Clip(10)

# ET14 Roof Clip(50)

# ET15 Hanger Bracket

## Warning:

1. Roof Clips and Hanger Brackets must be installed properly to ensure proper operation and to prevent the risk of electrical hazard or fire. Follow all design, installation, assembly, and test instructions carefully.
2. To minimize the danger of fire from sustained electrical arcing if the heating cable is damaged or improperly installed, and to comply with the requirements of national electrical codes, ground-fault equipment protection.
3. Article 426 of the National Electrical Code and Section 62 of CAN/CSA-C22.1, Canadian Code govern the installation of PSL/PSLL series heating cable must be used on each heating cable branch circuit. Arcing may not be stopped by conventional circuit protection with the requirements of national electrical codes, ground-fault equipment protection.
4. Do not use Clip and Hanger Bracket for installation on slate or tile roofs as damage may occur to roof material. Consult roofing manufacturer for components approved for use on specific roof material.
5. De-energize all power circuits before installation or servicing.
6. Keep ends of heating devices and kit components dry before and during installation.
7. Damaged heating cable can cause arcing or fire. Do not energize damaged heating cable. Repair or replace damaged heating cable prior to applying power.
8. While using pliers to close clamps on heating cable, heating cable should not be crushed or altered structurally in any way.
9. The cable should not be twisted during installation.
10. Heating cable should not be embedded in the thermal insulation.

## ET13/ET14 with screw or nail

1. Determine heating cable layout and dip placement according to JSR00 and JSR08 installation instructions.
2. Apply sealant, appropriate for your roof, to back side of dip where nail or screw will be used.
3. Orient the dip as needed, attach clip to roof using a nail or a screws

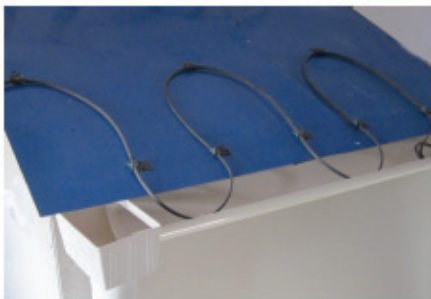


Figure 1

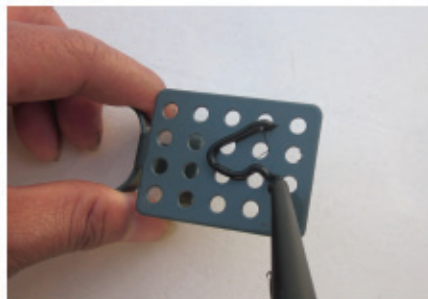


Figure 2

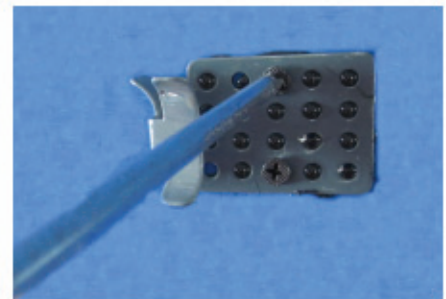


Figure 3



# ET13 Roof Clip(10)

# ET14 Roof Clip(50)

# ET15 Hanger Bracket

## ET13/ET14 with screw or nail

4. Spread sealant on top of nail or screw heads



Figure 4

5. Install heating cable. Use pliers to close clamps, but do not crush the heating cable.



Figure 5

## ET13/ET14 with adhesive

1. Determine heating cable layout and clip placement according to ET00 and ET08 installation instructions.



Figure 1

2. Adhesive Selection:

Select appropriate adhesive  
For most metal roofs, we recommend GE RTV 167 Grey

3. Prepare roof surface per adhesive manufacturer's specification. Apply a liberal amount of adhesive to back side of Roof Clips

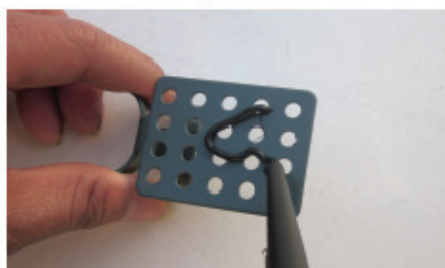


Figure 3

4. Place clip on prepared surface. Press down to ensure adhesive flows through holes.



Figure 4

5. Install heating cable. Use pliers to close clamps as page 2 shown, but do not crush the heating cable.

## Installing ET15 in Gutter

1. Bend the ET15 to approximately 90 degree. Insert cable ties through holes on the ET15



Figure 1

2. Position the ET15 and tighten the cable ties. Trim off excess cable tie.



Figure 2

3. The ET15 should be centered on the edge of the downspout to prevent mechanical damage and to support the heating cable.



Figure 3

4. The ET15 can be used to protect the heating cable from sharp edges. The ET15 can also be used in gutter as a spacer