



EZ Roof Mount with “L” foot, Standoff and Variants

Patent # US 8122648B

INSTALLATION INSTRUCTIONS

Please Read Carefully Before Installing



Products are tested and listed by IAPMO
To standards EC002-2011 and UL-441-96 Rain Test

Document Number 2012-K10068a

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WARNING NOTICES:

1. Installer is responsible for use and application of **Personal Safety Equipment** including but not limited to: fall protection, eye and hand protection, proper use of electrical cords, use of ladders, and electrical hazard protection.
2. **Torque values** are called out in this Instruction Manual and must be adhered to.
3. The use of **anti-seize compound** such as Permatex anti-seize lubricant is recommended for all threaded parts.

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Specifications:

The pullout performance of the EZ Roof Mount is entirely dependent upon the strength and correct mounting of the Lag Bolt in the roof joist. The pilot hole must not be oversized, the wood must be in serviceable condition, and the lag bolt must have at least 2 inches of thread in the joist timber.

Our tested specification is:

Pullout (uplift): 2160 lbs lowest of 3 tests
 Lateral Deflection: 840 lbs. lowest of 3
 Support (Dead load): 2500 lbs.
 Rain test: UL 441-96, pass

These instructions cover the installation of the EZ Roof mount product line including the following:

- EZ Roof mount with “L” foot, available in silver or black finish K10068-xxx



- EZ Roof mount with standoff, 2-3-5-7 inch K10064-xxx





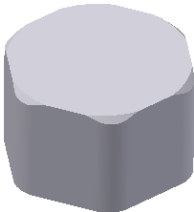

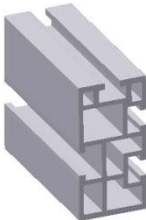
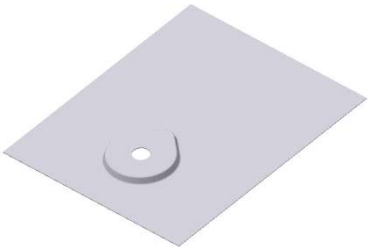
- SunModo “L” foot connection to standard and light rail. K10066-001 and 002 tall.



- EZ Roof Mount with “C” Bracket.

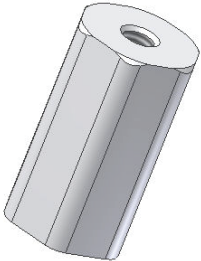

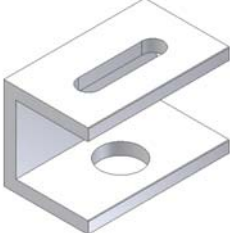


Part List for EZ Roof Mount Kit K10068-001 and K10068-XXX with “L” foot (AL rail not included in the kit):

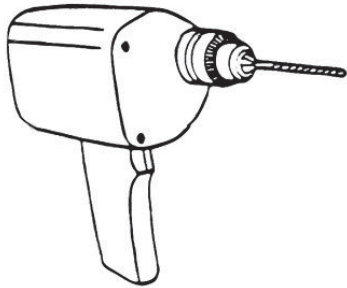
 <p>AL Shoe A20065 & Sealing Washer C10006-001</p>	 <p>5/16X4 Stainless Steel Lag Bolt B15015-004</p>	 <p>AL Hex Cap A20066-001 and – BK1</p>
 <p>AL L Foot Included with EZ Roof L Kit K10068-xxx</p>	 <p>AL Rail (Not Included)</p>	 <p>AL Flashing A20052-001 and -XXX</p>

*Note that –xxx variants are Black, extra height, extra length, and other options.

Different Parts for Standoff Mount, “L” foot on Standoff, and “C” Bracket:

 <p>Standoff- 2-3-5-7 in. Part of EZ Roof Kit K10064-xxx</p>	 <p>L Foot Kit K10066-001 and -XXX</p>	 <p>C Bracket Part of EZ Roof Kit K12005-001</p>
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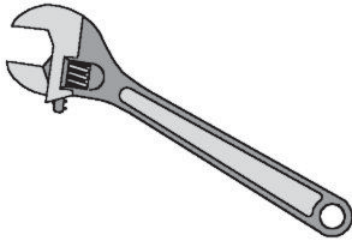
Tools and Supplies needed for Installation:



Electric Drill



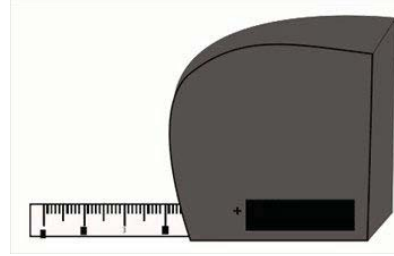
Drill Bit for lag bolt, 7/32 inch diameter.



Adjustable Crescent wrench to fit 1 1/16 inch Hex nut.



3/8 Socket wrench with 9/16 deep socket for lag screws and 7/16 deep socket for mid and end clamps.



Tape measure to layout roof installation.



Anti-seize compound (Permatex 80071 or equivalent).



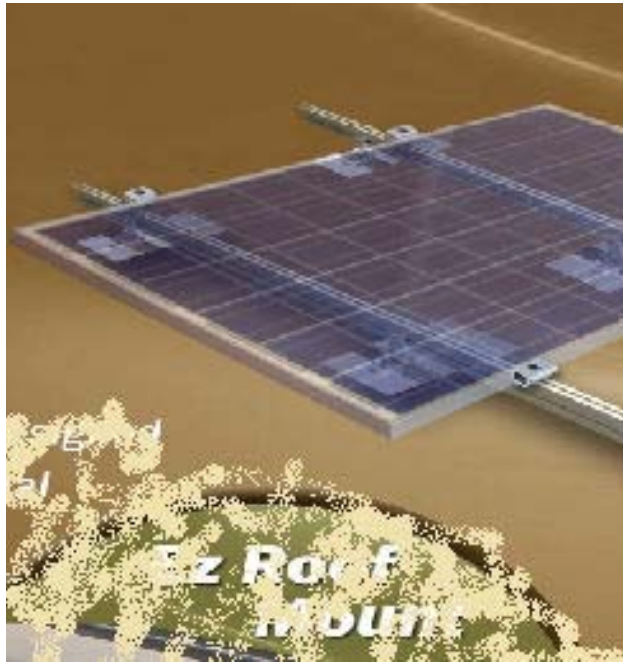
Caulk gun and silicon sealant (GE 1200 construction sealant or equivalent).

Other items that can be useful:

- Chalk or roofers marker to layout roof.
- Adaptor for 3/8 inch socket to drill chuck
- Torque wrench with 9/16 and 1 1/16 sockets. (Lag bolt and Hex cap)

Laying out a Roof Mounted PV System

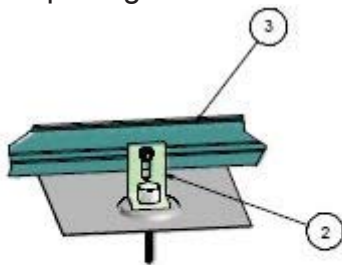
Please refer to our detailed Instruction Manual on solar racking and mounting which covers the following:



3 D view of basic layout.



Basic layout with EZ Roof Mounts on 48 inch spacing E-W



DETAIL A

Mounting detail for EZ Roof Mount with "L" foot.



DETAIL B

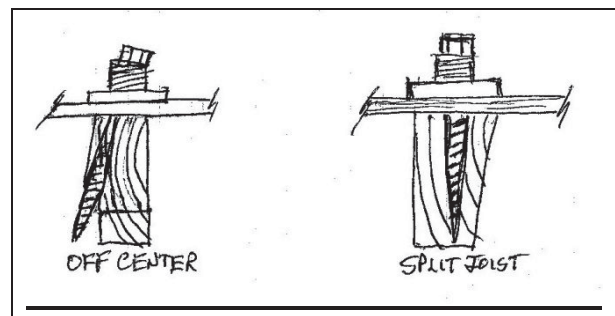
Mid Clamp mount on rail system



DETAIL C

End Clamp mount on rail system

Locating the center of a Roof Joist



It is very important to locate the center of a roof joist, and to drill the pilot hole such that the lag bolt does not come out the side or split the timber member. Use any conventional method to positively locate the center of the rafter or joist.

Installation of the EZ Roof Mount Kit

K10068-xxx

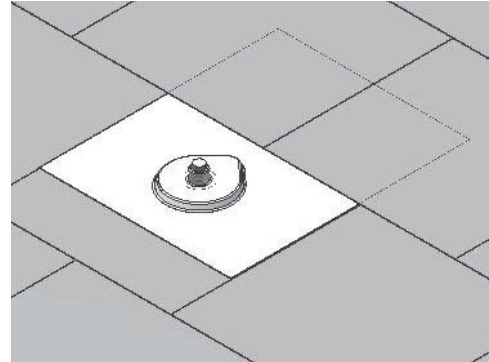
1. From the marked location, move down the roof 2.25 inches from the bottom of the shingle, and drill the pilot hole for the lag bolt with a 7/32 drill bit. For maximum strength, the hole should not be more than 3 inches in depth, and a drill stop may be used to insure this.



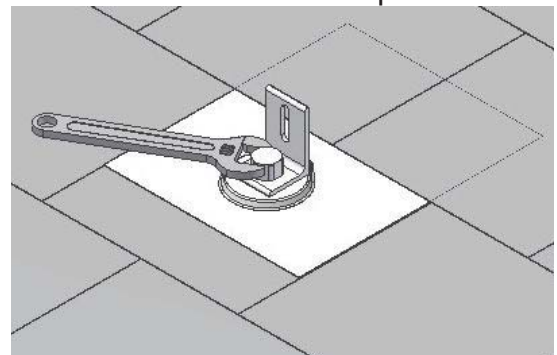
2. Clean sawdust, and fill hole with sealant. Install AL shoe to roof by using 5/16 lag bolt (Use GE 1200 Construction Silicon Sealant or Equivalent)



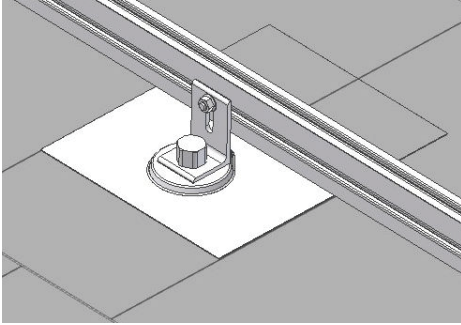
3. Make sure the washer on the threaded shank is positioned correctly. Use roofer bar to lift roof shingle, slide the flashing under shingle, and insert the flashing on threaded shank as shown.



4. Insert "L" foot to AL shoe on top of flashing. Place AL hex cap on shoe, and slightly tighten cap. Use 15 lbs-ft. nominal torque.



5. Install AL rail to "L" foot to the specific orientation. Then, tighten AL hex cap and flange nut to 20 lbs-ft torque.

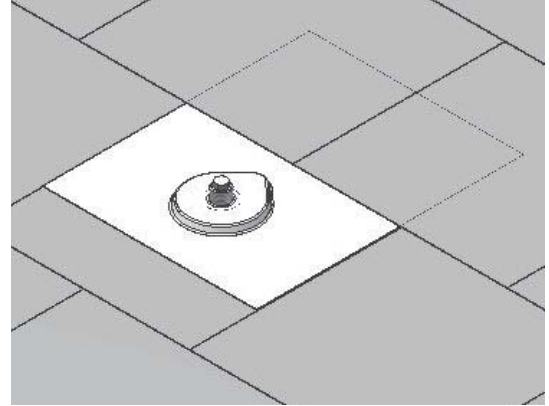


Installation of the EZ Roof Mounting Standoff Kit K10064-xxx

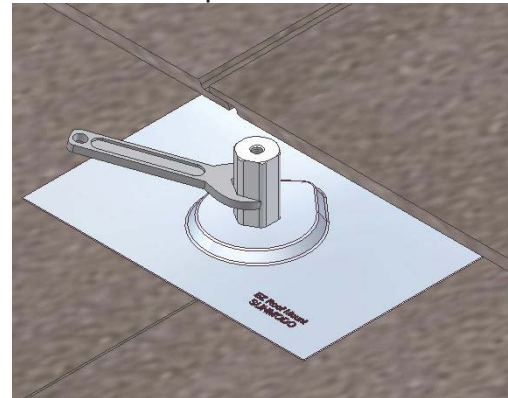
1. Mount the AL shoe the same as shown above.



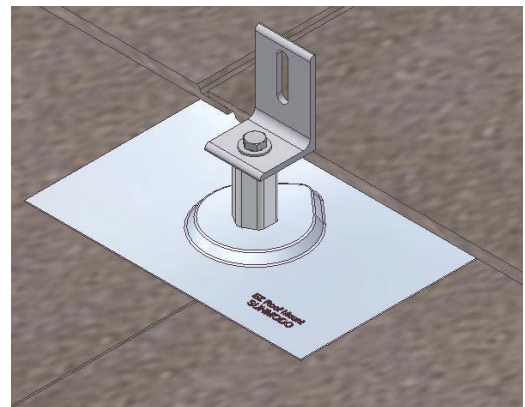
2. Make sure the sealing washer is positioned correctly on the threaded shank of the Aluminum Shoe. Use roofer bar to lift roof shingle, slide the flashing under shingle, and insert the flashing over the threaded shank.



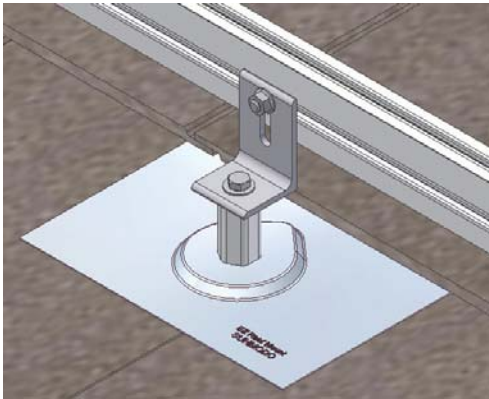
3. Place AL standoff on shoe threads and tighten by hand, then by wrench. Use 15 lbs-ft. nominal torque.



4. Using the 3/8 inch flange bolt (supplied with AL "L" foot) attach to the top of the standoff.

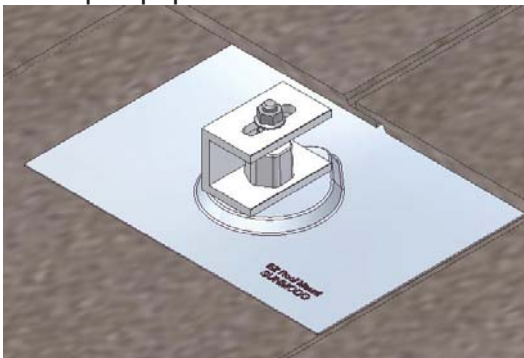


5. Then the Rail can be mounted to the “L” foot as shown below.



Installation of the EZ Roof Mount with C Bracket Kit K12005-001

1. Mount the “C” Bracket using steps 1-3 (See above) of the “L” EZ Roof Mount Kit K10068-001.
2. Mount the “C” bracket instead of an “L” foot, using the Hex Nut. The “C” bracket can be used to mount a variety of rails and other rooftop equipment.



10 Year Product Warranty and 5 Year Finish Warranty

Terms and Conditions

SunModo warrants the original Purchaser that each Mounting Structure to be free from defects in materials and workmanship for a period of 10 years except for the finish, which shall be free

from visible peeling, or cracking under normal atmospheric conditions for a period of 5 years starting from 1) the date of installation at the original site or 2) 30 days after the original purchase. The Finish Warranty does not apply to any foreign residue deposited on the finish. The Finish Warranty is void if the practices specified by AAMA 608& 610-02-“Cleaning and Maintenance for Architecturally Finish Aluminum” (www.aamanet.org) are not followed by Purchaser. The limited warranty is void if the products are not installed properly in accordance with SunModo’s Written Installation instructions, or is not used for the purpose for which it is designed, or the product has been modified, repaired, or reworked not authorized by SunModo.

SunModo Limited Warranty

The Warranty does not cover the product that is damaged resulting from shipping, storage, and misuse or abuse during installation. The limited warranty covers the cost of parts to repair or replace the products to a proper working condition. Transportation and incidental costs associated with warranty items are not reimbursable SunModo Limited Warranty only covers its products and under no circumstances will be liable for indirect or consequential damages resulting from or related use by original purchaser of the product.

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