

## Solar Snow Management Installation Instructions

*NOTE: Not for use on solar arrays where the ground snow load exceeds 50 pounds per square foot (psf).*

### Typical Roof Types:

- Solar PV Arrays

### Solar Snow Management Systems Overview:

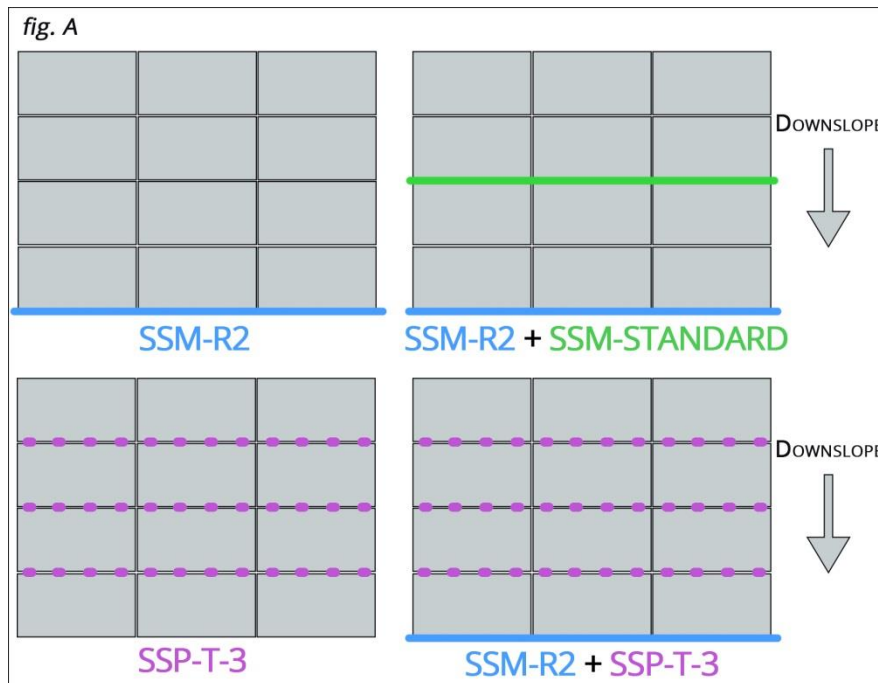
**SSM-R2 System:** The SSM-R2 system is installed only on the eave edge of a solar array.

**SSM-STANDARD System:** The SSM-STANDARD system is installed in horizontal joints between tiers upslope of the solar array eave edge.

**SSP-T-3:** SSP-T-3 Solar Snow Pads are installed in horizontal joints between tiers upslope from the solar array eave edge.

### Typical Solar Snow Retention Layouts/Combinations:

*NOTE: \*fig. A is for reference purposes only and is not a recommended layout.*



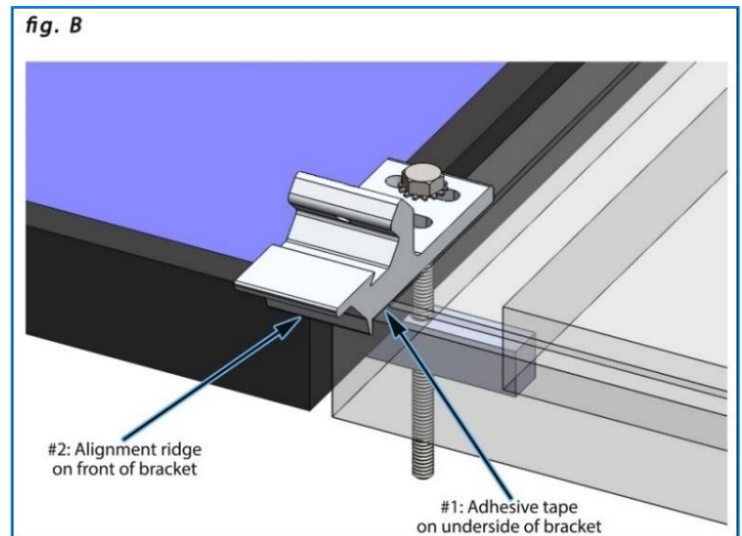
If you have any questions, or need a project-specific layout, please contact us at 888-766-4273.



## SSM-R2 System Installation

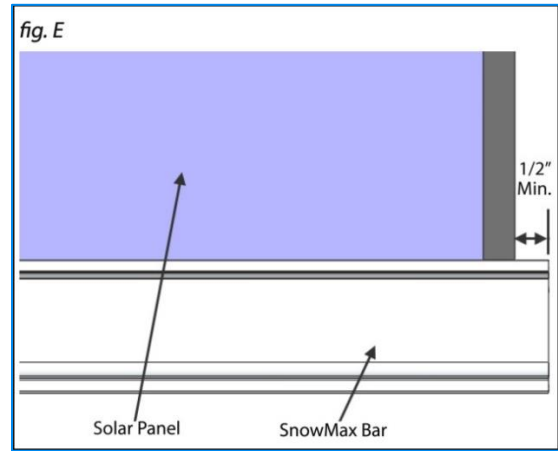
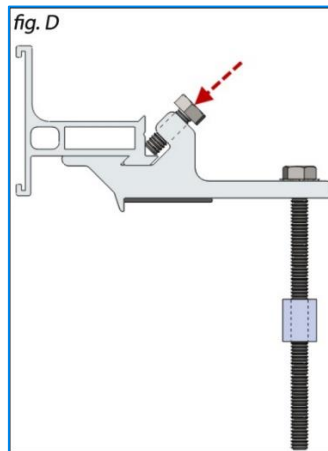
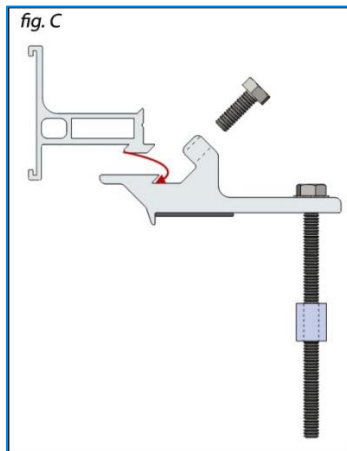
### SSM-R2 Bracket:

1. Remove the release paper from the adhesive tape on the underside of the bracket (*fig. B, #1*).
2. Drop the T-nut in the vertical joints between solar panels. Use the alignment ridge on the front of the bracket (*fig. B, #2*) to secure placement on the panel edge.
3. With T-nut perpendicular to panel edge, torque bolt with T-nut to a minimum of 120 inch-pounds.

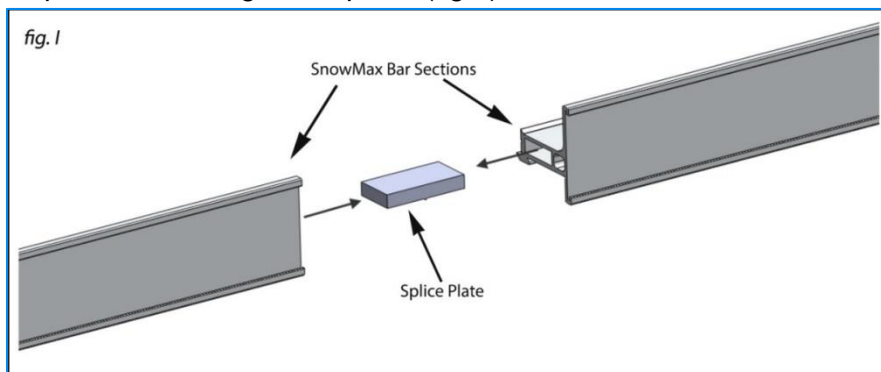


### SNOWMAX-BAR (2" bar):

4. Place the bar into the bracket's dovetail feature (*fig. C*). Install the Lock Bolt (*fig. D*). Bar must extend a minimum of 1/2" beyond the sides of the solar array (*fig. E*) to accommodate the SSM-R2-END bracket.

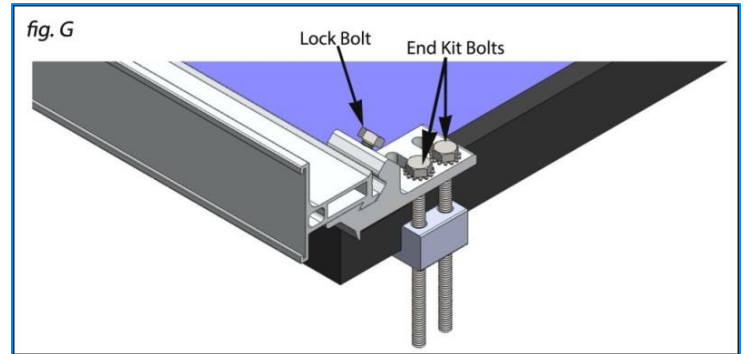


5. To connect two sections of SNOWMAX-BAR, slide a SNOWMAX SPLICE PLATE into the hollow chamber of the SNOWMAX-BAR. The small ridge on one side of the Splice Plate (which can be facing up or down) keeps it from sliding out of place (*fig. I*).

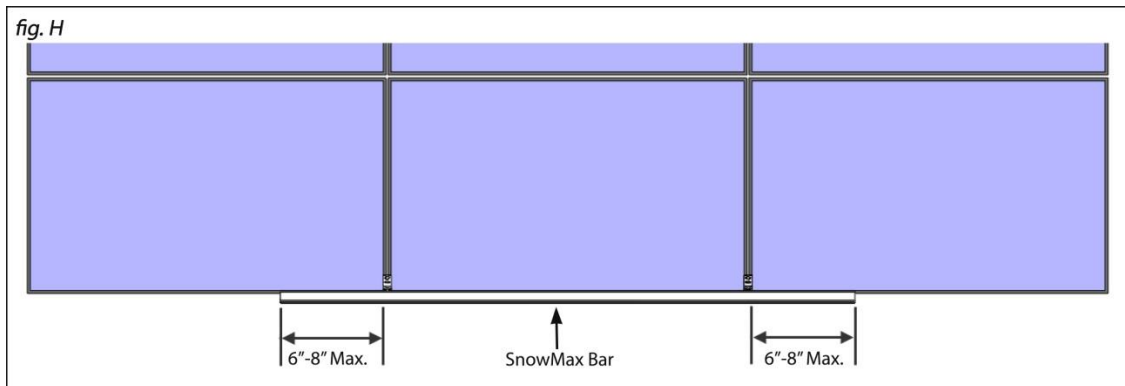


### SSM-R2-END Bracket:

6. Remove the release paper from the adhesive tape on the underside of the bracket.
7. Position the SSM-R2-END bracket over the extended end of the SNOWMAX-BAR until the Bottom Clamp lines up with the side of the solar panel frame.
8. Tighten Lock Bolt to secure the SNOWMAX-BAR. Tighten the bolts to secure Bottom Clamp to bottom of solar panel frame (*fig. G*).



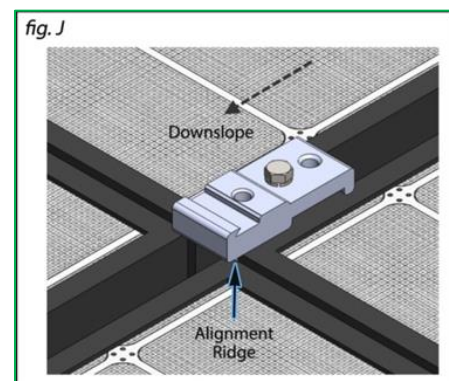
**NOTE:** Installations that do not extend the full length of the panel do not require SSM-R2-END brackets. The SNOWMAX-BAR should not extend more than 6" - 8" from the last SSM-R2 bracket (*fig. H*).



## SSM-STANDARD System Installation

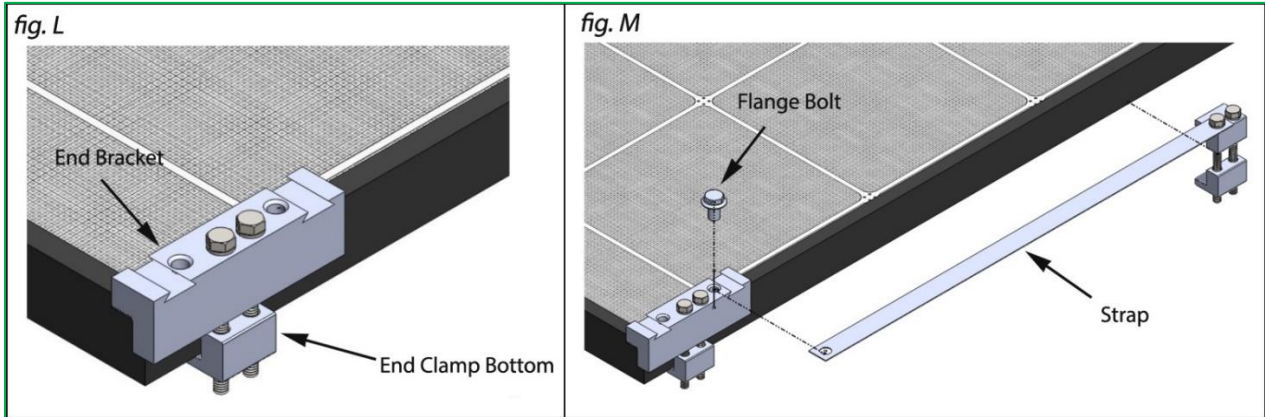
### SSM-BRKT Bracket:

1. Drop the T-nut in the vertical joints between solar panels. Position the bracket on the panel frame so that the alignment ridge sits against the upslope panel (*fig. J*).
2. With T-nut perpendicular to panel edge, torque bolt with T-nut to a minimum of 120 inch-pounds.



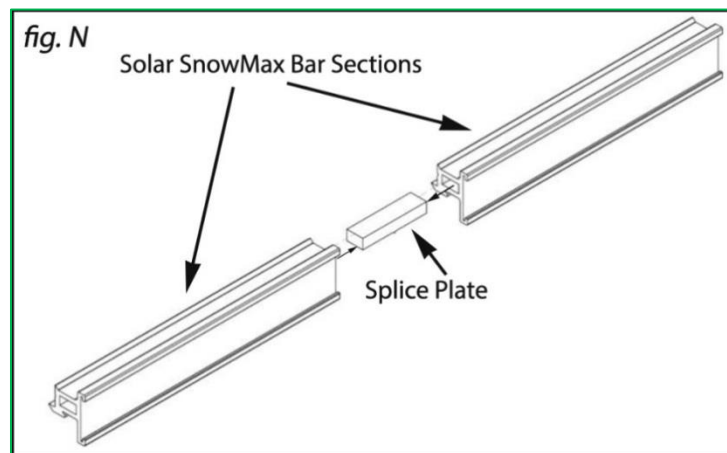
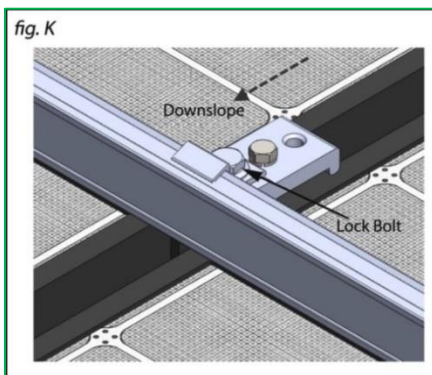
**SSM-END BRKT Bracket:**

3. Set the End Bracket & End Clamp Bottom (*fig. L*) on the bottom corner of module. Align with the SSM-BRKT brackets installed on that tier. Torque bolts to 120 inch-pounds.
4. Use the supplied flange bolt to secure strap (*fig. M*). Install the upper clamp.



**SSM-BAR (1" Bar):**

5. Drop SSM-BAR into the bracket's dovetail. Install the washer and tighten the Lock Bolt (*fig. K*).
6. To connect two sections of SSM-BAR, slide a SSM SPLICE PLATE into the hollow chamber of the SSM-BAR. The small ridge on one side of the Splice Plate (which can be facing up or down) keeps it from sliding out of place (*fig. N*).



**SSM-BRKT with SSM-BRKT ASM-BLK:**

*In situations where a solar panel is missing from an array, in the below tier of an array, or when panels overhang below tiers, you will need to install a strap with the SSM-BRKT Bracket (ex: fig. O).*

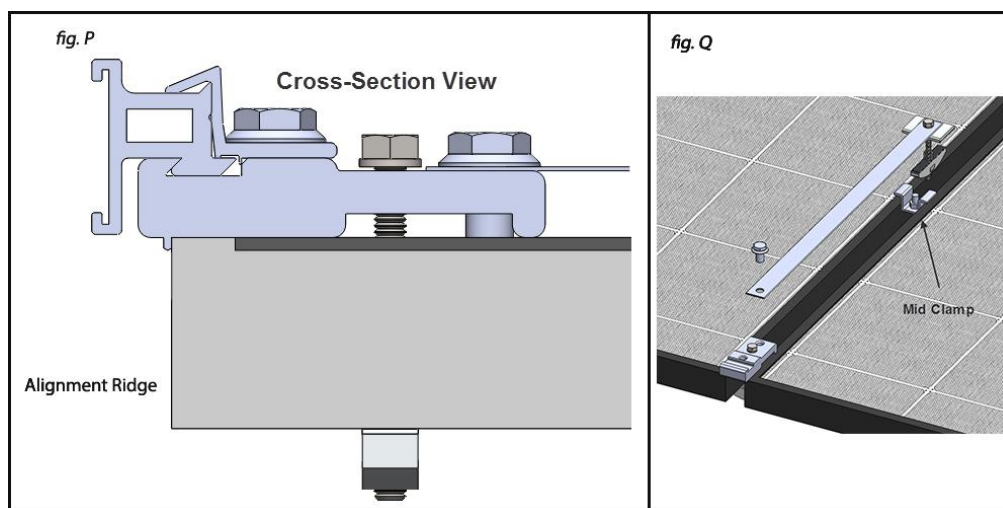


7. Install the bracket so that the alignment ridge tightly abuts the leading edge of tier (fig. P).

8. Clamp bracket into place using T-nut assembly and torque to 120 inch-pounds.

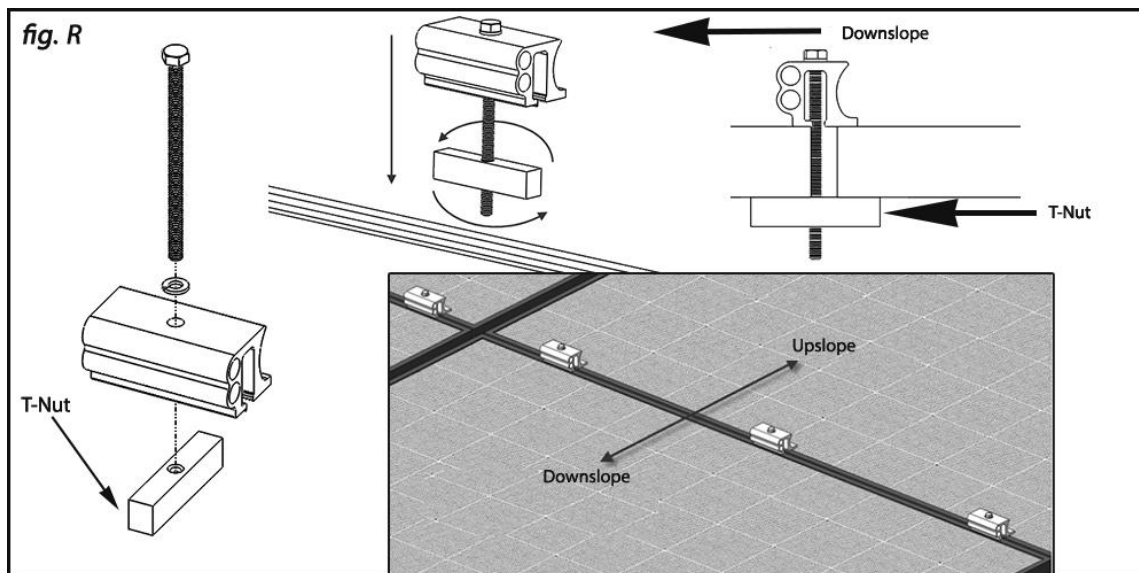
*NOTE: For SSM assemblies installed along the leading edge of a tier, a strap is always installed to prevent the system from sliding down*

9. Install the Strap with T-nut, placing the T-nut above the lowest racking mid clamp (fig. Q) so that it cannot slide down. This will vary from array to array depending on rack locations. Torque bolts to 120 inch-pounds.



### SSP-T-3 Installation:

1. The first row of SSP-T-3 (Solar Snow Pad) should be installed in the horizontal joint between the top of the 1st panel and the bottom of the 2nd panel (*fig. R*). **NOTE: Max panel gap is  $\frac{3}{4}$ "**
2. For landscape orientation arrays, four SSP-T-3's should be installed per panel. For portrait orientation arrays, three SSP-T-3's should be installed per panel. For either orientation, SSP-T-3's should be evenly spaced within the panel gap.
3. Drop the T-nut in the horizontal joint between the panels. With T-nut perpendicular to the joint, torque bolt to 120 inch-pounds.



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