

VAB SNOW-RAIL INSTALLATION INSTRUCTIONS

VAB ACECLAMP®
patent pending **A2** SSMR CLAMP

Brackets are available in Left and Right configurations. See the diagrams below to help you determine which bracket is right for you.



REQUIRED COMPONENTS & TOOLS



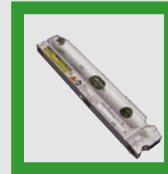
Industrial grade screw gun



5/32" hex drive bit & 9/16" hex socket



Sawzall



chalk line or laser



3/16" hex drive bit



Dial indicator torque wrench

BEFORE YOU GET ON THE ROOF!

It is essential to verify you have the correct bracket before the job begins.

Please take the time to verify that you have the correct bracket for your job.

While facing the roof, if the angled portion of the eave is to the left, use a LEFT bracket. If it's angled to the right, you'll need a RIGHT bracket.



Shown: LEFT Bracket Required

Shown: RIGHT Bracket Required

L
LEFT BRACKET
No markings



R
RIGHT BRACKET
Cut with an R marking

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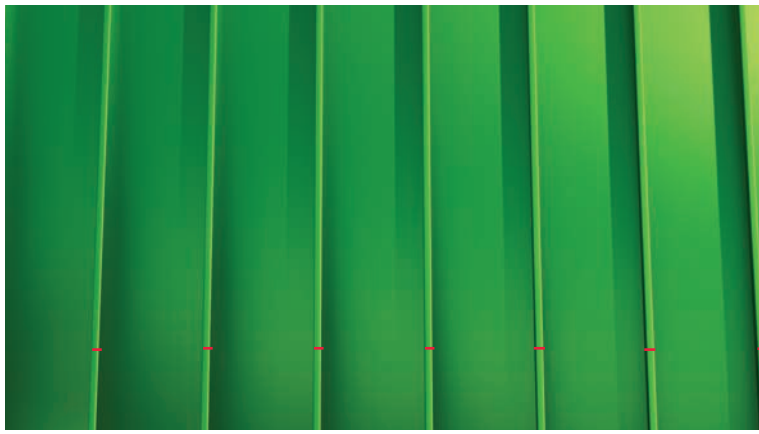
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STEP # 1

Snap a line or use a laser to line up the brackets on the roof panel seams, parallel to the eave or gutter. A general rule is that the snow rail system closest to the eaves should be installed 12" above the gutter or directly over the load bearing wall, whenever possible.



chalk line or laser



STEP # 2

Begin placing VAB assemblies as shown in the photos. Be sure that the slope on the VAB faces the downward slope of the roof as shown. Depending upon your installation scenario, you may need to reorient either your A2® roof clamps or brackets.

IMPORTANT: The VAB bracket is designed to be positioned so that the snow load is applied in the direction as shown in the "correct" photo.



✓ CORRECT!



✗ INCORRECT

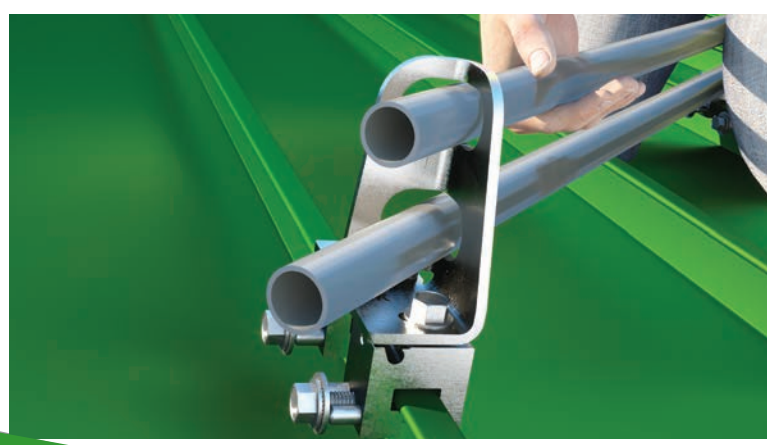
STEP # 3

Use a 9/16" hex bit in your screw gun to attach the AceClamp® A2® and tighten to the torque values that are appropriate for your panel material and thickness. The brackets are loosely attached to the AceClamp® A2® at the factory for your convenience. They should be tightened to 100 in-lb once in position on the roof seam. Please see the AceClamp® A2® Data Sheet or contact AceClamp® engineering for recommended torque limits.



STEP # 4

Carefully insert the 1" diameter aluminum tubing through the holes in the brackets and join the 8' lengths of tubing together with the Internal Connectors. (Note: cut ends of tubing may need to be lightly deburred to aid the installation of the Internal Connectors.)



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(instructions continued)

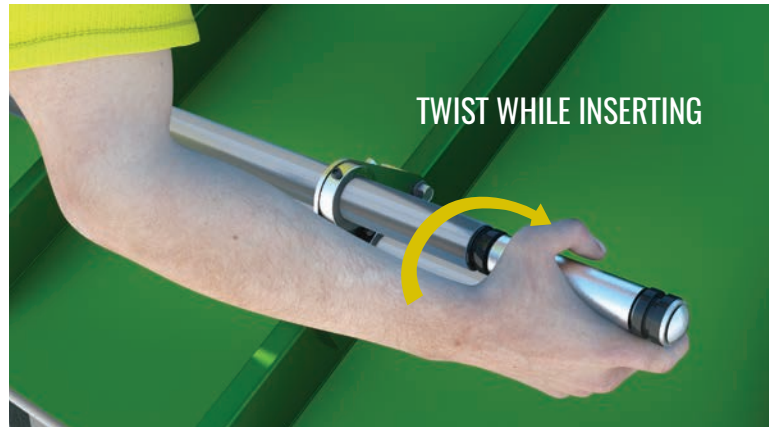
STEP
5^a

Insert the Internal Coupling into the end of one piece of tubing until one half of the aluminum body is still exposed.



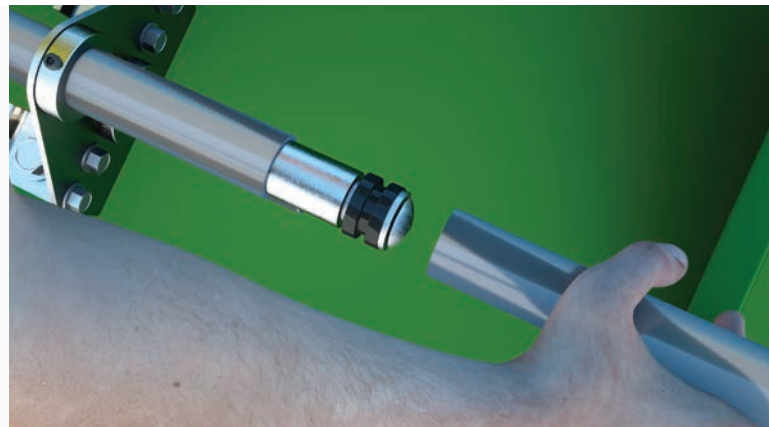
STEP
5^b

Twist the exposed portion of the body clockwise until there is tension between the rubber gasket and the inside of the tubing. Continue tightening until the Internal Connector cannot be pulled out of the tubing.



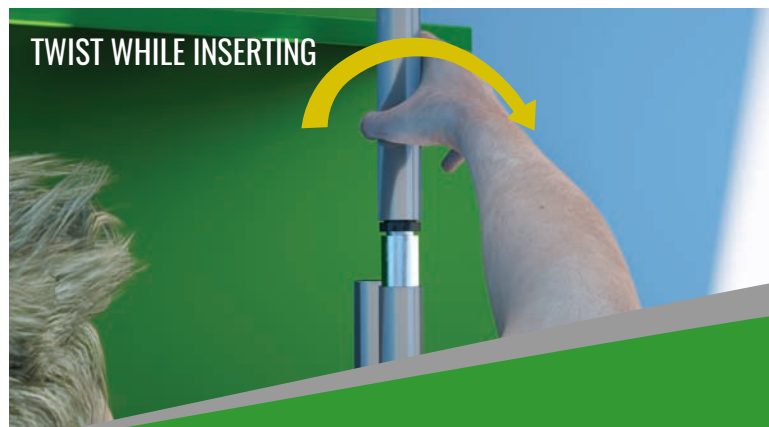
STEP
6^a

Insert the next section of the tubing through the brackets and slide it over the exposed portion of the Internal Connector.



STEP
6^b

Twist the new section of the tubing clockwise until the tubing cannot be pulled from the Internal Connector.



(instructions continued on back)

*Photos shown are for representative purposes only. Actual product may vary. Design subject to change without notice. Always use OSHA approved safety equipment and procedures when working on a roof. Not responsible for typographical errors.

VAB SNOW-RAIL INSTALLATION INSTRUCTIONS

(Instructions continued)

STEP # 6C

Check to see that there is no gap between the lengths of tubing. If there is a gap simply twist the tubing counter-clockwise and push the tubing together and turn clockwise until it is tight again.



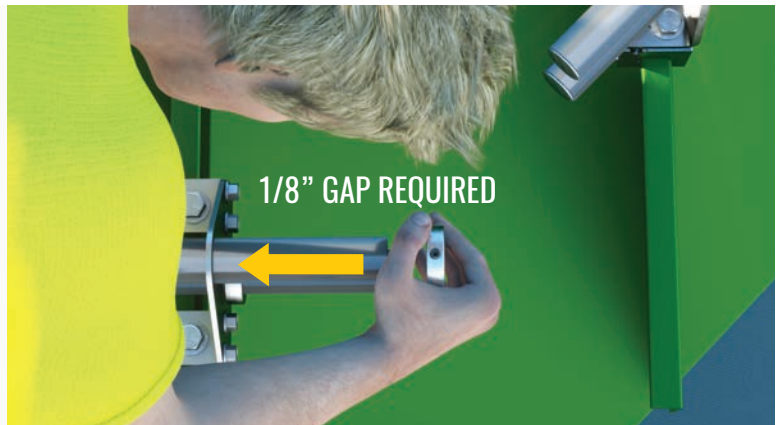
STEP # 7

Continue to assemble additional lengths of tubing until either the run is complete or you have installed 100 feet of tubing. Continuous runs of tubing should be limited to 100 feet max to allow for thermal expansion.



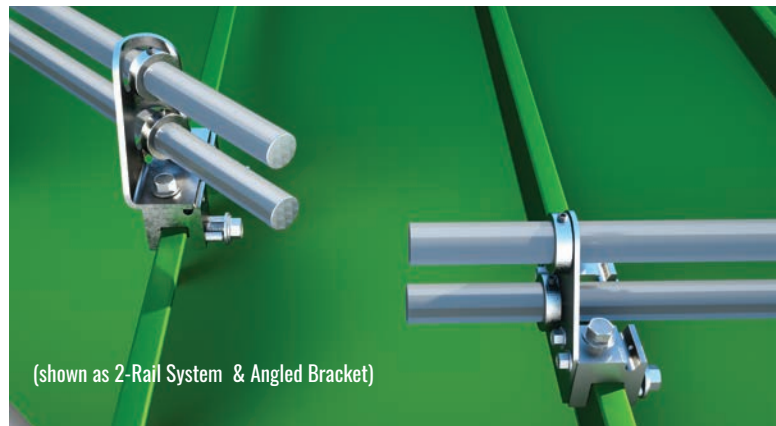
STEP # 8

Install Collars at each end of run of tubing outside of the end most brackets to prevent tubing from shifting from side to side. DO NOT install Collar right against the bracket. A minimum of 1/8" clearance should be provided per 8' length of run to allow for thermal expansion up to a maximum of 1" total clearance for the 100' max. run. Tighten collars with the 5/32" hex drive bit until the Collar is secure.



STEP # 9

Ensure that tubing does not extend no more than 6" beyond either end bracket. Cut or adjust if necessary.



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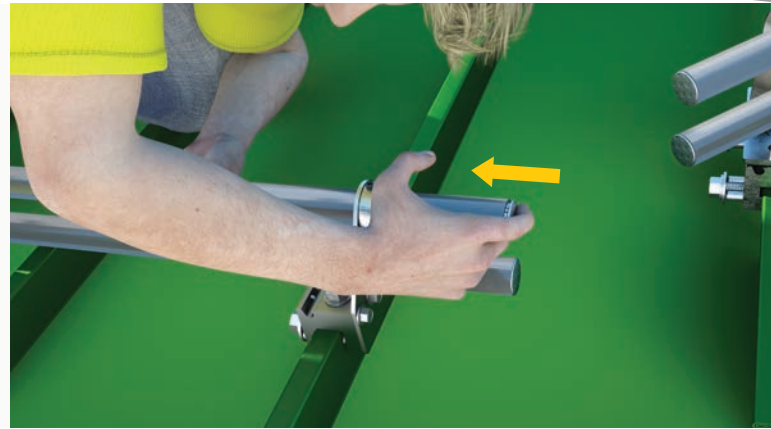
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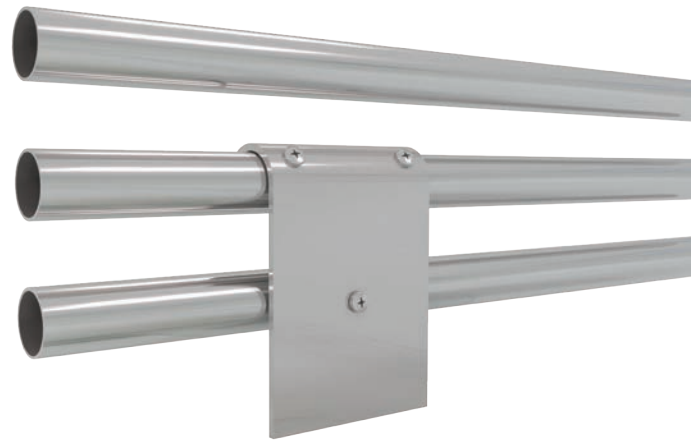
STEP
#10

End Plugs finish off your Snow-Rail and keep moisture and insects from the inside of the tubing. Simply press the End Plug into the end of tube.



STEP
#11

Ice Flags, if needed, should be installed on the top rail of two-rail systems and the middle rail of three-rail systems. This will control the downward sliding of the snow as it melts.



Installation Tips & Precautions

- Continuous runs of Snow-Rails should be limited to 100 feet to allow for thermal expansion.
- Allow clearance between Collars and the brackets on each end of run of Snow-Rail tubing to allow for thermal expansion.
- Install each AceClamp® to the recommended torque limit for the panel material and thickness. (See AceClamp® A2® Data Sheets or contact AceClamp® Engineering.)
- Trim tubing if necessary so that tubing does not extend more than 6" beyond each end bracket.
- At no time should you use the AceClamp® A2® as part of your fall- protection system!



The management at PMC Industries, Inc. is committed to providing you, our customer the fastest, easiest and safest attachment devices for your snow retention system. We welcome suggestions that will make your job easier.

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