

Universal Bracket Installation Guide

Thank you for purchasing your new adjustable universal bracket from *Attic Breeze*. Our custom solar panel mounting brackets have been carefully designed to provide easy installation with minimal tools or experience required. Before beginning, please completely review this guide and the tools required for installation.

Application

This guide applies to installation of the Attic Breeze Universal Bracket for use with fan units which feature a remote mounted solar panel. The universal bracket is designed to allow the solar panel to be mounted in any direction and tilted at an angle of up to 90 degrees from horizontal for optimum sun exposure.

Parts & Equipment

The following parts and equipment are included for your installation:

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|--|-------------------------------------|
| (1) <i>Attic Breeze</i> Universal Bracket arm | (2) ¼" stainless steel hardware set |
| (1) <i>Attic Breeze</i> Universal Bracket base | (4) ⅝" stainless steel hardware set |

What's Needed

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| • cordless drill with nut driver attachments | • lag screws, retaining bolts, or U-bolts |
| • 7/16" & 1/2" sockets and wrenches | • roofing-grade weatherproof sealant |

Getting Started

Choose a location to install the solar panel that will offer optimum sun exposure throughout the day. The universal bracket may be mounted on a flat roof, sloped roof, vertical wall, or on a pole. For best results, pick an area where the solar panel can be oriented in a southern direction and is not shaded or otherwise blocked from the sun for extended periods.

Bracket Assembly

Place the solar panel face down on a flat surface where the bracket can be assembled.

NOTE: If the edges of solar panel are painted, make sure to protect the painted finish while assembling the universal bracket.

Insert a ¼" hex head bolt with a flat washer through the top mounting hole on the universal bracket arm and hand tighten to the solar panel with a ¼" lock washer and hex nut. Using the center mounting holes on the solar panel, do the same for the bottom mounting slot on the bracket as shown in Figure 1. Tightly secure all attachment bolts to the solar panel using the 7/16" socket and wrench.

Next, insert the universal bracket base into the channel of the attached bracket arm. Align the curved slots in the bracket arm with the corresponding holes in the base. Insert a ⅝" hex head bolt with a flat washer through the brackets and hand tighten the two pieces together using a ⅝" flat washer, lock washer, and hex nut as shown in Figure 2. Do the same for the remaining curved slot holes on the bracket arm.

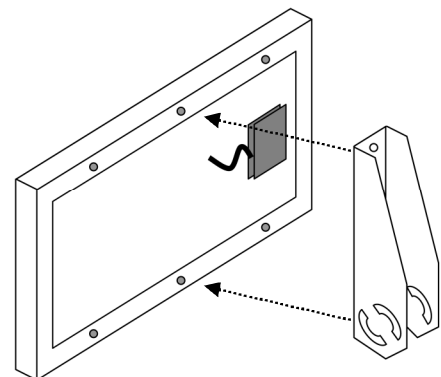


Figure 1 - Mounting the Bracket Arm

Mounting the Bracket

The universal bracket can be mounted in a variety of ways depending on the specific needs of your project. When mounting the bracket on either a flat roof, sloped roof, or vertical wall, use the appropriate lag screws or retaining bolts to securely fasten the mounting bracket base to your roof or wall as required for your specific roof type and the building code requirements in your area (see Figures 3 & 4). Make sure to apply a roofing-grade weatherproof sealant to all of the mounting screws or retaining bolts. Alternatively, your universal bracket can also be pole mounted using a U-bolt clamp (see Figure 5). The bracket is designed to accept pole sizes ranging from 1 to 4 inches in diameter.

After the mounting the bracket, adjust the solar panel to the desired tilt angle and tightly secure all of the $\frac{5}{16}$ " bracket adjustment bolts using the $\frac{1}{2}$ " socket and wrench. Connect the solar panel power plug to the remote power cable. If the remote power cable is not long enough to reach the location where you wish to mount your solar panel, please consult your *Attic Breeze* dealer for additional cable options.

NOTE: If your remote power cable has been routed through a hole in either the roof decking or wall, make sure to secure the remote power cable so that it cannot move and weatherproof any penetrations with the roofing-grade weatherproof sealant.

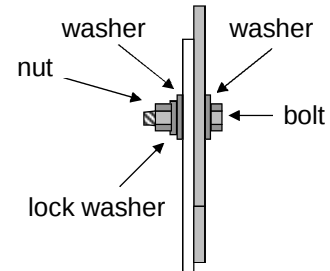
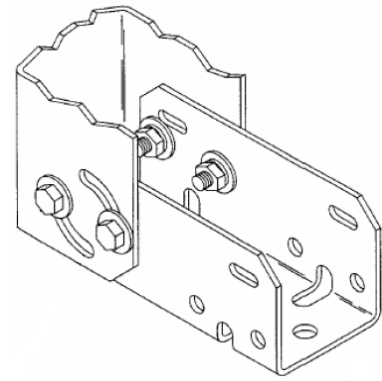


Figure 2 - Bracket Assembly

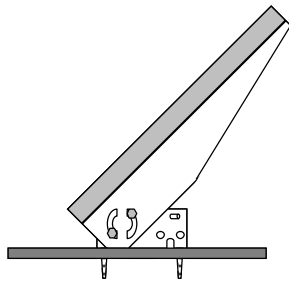


Figure 3 - Roof Mount

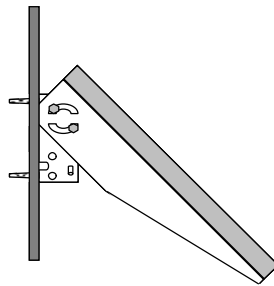


Figure 4 - Wall Mount

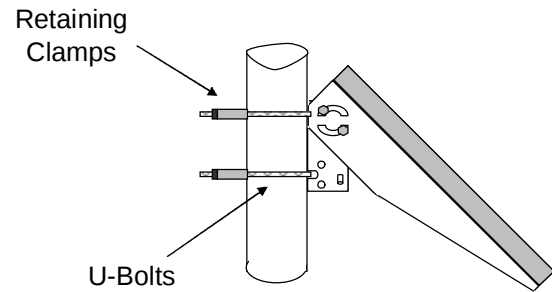


Figure 5 - Pole Mount

Mounting Angle & Orientation

For optimum performance throughout North America, the solar panel included with your fan unit should always be installed facing toward the south if possible. This will give the solar panel the best average sun exposure throughout the day (see Figure 6).

Determining the optimum angle of inclination will depend on your specific location. As a general rule, the solar panel should be tilted to the same angle in degrees as your latitude coordinates (roughly 35-45 degrees from horizontal) minus about 15 degrees. Using this approximate angle of inclination will allow your solar panel to receive optimum sun exposure during the summer months for maximum seasonal performance.

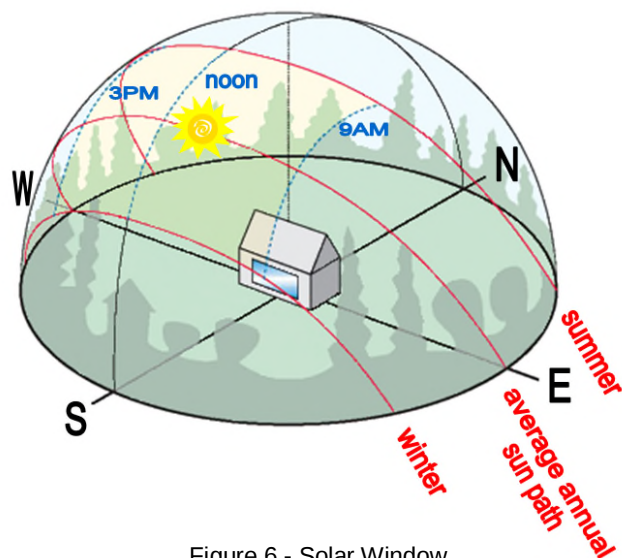


Figure 6 - Solar Window