

March 28, 2013

Sol Attach, LLC  
Attn: Kevin Stapleton  
16238 Bear Run  
San Antonio, TX 78247



Re: Solar Mounting System for Pitched Rooftops with Sol Attach Roof Mounting System in Arizona

To Whom It May Concern:

Anchor Engineering, Inc. has reviewed the Sol Attach Roof Mounting System for the design assumptions outlined below and we have concluded that the Sol Attach Roof Mounting System is in compliance with the following codes/standards.

1. ASCE 7-05 – Minimum Design Loads for Buildings and Other Structures, by ASCE/SEI, 2005.
2. ASCE 7-10 – Minimum Design Loads for Buildings and Other Structures, by ASCE/SEI, 2010.
3. 2006 International Building Code, by International Code Council, Inc., 2006.
4. 2009 International Building Code, by International Code Council, Inc., 2009.
5. 2012 International Building Code, by International Code Council, Inc., 2012.

#### Design Assumptions:

- Snow load of no more than 40 psf (pounds per square foot).
- Ultimate Wind Load ( $V_{ult}$ ) of no more than 155 mph (miles per hour), Basic Wind Speed ( $V_{ASD}$ ) of no more than 120 mph.
- Exposure Category A, B or C as defined by ASCE 7-10/ASCE 7-05.
- Maximum mean roof height of no more than 30'-0" as defined by ASCE 7-10/ASCE 7-05.
- Importance Factor of no more than 1.0 as defined by ASCE 7-10/ASCE 7-05.
- Roof Slopes from 7 to 45 degrees.
- Roof sheathing minimum thickness of 7/16" OSB
- Dry service conditions.
- Array may be located within roof zones 1, 2, or 3.
- Analysis of the mount is based upon the maximum effects of either the largest gravity loads or wind uplift loads. The point loads (either positive or negative) can act in either direction depending upon the type of loading (i.e. wind, snow...etc.).
- Fasteners installed per manufacturer specifications.
- Four PV mounts per PV module such that adjacent modules share two PV mounts.

#### Product Specifications:

- Aluminum alloy is 6061-T6.
- (6) #12 Kwikseal II WoodBinders per Sol Attach PV mount at Basic Wind Speed ( $V_{ASD}$ ) of 110-120 mph and mounted on roof slopes between 7 and 27 degrees.
- (4) #12 Kwikseal II WoodBinders per Sol Attach PV mount at Basic Wind Speed ( $V_{ASD}$ ) up to and including 100 mph and mounted on roof slopes between 7 and 27 degrees.
- (4) #12 Kwikseal II WoodBinders or (4) #12 Woodgrip XG fasteners per Sol Attach PV mount at Basic Wind Speed ( $V_{ASD}$ ) up to and including 120 mph and mounted on roof slopes between 27 and 45 degrees.

Module Specifications:

- Modules may be installed in landscape or portrait orientation.
- Modules may have a maximum short side dimension of 39.1”.
- Modules may have a maximum long side dimension of 77.1”.
- Modules may be a maximum of 59.5lb.

Please see attached data sheets for the Sol Attach Roof Mounting System specification sheet.

The Sol Attach Roof Mounting System was evaluated for pull-out resistance of the fasteners and punching shear in the OSB. Review of any building structural element is outside the scope of this letter.

Should questions arise, or if further information is required, please contact our office.

Sincerely,  
Anchor Engineering, Inc.

Reviewed by:



Dustin C. Stallings, E.I.  
Design Engineer I



Patrick J. Kervin, P.E.  
Principal