January 7, 2019

SunModo Corporation 14800 NE 65th St. Vancouver, WA 98682 Attn.: Tony Liu ARC DESIGN & CONSULTING, LLC.

Re: K50532-001 Rev C EZ Grip Attachment- Load Capacities in Min. 26 GA Metal Roofs

As requested, ARC Design & Consulting, LLC, has performed a comprehensive structural review of the subject-referenced SunModo roof attachment product to determine its allowable loads when installed in 26 GA (or thicker) metal roofs using approved screws (as specified below).

Assumptions of Design

- Minimum 26 GA metal roof (80 ksi) or 24 GA metal roof (50 ksi) [ASTM A792/A1011/A653/A572/A529]
- Screw Specifications
 - Minimum ¼-20 self-drilling screw
 - o Gr. 2 carbon steel or 410 stainless steel
- No eccentric loads (no base moment)

K50532-001 Rev C EZ Grip Load Capacities		
	ULTIMATE	FOS = 3
PULL-OUT	948 lbs.	316 lbs.
SHEAR*	474 lbs.	158 lbs.

^{*}Shear loads based on pull-out loads multiplied by a factor of 0.5

Reference Documents

- D10149-V002 EZ Grip Metal Mount Installation Instructions SunModo
- Section and material data provided by SunModo Corporation
- ASCE/SEI 7-10 Minimum Design Loads for Buildings & Other Structures
- ADM1-2010 Aluminum Design Manual
- Blazer Self Drilling Screws Pullout Loads

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