July 10, 2023

SnapNrack
775 Fiero Lane, Ste. 200
San Luis Obispo, CA 93401

Attn.: SnapNrack - Engineering Department

Re: Engineering Certification for the SnapNrack 'MightyMount Metal-T™' Deck-Mount Rail-less System (2022-11268)

The SnapNrack MightyMount Metal-T™ system is a deck-mounted, rail-less racking system intended for open and enclosed structures with metal roof decks. The system simplifies installation by mounting a solar panel directly into an existing metal roof deck. The SnapNrack MightyMount Metal-T™ system shall be installed per the manufacturer's installation manual for the system tables to be applicable.

PZSE, Inc. - Structural Engineers has reviewed SnapNrack's 'MightyMount Metal-T™' System material properties, FEA modeling report and component UL 2703 performance-based testing. All information, data and analysis contained within the SnapNrack 'MightyMount Metal-T™' installation tables are based on, and comply with the following codes:

1. Minimum Design Loads for Buildings and other Structures, ASCE/SEI 7-16
2. 2006-2021 International Building Code, by International Code Council, Inc.
3. 2006-2021 International Residential Code, by International Code Council, Inc.
4. AC428, Acceptance Criteria for Modular Framing Systems Used to Support Photovoltaic (PV) Panels, November 1, 2012 by ICC-ES
5. 2018 National Design Specification for Wood Construction (NDS), by the American Wood Council

Following are typical specifications to meet the above code requirements:

Design Criteria:
Ground Snow Load = 0 - 50 (psf)
Basic Wind Speed = 85 - 130 (mph)
Roof Mean Height = 0 - 30 (ft)
Roof Pitch = 0 - 20 (degrees)
Exposure Category = B, C

Installation Tables:
For mount requirements and system applicability see the following 'MightyMount Metal-T™' Installation Tables.

Cantilever:
Maximum Solar Panel cantilever length is L/4, where "L" is the Panel dimension adjacent to the cantilever, unless the Panel manufacturer has a pre-specified clamping zone.

Clearance:
1" to 10" clear from top of roof to top of solar panel.

Tolerance(s):
A single use - 1.0" tolerance for any specified dimension in this report is allowed for installation.

Installation Orientation: Landscape - Solar Panel long dimension is parallel to ridge/eave line of roof and the solar panel is mounted on the short side.

Portrait – Solar Panel short dimension is parallel to ridge/eave line of roof and the solar panel is mounted on the short side.

'MightyMount Metal-T™ System Mount Tables assume maximum panel dimensions for the following:

Solar Panel 1 – 21.25 ft^2 (Maximum)
Solar Panel 2 – 22.17 ft^2 (Maximum)
Solar Panel 3 – 26.89 ft^2 (Maximum)

Design Reactions:

The standard installation tables use the following maximum reactions:

'MightyMount Metal-T™' Design Reactions		
Downward	Uplift	Lateral (side loads)
528.0 lbs	528.0 lbs	200.0 lbs

For alternate roof decks, anchorage-fasteners must be designed for the above design reactions.

Standard Attachments to Metal Roofs (Open or Enclosed):
Track component assumed to lay flat on roof surface, unimpeded by the roof profile. The track component is secured to the roof with **#14 SDST screws**. The min. number of required screws is shown in the table below (assuming "X" for project specific design criteria on the Installation Table).

MightMount 'Metal-T™' Attachment Table	
Roof Deck Ga. Thickness	(#) of Screws
Cold Formed	
20 GA	6
22 GA	6
24 GA	8
26 GA	8
Aluminum	(#) of Screws
24 GA	8

Alternate Attachment to Metal Roofs (Open or Enclosed):
Site specific design criteria may not reach the maximum design reactions for the system and thus the standard attachment table may be stronger than required. Alternate attachments to a roof may be used when the attachment (fasteners) is engineered by a design professional. The site-specific uplift, downward and lateral reactions are provided in Appendix A. Typical screw capacities are shown in Appendix B for ease of reference.

Enclosed Structure Components and Cladding Roof Zones:
The Edge Zones of the roof shall be determined based on the building's least horizontal dimension (LHD). The Edge Zone, "a", is equal to 10% of the LHD (a = 0.1 * LHD) where "a" shall not be taken as less than 3 feet. For this packet, we assume building LHD less than 30 feet. For greater values, further analysis is required to determine proper Edge Zones. See ASCE 7-16 Figure 30.3-2A-I for roof zones.

Open Structure Components and Cladding Roof Zones:
The Edge Zones of the roof shall be determined based on the building's least horizontal dimension (LHD). The Edge Zone, "a", is equal to 10% of the LHD (a = 0.1 * LHD) where "a" shall not be taken as less than 3 feet. For this packet, we assume building LHD less than 30 feet. For greater values, further analysis is required to determine proper Edge Zones. See ASCE 7-16 Figure 30.7-1 for roof zones.

Panel with Support Mounts in Multiple Roof Zones:
Edge and Corner Zone spacings (Zone 2 & 3, respectively) apply only to mounts located in those Zones, not to all the mounts supporting the solar panel.

Wind Notes:
1) Tables are determined for racking system only and do not include roof capacity check.
2) Risk Category II per ASCE 7-10 & 7-16.
3) Topographic factor, kzt is 1.0.
4) Average parapet height is 0.0 ft.
5) Wind speeds are LRFD values.
6) Attachment spacing(s) apply to a seismic design category E or less.

<u>Structural Details</u>

Part Number:	Description:
SNR-DC-00600	Mighty Mount Metal T™, System Overview
SNR-DC-00601	Mighty Mount Metal T™, Attachment Detail, Corrugated
SNR-DC-00602	Mighty Mount Metal T™, System Overview, Flush Mount

Design Responsibility:
These tables are intended to be used under the responsible charge of a registered design professional where required by the authority having jurisdiction. In all cases, these tables should be used under the direction of a design professional with sufficient structural engineering knowledge and experience to be able to:

- Evaluate whether these tables are applicable to the project, and
- Understand and determine the appropriate values for all input parameters of these tables.

This letter certifies that the SnapNrack 'MightyMount Metal-T™' Deck-Mount Rail-less System, when installed according to the limitations of this letter and the attached spacing tables, is in compliance with the above codes and loading criteria. This certification excludes evaluation of the building structure to support the loads imposed on the building by the array; including, but not limited to: strength and deflection of structural framing members, fastening and/or strength of roofing materials, and/or the effects of snow accumulation on the roof. This requires additional knowledge of the building and is outside the scope of the certification of this racking system.

If you have any questions on the above, do not hesitate to call.

Prepared by:
PZSE, Inc. – Structural Engineers
Roseville, CA

SnapNrack 'MightyMount Metal-T' Zone 1 / Zone 2 / Zone 3 : (X = System is applicable, NA = Not Applicable)
[0-30 ft]

Solar Panel 1 - 21.25 sq. ft. (maximum)

Snow Load	Exposure Category	Roof Pitch (Degrees)	Wind Speed (MPH)						
			85	90	95	100	110	120	130
0 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / NA	X / X / NA	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
10 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / NA	X / X / NA	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
20 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / NA	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
25 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / NA	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
30 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
35 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
40 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
50 PSF	B	θ < 7	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA

SnapNrack 'MightyMount Metal-T' Zone 1 / Zone 2 / Zone 3 : (X = System is applicable, NA = Not Applicable)
[0-30 ft]

Solar Panel 2 - 22.17 sq. ft. (maximum)

Snow Load	Exposure Category	Roof Pitch (Degrees)	Wind Speed (MPH)						
			85	90	95	100	110	120	130
0 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	X / X / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	X / X / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / NA	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
10 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	X / X / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	X / X / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / NA	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
20 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	X / X / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / NA	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
25 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / NA	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
30 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
35 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
40 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
50 PSF	B	θ < 7	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA

SnapNrack 'MightyMount Metal-T' Zone 1 / Zone 2 / Zone 3 : (X = System is applicable, NA = Not Applicable)
[0-30 ft]

Solar Panel 3 - 26.89 sq. ft. (maximum)

Snow Load	Exposure Category	Roof Pitch (Degrees)	Wind Speed (MPH)						
			85	90	95	100	110	120	130
0 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / NA	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
10 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / NA	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
20 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / NA	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
25 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / NA	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
30 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
35 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
40 PSF	B	θ < 7	X / X / X	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	X / X / X	X / X / X	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
50 PSF	B	θ < 7	X / X / X	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
	C	θ < 7	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA
		7 < θ ≤ 20	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA	NA / NA / NA

Appendix A: Case Specific Reactions

Appendix A: SnapNrack 'MightyMount Metal-T' Zone 1 / Zone 2 / Zone 3 : Uplift Reaction (lbs)
[0-30 ft]

Solar Panel 1 - 21.25 sq. ft. (maximum)

Snow Load	Exposure Category	Roof Pitch (Degrees)	Wind Speed (MPH)						
			85	90	95	100	110	120	130
0 PSF	B	θ < 7	73.6 / 124.1 / 258.8	84.8 / 141.5 / 292.5	96.7 / 159.8 / 328.1	109.2 / 179.1 / 365.5	136.1 / 220.7 / 446.3	165.6 / 266.3 / 534.7	197.6 / 315.8 / 630.9
		7 < θ ≤ 20	142 / 226.2 / 335.6	161.4 / 255.7 / 378.4	181.8 / 287 / 423.7	203.4 / 320 / 471.4	249.9 / 390.9 / 574.2	300.8 / 468.6 / 686.8	356.2 / 553.1 / 809.1
	C	θ < 7	110.7 / 181.4 / 370	126.4 / 205.7 / 417.1	143 / 231.3 / 466.9	160.5 / 258.3 / 519.4	198.1 / 316.6 / 632.4	239.4 / 380.4 / 756.2	284.3 / 449.7 / 890.8
		7 < θ ≤ 20	206 / 323.8 / 477.1	233.1 / 365.2 / 537	261.8 / 409 / 600.4	292 / 455.1 / 667.2	357.1 / 554.5 / 811.1	428.4 / 663.3 / 968.7	505.9 / 781.6 / 1140
10 PSF	B	θ < 7	73.6 / 124.1 / 258.8	84.8 / 141.5 / 292.5	96.7 / 159.8 / 328.1	109.2 / 179.1 / 365.5	136.1 / 220.7 / 446.3	165.6 / 266.3 / 534.7	197.6 / 315.8 / 630.9
		7 < θ ≤ 20	142 / 226.2 / 335.6	161.4 / 255.7 / 378.4	181.8 / 287 / 423.7	203.4 / 320 / 471.4	249.9 / 390.9 / 574.2	300.8 / 468.6 / 686.8	356.2 / 553.1 / 809.1
	C	θ < 7	110.7 / 181.4 / 370	126.4 / 205.7 / 417.1	143 / 231.3 / 466.9	160.5 / 258.3 / 519.4	198.1 / 316.6 / 632.4	239.4 / 380.4 / 756.2	284.3 / 449.7 / 890.8
		7 < θ ≤ 20	206 / 323.8 / 477.1	233.1 / 365.2 / 537	261.8 / 409 / 600.4	292 / 455.1 / 667.2	357.1 / 554.5 / 811.1	428.4 / 663.3 / 968.7	505.9 / 781.6 / 1140
20 PSF	B	θ < 7	73.6 / 124.1 / 258.8	84.8 / 141.5 / 292.5	96.7 / 159.8 / 328.1	109.2 / 179.1 / 365.5	136.1 / 220.7 / 446.3	165.6 / 266.3 / 534.7	197.6 / 315.8 / 630.9
		7 < θ ≤ 20	142 / 226.2 / 335.6	161.4 / 255.7 / 378.4	181.8 / 287 / 423.7	203.4 / 320 / 471.4	249.9 / 390.9 / 574.2	300.8 / 468.6 / 686.8	356.2 / 553.1 / 809.1
	C	θ < 7	110.7 / 181.4 / 370	126.4 / 205.7 / 417.1	143 / 231.3 / 466.9	160.5 / 258.3 / 519.4	198.1 / 316.6 / 632.4	239.4 / 380.4 / 756.2	284.3 / 449.7 / 890.8
		7 < θ ≤ 20	206 / 323.8 / 477.1	233.1 / 365.2 / 537	261.8 / 409 / 600.4	292 / 455.1 / 667.2	357.1 / 554.5 / 811.1	428.4 / 663.3 / 968.7	505.9 / 781.6 / 1140
25 PSF	B	θ < 7	73.6 / 124.1 / 258.8	84.8 / 141.5 / 292.5	96.7 / 159.8 / 328.1	109.2 / 179.1 / 365.5	136.1 / 220.7 / 446.3	165.6 / 266.3 / 534.7	197.6 / 315.8 / 630.9
		7 < θ ≤ 20	142 / 226.2 / 335.6	161.4 / 255.7 / 378.4	181.8 / 287 / 423.7	203.4 / 320 / 471.4	249.9 / 390.9 / 574.2	300.8 / 468.6 / 686.8	356.2 / 553.1 / 809.1
	C	θ < 7	110.7 / 181.4 / 370	126.4 / 205.7 / 417.1	143 / 231.3 / 466.9	160.5 / 258.3 / 519.4	198.1 / 316.6 / 632.4	239.4 / 380.4 / 756.2	284.3 / 449.7 / 890.8
		7 < θ ≤ 20	206 / 323.8 / 477.1	233.1 / 365.2 / 537	261.8 / 409 / 600.4	292 / 455.1 / 667.2	357.1 / 554.5 / 811.1	428.4 / 663.3 / 968.7	505.9 / 781.6 / 1140
30 PSF	B	θ < 7	73.6 / 124.1 / 258.8	84.8 / 141.5 / 292.5	96.7 / 159.8 / 328.1	109.2 / 179.1 / 365.5	136.1 / 220.7 / 446.3	165.6 / 266.3 / 534.7	197.6 / 315.8 / 630.9
		7 < θ ≤ 20	142 / 226.2 / 335.6	161.4 / 255.7 / 378.4	181.8 / 287 / 423.7	203.4 / 320 / 471.4	249.9 / 390.9 / 574.2	300.8 / 468.6 / 686.8	356.2 / 553.1 / 809.1
	C	θ < 7	110.7 / 181.4 / 370	126.4 / 205.7 / 417.1	143 / 231.3 / 466.9	160.5 / 258.3 / 519.4	198.1 / 316.6 / 632.4	239.4 / 380.4 / 756.2	284.3 / 449.7 / 890.8
		7 < θ ≤ 20	206 / 323.8 / 477.1	233.1 / 365.2 / 537	261.8 / 409 / 600.4	292 / 455.1 / 667.2	357.1 / 554.5 / 811.1	428.4 / 663.3 / 968.7	505.9 / 781.6 / 1140
35 PSF	B	θ < 7	73.6 / 124.1 / 258.8	84.8 / 141.5 / 292.5	96.7 / 159.8 / 328.1	109.2 / 179.1 / 365.5	136.1 / 220.7 / 446.3	165.6 / 266.3 / 534.7	197.6 / 315.8 / 630.9
		7 < θ ≤ 20	142 / 226.2 / 335.6	161.4 / 255.7 / 378.4	181.8 / 287 / 423.7	203.4 / 320 / 471.4	249.9 / 390.9 / 574.2	300.8 / 468.6 / 686.8	356.2 / 553.1 / 809.1
	C	θ < 7	110.7 / 181.4 / 370	126.4 / 205.7 / 417.1	143 / 231.3 / 466.9	160.5 / 258.3 / 519.4	198.1 / 316.6 / 632.4	239.4 / 380.4 / 756.2	284.3 / 449.7 / 890.8
		7 < θ ≤ 20	206 / 323.8 / 477.1	233.1 / 365.2 / 537	261.8 / 409 / 600.4	292 / 455.1 / 667.2	357.1 / 554.5 / 811.1	428.4 / 663.3 / 968.7	505.9 / 781.6 / 1140
40 PSF	B	θ < 7	73.6 / 124.1 / 258.8	84.8 / 141.5 / 292.5	96.7 / 159.8 / 328.1	109.2 / 179.1 / 365.5	136.1 / 220.7 / 446.3	165.6 / 266.3 / 534.7	197.6 / 315.8 / 630.9
		7 < θ ≤ 20	142 / 226.2 / 335.6	161.4 / 255.7 / 378.4	181.8 / 287 / 423.7	203.4 / 320 / 471.4	249.9 / 390.9 / 574.2	300.8 / 468.6 / 686.8	356.2 / 553.1 / 809.1
	C	θ < 7	110.7 / 181.4 / 370	126.4 / 205.7 / 417.1	143 / 231.3 / 466.9	160.5 / 258.3 / 519.4	198.1 / 316.6 / 632.4	239.4 / 380.4 / 756.2	284.3 / 449.7 / 890.8
		7 < θ ≤ 20	206 / 323.8 / 477.1	233.1 / 365.2 / 537	261.8 / 409 / 600.4	292 / 455.1 / 667.2	357.1 / 554.5 / 811.1	428.4 / 663.3 / 968.7	505.9 / 781.6 / 1140
50 PSF	B	θ < 7	73.6 / 124.1 / 258.8	84.8 / 141.5 / 292.5	96.7 / 159.8 / 328.1	109.2 / 179.1 / 365.5	136.1 / 220.7 / 446.3	165.6 / 266.3 / 534.7	197.6 / 315.8 / 630.9
		7 < θ ≤ 20	142 / 226.2 / 335.6	161.4 / 255.7 / 378.4	181.8 / 287 / 423.7	203.4 / 320 / 471.4	249.9 / 390.9 / 574.2	300.8 / 468.6 / 686.8	356.2 / 553.1 / 809.1
	C	θ < 7	110.7 / 181.4 / 370	126.4 / 205.7 / 417.1	143 / 231.3 / 466.9	160.5 / 258.3 / 519.4	198.1 / 316.6 / 632.4	239.4 / 380.4 / 756.2	284.3 / 449.7 / 890.8
		7 < θ ≤ 20	206 / 323.8 / 477.1	233.1 / 365.2 / 537	261.8 / 409 / 600.4	292 / 455.1 / 667.2	357.1 / 554.5 / 811.1	428.4 / 663.3 / 968.7	505.9 / 781.6 / 1140

Appendix A: SnapNrack 'MightyMount Metal-T' Zone 1 / Zone 2 / Zone 3 : Downward Reaction (lbs)
[0-30 ft]

Solar Panel 1 - 21.25 sq. ft. (maximum)

Snow Load	Exposure Category	Roof Pitch (Degrees)	Wind Speed (MPH)						
			85	90	95	100	110	120	130
0 PSF	B	θ < 7	233.7 / 233.7 / 233.7	258.2 / 258.2 / 258.2	284 / 284 / 284	311.3 / 311.3 / 311.3	370 / 370 / 370	434.3 / 434.3 / 434.3	504.3 / 504.3 / 504.3
		7 < θ ≤ 20	257.3 / 257.3 / 257.3	284.8 / 284.8 / 284.8	313.9 / 313.9 / 313.9	344.6 / 344.6 / 344.6	410.6 / 410.6 / 410.6	483 / 483 / 483	561.7 / 561.7 / 561.7
	C	θ < 7	314.5 / 314.5 / 314.5	348.8 / 348.8 / 348.8	385 / 385 / 385	423.2 / 423.2 / 423.2	505.4 / 505.4 / 505.4	595.4 / 595.4 / 595.4	693.3 / 693.3 / 693.3
		7 < θ ≤ 20	348.2 / 348.2 / 348.2	386.7 / 386.7 / 386.7	427.5 / 427.5 / 427.5	470.4 / 470.4 / 470.4	562.9 / 562.9 / 562.9	664.2 / 664.2 / 664.2	774.3 / 774.3 / 774.3
10 PSF	B	θ < 7	111.4 / 243 / 243	261.3 / 261.3 / 261.3	284 / 284 / 284	311.3 / 311.3 / 311.3	370 / 370 / 370	434.3 / 434.3 / 434.3	504.3 / 504.3 / 504.3
		7 < θ ≤ 20	257.3 / 257.3 / 257.3	284.8 / 284.8 / 284.8	313.9 / 313.9 / 313.9	344.6 / 344.6 / 344.6	410.6 / 410.6 / 410.6	483 / 483 / 483	561.7 / 561.7 / 561.7
	C	θ < 7	314.5 / 314.5 / 314.5	348.8 / 348.8 / 348.8	385 / 385 / 385	423.2 / 423.2 / 423.2	505.4 / 505.4 / 505.4	595.4 / 595.4 / 595.4	693.3 / 693.3 / 693.3
		7 < θ ≤ 20	348.2 / 348.2 / 348.2	386.7 / 386.7 / 386.7	427.5 / 427.5 / 427.5	470.4 / 470.4 / 470.4	562.9 / 562.9 / 562.9	664.2 / 664.2 / 664.2	774.3 / 774.3 / 774.3
20 PSF	B	θ < 7	302.8 / 302.8 / 302.8	321.1 / 321.1 / 321.1	340.5 / 340.5 / 340.5	361 / 361 / 361	405 / 405 / 405	453.3 / 453.3 / 453.3	505.7 / 505.7 / 505.7
		7 < θ ≤ 20	313.7 / 313.7 / 313.7	334.3 / 334.3 / 334.3	356.1 / 356.1 / 356.1	379.1 / 379.1 / 379.1	428.7 / 428.7 / 428.7	483 / 483 / 483	561.7 / 561.7 / 561.7
	C	θ < 7	363.4 / 363.4 / 363.4	389.1 / 389.1 / 389.1	416.2 / 416.2 / 416.2	444.9 / 444.9 / 444.9	506.5 / 506.5 / 506.5	595.4 / 595.4 / 595.4	693.3 / 693.3 / 693.3
		7 < θ ≤ 20	381.9 / 381.9 / 381.9	410.8 / 410.8 / 410.8	441.3 / 441.3 / 441.3	473.5 / 473.5 / 473.5	562.9 / 562.9 / 562.9	664.2 / 664.2 / 664.2	774.3 / 774.3 / 774.3
25 PSF	B	θ < 7	332.7 / 332.7 / 332.7	351 / 351 / 351	370.4 / 370.4 / 370.4	390.9 / 390.9 / 390.9	434.9 / 434.9 / 434.9	483.2 / 483.2 / 483.2	535.6 / 535.6 / 535.6
		7 < θ ≤ 20	342 / 342 / 342	362.6 / 362.6 / 362.6	384.4 / 384.4 / 384.4	407.4 / 407.4 / 407.4	457 / 457 / 457	511.3 / 511.3 / 511.3	570.3 / 570.3 / 570.3
	C	θ < 7	393.3 / 393.3 / 393.3	419 / 419 / 419	446.1 / 446.1 / 446.1	474.8 / 474.8 / 474.8	536.4 / 536.4 / 536.4	604 / 604 / 604	693.3 / 693.3 / 693.3
		7 < θ ≤ 20	410.2 / 410.2 / 410.2	439.1 / 439.1 / 439.1	469.6 / 469.6 / 469.6	501.8 / 501.8 / 501.8	571.2 / 571.2 / 571.2	664.2 / 664.2 / 664.2	774.3 / 774.3 / 774.3
30 PSF	B	θ < 7	362.6 / 362.6 / 362.6	380.9 / 380.9 / 380.9	400.3 / 400.3 / 400.3	420.8 / 420.8 / 420.8	464.8 / 464.8 / 464.8	513.1 / 513.1 / 513.1	565.5 / 565.5 / 565.5
		7 < θ ≤ 20	370.3 / 370.3 / 370.3	390.9 / 390.9 / 390.9	412.7 / 412.7 / 412.7	435.7 / 435.7 / 435.7	485.3 / 485.3 / 485.3	539.6 / 539.6 / 539.6	598.6 / 598.6 / 598.6
	C	θ < 7	423.2 / 423.2 / 423.2	448.9 / 448.9 / 448.9	476 / 476 / 476	504.7 / 504.7 / 504.7	566.3 / 566.3 / 566.3	633.9 / 633.9 / 633.9	707.3 / 707.3 / 707.3
		7 < θ ≤ 20	438.5 / 438.5 / 438.5	467.4 / 467.4 / 467.4	497.9 / 497.9 / 497.9	530.1 / 530.1 / 530.1	599.5 / 599.5 / 599.5	675.5 / 675.5 / 675.5	774.3 / 774.3 / 774.3
35 PSF	B	θ < 7	392.5 / 392.5 / 392.5	410.8 / 410.8 / 410.8	430.2 / 430.2 / 430.2	450.7 / 450.7 / 450.7	494.7 / 494.7 / 494.7	543 / 543 / 543	595.4 / 595.4 / 595.4
		7 < θ ≤ 20	398.6 / 398.6 / 398.6	419.2 / 419.2 / 419.2	441 / 441 / 441	464.1 / 464.1 / 464.1	513.6 / 513.6 / 513.6	567.9 / 567.9 / 567.9	626.9 / 626.9 / 626.9
	C	θ < 7	453.1 / 453.1 / 453.1	478.8 / 478.8 / 478.8	505.9 / 505.9 / 505.9	534.6 / 534.6 / 534.6	596.2 / 596.2 / 596.2	663.8 / 663.8 / 663.8	737.2 / 737.2 / 737.2
		7 < θ ≤ 20	466.8 / 466.8 / 466.8	495.7 / 495.7 / 495.7	526.2 / 526.2 / 526.2	558.4 / 558.4 / 558.4	627.8 / 627.8 / 627.8	703.8 / 703.8 / 703.8	786.4 / 786.4 / 786.4
40 PSF	B	θ < 7	422.4 / 422.4 / 422.4	440.7 / 440.7 / 440.7	460.1 / 460.1 / 460.1	480.6 / 480.6 / 480.6	524.6 / 524.6 / 524.6	572.8 / 572.8 / 572.8	625.3 / 625.3 / 625.3
		7 < θ ≤ 20	426.9 / 426.9 / 426.9	447.5 / 447.5 / 447.5	469.4 / 469.4 / 469.4	492.4 / 492.4 / 492.4	541.9 / 541.9 / 541.9	596.2 / 596.2 / 596.2	655.2 / 655.2 / 655.2
	C	θ < 7	483 / 483 / 483	508.7 / 508.7 / 508.7	535.8 / 535.8 / 535.8	564.5 / 564.5 / 564.5	626.1 / 626.1 / 626.1	693.7 / 693.7 / 693.7	767.1 / 767.1 / 767.1
		7 < θ ≤ 20	495.1 / 495.1 / 495.1	524 / 524 / 524	554.5 / 554.5 / 554.5	586.7 / 586.7 / 586.7	656.1 / 656.1 / 656.1	732.1 / 732.1 / 732.1	814.7 / 814.7 / 814.7
50 PSF	B	θ < 7	482.2 / 482.2 / 482.2	500.5 / 500.5 / 500.5	519.9 / 519.9 / 519.9	540.4 / 540.4 / 540.4	584.4 / 584.4 / 584.4	632.6 / 632.6 / 632.6	685.1 / 685.1 / 685.1
		7 < θ ≤ 20	483.5 / 483.5 / 483.5	504.1 / 504.1 / 504.1	526 / 526 / 526	549 / 549 / 549	598.5 / 598.5 / 598.5	652.8 / 652.8 / 652.8	711.8 / 711.8 / 711.8
	C	θ < 7	542.8 / 542.8 / 542.8	568.5 / 568.5 / 568.5	595.6 / 595.6 / 595.6	624.3 / 624.3 / 624.3	685.9 / 685.9 / 685.9	753.5 / 753.5 / 753.5	826.9 / 826.9 / 826.9
		7 < θ ≤ 20	551.7 / 551.7 / 551.7	580.6 / 580.6 / 580.6	611.1 / 611.1 / 611.1	643.4 / 643.4 / 643.4	712.7 / 712.7 / 712.7	788.7 / 788.7 / 788.7	871.3 / 871.3 / 871.3

The lateral reaction for all cases does not exceed 150.0 llbs

Appendix A: SnapNrack 'MightyMount Metal-T' Zone 1 / Zone 2 / Zone 3 : Uplift Reaction (lbs)
[0-30 ft]

Solar Panel 2 - 22.17 sq. ft. (maximum)

Snow Load	Exposure Category	Roof Pitch (Degrees)	Wind Speed (MPH)						
			85	90	95	100	110	120	130
0 PSF	B	θ < 7	76.8 / 129.5 / 270	88.5 / 147.6 / 305.1	100.9 / 166.7 / 342.2	113.9 / 186.8 / 381.3	142 / 230.2 / 465.6	172.7 / 277.8 / 557.8	206.2 / 329.4 / 658.1
		7 < θ ≤ 20	148.1 / 235.9 / 350.1	168.3 / 266.8 / 394.8	189.7 / 299.4 / 442	212.2 / 333.8 / 491.8	260.7 / 407.8 / 599	313.8 / 488.9 / 716.4	371.6 / 577 / 844
	C	θ < 7	115.4 / 189.2 / 385.9	131.8 / 214.5 / 435.1	149.1 / 241.3 / 487	167.4 / 269.5 / 541.8	206.7 / 330.2 / 659.7	249.8 / 396.8 / 788.9	296.6 / 469.1 / 929.3
		7 < θ ≤ 20	214.9 / 337.8 / 497.6	243.2 / 381 / 560.2	273.1 / 426.6 / 626.3	304.6 / 474.8 / 696	372.5 / 578.4 / 846.1	446.9 / 691.9 / 1010.5	527.7 / 815.3 / 1189.2
10 PSF	B	θ < 7	76.8 / 129.5 / 270	88.5 / 147.6 / 305.1	100.9 / 166.7 / 342.2	113.9 / 186.8 / 381.3	142 / 230.2 / 465.6	172.7 / 277.8 / 557.8	206.2 / 329.4 / 658.1
		7 < θ ≤ 20	148.1 / 235.9 / 350.1	168.3 / 266.8 / 394.8	189.7 / 299.4 / 442	212.2 / 333.8 / 491.8	260.7 / 407.8 / 599	313.8 / 488.9 / 716.4	371.6 / 577 / 844
	C	θ < 7	115.4 / 189.2 / 385.9	131.8 / 214.5 / 435.1	149.1 / 241.3 / 487	167.4 / 269.5 / 541.8	206.7 / 330.2 / 659.7	249.8 / 396.8 / 788.9	296.6 / 469.1 / 929.3
		7 < θ ≤ 20	214.9 / 337.8 / 497.6	243.2 / 381 / 560.2	273.1 / 426.6 / 626.3	304.6 / 474.8 / 696	372.5 / 578.4 / 846.1	446.9 / 691.9 / 1010.5	527.7 / 815.3 / 1189.2
20 PSF	B	θ < 7	76.8 / 129.5 / 270	88.5 / 147.6 / 305.1	100.9 / 166.7 / 342.2	113.9 / 186.8 / 381.3	142 / 230.2 / 465.6	172.7 / 277.8 / 557.8	206.2 / 329.4 / 658.1
		7 < θ ≤ 20	148.1 / 235.9 / 350.1	168.3 / 266.8 / 394.8	189.7 / 299.4 / 442	212.2 / 333.8 / 491.8	260.7 / 407.8 / 599	313.8 / 488.9 / 716.4	371.6 / 577 / 844
	C	θ < 7	115.4 / 189.2 / 385.9	131.8 / 214.5 / 435.1	149.1 / 241.3 / 487	167.4 / 269.5 / 541.8	206.7 / 330.2 / 659.7	249.8 / 396.8 / 788.9	296.6 / 469.1 / 929.3
		7 < θ ≤ 20	214.9 / 337.8 / 497.6	243.2 / 381 / 560.2	273.1 / 426.6 / 626.3	304.6 / 474.8 / 696	372.5 / 578.4 / 846.1	446.9 / 691.9 / 1010.5	527.7 / 815.3 / 1189.2
25 PSF	B	θ < 7	76.8 / 129.5 / 270	88.5 / 147.6 / 305.1	100.9 / 166.7 / 342.2	113.9 / 186.8 / 381.3	142 / 230.2 / 465.6	172.7 / 277.8 / 557.8	206.2 / 329.4 / 658.1
		7 < θ ≤ 20	148.1 / 235.9 / 350.1	168.3 / 266.8 / 394.8	189.7 / 299.4 / 442	212.2 / 333.8 / 491.8	260.7 / 407.8 / 599	313.8 / 488.9 / 716.4	371.6 / 577 / 844
	C	θ < 7	115.4 / 189.2 / 385.9	131.8 / 214.5 / 435.1	149.1 / 241.3 / 487	167.4 / 269.5 / 541.8	206.7 / 330.2 / 659.7	249.8 / 396.8 / 788.9	296.6 / 469.1 / 929.3
		7 < θ ≤ 20	214.9 / 337.8 / 497.6	243.2 / 381 / 560.2	273.1 / 426.6 / 626.3	304.6 / 474.8 / 696	372.5 / 578.4 / 846.1	446.9 / 691.9 / 1010.5	527.7 / 815.3 / 1189.2
30 PSF	B	θ < 7	76.8 / 129.5 / 270	88.5 / 147.6 / 305.1	100.9 / 166.7 / 342.2	113.9 / 186.8 / 381.3	142 / 230.2 / 465.6	172.7 / 277.8 / 557.8	206.2 / 329.4 / 658.1
		7 < θ ≤ 20	148.1 / 235.9 / 350.1	168.3 / 266.8 / 394.8	189.7 / 299.4 / 442	212.2 / 333.8 / 491.8	260.7 / 407.8 / 599	313.8 / 488.9 / 716.4	371.6 / 577 / 844
	C	θ < 7	115.4 / 189.2 / 385.9	131.8 / 214.5 / 435.1	149.1 / 241.3 / 487	167.4 / 269.5 / 541.8	206.7 / 330.2 / 659.7	249.8 / 396.8 / 788.9	296.6 / 469.1 / 929.3
		7 < θ ≤ 20	214.9 / 337.8 / 497.6	243.2 / 381 / 560.2	273.1 / 426.6 / 626.3	304.6 / 474.8 / 696	372.5 / 578.4 / 846.1	446.9 / 691.9 / 1010.5	527.7 / 815.3 / 1189.2
35 PSF	B	θ < 7	76.8 / 129.5 / 270	88.5 / 147.6 / 305.1	100.9 / 166.7 / 342.2	113.9 / 186.8 / 381.3	142 / 230.2 / 465.6	172.7 / 277.8 / 557.8	206.2 / 329.4 / 658.1
		7 < θ ≤ 20	148.1 / 235.9 / 350.1	168.3 / 266.8 / 394.8	189.7 / 299.4 / 442	212.2 / 333.8 / 491.8	260.7 / 407.8 / 599	313.8 / 488.9 / 716.4	371.6 / 577 / 844
	C	θ < 7	115.4 / 189.2 / 385.9	131.8 / 214.5 / 435.1	149.1 / 241.3 / 487	167.4 / 269.5 / 541.8	206.7 / 330.2 / 659.7	249.8 / 396.8 / 788.9	296.6 / 469.1 / 929.3
		7 < θ ≤ 20	214.9 / 337.8 / 497.6	243.2 / 381 / 560.2	273.1 / 426.6 / 626.3	304.6 / 474.8 / 696	372.5 / 578.4 / 846.1	446.9 / 691.9 / 1010.5	527.7 / 815.3 / 1189.2
40 PSF	B	θ < 7	76.8 / 129.5 / 270	88.5 / 147.6 / 305.1	100.9 / 166.7 / 342.2	113.9 / 186.8 / 381.3	142 / 230.2 / 465.6	172.7 / 277.8 / 557.8	206.2 / 329.4 / 658.1
		7 < θ ≤ 20	148.1 / 235.9 / 350.1	168.3 / 266.8 / 394.8	189.7 / 299.4 / 442	212.2 / 333.8 / 491.8	260.7 / 407.8 / 599	313.8 / 488.9 / 716.4	371.6 / 577 / 844
	C	θ < 7	115.4 / 189.2 / 385.9	131.8 / 214.5 / 435.1	149.1 / 241.3 / 487	167.4 / 269.5 / 541.8	206.7 / 330.2 / 659.7	249.8 / 396.8 / 788.9	296.6 / 469.1 / 929.3
		7 < θ ≤ 20	214.9 / 337.8 / 497.6	243.2 / 381 / 560.2	273.1 / 426.6 / 626.3	304.6 / 474.8 / 696	372.5 / 578.4 / 846.1	446.9 / 691.9 / 1010.5	527.7 / 815.3 / 1189.2
50 PSF	B	θ < 7	76.8 / 129.5 / 270	88.5 / 147.6 / 305.1	100.9 / 166.7 / 342.2	113.9 / 186.8 / 381.3	142 / 230.2 / 465.6	172.7 / 277.8 / 557.8	206.2 / 329.4 / 658.1
		7 < θ ≤ 20	148.1 / 235.9 / 350.1	168.3 / 266.8 / 394.8	189.7 / 299.4 / 442	212.2 / 333.8 / 491.8	260.7 / 407.8 / 599	313.8 / 488.9 / 716.4	371.6 / 577 / 844
	C	θ < 7	115.4 / 189.2 / 385.9	131.8 / 214.5 / 435.1	149.1 / 241.3 / 487	167.4 / 269.5 / 541.8	206.7 / 330.2 / 659.7	249.8 / 396.8 / 788.9	296.6 / 469.1 / 929.3
		7 < θ ≤ 20	214.9 / 337.8 / 497.6	243.2 / 381 / 560.2	273.1 / 426.6 / 626.3	304.6 / 474.8 / 696	372.5 / 578.4 / 846.1	446.9 / 691.9 / 1010.5	527.7 / 815.3 / 1189.2

Appendix A: SnapNrack 'MightyMount Metal-T' Zone 1 / Zone 2 / Zone 3 : Downward Reaction (lbs)
[0-30 ft]

Solar Panel 2 - 22.17 sq. ft. (maximum)

Snow Load	Exposure Category	Roof Pitch (Degrees)	Wind Speed (MPH)						
			85	90	95	100	110	120	130
0 PSF	B	θ < 7	243.8 / 243.8 / 243.8	269.3 / 269.3 / 269.3	296.3 / 296.3 / 296.3	324.7 / 324.7 / 324.7	386 / 386 / 386	453.1 / 453.1 / 453.1	526 / 526 / 526
		7 < θ ≤ 20	268.4 / 268.4 / 268.4	297.1 / 297.1 / 297.1	327.4 / 327.4 / 327.4	359.4 / 359.4 / 359.4	428.4 / 428.4 / 428.4	503.8 / 503.8 / 503.8	585.9 / 585.9 / 585.9
	C	θ < 7	328.1 / 328.1 / 328.1	363.8 / 363.8 / 363.8	401.6 / 401.6 / 401.6	441.4 / 441.4 / 441.4	527.2 / 527.2 / 527.2	621.1 / 621.1 / 621.1	723.2 / 723.2 / 723.2
		7 < θ ≤ 20	363.2 / 363.2 / 363.2	403.4 / 403.4 / 403.4	445.9 / 445.9 / 445.9	490.7 / 490.7 / 490.7	587.2 / 587.2 / 587.2	692.9 / 692.9 / 692.9	807.8 / 807.8 / 807.8
10 PSF	B	θ < 7	116.2 / 253.5 / 253.5	272.6 / 272.6 / 272.6	296.3 / 296.3 / 296.3	324.7 / 324.7 / 324.7	386 / 386 / 386	453.1 / 453.1 / 453.1	526 / 526 / 526
		7 < θ ≤ 20	268.4 / 268.4 / 268.4	297.1 / 297.1 / 297.1	327.4 / 327.4 / 327.4	359.4 / 359.4 / 359.4	428.4 / 428.4 / 428.4	503.8 / 503.8 / 503.8	585.9 / 585.9 / 585.9
	C	θ < 7	328.1 / 328.1 / 328.1	363.8 / 363.8 / 363.8	401.6 / 401.6 / 401.6	441.4 / 441.4 / 441.4	527.2 / 527.2 / 527.2	621.1 / 621.1 / 621.1	723.2 / 723.2 / 723.2
		7 < θ ≤ 20	363.2 / 363.2 / 363.2	403.4 / 403.4 / 403.4	445.9 / 445.9 / 445.9	490.7 / 490.7 / 490.7	587.2 / 587.2 / 587.2	692.9 / 692.9 / 692.9	807.8 / 807.8 / 807.8
20 PSF	B	θ < 7	315.8 / 315.8 / 315.8	335 / 335 / 335	355.2 / 355.2 / 355.2	376.5 / 376.5 / 376.5	422.5 / 422.5 / 422.5	472.8 / 472.8 / 472.8	527.5 / 527.5 / 527.5
		7 < θ ≤ 20	327.2 / 327.2 / 327.2	348.7 / 348.7 / 348.7	371.5 / 371.5 / 371.5	395.5 / 395.5 / 395.5	447.2 / 447.2 / 447.2	503.8 / 503.8 / 503.8	585.9 / 585.9 / 585.9
	C	θ < 7	379.1 / 379.1 / 379.1	405.9 / 405.9 / 405.9	434.2 / 434.2 / 434.2	464.1 / 464.1 / 464.1	528.4 / 528.4 / 528.4	621.1 / 621.1 / 621.1	723.2 / 723.2 / 723.2
		7 < θ ≤ 20	398.3 / 398.3 / 398.3	428.5 / 428.5 / 428.5	460.4 / 460.4 / 460.4	494 / 494 / 494	587.2 / 587.2 / 587.2	692.9 / 692.9 / 692.9	807.8 / 807.8 / 807.8
25 PSF	B	θ < 7	347 / 347 / 347	366.2 / 366.2 / 366.2	386.4 / 386.4 / 386.4	407.7 / 407.7 / 407.7	453.7 / 453.7 / 453.7	504 / 504 / 504	558.7 / 558.7 / 558.7
		7 < θ ≤ 20	356.7 / 356.7 / 356.7	378.3 / 378.3 / 378.3	401 / 401 / 401	425 / 425 / 425	476.7 / 476.7 / 476.7	533.3 / 533.3 / 533.3	594.9 / 594.9 / 594.9
	C	θ < 7	410.3 / 410.3 / 410.3	437.1 / 437.1 / 437.1	465.4 / 465.4 / 465.4	495.3 / 495.3 / 495.3	559.6 / 559.6 / 559.6	630 / 630 / 630	723.2 / 723.2 / 723.2
		7 < θ ≤ 20	427.9 / 427.9 / 427.9	458 / 458 / 458	489.9 / 489.9 / 489.9	523.5 / 523.5 / 523.5	595.8 / 595.8 / 595.8	692.9 / 692.9 / 692.9	807.8 / 807.8 / 807.8
30 PSF	B	θ < 7	378.2 / 378.2 / 378.2	397.4 / 397.4 / 397.4	417.6 / 417.6 / 417.6	438.9 / 438.9 / 438.9	484.9 / 484.9 / 484.9	535.2 / 535.2 / 535.2	589.9 / 589.9 / 589.9
		7 < θ ≤ 20	386.2 / 386.2 / 386.2	407.8 / 407.8 / 407.8	430.6 / 430.6 / 430.6	454.6 / 454.6 / 454.6	506.2 / 506.2 / 506.2	562.9 / 562.9 / 562.9	624.4 / 624.4 / 624.4
	C	θ < 7	441.4 / 441.4 / 441.4	468.2 / 468.2 / 468.2	496.6 / 496.6 / 496.6	526.4 / 526.4 / 526.4	590.8 / 590.8 / 590.8	661.2 / 661.2 / 661.2	737.8 / 737.8 / 737.8
		7 < θ ≤ 20	457.4 / 457.4 / 457.4	487.5 / 487.5 / 487.5	519.4 / 519.4 / 519.4	553 / 553 / 553	625.4 / 625.4 / 625.4	704.6 / 704.6 / 704.6	807.8 / 807.8 / 807.8
35 PSF	B	θ < 7	409.4 / 409.4 / 409.4	428.5 / 428.5 / 428.5	448.8 / 448.8 / 448.8	470.1 / 470.1 / 470.1	516.1 / 516.1 / 516.1	566.4 / 566.4 / 566.4	621.1 / 621.1 / 621.1
		7 < θ ≤ 20	415.8 / 415.8 / 415.8	437.3 / 437.3 / 437.3	460.1 / 460.1 / 460.1	484.1 / 484.1 / 484.1	535.8 / 535.8 / 535.8	592.4 / 592.4 / 592.4	653.9 / 653.9 / 653.9
	C	θ < 7	472.6 / 472.6 / 472.6	499.4 / 499.4 / 499.4	527.8 / 527.8 / 527.8	557.6 / 557.6 / 557.6	622 / 622 / 622	692.4 / 692.4 / 692.4	769 / 769 / 769
		7 < θ ≤ 20	486.9 / 486.9 / 486.9	517.1 / 517.1 / 517.1	548.9 / 548.9 / 548.9	582.5 / 582.5 / 582.5	654.9 / 654.9 / 654.9	734.2 / 734.2 / 734.2	820.3 / 820.3 / 820.3
40 PSF	B	θ < 7	440.6 / 440.6 / 440.6	459.7 / 459.7 / 459.7	480 / 480 / 480	501.3 / 501.3 / 501.3	547.2 / 547.2 / 547.2	597.6 / 597.6 / 597.6	652.3 / 652.3 / 652.3
		7 < θ ≤ 20	445.3 / 445.3 / 445.3	466.8 / 466.8 / 466.8	489.6 / 489.6 / 489.6	513.6 / 513.6 / 513.6	565.3 / 565.3 / 565.3	621.9 / 621.9 / 621.9	683.4 / 683.4 / 683.4
	C	θ < 7	503.8 / 503.8 / 503.8	530.6 / 530.6 / 530.6	559 / 559 / 559	588.8 / 588.8 / 588.8	653.1 / 653.1 / 653.1	723.6 / 723.6 / 723.6	800.2 / 800.2 / 800.2
		7 < θ ≤ 20	516.4 / 516.4 / 516.4	546.6 / 546.6 / 546.6	578.5 / 578.5 / 578.5	612.1 / 612.1 / 612.1	684.4 / 684.4 / 684.4	763.7 / 763.7 / 763.7	849.8 / 849.8 / 849.8
50 PSF	B	θ < 7	503 / 503 / 503	522.1 / 522.1 / 522.1	542.3 / 542.3 / 542.3	563.7 / 563.7 / 563.7	609.6 / 609.6 / 609.6	659.9 / 659.9 / 659.9	714.6 / 714.6 / 714.6
		7 < θ ≤ 20	504.4 / 504.4 / 504.4	525.9 / 525.9 / 525.9	548.7 / 548.7 / 548.7	572.7 / 572.7 / 572.7	624.3 / 624.3 / 624.3	681 / 681 / 681	742.5 / 742.5 / 742.5
	C	θ < 7	566.2 / 566.2 / 566.2	593 / 593 / 593	621.3 / 621.3 / 621.3	651.2 / 651.2 / 651.2	715.5 / 715.5 / 715.5	786 / 786 / 786	862.5 / 862.5 / 862.5
		7 < θ ≤ 20	575.5 / 575.5 / 575.5	605.6 / 605.6 / 605.6	637.5 / 637.5 / 637.5	671.1 / 671.1 / 671.1	743.5 / 743.5 / 743.5	822.7 / 822.7 / 822.7	908.9 / 908.9 / 908.9

The lateral reaction for all cases does not exceed 160.0 llbs

Appendix A: SnapNrack 'MightyMount Metal-T' Zone 1 / Zone 2 / Zone 3 : Uplift Reaction (lbs)
[0-30 ft]

Solar Panel 3 - 26.89 sq. ft. (maximum)

Snow Load	Exposure Category	Roof Pitch (Degrees)	Wind Speed (MPH)						
			85	90	95	100	110	120	130
0 PSF	B	θ < 7	93.2 / 157.1 / 327.5	107.4 / 179 / 370.1	122.4 / 202.2 / 415.1	138.2 / 226.6 / 462.6	172.2 / 279.3 / 564.7	209.5 / 336.9 / 676.6	250.1 / 399.6 / 798.3
		7 < θ ≤ 20	179.7 / 286.2 / 424.7	204.2 / 323.6 / 478.9	230.1 / 363.2 / 536.2	257.4 / 404.9 / 596.5	316.2 / 494.6 / 726.6	380.7 / 593 / 869	450.7 / 699.9 / 1023.8
	C	θ < 7	140 / 229.5 / 468.1	159.9 / 260.2 / 527.8	180.9 / 292.7 / 590.8	203 / 326.9 / 657.2	250.7 / 400.6 / 800.2	303 / 481.3 / 956.9	359.7 / 569 / 1127.2
		7 < θ ≤ 20	260.6 / 409.8 / 603.7	294.9 / 462.2 / 679.5	331.2 / 517.5 / 759.7	369.5 / 575.9 / 844.2	451.8 / 701.6 / 1026.3	542 / 839.3 / 1225.7	640.1 / 988.9 / 1442.5
10 PSF	B	θ < 7	93.2 / 157.1 / 327.5	107.4 / 179 / 370.1	122.4 / 202.2 / 415.1	138.2 / 226.6 / 462.6	172.2 / 279.3 / 564.7	209.5 / 336.9 / 676.6	250.1 / 399.6 / 798.3
		7 < θ ≤ 20	179.7 / 286.2 / 424.7	204.2 / 323.6 / 478.9	230.1 / 363.2 / 536.2	257.4 / 404.9 / 596.5	316.2 / 494.6 / 726.6	380.7 / 593 / 869	450.7 / 699.9 / 1023.8
	C	θ < 7	140 / 229.5 / 468.1	159.9 / 260.2 / 527.8	180.9 / 292.7 / 590.8	203 / 326.9 / 657.2	250.7 / 400.6 / 800.2	303 / 481.3 / 956.9	359.7 / 569 / 1127.2
		7 < θ ≤ 20	260.6 / 409.8 / 603.7	294.9 / 462.2 / 679.5	331.2 / 517.5 / 759.7	369.5 / 575.9 / 844.2	451.8 / 701.6 / 1026.3	542 / 839.3 / 1225.7	640.1 / 988.9 / 1442.5
20 PSF	B	θ < 7	93.2 / 157.1 / 327.5	107.4 / 179 / 370.1	122.4 / 202.2 / 415.1	138.2 / 226.6 / 462.6	172.2 / 279.3 / 564.7	209.5 / 336.9 / 676.6	250.1 / 399.6 / 798.3
		7 < θ ≤ 20	179.7 / 286.2 / 424.7	204.2 / 323.6 / 478.9	230.1 / 363.2 / 536.2	257.4 / 404.9 / 596.5	316.2 / 494.6 / 726.6	380.7 / 593 / 869	450.7 / 699.9 / 1023.8
	C	θ < 7	140 / 229.5 / 468.1	159.9 / 260.2 / 527.8	180.9 / 292.7 / 590.8	203 / 326.9 / 657.2	250.7 / 400.6 / 800.2	303 / 481.3 / 956.9	359.7 / 569 / 1127.2
		7 < θ ≤ 20	260.6 / 409.8 / 603.7	294.9 / 462.2 / 679.5	331.2 / 517.5 / 759.7	369.5 / 575.9 / 844.2	451.8 / 701.6 / 1026.3	542 / 839.3 / 1225.7	640.1 / 988.9 / 1442.5
25 PSF	B	θ < 7	93.2 / 157.1 / 327.5	107.4 / 179 / 370.1	122.4 / 202.2 / 415.1	138.2 / 226.6 / 462.6	172.2 / 279.3 / 564.7	209.5 / 336.9 / 676.6	250.1 / 399.6 / 798.3
		7 < θ ≤ 20	179.7 / 286.2 / 424.7	204.2 / 323.6 / 478.9	230.1 / 363.2 / 536.2	257.4 / 404.9 / 596.5	316.2 / 494.6 / 726.6	380.7 / 593 / 869	450.7 / 699.9 / 1023.8
	C	θ < 7	140 / 229.5 / 468.1	159.9 / 260.2 / 527.8	180.9 / 292.7 / 590.8	203 / 326.9 / 657.2	250.7 / 400.6 / 800.2	303 / 481.3 / 956.9	359.7 / 569 / 1127.2
		7 < θ ≤ 20	260.6 / 409.8 / 603.7	294.9 / 462.2 / 679.5	331.2 / 517.5 / 759.7	369.5 / 575.9 / 844.2	451.8 / 701.6 / 1026.3	542 / 839.3 / 1225.7	640.1 / 988.9 / 1442.5
30 PSF	B	θ < 7	93.2 / 157.1 / 327.5	107.4 / 179 / 370.1	122.4 / 202.2 / 415.1	138.2 / 226.6 / 462.6	172.2 / 279.3 / 564.7	209.5 / 336.9 / 676.6	250.1 / 399.6 / 798.3
		7 < θ ≤ 20	179.7 / 286.2 / 424.7	204.2 / 323.6 / 478.9	230.1 / 363.2 / 536.2	257.4 / 404.9 / 596.5	316.2 / 494.6 / 726.6	380.7 / 593 / 869	450.7 / 699.9 / 1023.8
	C	θ < 7	140 / 229.5 / 468.1	159.9 / 260.2 / 527.8	180.9 / 292.7 / 590.8	203 / 326.9 / 657.2	250.7 / 400.6 / 800.2	303 / 481.3 / 956.9	359.7 / 569 / 1127.2
		7 < θ ≤ 20	260.6 / 409.8 / 603.7	294.9 / 462.2 / 679.5	331.2 / 517.5 / 759.7	369.5 / 575.9 / 844.2	451.8 / 701.6 / 1026.3	542 / 839.3 / 1225.7	640.1 / 988.9 / 1442.5
35 PSF	B	θ < 7	93.2 / 157.1 / 327.5	107.4 / 179 / 370.1	122.4 / 202.2 / 415.1	138.2 / 226.6 / 462.6	172.2 / 279.3 / 564.7	209.5 / 336.9 / 676.6	250.1 / 399.6 / 798.3
		7 < θ ≤ 20	179.7 / 286.2 / 424.7	204.2 / 323.6 / 478.9	230.1 / 363.2 / 536.2	257.4 / 404.9 / 596.5	316.2 / 494.6 / 726.6	380.7 / 593 / 869	450.7 / 699.9 / 1023.8
	C	θ < 7	140 / 229.5 / 468.1	159.9 / 260.2 / 527.8	180.9 / 292.7 / 590.8	203 / 326.9 / 657.2	250.7 / 400.6 / 800.2	303 / 481.3 / 956.9	359.7 / 569 / 1127.2
		7 < θ ≤ 20	260.6 / 409.8 / 603.7	294.9 / 462.2 / 679.5	331.2 / 517.5 / 759.7	369.5 / 575.9 / 844.2	451.8 / 701.6 / 1026.3	542 / 839.3 / 1225.7	640.1 / 988.9 / 1442.5
40 PSF	B	θ < 7	93.2 / 157.1 / 327.5	107.4 / 179 / 370.1	122.4 / 202.2 / 415.1	138.2 / 226.6 / 462.6	172.2 / 279.3 / 564.7	209.5 / 336.9 / 676.6	250.1 / 399.6 / 798.3
		7 < θ ≤ 20	179.7 / 286.2 / 424.7	204.2 / 323.6 / 478.9	230.1 / 363.2 / 536.2	257.4 / 404.9 / 596.5	316.2 / 494.6 / 726.6	380.7 / 593 / 869	450.7 / 699.9 / 1023.8
	C	θ < 7	140 / 229.5 / 468.1	159.9 / 260.2 / 527.8	180.9 / 292.7 / 590.8	203 / 326.9 / 657.2	250.7 / 400.6 / 800.2	303 / 481.3 / 956.9	359.7 / 569 / 1127.2
		7 < θ ≤ 20	260.6 / 409.8 / 603.7	294.9 / 462.2 / 679.5	331.2 / 517.5 / 759.7	369.5 / 575.9 / 844.2	451.8 / 701.6 / 1026.3	542 / 839.3 / 1225.7	640.1 / 988.9 / 1442.5
50 PSF	B	θ < 7	93.2 / 157.1 / 327.5	107.4 / 179 / 370.1	122.4 / 202.2 / 415.1	138.2 / 226.6 / 462.6	172.2 / 279.3 / 564.7	209.5 / 336.9 / 676.6	250.1 / 399.6 / 798.3
		7 < θ ≤ 20	179.7 / 286.2 / 424.7	204.2 / 323.6 / 478.9	230.1 / 363.2 / 536.2	257.4 / 404.9 / 596.5	316.2 / 494.6 / 726.6	380.7 / 593 / 869	450.7 / 699.9 / 1023.8
	C	θ < 7	140 / 229.5 / 468.1	159.9 / 260.2 / 527.8	180.9 / 292.7 / 590.8	203 / 326.9 / 657.2	250.7 / 400.6 / 800.2	303 / 481.3 / 956.9	359.7 / 569 / 1127.2
		7 < θ ≤ 20	260.6 / 409.8 / 603.7	294.9 / 462.2 / 679.5	331.2 / 517.5 / 759.7	369.5 / 575.9 / 844.2	451.8 / 701.6 / 1026.3	542 / 839.3 / 1225.7	640.1 / 988.9 / 1442.5

Appendix A: SnapNrack 'MightyMount Metal-T' Zone 1 / Zone 2 / Zone 3 : Downward Reaction (lbs)
[0-30 ft]

Solar Panel 3 - 26.89 sq. ft. (maximum)

Snow Load	Exposure Category	Roof Pitch (Degrees)	Wind Speed (MPH)						
			85	90	95	100	110	120	130
0 PSF	B	θ < 7	295.7 / 295.7 / 295.7	326.7 / 326.7 / 326.7	359.4 / 359.4 / 359.4	393.9 / 393.9 / 393.9	468.2 / 468.2 / 468.2	549.6 / 549.6 / 549.6	638.1 / 638.1 / 638.1
		7 < θ ≤ 20	325.5 / 325.5 / 325.5	360.4 / 360.4 / 360.4	397.2 / 397.2 / 397.2	436 / 436 / 436	519.6 / 519.6 / 519.6	611.2 / 611.2 / 611.2	710.7 / 710.7 / 710.7
	C	θ < 7	398 / 398 / 398	441.3 / 441.3 / 441.3	487.1 / 487.1 / 487.1	535.5 / 535.5 / 535.5	639.5 / 639.5 / 639.5	753.4 / 753.4 / 753.4	877.3 / 877.3 / 877.3
		7 < θ ≤ 20	440.6 / 440.6 / 440.6	489.4 / 489.4 / 489.4	540.9 / 540.9 / 540.9	595.2 / 595.2 / 595.2	712.3 / 712.3 / 712.3	840.5 / 840.5 / 840.5	979.8 / 979.8 / 979.8
10 PSF	B	θ < 7	140.9 / 307.4 / 307.4	330.7 / 330.7 / 330.7	359.4 / 359.4 / 359.4	393.9 / 393.9 / 393.9	468.2 / 468.2 / 468.2	549.6 / 549.6 / 549.6	638.1 / 638.1 / 638.1
		7 < θ ≤ 20	325.5 / 325.5 / 325.5	360.4 / 360.4 / 360.4	397.2 / 397.2 / 397.2	436 / 436 / 436	519.6 / 519.6 / 519.6	611.2 / 611.2 / 611.2	710.7 / 710.7 / 710.7
	C	θ < 7	398 / 398 / 398	441.3 / 441.3 / 441.3	487.1 / 487.1 / 487.1	535.5 / 535.5 / 535.5	639.5 / 639.5 / 639.5	753.4 / 753.4 / 753.4	877.3 / 877.3 / 877.3
		7 < θ ≤ 20	440.6 / 440.6 / 440.6	489.4 / 489.4 / 489.4	540.9 / 540.9 / 540.9	595.2 / 595.2 / 595.2	712.3 / 712.3 / 712.3	840.5 / 840.5 / 840.5	979.8 / 979.8 / 979.8
20 PSF	B	θ < 7	383.1 / 383.1 / 383.1	406.3 / 406.3 / 406.3	430.9 / 430.9 / 430.9	456.8 / 456.8 / 456.8	512.5 / 512.5 / 512.5	573.5 / 573.5 / 573.5	639.9 / 639.9 / 639.9
		7 < θ ≤ 20	396.9 / 396.9 / 396.9	423 / 423 / 423	450.6 / 450.6 / 450.6	479.7 / 479.7 / 479.7	542.4 / 542.4 / 542.4	611.2 / 611.2 / 611.2	710.7 / 710.7 / 710.7
	C	θ < 7	459.8 / 459.8 / 459.8	492.3 / 492.3 / 492.3	526.7 / 526.7 / 526.7	562.9 / 562.9 / 562.9	641 / 641 / 641	753.4 / 753.4 / 753.4	877.3 / 877.3 / 877.3
		7 < θ ≤ 20	483.2 / 483.2 / 483.2	519.8 / 519.8 / 519.8	558.4 / 558.4 / 558.4	599.2 / 599.2 / 599.2	712.3 / 712.3 / 712.3	840.5 / 840.5 / 840.5	979.8 / 979.8 / 979.8
25 PSF	B	θ < 7	420.9 / 420.9 / 420.9	444.2 / 444.2 / 444.2	468.7 / 468.7 / 468.7	494.6 / 494.6 / 494.6	550.3 / 550.3 / 550.3	611.4 / 611.4 / 611.4	677.7 / 677.7 / 677.7
		7 < θ ≤ 20	432.7 / 432.7 / 432.7	458.8 / 458.8 / 458.8	486.5 / 486.5 / 486.5	515.6 / 515.6 / 515.6	578.3 / 578.3 / 578.3	646.9 / 646.9 / 646.9	721.6 / 721.6 / 721.6
	C	θ < 7	497.6 / 497.6 / 497.6	530.2 / 530.2 / 530.2	564.5 / 564.5 / 564.5	600.8 / 600.8 / 600.8	678.8 / 678.8 / 678.8	764.2 / 764.2 / 764.2	877.3 / 877.3 / 877.3
		7 < θ ≤ 20	519 / 519 / 519	555.6 / 555.6 / 555.6	594.2 / 594.2 / 594.2	635 / 635 / 635	722.8 / 722.8 / 722.8	840.5 / 840.5 / 840.5	979.8 / 979.8 / 979.8
30 PSF	B	θ < 7	458.8 / 458.8 / 458.8	482 / 482 / 482	506.5 / 506.5 / 506.5	532.4 / 532.4 / 532.4	588.2 / 588.2 / 588.2	649.2 / 649.2 / 649.2	715.6 / 715.6 / 715.6
		7 < θ ≤ 20	468.5 / 468.5 / 468.5	494.6 / 494.6 / 494.6	522.3 / 522.3 / 522.3	551.4 / 551.4 / 551.4	614.1 / 614.1 / 614.1	682.8 / 682.8 / 682.8	757.4 / 757.4 / 757.4
	C	θ < 7	535.5 / 535.5 / 535.5	568 / 568 / 568	602.4 / 602.4 / 602.4	638.6 / 638.6 / 638.6	716.6 / 716.6 / 716.6	802.1 / 802.1 / 802.1	895 / 895 / 895
		7 < θ ≤ 20	554.8 / 554.8 / 554.8	591.4 / 591.4 / 591.4	630.1 / 630.1 / 630.1	670.8 / 670.8 / 670.8	758.6 / 758.6 / 758.6	854.7 / 854.7 / 854.7	979.8 / 979.8 / 979.8
35 PSF	B	θ < 7	496.6 / 496.6 / 496.6	519.8 / 519.8 / 519.8	544.4 / 544.4 / 544.4	570.3 / 570.3 / 570.3	626 / 626 / 626	687 / 687 / 687	753.4 / 753.4 / 753.4
		7 < θ ≤ 20	504.3 / 504.3 / 504.3	530.5 / 530.5 / 530.5	558.1 / 558.1 / 558.1	587.2 / 587.2 / 587.2	649.9 / 649.9 / 649.9	718.6 / 718.6 / 718.6	793.2 / 793.2 / 793.2
	C	θ < 7	573.3 / 573.3 / 573.3	605.8 / 605.8 / 605.8	640.2 / 640.2 / 640.2	676.4 / 676.4 / 676.4	754.4 / 754.4 / 754.4	839.9 / 839.9 / 839.9	932.8 / 932.8 / 932.8
		7 < θ ≤ 20	590.6 / 590.6 / 590.6	627.2 / 627.2 / 627.2	665.9 / 665.9 / 665.9	706.6 / 706.6 / 706.6	794.4 / 794.4 / 794.4	890.6 / 890.6 / 890.6	995.1 / 995.1 / 995.1
40 PSF	B	θ < 7	534.4 / 534.4 / 534.4	557.7 / 557.7 / 557.7	582.2 / 582.2 / 582.2	608.1 / 608.1 / 608.1	663.8 / 663.8 / 663.8	724.9 / 724.9 / 724.9	791.2 / 791.2 / 791.2
		7 < θ ≤ 20	540.2 / 540.2 / 540.2	566.3 / 566.3 / 566.3	593.9 / 593.9 / 593.9	623 / 623 / 623	685.7 / 685.7 / 685.7	754.4 / 754.4 / 754.4	829 / 829 / 829
	C	θ < 7	611.1 / 611.1 / 611.1	643.6 / 643.6 / 643.6	678 / 678 / 678	714.2 / 714.2 / 714.2	792.3 / 792.3 / 792.3	877.7 / 877.7 / 877.7	970.6 / 970.6 / 970.6
		7 < θ ≤ 20	626.4 / 626.4 / 626.4	663 / 663 / 663	701.7 / 701.7 / 701.7	742.4 / 742.4 / 742.4	830.2 / 830.2 / 830.2	926.4 / 926.4 / 926.4	1030.9 / 1030.9 / 1030.9
50 PSF	B	θ < 7	610.1 / 610.1 / 610.1	633.3 / 633.3 / 633.3	657.9 / 657.9 / 657.9	683.7 / 683.7 / 683.7	739.5 / 739.5 / 739.5	800.5 / 800.5 / 800.5	866.9 / 866.9 / 866.9
		7 < θ ≤ 20	611.8 / 611.8 / 611.8	637.9 / 637.9 / 637.9	665.5 / 665.5 / 665.5	694.6 / 694.6 / 694.6	757.3 / 757.3 / 757.3	826 / 826 / 826	900.7 / 900.7 / 900.7
	C	θ < 7	686.8 / 686.8 / 686.8	719.3 / 719.3 / 719.3	753.7 / 753.7 / 753.7	789.9 / 789.9 / 789.9	867.9 / 867.9 / 867.9	953.4 / 953.4 / 953.4	1046.3 / 1046.3 / 1046.3
		7 < θ ≤ 20	698.1 / 698.1 / 698.1	734.7 / 734.7 / 734.7	773.3 / 773.3 / 773.3	814.1 / 814.1 / 814.1	901.9 / 901.9 / 901.9	998 / 998 / 998	1102.5 / 1102.5 / 1102.5

The lateral reaction for all cases does not exceed 190.0 llbs

Appendix B: Standard Screw Capacities

Allowable capacities per #14 screw for Cold formed metal roofs (screws shall conform to the requirements from ASTM A449-14 and AISI 2016 Edition):

Metal gage size:	Uplift:	Lateral:
20 Ga	111 lbs	211 lbs
22 Ga	92 lbs	160 lbs
24 Ga	74 lbs	115 lbs
26 Ga	66 lbs	89 lbs