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September 19, 2019

page 1 of 51

Attn: Mr. Takashi Chiyoda, General Manager

Subject: Roof Tech RT-APEX – Structural Analysis

SML Job No.: 471-13

Dear Mr. Chiyoda:

We have analyzed the Roof Tech RT-APEX photovoltaic (PV) panel roof mount system and determined that, for the configurations and criteria described below, it is in compliance with the applicable sections of the following Reference Documents:

- Codes: ASCE/SEI 7-10 Min. Design Loads for Buildings & Other Structures
International Building Code 2012 & 2015 Editions
International Residential Building Code 2012 & 2015 Editions
- Other: Aluminum Design Manual, 2010 & 2015 Editions

The Roof Tech RT-APEX photovoltaic (PV) panel roof mount system is comprised of a 6000 series aluminum extrusions. The aluminum extrusions from the bottom up are, Base, Pillar, U-D Bracket, and End or Mid Clamps. **Note: The U-D Splice Bracket, End Splice Clamp, and Mid Splice Clamp are longer versions of their standard length counterpart, and may be used instead of the standard parts with the same minimum spacing.** A 6.0 mm stainless steel set screw SHCS attaches the Base to the Pillar with an installation torque of 9.0 ft-lb. A 12.0 mm stainless steel hex screw stud attaches the Pillar to the U-D Bracket, and is field adjustable up and down. A 8.0 mm stainless steel SHCS and conical stainless steel star washer attaches either the End or Mid Clamp to the U-D Bracket with the higher of either a minimum installation torque of 12.0 ft-lb or the minimum installation torque indicated in the Roof Tech Installation manual for the specific PV panel being installed. The RT-APEX installation must be with the Base's long direction parallel to the roof framing (down slope) and in accordance with Roof Tech's Installation Manual. The system is attached to the roof wood substrate with 5.0 mm x 60 mm long stainless steel wood screws.

Four wood substrates were tested with the fasteners also passing through two layers of composite asphalt roof shingles and 2 layers of building paper. The first tested wood substrate consisted of 15/32" thick sheathing over a 2x4 DF-L #2 rafter (2x truss top chord OK by inspection), the second tested wood substrate consisted of 7/16" thick OSB only, the third tested wood substrate

consisted of 15/32" thick plywood only, and the fourth tested wood substrate was 1x6 planks DF-L #2 (G=0.50). See Exhibit 'A' – attached. **Note: Two wood screws are required at the rafter installations and five wood screws are required at the OSB, plywood and 1x6 plank only installations. Where an asterisk (*) and two values are shown in a single cell in the span tables below, the second value with the asterisk requires the installation of a #6 Self-Drilling Self-Tapping (SDST) screw installed through the Pillar, into the Base, across from the set screw SHCS.**

The testing data provided by Institute of Building Technology (IBT) report no.: 2426-19006 project no.: 31772, dated May 22, 2019, shows that the critical failure occurs in one of two ways; aluminum or stainless steel failure or wood failure. Maximum allowable values for these failure conditions were derived using a safety factor of 2.0 on the ultimate loads resulting in aluminum or stainless steel failure and a safety factor of 3.0 on the loads resulting in wood failure. The testing was performed in general accordance with IAPMO Uniform Evaluation Services *Evaluation Criteria for Joist Hangers and Miscellaneous Connectors*, EC002 adopted June 2007, revised January 2016 and ASTM D1761-2012, *Standard Test Methods for Mechanical Fasteners in Wood*.

The results of the above testing are presented below:

The maximum allowable uplift and shear force (w/out and with *SDST screw) for 15/32" thick sheathing over a 2x4 DF #2 rafter is 520 lb and 87 lb/*117 lb respectively. The maximum allowable uplift, down force, and shear force (w/out and with SDST screw) for 7/16" thick OSB only is 182 lb, 181 lb, and 82 lb/*107 lb respectively. The maximum allowable uplift, down force, and shear force (w/out and with SDST screw) for 15/32" thick plywood only is 156 lb, 206 lb, and 79 lb/*108 lb respectively. The maximum allowable uplift, down force, and shear force (w/out and with SDST screw) for 1x6 Planks only is 164 lb, 406 lb, and 83 lb/*115 lb respectively.

The attached tables below show the maximum spacing of the RT-APEX for the combined loading criteria of wind speed, roof slope, and snow loads which produce reaction loads less than the allowable loads listed above. The effect of seismic loads (for all design categories A-F) have been determined to be less than the effect due to wind loads in all load conditions and combinations. The assumed topography is flat with a $K_{zt} = 1.0$. Therefore, the maximum allowable spacing for common load cases due to dead, wind and snow loads are the controlling load cases.

Instructions on how to combine rafter and decking only installations (See Exhibit B):

For any given set of design criteria pull the value from the rafter and decking only (Plywood or OSB Only) tables. Add the given rafter spacing to the given decking only spacing and divide by 2.

RtoR = rafter-to-rafter spacing, while DtoD = deck-to-deck spacing.

If RtoR = 6 feet and DtoD = 4 feet, the rafter-to-deck spacing shall be defined by the following equation. $[(RtoR)+(DtoD)]/2 = [6 \text{ ft} + 4 \text{ ft}]/2 = 5 \text{ ft}$.

RT1	RT-APEX Rafter Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches													
	Portrait Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
0 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	87/*96	77/*96
			2	96	96	96	82/*83	70/*71	61	53/*54	47	42		
			3	73/*74	67/*68	61/*62	52	44/*45	39	34	30	26/*27		
		7 to 27 Degrees	1	96	96	96	96	96	96	96	86/*96	78/*96	71/*96	
			2	95/*96	88/*94	82/*88	72/*76	63/*66	56/*58	49/*51	44/*46	40/*41		
			3	66/*70	61/*64	57/*59	49/*51	43/*44	38/*39	33/*34	30	27		
		28 to 45 Degrees	1	96	96	96	92/*96	83/*96	75/*96	69/*96	63/*96	57/*96		
			2	96	95/*96	90/*96	81/*90	73/*80	66/*72	60/*64	54/*58	50/*53		
			3	96	95/*96	90/*96	81/*90	73/*80	66/*72	60/*64	54/*58	50/*53		
	C	0 to 6 Degrees	1	96	96	96	96	92/*96	79/*96	69/*96	61/*96	54/*96		
			2	82/*83	75	68/*69	58	50	43	38	33	29/*30		
			3	52	47	43	37	31	27	24	21	19		
		7 to 27 Degrees	1	96	96	96	92/*96	81/*96	72/*96	65/*96	58/*96	52/*96		
			2	71/*75	66/*70	61/*64	53/*55	46/*48	41/*42	36/*37	32/*33	29/*30		
			3	49/*51	45/*47	42/*43	36/*37	31/*32	27/*28	24/*25	21/*22	19		
		28 to 45 Degrees	1	91/*96	86/*96	81/*96	73/*96	65/*96	59/*96	53/*96	48/*96	44/*96		
			2	81/*90	76/*84	71/*78	63/*69	57/*61	51/*54	46/*48	41/*43	37/*39		
			3	81/*90	76/*84	71/*78	63/*69	57/*61	51/*54	46/*48	41/*43	37/*39		
	D	0 to 6 Degrees	1	96	96	96	90/*96	77/*96	66/*96	58/*96	51/*96	45/*96		
			2	69	63	57/*58	48/*49	42	36	32	28	25		
			3	43/*44	40	36	31	26	23	20	18	16		
		7 to 27 Degrees	1	96	96	92/*96	80/*96	70/*96	62/*96	56/*96	50/*96	45/*96		
			2	62/*65	57/*59	53/*55	46/*47	40/*41	35/*36	31/*32	27/*28	25		
			3	42/*43	39/*40	36/*37	31	26/*27	23/*24	20/*21	18	16		
28 to 45 Degrees		1	82/*96	77/*96	72/*96	64/*96	57/*96	51/*96	46/*96	42/*96	38/*96			
		2	72/*78	67/*73	63/*68	56/*60	49/*53	44/*47	39/*41	36/*37	32/*33			
		3	72/*78	67/*73	63/*68	56/*60	49/*53	44/*47	39/*41	36/*37	32/*33			
1-10 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	87/*96	77/*96	
			2	96	96	96	82/*83	70/*71	61	53/*54	47	42		
			3	73/*74	67/*68	61/*62	52	44/*45	39	34	30	26/*27		
		7 to 27 Degrees	1	74/*96	74/*96	74/*96	74/*96	74/*96	74/*96	74/*96	74/*96	74/*96	71/*96	
			2	74/*96	74/*94	74/*88	72/*76	63/*66	56/*58	49/*51	44/*46	40/*41		
			3	66/*70	61/*64	57/*59	49/*51	43/*44	38/*39	33/*34	30	27		
		28 to 45 Degrees	1	69/*94	69/*94	69/*94	69/*94	69/*94	69/*94	69/*94	63/*94	57/*94		
			2	69/*94	69/*94	69/*94	69/*90	69/*80	66/*72	60/*64	54/*58	50/*53		
			3	69/*94	69/*94	69/*94	69/*90	69/*80	66/*72	60/*64	54/*58	50/*53		
	C	0 to 6 Degrees	1	96	96	96	96	92/*96	79/*96	69/*96	61/*96	54/*96		
			2	82/*83	75	68/*69	58	50	43	38	33	29/*30		
			3	52	47	43	37	31	27	24	21	19		
		7 to 27 Degrees	1	74/*96	74/*96	74/*96	74/*96	74/*96	74/*96	65/*96	58/*96	52/*96		
			2	71/*75	66/*70	61/*64	53/*55	46/*48	41/*42	36/*37	32/*33	29/*30		
			3	49/*51	45/*47	42/*43	36/*37	31/*32	27/*28	24/*25	21/*22	19		
		28 to 45 Degrees	1	69/*94	69/*94	69/*94	69/*94	65/*94	59/*94	53/*94	48/*94	44/*94		
			2	69/*90	69/*84	69/*78	63/*69	57/*61	51/*54	46/*48	41/*43	37/*39		
			3	69/*90	69/*84	69/*78	63/*69	57/*61	51/*54	46/*48	41/*43	37/*39		
	D	0 to 6 Degrees	1	96	96	96	90/*96	77/*96	66/*96	58/*96	51/*96	45/*96		
			2	69	63	57/*58	48/*49	42	36	32	28	25		
			3	43/*44	40	36	31	26	23	20	18	16		
		7 to 27 Degrees	1	74/*96	74/*96	74/*96	74/*96	70/*96	62/*96	56/*96	50/*96	45/*96		
			2	62/*65	57/*59	53/*55	46/*47	40/*41	35/*36	31/*32	27/*28	25		
			3	42/*43	39/*40	36/*37	31	26/*27	23/*24	20/*21	18	16		
28 to 45 Degrees		1	69/*94	69/*94	69/*94	64/*94	57/*94	51/*94	46/*94	42/*94	38/*94			
		2	69/*78	67/*73	63/*68	56/*60	49/*53	44/*47	39/*41	36/*37	32/*33			
		3	69/*78	67/*73	63/*68	56/*60	49/*53	44/*47	39/*41	36/*37	32/*33			

RT1	RT-APEX Rafter Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches																								
	Portrait Orientation - ASCE 7-10																								
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)																					
				110	115	120	130	140	150	160	170	180													
11-20 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96		
			2	96	96	96	82/*83	70/*71	61	53/*54	47	42													
			3	73/*74	67/*68	61/*62	52	44/*45	39	34	30	26/*27													
		7 to 27 Degrees	1	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61
			2	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*58	45/*51	44/*46	40/*41												
			3	45/*61	45/*61	45/*59	45/*51	43/*44	38/*39	33/*34	30	27													
		28 to 45 Degrees	1	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59
			2	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59
			3	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59
	C	0 to 6 Degrees	1	96	96	96	96	96	92/*96	79/*96	69/*96	61/*96	54/*96												
			2	82/*83	75	68/*69	58	50	43	38	33	29/*30													
			3	52	47	43	37	31	27	24	21	19													
		7 to 27 Degrees	1	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61
			2	45/*61	45/*61	45/*61	45/*55	45/*48	41/*42	36/*37	32/*33	29/*30													
			3	45/*51	45/*47	42/*43	36/*37	31/*32	27/*28	24/*25	21/*22	19													
		28 to 45 Degrees	1	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59
			2	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*54	44/*48	41/*43	37/*39											
			3	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*54	44/*48	41/*43	37/*39											
	D	0 to 6 Degrees	1	96	96	96	90/*96	77/*96	66/*96	58/*96	51/*96	45/*96													
			2	69	63	57/*58	48/*49	42	36	32	28	25													
			3	43/*44	40	36	31	26	23	20	18	16													
		7 to 27 Degrees	1	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61	45/*61
			2	45/*61	45/*59	45/*55	45/*47	40/*41	35/*36	31/*32	27/*28	25													
			3	42/*43	39/*40	36/*37	31	26/*27	23/*24	20/*21	18	16													
28 to 45 Degrees		1	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	
		2	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*53	44/*47	39/*41	36/*37	32/*33											
		3	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*59	44/*53	44/*47	39/*41	36/*37	32/*33											
21-30 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96		
			2	96	96	96	82/*83	70/*71	61	53/*54	47	42													
			3	73/*74	67/*68	61/*62	52	44/*45	39	34	30	26/*27													
		7 to 27 Degrees	1	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50
			2	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50
			3	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*44	37/*39	33/*34	30	27										
		28 to 45 Degrees	1	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50
			2	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50
			3	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50
	C	0 to 6 Degrees	1	96	96	96	96	96	92/*96	79/*96	69/*96	61/*96	54/*96												
			2	82/*83	75	68/*69	58	50	43	38	33	29/*30													
			3	52	47	43	37	31	27	24	21	19													
		7 to 27 Degrees	1	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50
			2	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*48	37/*42	36/*37	32/*33	29/*30											
			3	37/*50	37/*47	37/*43	36/*37	31/*32	27/*28	24/*25	21/*22	19													
		28 to 45 Degrees	1	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50
			2	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50
			3	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50
	D	0 to 6 Degrees	1	96	96	96	90/*96	77/*96	66/*96	58/*96	51/*96	45/*96													
			2	69	63	57/*58	48/*49	42	36	32	28	25													
			3	43/*44	40	36	31	26	23	20	18	16													
		7 to 27 Degrees	1	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50
			2	37/*50	37/*50	37/*50	37/*50	37/*47	37/*41	35/*36	31/*32	27/*28	25												
			3	37/*43	37/*40	36/*37	31	26/*27	23/*24	20/*21	18	16													
28 to 45 Degrees		1	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	
		2	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	
		3	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	37/*50	

RT1	RT-APEX Rafter Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches														
	Portrait Orientation - ASCE 7-10														
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)											
				110	115	120	130	140	150	160	170	180			
31-40 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	87/*96	77/*96	
			2	96	96	96	82/*83	70/*71	61	53/*54	47	42			
			3	73/*74	67/*68	61/*62	52	44/*45	39	34	30	26/*27			
		7 to 27 Degrees	1	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39
			2	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39
			3	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*34	29/*30	27		
		28 to 45 Degrees	1	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39
			2	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39
			3	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39
	C	0 to 6 Degrees	1	96	96	96	96	92/*96	79/*96	69/*96	61/*96	54/*96			
			2	82/*83	75	68/*69	58	50	43	38	33	29/*30			
			3	52	47	43	37	31	27	24	21	19			
		7 to 27 Degrees	1	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39
			2	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*37	29/*33	29/*30		
			3	29/*39	29/*39	29/*39	29/*39	29/*37	29/*32	27/*28	24/*25	21/*22	19		
		28 to 45 Degrees	1	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39
			2	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39
			3	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39
	D	0 to 6 Degrees	1	96	96	96	90/*96	77/*96	66/*96	58/*96	51/*96	45/*96			
			2	69	63	57/*58	48/*49	42	36	32	28	25			
			3	43/*44	40	36	31	26	23	20	18	16			
		7 to 27 Degrees	1	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39
			2	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39
			3	29/*39	29/*39	29/*39	29/*39	29/*37	29/*31	26/*27	23/*24	20/*21	18	16	
28 to 45 Degrees		1	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	
		2	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	
		3	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	29/*39	
41-50 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	87/*96	77/*96	
			2	96	96	96	82/*83	70/*71	61	53/*54	47	42			
			3	73/*74	67/*68	61/*62	52	44/*45	39	34	30	26/*27			
		7 to 27 Degrees	1	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32
			2	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32
			3	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*30	24/*27		
		28 to 45 Degrees	1	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32
			2	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32
			3	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32
	C	0 to 6 Degrees	1	96	96	96	96	92/*96	79/*96	69/*96	61/*96	54/*96			
			2	82/*83	75	68/*69	58	50	43	38	33	29/*30			
			3	52	47	43	37	31	27	24	21	19			
		7 to 27 Degrees	1	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32
			2	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32
			3	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*28	24/*25	21/*22	19		
		28 to 45 Degrees	1	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32
			2	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32
			3	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32
	D	0 to 6 Degrees	1	96	96	96	90/*96	77/*96	66/*96	58/*96	51/*96	45/*96			
			2	69	63	57/*58	48/*49	42	36	32	28	25			
			3	43/*44	40	36	31	26	23	20	18	16			
		7 to 27 Degrees	1	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32
			2	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*28	24/*25	
			3	24/*32	24/*32	24/*32	24/*32	24/*31	24/*27	23/*24	20/*21	18	16		
28 to 45 Degrees		1	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	
		2	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	
		3	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	24/*32	

RT1	RT-APEX Rafter Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches													
	Portrait Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
51-60 PSF	B	0 to 6 Degrees	1	81/*96	81/*96	81/*96	81/*96	81/*96	81/*96	81/*96	81/*96	81/*96	77/*96	
			2	81/*96	81/*96	81/*96	81/*83	70/*71	61	53/*54	47	42		
			3	73/*74	67/*68	61/*62	52	44/*45	39	34	30	26/*27		
		7 to 27 Degrees	1	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27
			2	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27
			3	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27
		28 to 45 Degrees	1	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28
			2	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28
			3	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28
	C	0 to 6 Degrees	1	81/*96	81/*96	81/*96	81/*96	81/*96	81/*96	79/*96	69/*96	61/*96	54/*96	
			2	81/*83	75	68/*69	58	50	43	38	33	29/*30		
			3	52	47	43	37	31	27	24	21	19		
		7 to 27 Degrees	1	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	
			2	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	
			3	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*25	20/*22	19	
		28 to 45 Degrees	1	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	
			2	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	
			3	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	
	D	0 to 6 Degrees	1	81/*96	81/*96	81/*96	81/*96	81/*96	81/*96	66/*96	58/*96	51/*96	45/*96	
			2	69	63	57/*58	48/*49	42	36	32	28	25		
			3	43/*44	40	36	31	26	23	20	18	16		
		7 to 27 Degrees	1	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	
			2	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*25	
			3	20/*27	20/*27	20/*27	20/*27	20/*27	20/*27	20/*24	20/*21	18	16	
28 to 45 Degrees		1	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28		
		2	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28		
		3	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28	20/*28		
61-70 PSF	B	0 to 6 Degrees	1	70/*95	70/*95	70/*95	70/*95	70/*95	70/*95	70/*95	70/*95	70/*95	70/*95	
			2	70/*95	70/*95	70/*95	70/*83	70/*71	61	53/*54	47	42		
			3	70/*74	67/*68	61/*62	52	44/*45	39	34	30	26/*27		
		7 to 27 Degrees	1	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
			2	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
			3	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
		28 to 45 Degrees	1	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
			2	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
			3	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
	C	0 to 6 Degrees	1	70/*95	70/*95	70/*95	70/*95	70/*95	70/*95	70/*95	69/*95	61/*95	54/*95	
			2	70/*83	70/*75	68/*69	58	50	43	38	33	29/*30		
			3	52	47	43	37	31	27	24	21	19		
		7 to 27 Degrees	1	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
			2	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
			3	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*22	18/*19	
		28 to 45 Degrees	1	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
			2	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
			3	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
	D	0 to 6 Degrees	1	70/*95	70/*95	70/*95	70/*95	70/*95	70/*95	66/*95	58/*95	51/*95	45/*95	
			2	69	63	57/*58	48/*49	42	36	32	28	25		
			3	43/*44	40	36	31	26	23	20	18	16		
		7 to 27 Degrees	1	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
			2	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
			3	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*21	18	16	
28 to 45 Degrees		1	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24		
		2	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24		
		3	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24		

RT2	RT-APEX Rafter Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches													
	Portrait Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
0 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	86/*96	76/*96	67/*96	
			2	96	93/*95	85/*87	72/*73	62	53/*54	47	41	37		
			3	64/*65	59	54	45/*46	39	34	30	26	23		
		7 to 27 Degrees	1	96	96	96	96	94/*96	84/*96	76/*96	68/*96	62/*96		
			2	83/*90	77/*83	72/*77	63/*66	55/*58	49/*51	43/*45	39/*40	35/*36		
			3	58/*61	54/*56	50/*52	43/*45	37/*39	33/*34	29/*30	26/*27	23/*24		
		28 to 45 Degrees	1	96	94/*96	89/*96	80/*96	73/*96	66/*96	60/*96	55/*96	50/*96		
			2	88/*96	84/*94	79/*89	71/*79	64/*70	58/*63	52/*56	48/*51	43/*46		
			3	88/*96	84/*94	79/*89	71/*79	64/*70	58/*63	52/*56	48/*51	43/*46		
	C	0 to 6 Degrees	1	96	96	96	94/*96	80/*96	69/*96	61/*96	53/*96	47/*96		
			2	72/*73	65/*66	60	51	43/*44	38	33	29	26		
			3	45/*46	41/*42	38	32	27/*28	24	21	18	16		
		7 to 27 Degrees	1	96	96	92/*96	81/*96	71/*96	63/*96	57/*96	51/*96	46/*96		
			2	63/*66	58/*61	54/*56	47/*48	41/*42	36/*37	32/*33	28/*29	25/*26		
			3	43/*44	39/*41	36/*38	31/*32	27/*28	24	21	19	17		
		28 to 45 Degrees	1	80/*96	76/*96	71/*96	64/*96	57/*96	51/*96	46/*96	42/*96	38/*96		
			2	71/*78	67/*73	63/*68	56/*60	50/*53	44/*47	40/*42	36/*38	33/*34		
			3	71/*78	67/*73	63/*68	56/*60	50/*53	44/*47	40/*42	36/*38	33/*34		
	D	0 to 6 Degrees	1	96	96	93/*96	79/*96	67/*96	58/*96	51/*96	45/*96	40/*96		
			2	60/*61	55	50/*51	42/*43	36/*37	32	28	24	22		
			3	38	35	32	27	23	20	17/*18	15	14		
		7 to 27 Degrees	1	92/*96	86/*96	80/*96	70/*96	62/*96	55/*96	49/*96	44/*96	39/*96		
			2	54/*57	50/*52	46/*48	40/*41	35/*36	31	27/*28	24/*25	21/*22		
			3	37/*38	34/*35	31/*32	27	23/*24	20/*21	18	16	14		
28 to 45 Degrees		1	72/*96	67/*96	63/*96	56/*96	50/*96	45/*96	40/*96	36/*96	33/*96			
		2	63/*69	59/*64	55/*60	49/*52	43/*46	39/*41	35/*36	31/*33	28/*29			
		3	63/*69	59/*64	55/*60	49/*52	43/*46	39/*41	35/*36	31/*33	28/*29			
1-10 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	86/*96	76/*96	67/*96		
			2	96	93/*95	85/*87	72/*73	62	53/*54	47	41	37		
			3	64/*65	59	54	45/*46	39	34	30	26	23		
		7 to 27 Degrees	1	65/*87	65/*87	65/*87	65/*87	65/*87	65/*87	65/*87	65/*87	62/*87		
			2	65/*87	65/*83	65/*77	63/*66	55/*58	49/*51	43/*45	39/*40	35/*36		
			3	58/*61	54/*56	50/*52	43/*45	37/*39	33/*34	29/*30	26/*27	23/*24		
		28 to 45 Degrees	1	61/*82	61/*82	61/*82	61/*82	61/*82	61/*82	60/*82	55/*82	50/*82		
			2	61/*82	61/*82	61/*82	61/*79	61/*70	58/*63	52/*56	48/*51	43/*46		
			3	61/*82	61/*82	61/*82	61/*79	61/*70	58/*63	52/*56	48/*51	43/*46		
	C	0 to 6 Degrees	1	96	96	96	94/*96	80/*96	69/*96	61/*96	53/*96	47/*96		
			2	72/*73	65/*66	60	51	43/*44	38	33	29	26		
			3	45/*46	41/*42	38	32	27/*28	24	21	18	16		
		7 to 27 Degrees	1	65/*87	65/*87	65/*87	65/*87	65/*87	63/*87	57/*87	51/*87	46/*87		
			2	63/*66	58/*61	54/*56	47/*48	41/*42	36/*37	32/*33	28/*29	25/*26		
			3	43/*44	39/*41	36/*38	31/*32	27/*28	24	21	19	17		
		28 to 45 Degrees	1	61/*82	61/*82	61/*82	61/*82	57/*82	51/*82	46/*82	42/*82	38/*82		
			2	61/*78	61/*73	61/*68	56/*60	50/*53	44/*47	40/*42	36/*38	33/*34		
			3	61/*78	61/*73	61/*68	56/*60	50/*53	44/*47	40/*42	36/*38	33/*34		
	D	0 to 6 Degrees	1	96	96	93/*96	79/*96	67/*96	58/*96	51/*96	45/*96	40/*96		
			2	60/*61	55	50/*51	42/*43	36/*37	32	28	24	22		
			3	38	35	32	27	23	20	17/*18	15	14		
		7 to 27 Degrees	1	65/*87	65/*87	65/*87	65/*87	62/*87	55/*87	49/*87	44/*87	39/*87		
			2	54/*57	50/*52	46/*48	40/*41	35/*36	31	27/*28	24/*25	21/*22		
			3	37/*38	34/*35	31/*32	27	23/*24	20/*21	18	16	14		
28 to 45 Degrees		1	61/*82	61/*82	61/*82	56/*82	50/*82	45/*82	40/*82	36/*82	33/*82			
		2	61/*69	59/*64	55/*60	49/*52	43/*46	39/*41	35/*36	31/*33	28/*29			
		3	61/*69	59/*64	55/*60	49/*52	43/*46	39/*41	35/*36	31/*33	28/*29			

RT2	RT-APEX Rafter Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches												
	Portrait Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
11-20 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	86/*96	76/*96	67/*96
			2	96	93/*95	85/*87	72/*73	62	53/*54	47	41	37	
			3	64/*65	59	54	45/*46	39	34	30	26	23	
		7 to 27 Degrees	1	39/*53	39/*53	39/*53	39/*53	39/*53	39/*53	39/*53	39/*53	39/*53	39/*53
			2	39/*53	39/*53	39/*53	39/*53	39/*53	39/*51	39/*45	39/*40	35/*36	
			3	39/*53	39/*53	39/*52	39/*45	37/*39	33/*34	29/*30	26/*27	23/*24	
		28 to 45 Degrees	1	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52
			2	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	38/*51	38/*46	
			3	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	38/*51	38/*46	
	C	0 to 6 Degrees	1	96	96	96	94/*96	80/*96	69/*96	61/*96	53/*96	47/*96	
			2	72/*73	65/*66	60	51	43/*44	38	33	29	26	
			3	45/*46	41/*42	38	32	27/*28	24	21	18	16	
		7 to 27 Degrees	1	39/*53	39/*53	39/*53	39/*53	39/*53	39/*53	39/*53	39/*53	39/*53	
			2	39/*53	39/*53	39/*53	39/*48	39/*42	36/*37	32/*33	28/*29	25/*26	
			3	39/*44	39/*41	36/*38	31/*32	27/*28	24	21	19	17	
		28 to 45 Degrees	1	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	
			2	38/*52	38/*52	38/*52	38/*52	38/*52	38/*47	38/*42	36/*38	33/*34	
			3	38/*52	38/*52	38/*52	38/*52	38/*52	38/*47	38/*42	36/*38	33/*34	
	D	0 to 6 Degrees	1	96	96	93/*96	79/*96	67/*96	58/*96	51/*96	45/*96	40/*96	
			2	60/*61	55	50/*51	42/*43	36/*37	32	28	24	22	
			3	38	35	32	27	23	20	17/*18	15	14	
		7 to 27 Degrees	1	39/*53	39/*53	39/*53	39/*53	39/*53	39/*53	39/*53	39/*53	39/*53	
			2	39/*53	39/*52	39/*48	39/*41	35/*36	31	27/*28	24/*25	21/*22	
			3	37/*38	34/*35	31/*32	27	23/*24	20/*21	18	16	14	
28 to 45 Degrees		1	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	38/*52	36/*52	33/*52		
		2	38/*52	38/*52	38/*52	38/*52	38/*46	38/*41	35/*36	31/*33	28/*29		
		3	38/*52	38/*52	38/*52	38/*52	38/*46	38/*41	35/*36	31/*33	28/*29		
21-30 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	86/*96	76/*96	67/*96	
			2	96	93/*95	85/*87	72/*73	62	53/*54	47	41	37	
			3	64/*65	59	54	45/*46	39	34	30	26	23	
		7 to 27 Degrees	1	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	
			2	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	33/*40	33/*36	
			3	33/*44	33/*44	33/*44	33/*44	33/*39	33/*34	29/*30	26/*27	23/*24	
		28 to 45 Degrees	1	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	
			2	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	
			3	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	
	C	0 to 6 Degrees	1	96	96	96	94/*96	80/*96	69/*96	61/*96	53/*96	47/*96	
			2	72/*73	65/*66	60	51	43/*44	38	33	29	26	
			3	45/*46	41/*42	38	32	27/*28	24	21	18	16	
		7 to 27 Degrees	1	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	
			2	33/*44	33/*44	33/*44	33/*44	33/*42	33/*37	32/*33	28/*29	25/*26	
			3	33/*44	33/*41	33/*38	31/*32	27/*28	24	21	19	17	
		28 to 45 Degrees	1	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	
			2	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*42	32/*38	32/*34	
			3	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*42	32/*38	32/*34	
	D	0 to 6 Degrees	1	96	96	93/*96	79/*96	67/*96	58/*96	51/*96	45/*96	40/*96	
			2	60/*61	55	50/*51	42/*43	36/*37	32	28	24	22	
			3	38	35	32	27	23	20	17/*18	15	14	
		7 to 27 Degrees	1	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	33/*44	
			2	33/*44	33/*44	33/*44	33/*41	33/*36	31	27/*28	24/*25	21/*22	
			3	33/*38	33/*35	31/*32	27	23/*24	20/*21	18	16	14	
28 to 45 Degrees		1	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43	32/*43		
		2	32/*43	32/*43	32/*43	32/*43	32/*43	32/*41	32/*36	31/*33	28/*29		
		3	32/*43	32/*43	32/*43	32/*43	32/*43	32/*41	32/*36	31/*33	28/*29		

RT2	RT-APEX Rafter Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches												
	Portrait Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
31-40 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	86/*96	76/*96	67/*96	
			2	96	93/*95	85/*87	72/*73	62	53/*54	47	41	37	
			3	64/*65	59	54	45/*46	39	34	30	26	23	
		7 to 27 Degrees	1	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35
			2	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35
			3	26/*35	26/*35	26/*35	26/*35	26/*35	26/*34	26/*30	26/*27	23/*24	
		28 to 45 Degrees	1	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34
			2	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34
			3	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34
	C	0 to 6 Degrees	1	96	96	96	94/*96	80/*96	69/*96	61/*96	53/*96	47/*96	
			2	72/*73	65/*66	60	51	43/*44	38	33	29	26	
			3	45/*46	41/*42	38	32	27/*28	24	21	18	16	
		7 to 27 Degrees	1	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35
			2	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*29	25/*26
			3	26/*35	26/*35	26/*35	26/*32	26/*28	24	21	19	17	
		28 to 45 Degrees	1	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34
			2	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34
			3	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34
	D	0 to 6 Degrees	1	96	96	93/*96	79/*96	67/*96	58/*96	51/*96	45/*96	40/*96	
			2	60/*61	55	50/*51	42/*43	36/*37	32	28	24	22	
			3	38	35	32	27	23	20	17/*18	15	14	
		7 to 27 Degrees	1	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35	26/*35
			2	26/*35	26/*35	26/*35	26/*35	26/*35	26/*31	26/*28	24/*25	21/*22	
			3	26/*35	26/*35	26/*32	26/*27	23/*24	20/*21	18	16	14	
28 to 45 Degrees		1	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	
		2	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*33	25/*29	
		3	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*34	25/*33	25/*29	
41-50 PSF	B	0 to 6 Degrees	1	84/*96	84/*96	84/*96	84/*96	84/*96	84/*96	84/*96	84/*96	76/*96	67/*96
			2	84/*96	84/*95	84/*87	72/*73	62	53/*54	47	41	37	
			3	64/*65	59	54	45/*46	39	34	30	26	23	
		7 to 27 Degrees	1	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28
			2	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28
			3	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*27	21/*24
		28 to 45 Degrees	1	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28
			2	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28
			3	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28
	C	0 to 6 Degrees	1	84/*96	84/*96	84/*96	84/*96	80/*96	69/*96	61/*96	53/*96	47/*96	
			2	72/*73	65/*66	60	51	43/*44	38	33	29	26	
			3	45/*46	41/*42	38	32	27/*28	24	21	18	16	
		7 to 27 Degrees	1	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28
			2	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*26
			3	21/*28	21/*28	21/*28	21/*28	21/*28	21/*24	21	19	17	
		28 to 45 Degrees	1	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28
			2	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28
			3	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28
	D	0 to 6 Degrees	1	84/*96	84/*96	84/*96	79/*96	67/*96	58/*96	51/*96	45/*96	40/*96	
			2	60/*61	55	50/*51	42/*43	36/*37	32	28	24	22	
			3	38	35	32	27	23	20	17/*18	15	14	
		7 to 27 Degrees	1	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28
			2	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*25	21/*22
			3	21/*28	21/*28	21/*28	21/*27	21/*24	20/*21	18	16	14	
28 to 45 Degrees		1	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	
		2	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	
		3	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	21/*28	

RT2	RT-APEX Rafter Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches													
	Portrait Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
51-60 PSF	B	0 to 6 Degrees	1	71/*96	71/*96	71/*96	71/*96	71/*96	71/*96	71/*96	71/*96	71/*96	67/*96	
			2	71/*96	71/*95	71/*87	71/*73	62	53/*54	47	41	37		
			3	64/*65	59	54	45/*46	39	34	30	26	23		
		7 to 27 Degrees	1	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24
			2	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24
			3	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24
		28 to 45 Degrees	1	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24
			2	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24
			3	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24
	C	0 to 6 Degrees	1	71/*96	71/*96	71/*96	71/*96	71/*96	71/*96	69/*96	61/*96	53/*96	47/*96	
			2	71/*73	65/*66	60	51	43/*44	38	33	29	26		
			3	45/*46	41/*42	38	32	27/*28	24	21	18	16		
		7 to 27 Degrees	1	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24
			2	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24
			3	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*21	18/*19	17	
		28 to 45 Degrees	1	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24
			2	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24
			3	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24
	D	0 to 6 Degrees	1	71/*96	71/*96	71/*96	71/*96	71/*96	71/*96	58/*96	51/*96	45/*96	40/*96	
			2	60/*61	55	50/*51	42/*43	36/*37	32	28	24	22		
			3	38	35	32	27	23	20	17/*18	15	14		
		7 to 27 Degrees	1	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24
			2	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24
			3	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*21	18	16	14
28 to 45 Degrees		1	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
		2	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
		3	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	
61-70 PSF	B	0 to 6 Degrees	1	62/*83	62/*83	62/*83	62/*83	62/*83	62/*83	62/*83	62/*83	62/*83	62/*83	
			2	62/*83	62/*83	62/*83	62/*73	62	53/*54	47	41	37		
			3	62/*65	59	54	45/*46	39	34	30	26	23		
		7 to 27 Degrees	1	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21
			2	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21
			3	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21
		28 to 45 Degrees	1	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21
			2	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21
			3	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21
	C	0 to 6 Degrees	1	62/*83	62/*83	62/*83	62/*83	62/*83	62/*83	62/*83	61/*83	53/*83	47/*83	
			2	62/*73	62/*66	60	51	43/*44	38	33	29	26		
			3	45/*46	41/*42	38	32	27/*28	24	21	18	16		
		7 to 27 Degrees	1	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21
			2	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21
			3	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*19	15/*17	
		28 to 45 Degrees	1	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21
			2	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21
			3	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21
D	0 to 6 Degrees	1	62/*83	62/*83	62/*83	62/*83	62/*83	62/*83	58/*83	51/*83	45/*83	40/*83		
		2	60/*61	55	50/*51	42/*43	36/*37	32	28	24	22			
		3	38	35	32	27	23	20	17/*18	15	14			
	7 to 27 Degrees	1	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	
		2	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	
		3	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*21	15/*18	15/*16	14		
	28 to 45 Degrees	1	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	
		2	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	
		3	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	16/*21	

RT3	RT-APEX Plywood Only Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches											
	Portrait Orientation - ASCE 7-10											
	Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)							
				110	115	120	130	140	150	160	170	180
0 PSF	B	0 to 6 Degrees	1	60/*61	60/*61	59	49	41	35	30/*31	27	23
			2	36/*37	33	30	25	21	18	16	14	12
			3	22	20	18	16	13	11	10	9	8
		7 to 27 Degrees	1	48/*52	48/*52	48/*52	47/*49	41/*42	35/*36	31/*32	27/*28	24/*25
			2	35/*36	32/*33	29/*30	25	21/*22	18/*19	16	14	13
			3	22/*23	21	19	16	14	12	10	9	8
		28 to 45 Degrees	1	43/*47	41/*45	39/*43	36/*39	33/*35	29/*30	26/*27	23/*24	21
			2	43/*47	40/*43	37/*39	32/*34	28/*29	25	22	19/*20	17/*18
			3	43/*47	40/*43	37/*39	32/*34	28/*29	25	22	19/*20	17/*18
	C	0 to 6 Degrees	1	48/*49	44	40	33	28	24	21	18	16
			2	25	23	21	17	15	13	11	10	9
			3	15	14	13	11	9	8	7	6	5
		7 to 27 Degrees	1	47/*49	43/*45	39/*41	33/*34	29	25/*26	22	19/*20	17
			2	25	22/*23	21	17/*18	15	13	11	10	9
			3	16	14/*15	13	11	10	8	7	6	6
		28 to 45 Degrees	1	36/*39	34/*37	32/*34	28/*29	24/*25	21/*22	19	17	15
			2	32/*34	30/*31	27/*28	23/*24	20/*21	18	16	14	12/*13
			3	32/*34	30/*31	27/*28	23/*24	20/*21	18	16	14	12/*13
	D	0 to 6 Degrees	1	40	36	33	27/*28	23	20	17	15	14
			2	21	19	17	14	12	11	9	8	7
			3	13	12	11	9	8	7	6	5	4
		7 to 27 Degrees	1	40/*41	36/*37	33/*34	28/*29	24/*25	21	18/*19	16	14/*15
			2	21	19	17/*18	15	13	11	10	8	7
			3	13/*14	12	11	9	8	7	6	5	5
28 to 45 Degrees		1	32/*34	30/*31	28/*29	24/*25	21	18	16	14	13	
		2	27/*28	25/*26	23/*24	20	17/*18	15	13	12	10/*11	
		3	27/*28	25/*26	23/*24	20	17/*18	15	13	12	10/*11	
1-10 PSF	B	0 to 6 Degrees	1	41/*42	41/*42	41/*42	41/*42	41	35	30/*31	27	23
			2	36/*37	33	30	25	21	18	16	14	12
			3	22	20	18	16	13	11	10	9	8
		7 to 27 Degrees	1	33/*36	33/*36	33/*36	33/*36	33/*36	32/*35	31/*32	27/*28	24/*25
			2	33/*36	32/*33	29/*30	25	21/*22	18/*19	16	14	13
			3	22/*23	21	19	16	14	12	10	9	8
		28 to 45 Degrees	1	33/*38	32/*37	31/*35	30/*33	28/*31	26/*29	25/*27	23/*24	21
			2	33/*38	32/*37	31/*35	30/*33	28/*29	25	22	19/*20	17/*18
			3	33/*38	32/*37	31/*35	30/*33	28/*29	25	22	19/*20	17/*18
	C	0 to 6 Degrees	1	41/*42	41/*42	40	33	28	24	21	18	16
			2	25	23	21	17	15	13	11	10	9
			3	15	14	13	11	9	8	7	6	5
		7 to 27 Degrees	1	33/*36	33/*36	33/*36	31/*34	29	25/*26	22	19/*20	17
			2	25	22/*23	21	17/*18	15	13	11	10	9
			3	16	14/*15	13	11	10	8	7	6	6
		28 to 45 Degrees	1	30/*33	29/*32	28/*31	26/*29	24/*25	21/*22	19	17	15
			2	30/*33	29/*31	27/*28	23/*24	20/*21	18	16	14	12/*13
			3	30/*33	29/*31	27/*28	23/*24	20/*21	18	16	14	12/*13
	D	0 to 6 Degrees	1	40	36	33	27/*28	23	20	17	15	14
			2	21	19	17	14	12	11	9	8	7
			3	13	12	11	9	8	7	6	5	4
		7 to 27 Degrees	1	33/*36	32/*36	31/*34	28/*29	24/*25	21	18/*19	16	14/*15
			2	21	19	17/*18	15	13	11	10	8	7
			3	13/*14	12	11	9	8	7	6	5	5
28 to 45 Degrees		1	28/*31	27/*30	26/*28	24/*25	21	18	16	14	13	
		2	27/*28	25/*26	23/*24	20	17/*18	15	13	12	10/*11	
		3	27/*28	25/*26	23/*24	20	17/*18	15	13	12	10/*11	

RT3	RT-APEX Plywood Only Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches												
	Portrait Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
11-20 PSF	B	0 to 6 Degrees	1	28/*29	28/*29	28/*29	28/*29	28/*29	28/*29	28/*29	28/*29	27	23
			2	28/*29	28/*29	28/*29	25	21	18	16	14	12	
			3	22	20	18	16	13	11	10	9	8	
		7 to 27 Degrees	1	22/*25	22/*25	22/*25	22/*25	22/*25	22/*25	22/*25	22/*24	21/*23	20/*22
			2	22/*25	22/*25	22/*25	22/*25	21/*22	18/*19	16	14	13	
			3	22/*23	21	19	16	14	12	10	9	8	
		28 to 45 Degrees	1	24/*28	24/*27	23/*27	22/*25	21/*24	20/*23	19/*22	19/*21	18/*20	
			2	24/*28	24/*27	23/*27	22/*25	21/*24	20/*23	19/*22	19/*20	17/*18	
			3	24/*28	24/*27	23/*27	22/*25	21/*24	20/*23	19/*22	19/*20	17/*18	
	C	0 to 6 Degrees	1	28/*29	28/*29	28/*29	28/*29	28	24	21	18	16	
			2	25	23	21	17	15	13	11	10	9	
			3	15	14	13	11	9	8	7	6	5	
		7 to 27 Degrees	1	22/*25	22/*25	22/*25	22/*24	21/*24	20/*23	20/*22	19/*20	17	
			2	22/*25	22/*23	21	17/*18	15	13	11	10	9	
			3	16	14/*15	13	11	10	8	7	6	6	
		28 to 45 Degrees	1	22/*25	22/*25	21/*24	20/*23	19/*21	18/*20	17/*19	16/*17	15	
			2	22/*25	22/*25	21/*24	20/*23	19/*21	18	16	14	12/*13	
			3	22/*25	22/*25	21/*24	20/*23	19/*21	18	16	14	12/*13	
	D	0 to 6 Degrees	1	28/*29	28/*29	28/*29	27/*28	23	20	17	15	14	
			2	21	19	17	14	12	11	9	8	7	
			3	13	12	11	9	8	7	6	5	4	
		7 to 27 Degrees	1	22/*25	22/*25	22/*24	21/*23	20/*22	20/*21	18/*19	16	14/*15	
			2	21	19	17/*18	15	13	11	10	8	7	
			3	13/*14	12	11	9	8	7	6	5	5	
28 to 45 Degrees		1	21/*24	21/*23	20/*23	19/*21	18/*20	17/*18	16	14	13		
		2	21/*24	21/*23	20/*23	19/*20	17/*18	15	13	12	10/*11		
		3	21/*24	21/*23	20/*23	19/*20	17/*18	15	13	12	10/*11		
21-30 PSF	B	0 to 6 Degrees	1	24/*25	24/*25	24/*25	24/*25	24/*25	24/*25	24/*25	24/*25	24/*25	23
			2	24/*25	24/*25	24/*25	24/*25	21	18	16	14	12	
			3	22	20	18	16	13	11	10	9	8	
		7 to 27 Degrees	1	18/*21	18/*21	18/*21	18/*21	18/*21	18/*21	18/*21	18/*21	18/*20	18/*20
			2	18/*21	18/*21	18/*21	18/*21	18/*21	18/*19	16	14	13	
			3	18/*21	18/*21	18/*19	16	14	12	10	9	8	
		28 to 45 Degrees	1	21/*25	21/*24	20/*24	20/*23	19/*22	18/*21	17/*20	17/*19	16/*18	
			2	21/*25	21/*24	20/*24	20/*23	19/*22	18/*21	17/*20	17/*19	16/*18	
			3	21/*25	21/*24	20/*24	20/*23	19/*22	18/*21	17/*20	17/*19	16/*18	
	C	0 to 6 Degrees	1	24/*25	24/*25	24/*25	24/*25	24/*25	24	21	18	16	
			2	24/*25	23	21	17	15	13	11	10	9	
			3	15	14	13	11	9	8	7	6	5	
		7 to 27 Degrees	1	18/*21	18/*21	18/*21	18/*21	18/*20	18/*20	17/*19	17/*18	16/*17	
			2	18/*21	18/*21	18/*21	17/*18	15	13	11	10	9	
			3	16	14/*15	13	11	10	8	7	6	6	
		28 to 45 Degrees	1	20/*23	19/*22	19/*22	18/*20	17/*19	16/*18	15/*17	15/*16	14/*15	
			2	20/*23	19/*22	19/*22	18/*20	17/*19	16/*18	15/*16	14	12/*13	
			3	20/*23	19/*22	19/*22	18/*20	17/*19	16/*18	15/*16	14	12/*13	
	D	0 to 6 Degrees	1	24/*25	24/*25	24/*25	24/*25	23	20	17	15	14	
			2	21	19	17	14	12	11	9	8	7	
			3	13	12	11	9	8	7	6	5	4	
		7 to 27 Degrees	1	18/*21	18/*21	18/*21	18/*20	18/*20	17/*19	16/*18	16	14/*15	
			2	18/*21	18/*19	17/*18	15	13	11	10	8	7	
			3	13/*14	12	11	9	8	7	6	5	5	
28 to 45 Degrees		1	19/*22	18/*21	18/*20	17/*19	16/*18	15/*17	14/*16	13/*14	13		
		2	19/*22	18/*21	18/*20	17/*19	16/*18	15	13	12	10/*11		
		3	19/*22	18/*21	18/*20	17/*19	16/*18	15	13	12	10/*11		

RT3	RT-APEX Plywood Only Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches													
	Portrait Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
31-40 PSF	B	0 to 6 Degrees	1	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	
			2	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	18	16	14	12	
			3	19/*20	19/*20	18	16	13	11	10	9	8		
		7 to 27 Degrees	1	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16
			2	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14	13	
			3	14/*16	14/*16	14/*16	14/*16	14	12	10	9	8		
		28 to 45 Degrees	1	17/*20	17/*20	17/*20	17/*19	16/*19	15/*18	15/*17	14/*16	14/*16	14/*16	14/*16
			2	17/*20	17/*20	17/*20	17/*19	16/*19	16/*19	15/*18	15/*17	14/*16	14/*16	14/*16
			3	17/*20	17/*20	17/*20	17/*19	16/*19	16/*19	15/*18	15/*17	14/*16	14/*16	14/*16
	C	0 to 6 Degrees	1	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	18	16
			2	19/*20	19/*20	19/*20	17	15	13	11	10	9		
			3	15	14	13	11	9	8	7	6	5		
		7 to 27 Degrees	1	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*15	13/*15
			2	14/*16	14/*16	14/*16	14/*16	14/*16	14/*15	13	11	10	9	
			3	14/*16	14/*15	13	11	10	8	7	6	6		
		28 to 45 Degrees	1	17/*19	16/*19	16/*18	15/*18	15/*17	14/*16	13/*15	13/*14	12/*14	12/*14	12/*14
			2	17/*19	16/*19	16/*18	15/*18	15/*17	14/*16	13/*15	13/*14	12/*14	12/*14	12/*14
			3	17/*19	16/*19	16/*18	15/*18	15/*17	14/*16	13/*15	13/*14	12/*14	12/*14	12/*14
	D	0 to 6 Degrees	1	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	17	15	14
			2	19/*20	19	17	14	12	11	9	8	7		
			3	13	12	11	9	8	7	6	5	4		
		7 to 27 Degrees	1	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*15	13/*15	13/*14
			2	14/*16	14/*16	14/*16	14/*15	13	11	10	8	7		
			3	13/*14	12	11	9	8	7	6	5	5		
28 to 45 Degrees		1	16/*18	16/*18	15/*17	15/*17	14/*16	13/*15	13/*14	12/*13	11/*13	11/*13	11/*13	
		2	16/*18	16/*18	15/*17	15/*17	14/*16	13/*15	13	12	10/*11	10/*11	10/*11	
		3	16/*18	16/*18	15/*17	15/*17	14/*16	13/*15	13	12	10/*11	10/*11	10/*11	
41-50 PSF	B	0 to 6 Degrees	1	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16
			2	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	14	12	
			3	15/*16	15/*16	15/*16	15/*16	13	11	10	9	8		
		7 to 27 Degrees	1	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13
			2	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13
			3	11/*13	11/*13	11/*13	11/*13	11/*13	11/*12	10	9	8		
		28 to 45 Degrees	1	14/*17	14/*17	14/*17	14/*17	14/*16	13/*16	13/*15	13/*15	12/*14	12/*14	12/*14
			2	14/*17	14/*17	14/*17	14/*17	14/*16	13/*16	13/*15	13/*15	12/*14	12/*14	12/*14
			3	14/*17	14/*17	14/*17	14/*17	14/*16	13/*16	13/*15	13/*15	12/*14	12/*14	12/*14
	C	0 to 6 Degrees	1	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16
			2	15/*16	15/*16	15/*16	15/*16	15	13	11	10	9		
			3	15	14	13	11	9	8	7	6	5		
		7 to 27 Degrees	1	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13
			2	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11	10	9	
			3	11/*13	11/*13	11/*13	11	10	8	7	6	6		
		28 to 45 Degrees	1	14/*17	14/*16	14/*16	13/*15	13/*15	12/*14	12/*13	11/*13	11/*12	11/*12	11/*12
			2	14/*17	14/*16	14/*16	13/*15	13/*15	12/*14	12/*13	11/*13	11/*12	11/*12	11/*12
			3	14/*17	14/*16	14/*16	13/*15	13/*15	12/*14	12/*13	11/*13	11/*12	11/*12	11/*12
	D	0 to 6 Degrees	1	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15/*16	15	14	
			2	15/*16	15/*16	15/*16	14	12	11	9	8	7		
			3	13	12	11	9	8	7	6	5	4		
		7 to 27 Degrees	1	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*12
			2	11/*13	11/*13	11/*13	11/*13	11/*13	11	10	8	7		
			3	11/*13	11/*12	11	9	8	7	6	5	5		
28 to 45 Degrees		1	14/*16	14/*16	13/*15	13/*15	12/*14	12/*13	11/*13	11/*12	10/*11	10/*11	10/*11	
		2	14/*16	14/*16	13/*15	13/*15	12/*14	12/*13	11/*13	11/*12	10/*11	10/*11	10/*11	
		3	14/*16	14/*16	13/*15	13/*15	12/*14	12/*13	11/*13	11/*12	10/*11	10/*11	10/*11	

RT3	RT-APEX Plywood Only Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches													
	Portrait Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
51-60 PSF	B	0 to 6 Degrees	1	13	13	13	13	13	13	13	13	13	13	
			2	13	13	13	13	13	13	13	13	13	12	
			3	13	13	13	13	13	13	11	10	9	8	
		7 to 27 Degrees	1	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11
			2	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11
			3	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10	9	8	8
		28 to 45 Degrees	1	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*13	11/*13	11/*13
			2	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*13	11/*13	11/*13
			3	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*13	11/*13	11/*13
	C	0 to 6 Degrees	1	13	13	13	13	13	13	13	13	13	13	
			2	13	13	13	13	13	13	13	11	10	9	
			3	13	13	13	11	9	8	7	6	5	5	
		7 to 27 Degrees	1	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11
			2	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10	9	9
			3	10/*11	10/*11	10/*11	10/*11	10	8	7	6	6	6	6
		28 to 45 Degrees	1	12/*14	12/*14	12/*14	12/*14	11/*13	11/*13	11/*12	10/*12	10/*12	10/*11	10/*11
			2	12/*14	12/*14	12/*14	12/*14	11/*13	11/*13	11/*12	10/*12	10/*12	10/*11	10/*11
			3	12/*14	12/*14	12/*14	12/*14	11/*13	11/*13	11/*12	10/*12	10/*12	10/*11	10/*11
	D	0 to 6 Degrees	1	13	13	13	13	13	13	13	13	13	13	
			2	13	13	13	13	12	11	9	8	7	7	
			3	13	12	11	9	8	7	6	5	4	4	
		7 to 27 Degrees	1	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11
			2	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10	8	7	7
			3	10/*11	10/*11	10/*11	9	8	7	6	5	5	5	5
28 to 45 Degrees		1	12/*14	12/*14	12/*14	11/*13	11/*13	10/*12	10/*11	10/*11	10/*11	9/*10	9/*10	
		2	12/*14	12/*14	12/*14	11/*13	11/*13	10/*12	10/*11	10/*11	10/*11	9/*10	9/*10	
		3	12/*14	12/*14	12/*14	11/*13	11/*13	10/*12	10/*11	10/*11	10/*11	9/*10	9/*10	
61-70 PSF	B	0 to 6 Degrees	1	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	
			2	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	
			3	11/*12	11/*12	11/*12	11/*12	11/*12	11	10	9	8	8	
		7 to 27 Degrees	1	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			2	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			3	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8	8
		28 to 45 Degrees	1	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11	10/*11
			2	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11
			3	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11
	C	0 to 6 Degrees	1	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12
			2	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11	10	9	9	9
			3	11/*12	11/*12	11/*12	11	9	8	7	6	5	5	5
		7 to 27 Degrees	1	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			2	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			3	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8	7	6	6	6
		28 to 45 Degrees	1	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11	10/*11	9/*11	9/*10	9/*10
			2	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11	10/*11	9/*11	9/*10	9/*10
			3	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11	10/*11	9/*11	9/*10	9/*10
	D	0 to 6 Degrees	1	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11	9	8	7	7
			2	11/*12	11/*12	11/*12	11/*12	11/*12	11	9	8	7	7	7
			3	11/*12	11/*12	11	9	8	7	6	5	4	4	4
		7 to 27 Degrees	1	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			2	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8	7	7
			3	8/*9	8/*9	8/*9	8/*9	8/*9	8	7	6	5	5	5
28 to 45 Degrees		1	10/*12	10/*12	10/*12	10/*12	10/*11	9/*11	9/*10	9/*10	9/*10	8/*10	8/*10	
		2	10/*12	10/*12	10/*12	10/*12	10/*11	9/*11	9/*10	9/*10	9/*10	8/*10	8/*10	
		3	10/*12	10/*12	10/*12	10/*12	10/*11	9/*11	9/*10	9/*10	9/*10	8/*10	8/*10	

RT4	RT-APEX Plywood Only Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches											
	Portrait Orientation - ASCE 7-10											
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)								
				110	115	120	130	140	150	160	170	180
0 PSF	B	0 to 6 Degrees	1	52/*53	52/*53	51/*52	43	36	31	27	23	20/*21
			2	32	29	26	22	19	16	14	12	11
			3	19/*20	18	16	14	12	10	9	8	7
		7 to 27 Degrees	1	42/*46	42/*46	42/*46	41/*43	35/*37	31/*32	27/*28	24	21/*22
			2	30/*31	28/*29	25/*26	22	19	16	14	12/*13	11
			3	20	18	16/*17	14	12	10	9	8	7
		28 to 45 Degrees	1	37/*42	36/*40	34/*38	31/*34	29/*31	26/*27	23	20/*21	18/*19
			2	37/*41	35/*37	33/*35	28/*30	25/*26	21/*22	19/*20	17	15
			3	37/*41	35/*37	33/*35	28/*30	25/*26	21/*22	19/*20	17	15
	C	0 to 6 Degrees	1	42/*43	38/*39	35	29	25	21	18	16	14
			2	22	20	18	15	13	11	10	8	7
			3	13/*14	12	11	9	8	7	6	5	5
		7 to 27 Degrees	1	41/*43	38/*39	34/*36	29/*30	25/*26	22	19/*20	17	15
			2	21/*22	20	18	15	13	11	10	9	8
			3	14	13	12	10	8	7	6	6	5
		28 to 45 Degrees	1	31/*34	30/*32	28/*30	24/*25	21/*22	19	16/*17	14/*15	13
			2	28/*29	26/*27	24/*25	20/*21	18	15/*16	14	12	11
			3	28/*29	26/*27	24/*25	20/*21	18	15/*16	14	12	11
	D	0 to 6 Degrees	1	35	32	29	24	20	18	15	13	12
			2	18	16/*17	15	13	11	9	8	7	6
			3	11	10	9	8	7	6	5	4	4
		7 to 27 Degrees	1	35/*36	32/*33	29/*30	25	21/*22	18/*19	16	14	13
			2	18	17	15	13	11	9/*10	8	7	6
			3	12	11	10	8	7	6	5	5	4
28 to 45 Degrees		1	28/*30	26/*27	24/*25	21	18/*19	16	14	12	11	
		2	24/*25	22/*23	20/*21	17/*18	15	13	12	10	9	
		3	24/*25	22/*23	20/*21	17/*18	15	13	12	10	9	
1-10 PSF	B	0 to 6 Degrees	1	36/*37	36/*37	36/*37	36/*37	36	31	27	23	20/*21
			2	32	29	26	22	19	16	14	12	11
			3	19/*20	18	16	14	12	10	9	8	7
		7 to 27 Degrees	1	29/*32	29/*32	29/*32	29/*32	29/*32	28/*31	27/*28	24	21/*22
			2	29/*31	28/*29	25/*26	22	19	16	14	12/*13	11
			3	20	18	16/*17	14	12	10	9	8	7
		28 to 45 Degrees	1	29/*33	28/*32	27/*31	26/*29	25/*27	23/*26	22/*23	20/*21	18/*19
			2	29/*33	28/*32	27/*31	26/*29	25/*26	21/*22	19/*20	17	15
			3	29/*33	28/*32	27/*31	26/*29	25/*26	21/*22	19/*20	17	15
	C	0 to 6 Degrees	1	36/*37	36/*37	35	29	25	21	18	16	14
			2	22	20	18	15	13	11	10	8	7
			3	13/*14	12	11	9	8	7	6	5	5
		7 to 27 Degrees	1	29/*32	29/*32	29/*32	28/*30	25/*26	22	19/*20	17	15
			2	21/*22	20	18	15	13	11	10	9	8
			3	14	13	12	10	8	7	6	6	5
		28 to 45 Degrees	1	26/*29	25/*28	24/*27	23/*25	21/*22	19	16/*17	14/*15	13
			2	26/*29	25/*27	24/*25	20/*21	18	15/*16	14	12	11
			3	26/*29	25/*27	24/*25	20/*21	18	15/*16	14	12	11
	D	0 to 6 Degrees	1	35	32	29	24	20	18	15	13	12
			2	18	16/*17	15	13	11	9	8	7	6
			3	11	10	9	8	7	6	5	4	4
		7 to 27 Degrees	1	29/*32	28/*31	27/*30	25	21/*22	18/*19	16	14	13
			2	18	17	15	13	11	9/*10	8	7	6
			3	12	11	10	8	7	6	5	5	4
28 to 45 Degrees		1	24/*27	23/*26	23/*25	21	18/*19	16	14	12	11	
		2	24/*25	22/*23	20/*21	17/*18	15	13	12	10	9	
		3	24/*25	22/*23	20/*21	17/*18	15	13	12	10	9	

RT4	RT-APEX Plywood Only Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches												
	Portrait Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
11-20 PSF	B	0 to 6 Degrees	1	25/*26	25/*26	25/*26	25/*26	25/*26	25/*26	25/*26	25/*26	23	20/*21
			2	25/*26	25/*26	25/*26	22	19	16	14	12	11	
			3	19/*20	18	16	14	12	10	9	8	7	
		7 to 27 Degrees	1	19/*22	19/*22	19/*22	19/*22	19/*22	19/*22	19/*22	19/*21	18/*20	18/*20
			2	19/*22	19/*22	19/*22	19/*22	19	16	14	12/*13	11	
			3	19/*20	18	16/*17	14	12	10	9	8	7	
		28 to 45 Degrees	1	21/*25	21/*24	20/*23	19/*22	19/*21	18/*20	17/*19	16/*18	15/*17	
			2	21/*25	21/*24	20/*23	19/*22	19/*21	18/*20	17/*19	16/*17	15	
			3	21/*25	21/*24	20/*23	19/*22	19/*21	18/*20	17/*19	16/*17	15	
	C	0 to 6 Degrees	1	25/*26	25/*26	25/*26	25/*26	25	21	18	16	14	
			2	22	20	18	15	13	11	10	8	7	
			3	13/*14	12	11	9	8	7	6	5	5	
		7 to 27 Degrees	1	19/*22	19/*22	19/*22	19/*21	19/*21	18/*20	17/*19	17	15	
			2	19/*22	19/*20	18	15	13	11	10	9	8	
			3	14	13	12	10	8	7	6	6	5	
		28 to 45 Degrees	1	19/*22	19/*22	18/*21	18/*20	17/*19	16/*17	15/*16	14/*15	13	
			2	19/*22	19/*22	18/*21	18/*20	17/*18	15/*16	14	12	11	
			3	19/*22	19/*22	18/*21	18/*20	17/*18	15/*16	14	12	11	
	D	0 to 6 Degrees	1	25/*26	25/*26	25/*26	24	20	18	15	13	12	
			2	18	16/*17	15	13	11	9	8	7	6	
			3	11	10	9	8	7	6	5	4	4	
		7 to 27 Degrees	1	19/*22	19/*22	19/*21	18/*20	18/*20	17/*19	16	14	13	
			2	18	17	15	13	11	9/*10	8	7	6	
			3	12	11	10	8	7	6	5	5	4	
28 to 45 Degrees		1	19/*21	18/*20	17/*20	16/*18	15/*17	15/*16	14	12	11		
		2	19/*21	18/*20	17/*20	16/*18	15	13	12	10	9		
		3	19/*21	18/*20	17/*20	16/*18	15	13	12	10	9		
21-30 PSF	B	0 to 6 Degrees	1	21/*22	21/*22	21/*22	21/*22	21/*22	21/*22	21/*22	21/*22	21/*22	20/*21
			2	21/*22	21/*22	21/*22	21/*22	21	19	16	14	12	11
			3	19/*20	18	16	14	12	10	9	8	7	
		7 to 27 Degrees	1	16/*18	16/*18	16/*18	16/*18	16/*18	16/*18	16/*18	16/*18	16/*18	15/*17
			2	16/*18	16/*18	16/*18	16/*18	16/*18	16	14	12/*13	11	
			3	16/*18	16/*18	16/*17	14	12	10	9	8	7	
		28 to 45 Degrees	1	18/*22	18/*21	18/*21	17/*20	17/*19	16/*18	15/*17	15/*17	14/*16	
			2	18/*22	18/*21	18/*21	17/*20	17/*19	16/*18	15/*17	15/*17	14/*15	
			3	18/*22	18/*21	18/*21	17/*20	17/*19	16/*18	15/*17	15/*17	14/*15	
	C	0 to 6 Degrees	1	21/*22	21/*22	21/*22	21/*22	21/*22	21	18	16	14	
			2	21/*22	20	18	15	13	11	10	8	7	
			3	13/*14	12	11	9	8	7	6	5	5	
		7 to 27 Degrees	1	16/*18	16/*18	16/*18	16/*18	16/*18	16/*17	15/*17	15/*16	14/*15	
			2	16/*18	16/*18	16/*18	15	13	11	10	9	8	
			3	14	13	12	10	8	7	6	6	5	
		28 to 45 Degrees	1	17/*20	17/*19	16/*19	16/*18	15/*17	14/*16	13/*15	13/*14	12/*13	
			2	17/*20	17/*19	16/*19	16/*18	15/*17	14/*16	13/*14	12	11	
			3	17/*20	17/*19	16/*19	16/*18	15/*17	14/*16	13/*14	12	11	
	D	0 to 6 Degrees	1	21/*22	21/*22	21/*22	21/*22	20	18	15	13	12	
			2	18	16/*17	15	13	11	9	8	7	6	
			3	11	10	9	8	7	6	5	4	4	
		7 to 27 Degrees	1	16/*18	16/*18	16/*18	16/*18	15/*17	15/*16	14/*16	14	13	
			2	16/*18	16/*17	15	13	11	9/*10	8	7	6	
			3	12	11	10	8	7	6	5	5	4	
28 to 45 Degrees		1	16/*19	16/*18	16/*18	15/*17	14/*16	13/*15	12/*14	12	11		
		2	16/*19	16/*18	16/*18	15/*17	14/*15	13	12	10	9		
		3	16/*19	16/*18	16/*18	15/*17	14/*15	13	12	10	9		

RT4	RT-APEX Plywood Only Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches												
	Portrait Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
31-40 PSF	B	0 to 6 Degrees	1	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17
			2	16/*17	16/*17	16/*17	16/*17	16/*17	16	14	12	11	
			3	16/*17	16/*17	16	14	12	10	9	8	7	
		7 to 27 Degrees	1	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14
			2	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*13	11
			3	12/*14	12/*14	12/*14	12/*14	12	10	9	8	7	
		28 to 45 Degrees	1	14/*18	14/*18	14/*17	14/*17	14/*16	14/*16	13/*15	13/*14	12/*14	
			2	14/*18	14/*18	14/*17	14/*17	14/*16	14/*16	13/*15	13/*14	12/*14	
			3	14/*18	14/*18	14/*17	14/*17	14/*16	14/*16	13/*15	13/*14	12/*14	
	C	0 to 6 Degrees	1	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16	14	
			2	16/*17	16/*17	16/*17	15	13	11	10	8	7	
			3	13/*14	12	11	9	8	7	6	5	5	
		7 to 27 Degrees	1	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*13	12/*13
			2	12/*14	12/*14	12/*14	12/*14	12/*13	11	10	9	8	
			3	12/*14	12/*13	12	10	8	7	6	6	5	
		28 to 45 Degrees	1	14/*17	14/*16	14/*16	13/*15	13/*15	12/*14	12/*13	11/*13	11/*12	
			2	14/*17	14/*16	14/*16	13/*15	13/*15	12/*14	12/*13	11/*12	11	
			3	14/*17	14/*16	14/*16	13/*15	13/*15	12/*14	12/*13	11/*12	11	
	D	0 to 6 Degrees	1	16/*17	16/*17	15	13	11	9	8	7	6	
			2	16/*17	16/*17	15	13	11	9	8	7	6	
			3	11	10	9	8	7	6	5	4	4	
		7 to 27 Degrees	1	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*13	12/*13	11/*12
			2	12/*14	12/*14	12/*14	12/*13	11	9/*10	8	7	6	
			3	12	11	10	8	7	6	5	5	4	
28 to 45 Degrees		1	14/*16	14/*16	13/*15	13/*15	12/*14	12/*13	11/*12	10/*12	10/*11		
		2	14/*16	14/*16	13/*15	13/*15	12/*14	12/*13	11/*12	10	9		
		3	14/*16	14/*16	13/*15	13/*15	12/*14	12/*13	11/*12	10	9		
41-50 PSF	B	0 to 6 Degrees	1	13/*14	13/*14	13/*14	13/*14	13/*14	13/*14	13/*14	13/*14	13/*14	13/*14
			2	13/*14	13/*14	13/*14	13/*14	13/*14	13/*14	13/*14	13/*14	12	11
			3	13/*14	13/*14	13/*14	13/*14	12	10	9	8	7	
		7 to 27 Degrees	1	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11
			2	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11
			3	10/*11	10/*11	10/*11	10/*11	10/*11	10	9	8	7	
		28 to 45 Degrees	1	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	11/*13	11/*13	11/*12	
			2	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	11/*13	11/*13	11/*12	
			3	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	11/*13	11/*13	11/*12	
	C	0 to 6 Degrees	1	13/*14	13/*14	13/*14	13/*14	13/*14	13/*14	13/*14	13/*14	13/*14	13/*14
			2	13/*14	13/*14	13/*14	13/*14	13	11	10	8	7	
			3	13/*14	12	11	9	8	7	6	5	5	
		7 to 27 Degrees	1	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11
			2	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10	9	8	
			3	10/*11	10/*11	10/*11	10	8	7	6	6	5	
		28 to 45 Degrees	1	12/*14	12/*14	12/*14	12/*13	11/*13	11/*12	10/*12	10/*11	9/*11	
			2	12/*14	12/*14	12/*14	12/*13	11/*13	11/*12	10/*12	10/*11	9/*11	
			3	12/*14	12/*14	12/*14	12/*13	11/*13	11/*12	10/*12	10/*11	9/*11	
	D	0 to 6 Degrees	1	13/*14	13/*14	13/*14	13	11	9	8	7	6	
			2	13/*14	13/*14	13/*14	13	11	9	8	7	6	
			3	11	10	9	8	7	6	5	4	4	
		7 to 27 Degrees	1	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11
			2	10/*11	10/*11	10/*11	10/*11	10/*11	9/*10	8	7	6	
			3	10/*11	10/*11	10	8	7	6	5	5	4	
28 to 45 Degrees		1	12/*14	12/*14	12/*13	11/*13	11/*12	10/*12	10/*11	9/*10	9/*10		
		2	12/*14	12/*14	12/*13	11/*13	11/*12	10/*12	10/*11	9/*10	9		
		3	12/*14	12/*14	12/*13	11/*13	11/*12	10/*12	10/*11	9/*10	9		

RT4	RT-APEX Plywood Only Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches													
	Portrait Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
51-60 PSF	B	0 to 6 Degrees	1	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	
			2	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	
			3	11/*12	11/*12	11/*12	11/*12	11/*12	10	9	8	7		
		7 to 27 Degrees	1	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	
			2	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	
			3	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*9	8	7		
		28 to 45 Degrees	1	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11	10/*11
			2	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11	10/*11
			3	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11	10/*11
	C	0 to 6 Degrees	1	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	
			2	11/*12	11/*12	11/*12	11/*12	11/*12	11	10	8	7		
			3	11/*12	11/*12	11	9	8	7	6	5	5		
		7 to 27 Degrees	1	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10
			2	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*9	8	
			3	8/*10	8/*10	8/*10	8/*10	8	7	6	6	6	5	
		28 to 45 Degrees	1	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11	9/*11	9/*10	9/*10	9/*10
			2	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11	9/*11	9/*10	9/*10	9/*10
			3	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11	9/*11	9/*10	9/*10	9/*10
	D	0 to 6 Degrees	1	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	
			2	11/*12	11/*12	11/*12	11/*12	11	9	8	7	6		
			3	11	10	9	8	7	6	5	4	4		
		7 to 27 Degrees	1	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*9	
			2	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8/*10	8	7	6	
			3	8/*10	8/*10	8/*10	8	7	6	5	5	4	4	
28 to 45 Degrees		1	10/*12	10/*12	10/*12	10/*12	10/*11	10/*11	9/*10	9/*10	8/*10	8/*9		
		2	10/*12	10/*12	10/*12	10/*12	10/*11	10/*11	9/*10	9/*10	8/*10	8/*9		
		3	10/*12	10/*12	10/*12	10/*12	10/*11	10/*11	9/*10	9/*10	8/*10	8/*9		
61-70 PSF	B	0 to 6 Degrees	1	10	10	10	10	10	10	10	10	10	10	
			2	10	10	10	10	10	10	10	10	10	10	
			3	10	10	10	10	10	10	9	8	7		
		7 to 27 Degrees	1	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8
			2	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8
			3	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7	
		28 to 45 Degrees	1	9/*11	9/*11	9/*11	9/*11	9/*11	9/*11	9/*11	9/*11	9/*10	9/*10	9/*10
			2	9/*11	9/*11	9/*11	9/*11	9/*11	9/*11	9/*11	9/*11	9/*10	9/*10	9/*10
			3	9/*11	9/*11	9/*11	9/*11	9/*11	9/*11	9/*11	9/*11	9/*10	9/*10	9/*10
	C	0 to 6 Degrees	1	10	10	10	10	10	10	10	10	10	10	
			2	10	10	10	10	10	10	10	10	8	7	
			3	10	10	10	9	8	7	6	5	5		
		7 to 27 Degrees	1	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8
			2	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8
			3	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7	6	6	5	
		28 to 45 Degrees	1	9/*11	9/*11	9/*11	9/*11	9/*11	9/*10	9/*10	8/*10	8/*9	8/*9	
			2	9/*11	9/*11	9/*11	9/*11	9/*11	9/*10	9/*10	8/*10	8/*9	8/*9	
			3	9/*11	9/*11	9/*11	9/*11	9/*11	9/*10	9/*10	8/*10	8/*9	8/*9	
	D	0 to 6 Degrees	1	10	10	10	10	10	10	10	10	10	10	
			2	10	10	10	10	10	10	9	8	7	6	
			3	10	10	9	8	7	6	5	4	4		
		7 to 27 Degrees	1	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8
			2	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7/*8	7	6	
			3	7/*8	7/*8	7/*8	7/*8	7	6	5	5	4	4	
28 to 45 Degrees		1	9/*11	9/*11	9/*11	9/*11	9/*10	9/*10	8/*10	8/*9	8/*9	7/*8		
		2	9/*11	9/*11	9/*11	9/*11	9/*10	9/*10	8/*10	8/*9	8/*9	7/*8		
		3	9/*11	9/*11	9/*11	9/*11	9/*10	9/*10	8/*10	8/*9	8/*9	7/*8		

RT5	RT-APEX OSB Only Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches											
	Portrait Orientation - ASCE 7-10											
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)								
				110	115	120	130	140	150	160	170	180
0 PSF	B	0 to 6 Degrees	1	53/*54	53/*54	53/*54	53/*54	48	41	35/*36	31	27
			2	42/*43	38/*39	35	29	25	21/*22	19	16	14/*15
			3	26	24	22	18	15/*16	13	12	10	9
		7 to 27 Degrees	1	44/*47	44/*47	44/*47	44/*47	44/*47	41/*42	36/*37	32	28/*29
			2	40/*41	37/*38	34	29	25	21/*22	19	17	15
			3	26/*27	24	22	19	16	14	12	11	9/*10
		28 to 45 Degrees	1	40/*43	38/*41	36/*39	33/*35	30/*32	27/*29	25/*26	23/*24	21/*22
			2	40/*43	38/*41	36/*39	33/*35	30/*32	27/*29	25/*26	22/*23	20
			3	40/*43	38/*41	36/*39	33/*35	30/*32	27/*29	25/*26	22/*23	20
	C	0 to 6 Degrees	1	53/*54	51	46	39	33	28	24/*25	21/*22	19
			2	29	26/*27	24	20	17	15	13	11	10
			3	18	16	15	13	11	9	8	7	6
		7 to 27 Degrees	1	44/*47	44/*47	44/*47	39/*40	33/*34	29/*30	25/*26	22/*23	20
			2	28/*29	26/*27	24	20/*21	17/*18	15	13	12	10
			3	18/*19	17	15/*16	13	11	10	9	7/*8	7
		28 to 45 Degrees	1	33/*35	31/*33	29/*31	26/*28	24/*25	21/*22	19/*20	18	16/*17
			2	33/*35	31/*33	29/*31	26/*28	23/*24	21	18	16	14/*15
			3	33/*35	31/*33	29/*31	26/*28	23/*24	21	18	16	14/*15
	D	0 to 6 Degrees	1	46/*47	42	38	32	27	23/*24	20	18	16
			2	24	22	20	17	14	12	11	10	8
			3	15	14	13	11	9	8	7	6	5
		7 to 27 Degrees	1	44/*47	42/*43	38/*39	33	28/*29	24/*25	21/*22	19	17
			2	24	22	20	17	15	13	11	10	9
			3	16	14	13	11	9/*10	8	7	6	6
28 to 45 Degrees		1	29/*31	28/*29	26/*28	23/*24	21/*22	19	17/*18	15/*16	14	
		2	29/*31	28/*29	26/*28	23/*24	20	17/*18	15/*16	14	12	
		3	29/*31	28/*29	26/*28	23/*24	20	17/*18	15/*16	14	12	
1-10 PSF	B	0 to 6 Degrees	1	36/*37	36/*37	36/*37	36/*37	36/*37	36/*37	35/*36	31	27
			2	36/*37	36/*37	35	29	25	21/*22	19	16	14/*15
			3	26	24	22	18	15/*16	13	12	10	9
		7 to 27 Degrees	1	30/*33	30/*33	30/*33	30/*33	30/*33	30/*32	28/*31	27/*29	26/*28
			2	30/*33	30/*33	30/*33	29	25	21/*22	19	17	15
			3	26/*27	24	22	19	16	14	12	11	9/*10
		28 to 45 Degrees	1	31/*35	30/*34	29/*32	28/*30	26/*28	25/*27	23/*25	22/*23	20/*22
			2	31/*35	30/*34	29/*32	28/*30	26/*28	25/*27	23/*25	22/*23	20
			3	31/*35	30/*34	29/*32	28/*30	26/*28	25/*27	23/*25	22/*23	20
	C	0 to 6 Degrees	1	36/*37	36/*37	36/*37	36/*37	33	28	24/*25	21/*22	19
			2	29	26/*27	24	20	17	15	13	11	10
			3	18	16	15	13	11	9	8	7	6
		7 to 27 Degrees	1	30/*33	30/*33	30/*33	29/*31	28/*30	26/*28	25/*26	22/*23	20
			2	28/*29	26/*27	24	20/*21	17/*18	15	13	12	10
			3	18/*19	17	15/*16	13	11	10	9	7/*8	7
		28 to 45 Degrees	1	28/*30	27/*29	26/*28	24/*26	22/*24	21/*22	19/*20	18	16/*17
			2	28/*30	27/*29	26/*28	24/*26	22/*24	21	18	16	14/*15
			3	28/*30	27/*29	26/*28	24/*26	22/*24	21	18	16	14/*15
	D	0 to 6 Degrees	1	36/*37	36/*37	36/*37	32	27	23/*24	20	18	16
			2	24	22	20	17	14	12	11	10	8
			3	15	14	13	11	9	8	7	6	5
		7 to 27 Degrees	1	30/*33	30/*32	29/*31	28/*30	26/*28	24/*25	21/*22	19	17
			2	24	22	20	17	15	13	11	10	9
			3	16	14	13	11	9/*10	8	7	6	6
28 to 45 Degrees		1	26/*28	25/*27	24/*26	22/*24	20/*22	19	17/*18	15/*16	14	
		2	26/*28	25/*27	24/*26	22/*24	20	17/*18	15/*16	14	12	
		3	26/*28	25/*27	24/*26	22/*24	20	17/*18	15/*16	14	12	

RT5	RT-APEX OSB Only Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches												
	Portrait Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
11-20 PSF	B	0 to 6 Degrees	1	25/*26	25/*26	25/*26	25/*26	25/*26	25/*26	25/*26	25/*26	25/*26	25/*26
			2	25/*26	25/*26	25/*26	25/*26	25	21/*22	19	16	14/*15	
			3	25/*26	24	22	18	15/*16	13	12	10	9	
		7 to 27 Degrees	1	21/*23	21/*23	21/*23	21/*23	21/*23	21/*23	21/*22	20/*22	19/*21	19/*20
			2	21/*23	21/*23	21/*23	21/*23	21/*23	21/*23	21/*22	19	17	15
			3	21/*23	21/*23	21/*22	19	16	14	12	11	9/*10	
		28 to 45 Degrees	1	23/*26	22/*25	22/*25	21/*23	20/*22	19/*21	18/*20	17/*19	16/*18	
			2	23/*26	22/*25	22/*25	21/*23	20/*22	19/*21	18/*20	17/*19	16/*18	
			3	23/*26	22/*25	22/*25	21/*23	20/*22	19/*21	18/*20	17/*19	16/*18	
	C	0 to 6 Degrees	1	25/*26	25/*26	25/*26	25/*26	25/*26	25/*26	25/*26	24/*25	21/*22	19
			2	25/*26	25/*26	24	20	17	15	13	11	10	
			3	18	16	15	13	11	9	8	7	6	
		7 to 27 Degrees	1	21/*23	21/*23	21/*23	20/*22	20/*21	19/*20	18/*20	18/*19	17/*18	
			2	21/*23	21/*23	21/*23	20/*21	17/*18	15	13	12	10	
			3	18/*19	17	15/*16	13	11	10	9	7/*8	7	
		28 to 45 Degrees	1	21/*23	20/*23	20/*22	19/*21	18/*19	17/*18	16/*17	15/*16	14/*15	
			2	21/*23	20/*23	20/*22	19/*21	18/*19	17/*18	16/*17	15/*16	14/*15	
			3	21/*23	20/*23	20/*22	19/*21	18/*19	17/*18	16/*17	15/*16	14/*15	
	D	0 to 6 Degrees	1	25/*26	25/*26	25/*26	25/*26	25/*26	25/*26	23/*24	20	18	16
			2	24	22	20	17	14	12	11	10	8	
			3	15	14	13	11	9	8	7	6	5	
		7 to 27 Degrees	1	21/*23	21/*23	20/*22	20/*21	19/*20	18/*19	17/*19	17/*18	16/*17	
			2	21/*23	21/*22	20	17	15	13	11	10	9	
			3	16	14	13	11	9/*10	8	7	6	6	
28 to 45 Degrees		1	20/*22	19/*21	19/*21	18/*19	16/*18	15/*17	14/*16	13/*14	13		
		2	20/*22	19/*21	19/*21	18/*19	16/*18	15/*17	14/*16	13/*14	12		
		3	20/*22	19/*21	19/*21	18/*19	16/*18	15/*17	14/*16	13/*14	12		
21-30 PSF	B	0 to 6 Degrees	1	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23
			2	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	21/*22	19	16	14/*15
			3	22/*23	22/*23	22	18	15/*16	13	12	10	9	
		7 to 27 Degrees	1	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*18	16/*18
			2	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17	15
			3	17/*19	17/*19	17/*19	17/*19	16	14	12	11	9/*10	
		28 to 45 Degrees	1	20/*23	20/*22	19/*22	19/*21	18/*20	17/*19	16/*18	16/*17	15/*16	
			2	20/*23	20/*22	19/*22	19/*21	18/*20	17/*19	16/*18	16/*17	15/*16	
			3	20/*23	20/*22	19/*22	19/*21	18/*20	17/*19	16/*18	16/*17	15/*16	
	C	0 to 6 Degrees	1	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22	21/*22	19
			2	22/*23	22/*23	22/*23	20	17	15	13	11	10	
			3	18	16	15	13	11	9	8	7	6	
		7 to 27 Degrees	1	17/*19	17/*19	17/*19	17/*19	17/*19	17/*18	16/*17	15/*17	15/*16	
			2	17/*19	17/*19	17/*19	17/*19	17/*18	15	13	12	10	
			3	17/*19	17	15/*16	13	11	10	9	7/*8	7	
		28 to 45 Degrees	1	19/*21	18/*20	18/*20	17/*19	16/*18	15/*17	14/*16	14/*15	13/*14	
			2	19/*21	18/*20	18/*20	17/*19	16/*18	15/*17	14/*16	14/*15	13/*14	
			3	19/*21	18/*20	18/*20	17/*19	16/*18	15/*17	14/*16	14/*15	13/*14	
	D	0 to 6 Degrees	1	22/*23	22/*23	22/*23	22/*23	22/*23	22	20	18	16	
			2	22/*23	22	20	17	14	12	11	10	8	
			3	15	14	13	11	9	8	7	6	5	
		7 to 27 Degrees	1	17/*19	17/*19	17/*19	17/*18	16/*18	16/*17	15/*16	15/*16	14/*15	
			2	17/*19	17/*19	17/*19	17	15	13	11	10	9	
			3	16	14	13	11	9/*10	8	7	6	6	
28 to 45 Degrees		1	18/*20	17/*19	17/*19	16/*17	15/*16	14/*15	13/*14	12/*13	12/*13		
		2	18/*20	17/*19	17/*19	16/*17	15/*16	14/*15	13/*14	12/*13	12		
		3	18/*20	17/*19	17/*19	16/*17	15/*16	14/*15	13/*14	12/*13	12		

RT5	RT-APEX OSB Only Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches												
	Portrait Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
31-40 PSF	B	0 to 6 Degrees	1	17	17	17	17	17	17	17	17	17	17
			2	17	17	17	17	17	17	17	16	14/*15	
			3	17	17	17	17	15/*16	13	12	10	9	
		7 to 27 Degrees	1	13/*15	13/*15	13/*15	13/*15	13/*15	13/*15	13/*15	13/*15	13/*15	13/*15
			2	13/*15	13/*15	13/*15	13/*15	13/*15	13/*15	13/*15	13/*15	13/*15	13/*15
			3	13/*15	13/*15	13/*15	13/*15	13/*15	13/*14	12	11	9/*10	
		28 to 45 Degrees	1	16/*19	16/*19	16/*18	16/*18	15/*17	15/*16	14/*16	14/*15	13/*14	
			2	16/*19	16/*19	16/*18	16/*18	15/*17	15/*16	14/*16	14/*15	13/*14	
			3	16/*19	16/*19	16/*18	16/*18	15/*17	15/*16	14/*16	14/*15	13/*14	
	C	0 to 6 Degrees	1	17	17	17	17	17	17	17	17	17	
			2	17	17	17	17	17	15	13	11	10	
			3	17	16	15	13	11	9	8	7	6	
		7 to 27 Degrees	1	13/*15	13/*15	13/*15	13/*15	13/*15	13/*15	13/*15	13/*14	13/*14	12/*13
			2	13/*15	13/*15	13/*15	13/*15	13/*15	13/*15	13	12	10	
			3	13/*15	13/*15	13/*15	13	11	10	9	7/*8	7	
		28 to 45 Degrees	1	16/*18	15/*17	15/*17	14/*16	14/*15	13/*15	13/*14	12/*13	11/*12	
			2	16/*18	15/*17	15/*17	14/*16	14/*15	13/*15	13/*14	12/*13	11/*12	
			3	16/*18	15/*17	15/*17	14/*16	14/*15	13/*15	13/*14	12/*13	11/*12	
	D	0 to 6 Degrees	1	17	17	17	17	17	17	17	17	16	
			2	17	17	17	17	14	12	11	10	8	
			3	15	14	13	11	9	8	7	6	5	
		7 to 27 Degrees	1	13/*15	13/*15	13/*15	13/*15	13/*15	13/*14	13/*14	12/*13	12/*13	
			2	13/*15	13/*15	13/*15	13/*15	13/*15	13	11	10	9	
			3	13/*15	13/*14	13	11	9/*10	8	7	6	6	
28 to 45 Degrees		1	15/*17	15/*16	14/*16	14/*15	13/*14	12/*14	12/*13	11/*12	10/*11		
		2	15/*17	15/*16	14/*16	14/*15	13/*14	12/*14	12/*13	11/*12	10/*11		
		3	15/*17	15/*16	14/*16	14/*15	13/*14	12/*14	12/*13	11/*12	10/*11		
41-50 PSF	B	0 to 6 Degrees	1	14	14	14	14	14	14	14	14	14	
			2	14	14	14	14	14	14	14	14	14	
			3	14	14	14	14	14	13	12	10	9	
		7 to 27 Degrees	1	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12
			2	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12
			3	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11	9/*10	
		28 to 45 Degrees	1	13/*15	13/*15	13/*15	13/*15	13/*15	13/*14	12/*14	12/*13	12/*13	
			2	13/*15	13/*15	13/*15	13/*15	13/*15	13/*14	12/*14	12/*13	12/*13	
			3	13/*15	13/*15	13/*15	13/*15	13/*15	13/*14	12/*14	12/*13	12/*13	
	C	0 to 6 Degrees	1	14	14	14	14	14	14	14	14	14	
			2	14	14	14	14	14	14	13	11	10	
			3	14	14	14	13	11	9	8	7	6	
		7 to 27 Degrees	1	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12
			2	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	10
			3	11/*12	11/*12	11/*12	11/*12	11	10	9	7/*8	7	
		28 to 45 Degrees	1	13/*15	13/*15	13/*15	13/*14	12/*14	12/*13	11/*12	11/*12	10/*11	
			2	13/*15	13/*15	13/*15	13/*14	12/*14	12/*13	11/*12	11/*12	10/*11	
			3	13/*15	13/*15	13/*15	13/*14	12/*14	12/*13	11/*12	11/*12	10/*11	
	D	0 to 6 Degrees	1	14	14	14	14	14	14	14	14	14	
			2	14	14	14	14	14	12	11	10	8	
			3	14	14	13	11	9	8	7	6	5	
		7 to 27 Degrees	1	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11	10/*11	
			2	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11	10	9	
			3	11/*12	11/*12	11/*12	11	9/*10	8	7	6	6	
28 to 45 Degrees		1	13/*15	13/*14	13/*14	12/*13	11/*13	11/*12	10/*11	10/*11	9/*10		
		2	13/*15	13/*14	13/*14	12/*13	11/*13	11/*12	10/*11	10/*11	9/*10		
		3	13/*15	13/*14	13/*14	12/*13	11/*13	11/*12	10/*11	10/*11	9/*10		

RT5	RT-APEX OSB Only Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches														
	Portrait Orientation - ASCE 7-10														
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)											
				110	115	120	130	140	150	160	170	180			
51-60 PSF	B	0 to 6 Degrees	1	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	
			2	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	
			3	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	10	9	
		7 to 27 Degrees	1	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10
			2	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10
			3	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10
		28 to 45 Degrees	1	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*12	11/*12	11/*12	10/*12
			2	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*12	11/*12	11/*12	10/*12
			3	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*12	11/*12	11/*12	10/*12
	C	0 to 6 Degrees	1	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12
			2	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11	10	10
			3	11/*12	11/*12	11/*12	11/*12	11/*12	11	9	8	7	6	6	6
		7 to 27 Degrees	1	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10
			2	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10
			3	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9	7/*8	7	7
		28 to 45 Degrees	1	11/*13	11/*13	11/*13	11/*13	11/*13	11/*13	11/*12	10/*12	10/*11	10/*11	9/*10	9/*10
			2	11/*13	11/*13	11/*13	11/*13	11/*13	11/*12	10/*12	10/*11	10/*11	10/*11	9/*10	9/*10
			3	11/*13	11/*13	11/*13	11/*13	11/*13	11/*12	10/*12	10/*11	10/*11	10/*11	9/*10	9/*10
	D	0 to 6 Degrees	1	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12
			2	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11/*12	11	10	10	8	8
			3	11/*12	11/*12	11/*12	11	9	8	7	6	6	5	5	5
		7 to 27 Degrees	1	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10
			2	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10
			3	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	8	7	6	6	6
28 to 45 Degrees		1	11/*13	11/*13	11/*13	11/*13	11/*12	10/*11	10/*11	9/*10	9/*10	9/*10	9/*10	9	
		2	11/*13	11/*13	11/*13	11/*12	10/*11	10/*11	9/*10	9/*10	9/*10	9/*10	9/*10	9	
		3	11/*13	11/*13	11/*13	11/*12	10/*11	10/*11	9/*10	9/*10	9/*10	9/*10	9/*10	9	
61-70 PSF	B	0 to 6 Degrees	1	10	10	10	10	10	10	10	10	10	10	10	
			2	10	10	10	10	10	10	10	10	10	10	10	
			3	10	10	10	10	10	10	10	10	10	10	9	
		7 to 27 Degrees	1	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			2	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			3	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
		28 to 45 Degrees	1	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	9/*10	9/*10
			2	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	9/*10
			3	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	9/*10
	C	0 to 6 Degrees	1	10	10	10	10	10	10	10	10	10	10	10	10
			2	10	10	10	10	10	10	10	10	10	10	10	10
			3	10	10	10	10	10	10	9	8	7	6	6	6
		7 to 27 Degrees	1	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			2	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			3	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	7/*8	7	7
		28 to 45 Degrees	1	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	9/*11	9/*10	9/*10	9/*10	8/*9	8/*9
			2	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	9/*11	9/*10	9/*10	9/*10	8/*9	8/*9
			3	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	9/*11	9/*10	9/*10	9/*10	8/*9	8/*9
	D	0 to 6 Degrees	1	10	10	10	10	10	10	10	10	10	10	10	10
			2	10	10	10	10	10	10	10	10	10	10	10	8
			3	10	10	10	10	10	9	8	7	6	6	5	5
		7 to 27 Degrees	1	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			2	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			3	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8	7	6	6	6	6
28 to 45 Degrees		1	10/*11	10/*11	10/*11	10/*11	9/*10	9/*10	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9	
		2	10/*11	10/*11	10/*11	10/*11	9/*10	9/*10	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9	
		3	10/*11	10/*11	10/*11	10/*11	9/*10	9/*10	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9	

RT6	RT-APEX OSB Only Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches											
	Portrait Orientation - ASCE 7-10											
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)								
				110	115	120	130	140	150	160	170	180
0 PSF	B	0 to 6 Degrees	1	46/*47	46/*47	46/*47	46/*47	42	36	31	27	24
			2	37	34	31	26	22	19	16	14	13
			3	23	21	19	16	14	12	10	9	8
		7 to 27 Degrees	1	39/*41	39/*41	39/*41	39/*41	39/*41	36/*37	31/*32	28	25
			2	35/*36	32/*33	29/*30	25/*26	22	19	16/*17	14/*15	13
			3	23	21	19	16	14	12	11	9	8
		28 to 45 Degrees	1	35/*38	33/*36	32/*34	29/*31	26/*28	24/*25	22/*23	20/*21	18/*19
			2	35/*38	33/*36	32/*34	29/*31	26/*28	24/*25	22/*23	20	17/*18
			3	35/*38	33/*36	32/*34	29/*31	26/*28	24/*25	22/*23	20	17/*18
	C	0 to 6 Degrees	1	46/*47	45	40/*41	34	29	25	21	19	17
			2	26	23	21	18	15	13	11	10	9
			3	16	14	13	11	9	8	7	6	5
		7 to 27 Degrees	1	39/*41	39/*41	39/*41	34/*35	29/*30	25/*26	22/*23	20	17/*18
			2	25	23	21	18	15	13	12	10	9
			3	16	15	14	11/*12	10	8/*9	7	7	6
		28 to 45 Degrees	1	29/*31	27/*29	26/*27	23/*24	21/*22	19/*20	17/*18	15/*16	14
			2	29/*31	27/*29	26/*27	23/*24	20/*21	18	16	14	13
			3	29/*31	27/*29	26/*27	23/*24	20/*21	18	16	14	13
	D	0 to 6 Degrees	1	41	37	33/*34	28	24	21	18	16	14
			2	21	19	18	15	13	11	9	8	7
			3	13	12	11	9	8	7	6	5	4
		7 to 27 Degrees	1	39/*41	36/*38	33/*34	29	25	21/*22	19	17	15
			2	21	19/*20	18	15	13	11	10	9	8
			3	14	12/*13	11	10	8	7	6	5	5
28 to 45 Degrees		1	26/*27	24/*26	23/*24	20/*21	18/*19	16/*17	15	13/*14	12	
		2	26/*27	24/*26	23/*24	20/*21	17/*18	15/*16	13/*14	12	11	
		3	26/*27	24/*26	23/*24	20/*21	17/*18	15/*16	13/*14	12	11	
1-10 PSF	B	0 to 6 Degrees	1	32/*33	32/*33	32/*33	32/*33	32/*33	32/*33	31	27	24
			2	32/*33	32/*33	31	26	22	19	16	14	13
			3	23	21	19	16	14	12	10	9	8
		7 to 27 Degrees	1	27/*29	27/*29	27/*29	27/*29	27/*29	26/*28	25/*27	24/*26	23/*24
			2	27/*29	27/*29	27/*29	25/*26	22	19	16/*17	14/*15	13
			3	23	21	19	16	14	12	11	9	8
		28 to 45 Degrees	1	27/*30	27/*29	26/*28	24/*27	23/*25	21/*23	20/*22	19/*20	18/*19
			2	27/*30	27/*29	26/*28	24/*27	23/*25	21/*23	20/*22	19/*20	17/*18
			3	27/*30	27/*29	26/*28	24/*27	23/*25	21/*23	20/*22	19/*20	17/*18
	C	0 to 6 Degrees	1	32/*33	32/*33	32/*33	32/*33	29	25	21	19	17
			2	26	23	21	18	15	13	11	10	9
			3	16	14	13	11	9	8	7	6	5
		7 to 27 Degrees	1	27/*29	27/*29	27/*29	26/*28	24/*26	23/*25	22/*23	20	17/*18
			2	25	23	21	18	15	13	12	10	9
			3	16	15	14	11/*12	10	8/*9	7	7	6
		28 to 45 Degrees	1	24/*27	23/*26	23/*25	21/*23	19/*21	18/*19	17/*18	15/*16	14
			2	24/*27	23/*26	23/*25	21/*23	19/*21	18	16	14	13
			3	24/*27	23/*26	23/*25	21/*23	19/*21	18	16	14	13
	D	0 to 6 Degrees	1	32/*33	32/*33	32/*33	28	24	21	18	16	14
			2	21	19	18	15	13	11	9	8	7
			3	13	12	11	9	8	7	6	5	4
		7 to 27 Degrees	1	27/*29	26/*28	26/*27	24/*26	23/*24	21/*22	19	17	15
			2	21	19/*20	18	15	13	11	10	9	8
			3	14	12/*13	11	10	8	7	6	5	5
28 to 45 Degrees		1	23/*25	22/*24	21/*23	19/*21	18/*19	16/*17	15	13/*14	12	
		2	23/*25	22/*24	21/*23	19/*21	17/*18	15/*16	13/*14	12	11	
		3	23/*25	22/*24	21/*23	19/*21	17/*18	15/*16	13/*14	12	11	

RT6	RT-APEX OSB Only Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches												
	Portrait Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
11-20 PSF	B	0 to 6 Degrees	1	22/*23	22/*23	22/*23	22/*23	22/*23	22	22/*23	22/*23	22/*23	22/*23
			2	22/*23	22/*23	22/*23	22/*23	22	19	16	14	13	
			3	22/*23	21	19	16	14	12	10	9	8	
		7 to 27 Degrees	1	18/*20	18/*20	18/*20	18/*20	18/*20	18/*20	18/*20	18/*19	17/*18	16/*18
			2	18/*20	18/*20	18/*20	18/*20	18/*20	18/*19	16/*17	14/*15	13	
			3	18/*20	18/*20	18/*19	16	14	12	11	9	8	
		28 to 45 Degrees	1	20/*23	20/*22	19/*22	18/*20	18/*19	17/*18	16/*17	15/*17	14/*16	
			2	20/*23	20/*22	19/*22	18/*20	18/*19	17/*18	16/*17	15/*17	14/*16	
			3	20/*23	20/*22	19/*22	18/*20	18/*19	17/*18	16/*17	15/*17	14/*16	
	C	0 to 6 Degrees	1	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	21	19	17	
			2	22/*23	22/*23	21	18	15	13	11	10	9	
			3	16	14	13	11	9	8	7	6	5	
		7 to 27 Degrees	1	18/*20	18/*20	18/*20	18/*19	17/*19	17/*18	16/*17	15/*16	15/*16	
			2	18/*20	18/*20	18/*20	18	15	13	12	10	9	
			3	16	15	14	11/*12	10	8/*9	7	7	6	
		28 to 45 Degrees	1	18/*20	18/*20	17/*19	16/*18	15/*17	15/*16	14/*15	13/*14	12/*13	
			2	18/*20	18/*20	17/*19	16/*18	15/*17	15/*16	14/*15	13/*14	12/*13	
			3	18/*20	18/*20	17/*19	16/*18	15/*17	15/*16	14/*15	13/*14	12/*13	
	D	0 to 6 Degrees	1	22/*23	22/*23	22/*23	22/*23	22/*23	21	18	16	14	
			2	21	19	18	15	13	11	9	8	7	
			3	13	12	11	9	8	7	6	5	4	
		7 to 27 Degrees	1	18/*20	18/*20	18/*19	17/*19	16/*18	16/*17	15/*16	14/*15	14/*15	
			2	18/*20	18/*20	18	15	13	11	10	9	8	
			3	14	12/*13	11	10	8	7	6	5	5	
28 to 45 Degrees		1	17/*19	17/*19	16/*18	15/*17	14/*16	13/*15	13/*14	12/*13	11/*12		
		2	17/*19	17/*19	16/*18	15/*17	14/*16	13/*15	13/*14	12	11		
		3	17/*19	17/*19	16/*18	15/*17	14/*16	13/*15	13/*14	12	11		
21-30 PSF	B	0 to 6 Degrees	1	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20
			2	19/*20	19/*20	19/*20	19/*20	19/*20	19	16	14	13	
			3	19/*20	19/*20	19	16	14	12	10	9	8	
		7 to 27 Degrees	1	15/*17	15/*17	15/*17	15/*17	15/*17	15/*17	15/*17	15/*16	15/*16	14/*16
			2	15/*17	15/*17	15/*17	15/*17	15/*17	15/*17	15/*17	15/*16	14/*15	13
			3	15/*17	15/*17	15/*17	15/*16	14	12	11	9	8	
		28 to 45 Degrees	1	18/*20	17/*20	17/*19	16/*18	16/*17	15/*17	14/*16	14/*15	13/*14	
			2	18/*20	17/*20	17/*19	16/*18	16/*17	15/*17	14/*16	14/*15	13/*14	
			3	18/*20	17/*20	17/*19	16/*18	16/*17	15/*17	14/*16	14/*15	13/*14	
	C	0 to 6 Degrees	1	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19	17	
			2	19/*20	19/*20	19/*20	18	15	13	11	10	9	
			3	16	14	13	11	9	8	7	6	5	
7 to 27 Degrees		1	15/*17	15/*17	15/*17	15/*17	15/*16	14/*16	14/*15	13/*15	13/*14		
		2	15/*17	15/*17	15/*17	15/*17	15	13	12	10	9		
		3	15/*16	15	14	11/*12	10	8/*9	7	7	6		
28 to 45 Degrees		1	16/*18	16/*18	15/*17	15/*16	14/*15	13/*14	13/*14	12/*13	11/*12		
		2	16/*18	16/*18	15/*17	15/*16	14/*15	13/*14	13/*14	12/*13	11/*12		
		3	16/*18	16/*18	15/*17	15/*16	14/*15	13/*14	13/*14	12/*13	11/*12		
D	0 to 6 Degrees	1	19/*20	19/*20	19/*20	19/*20	19/*20	19	18	16	14		
		2	19/*20	19	18	15	13	11	9	8	7		
		3	13	12	11	9	8	7	6	5	4		
	7 to 27 Degrees	1	15/*17	15/*17	15/*17	15/*16	14/*16	14/*15	13/*14	13/*14	12/*13		
		2	15/*17	15/*17	15/*17	15	13	11	10	9	8		
		3	14	12/*13	11	10	8	7	6	5	5		
	28 to 45 Degrees	1	16/*17	15/*17	15/*16	14/*15	13/*14	12/*13	12/*13	11/*12	10/*11		
		2	16/*17	15/*17	15/*16	14/*15	13/*14	12/*13	12/*13	11/*12	10/*11		
		3	16/*17	15/*17	15/*16	14/*15	13/*14	12/*13	12/*13	11/*12	10/*11		

RT6	RT-APEX OSB Only Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches													
	Portrait Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
31-40 PSF	B	0 to 6 Degrees	1	15	15	15	15	15	15	15	15	15	15	
			2	15	15	15	15	15	15	15	14	13		
			3	15	15	15	15	14	12	10	9	8		
		7 to 27 Degrees	1	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13
			2	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13
			3	12/*13	12/*13	12/*13	12/*13	12/*13	12	11	9	8		
		28 to 45 Degrees	1	14/*16	14/*16	14/*16	14/*16	13/*15	13/*14	12/*14	12/*13	11/*13		
			2	14/*16	14/*16	14/*16	14/*16	13/*15	13/*14	12/*14	12/*13	11/*13		
			3	14/*16	14/*16	14/*16	14/*16	13/*15	13/*14	12/*14	12/*13	11/*13		
	C	0 to 6 Degrees	1	15	15	15	15	15	15	15	15	15	15	
			2	15	15	15	15	15	13	11	10	9		
			3	15	14	13	11	9	8	7	6	5		
		7 to 27 Degrees	1	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	11/*12	11/*12	
			2	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	12	10	9		
			3	12/*13	12/*13	12/*13	11/*12	10	8/*9	7	7	6		
		28 to 45 Degrees	1	14/*15	13/*15	13/*15	13/*14	12/*13	11/*13	11/*12	10/*11	10/*11		
			2	14/*15	13/*15	13/*15	13/*14	12/*13	11/*13	11/*12	10/*11	10/*11		
			3	14/*15	13/*15	13/*15	13/*14	12/*13	11/*13	11/*12	10/*11	10/*11		
	D	0 to 6 Degrees	1	15	15	15	15	15	15	15	15	14		
			2	15	15	15	15	13	11	9	8	7		
			3	13	12	11	9	8	7	6	5	4		
		7 to 27 Degrees	1	12/*13	12/*13	12/*13	12/*13	12/*13	12/*13	11/*12	11/*12	11/*12	10/*11	
			2	12/*13	12/*13	12/*13	12/*13	12/*13	11	10	9	8		
			3	12/*13	12/*13	11	10	8	7	6	5	5		
28 to 45 Degrees		1	13/*15	13/*14	13/*14	12/*13	11/*13	11/*12	10/*11	10	9/*10			
		2	13/*15	13/*14	13/*14	12/*13	11/*13	11/*12	10/*11	10	9/*10			
		3	13/*15	13/*14	13/*14	12/*13	11/*13	11/*12	10/*11	10	9/*10			
41-50 PSF	B	0 to 6 Degrees	1	12	12	12	12	12	12	12	12	12		
			2	12	12	12	12	12	12	12	12	12		
			3	12	12	12	12	12	12	10	9	8		
		7 to 27 Degrees	1	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	
			2	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	
			3	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9	8		
		28 to 45 Degrees	1	12/*14	12/*14	12/*14	12/*13	12/*13	11/*13	11/*12	10/*12	10/*11		
			2	12/*14	12/*14	12/*14	12/*13	12/*13	11/*13	11/*12	10/*12	10/*11		
			3	12/*14	12/*14	12/*14	12/*13	12/*13	11/*13	11/*12	10/*12	10/*11		
	C	0 to 6 Degrees	1	12	12	12	12	12	12	12	12	12		
			2	12	12	12	12	12	12	11	10	9		
			3	12	12	12	11	9	8	7	6	5		
		7 to 27 Degrees	1	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	
			2	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9	
			3	9/*10	9/*10	9/*10	9/*10	9/*10	8/*9	7	7	6		
		28 to 45 Degrees	1	12/*13	12/*13	11/*13	11/*12	11/*12	10/*11	10/*11	9/*10	9/*10		
			2	12/*13	12/*13	11/*13	11/*12	11/*12	10/*11	10/*11	9/*10	9/*10		
			3	12/*13	12/*13	11/*13	11/*12	11/*12	10/*11	10/*11	9/*10	9/*10		
	D	0 to 6 Degrees	1	12	12	12	12	12	12	12	12	12		
			2	12	12	12	12	12	11	9	8	7		
			3	12	12	11	9	8	7	6	5	4		
		7 to 27 Degrees	1	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	
			2	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9	8	
			3	9/*10	9/*10	9/*10	9/*10	8	7	6	5	5		
28 to 45 Degrees		1	11/*13	11/*13	11/*12	11/*12	10/*11	10/*11	9/*10	9	8/*9			
		2	11/*13	11/*13	11/*12	11/*12	10/*11	10/*11	9/*10	9	8/*9			
		3	11/*13	11/*13	11/*12	11/*12	10/*11	10/*11	9/*10	9	8/*9			

RT6	RT-APEX OSB Only Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches													
	Portrait Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
51-60 PSF	B	0 to 6 Degrees	1	10	10	10	10	10	10	10	10	10	10	
			2	10	10	10	10	10	10	10	10	10	10	
			3	10	10	10	10	10	10	10	10	10	9	8
		7 to 27 Degrees	1	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			2	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			3	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8
		28 to 45 Degrees	1	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	9/*10	9/*10
			2	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	9/*10	9/*10
			3	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	10/*11	9/*10	9/*10
	C	0 to 6 Degrees	1	10	10	10	10	10	10	10	10	10	10	
			2	10	10	10	10	10	10	10	10	10	9	
			3	10	10	10	10	10	9	8	7	6	5	
		7 to 27 Degrees	1	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			2	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			3	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	7	7	6
		28 to 45 Degrees	1	10/*11	10/*11	10/*11	10/*11	9/*11	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9
			2	10/*11	10/*11	10/*11	10/*11	9/*11	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9
			3	10/*11	10/*11	10/*11	10/*11	9/*11	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9
	D	0 to 6 Degrees	1	10	10	10	10	10	10	10	10	10	10	
			2	10	10	10	10	10	10	10	9	8	7	
			3	10	10	10	10	9	8	7	6	5	4	
		7 to 27 Degrees	1	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9
			2	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8/*9	8
			3	8/*9	8/*9	8/*9	8/*9	8/*9	8	7	6	5	5	
28 to 45 Degrees		1	10/*11	10/*11	10/*11	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9	7/*8	7/*8	
		2	10/*11	10/*11	10/*11	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9	7/*8	7/*8	
		3	10/*11	10/*11	10/*11	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9	7/*8	7/*8	
61-70 PSF	B	0 to 6 Degrees	1	9	9	9	9	9	9	9	9	9	9	
			2	9	9	9	9	9	9	9	9	9	9	
			3	9	9	9	9	9	9	9	9	9	8	
		7 to 27 Degrees	1	7	7	7	7	7	7	7	7	7	7	7
			2	7	7	7	7	7	7	7	7	7	7	7
			3	7	7	7	7	7	7	7	7	7	7	7
		28 to 45 Degrees	1	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9
			2	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9
			3	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9
	C	0 to 6 Degrees	1	9	9	9	9	9	9	9	9	9	9	
			2	9	9	9	9	9	9	9	9	9	9	
			3	9	9	9	9	9	9	8	7	6	5	
		7 to 27 Degrees	1	7	7	7	7	7	7	7	7	7	7	7
			2	7	7	7	7	7	7	7	7	7	7	7
			3	7	7	7	7	7	7	7	7	7	7	6
		28 to 45 Degrees	1	9/*10	9/*10	9/*10	9/*10	8/*10	8/*9	8/*9	8/*9	8	7/*8	7/*8
			2	9/*10	9/*10	9/*10	9/*10	8/*10	8/*9	8/*9	8/*9	8	7/*8	7/*8
			3	9/*10	9/*10	9/*10	9/*10	8/*10	8/*9	8/*9	8/*9	8	7/*8	7/*8
	D	0 to 6 Degrees	1	9	9	9	9	9	9	9	9	9	9	
			2	9	9	9	9	9	9	9	9	8	7	
			3	9	9	9	9	9	8	7	6	5	4	
		7 to 27 Degrees	1	7	7	7	7	7	7	7	7	7	7	7
			2	7	7	7	7	7	7	7	7	7	7	7
			3	7	7	7	7	7	7	7	7	6	5	5
28 to 45 Degrees		1	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9	7/*8	7/*8	7/*8	7/*8	7/*8	
		2	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9	7/*8	7/*8	7/*8	7/*8	7/*8	
		3	9/*10	9/*10	9/*10	8/*9	8/*9	8/*9	7/*8	7/*8	7/*8	7/*8	7/*8	

RT7	RT-APEX 1x6 Plank Only Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches											
	Portrait Orientation - ASCE 7-10											
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)								
				110	115	120	130	140	150	160	170	180
0 PSF	B	0 to 6 Degrees	1	76/*77	68/*69	62	51/*52	43	37	32	28	25
			2	38	35	31/*32	26/*27	22/*23	19	17	15	13
			3	23/*24	21	19	16	14	12	10	9	8
		7 to 27 Degrees	1	69/*74	63/*67	58/*61	50/*52	43/*44	37/*38	32/*33	29	26
			2	36/*38	33/*34	31	26/*27	22/*23	19/*20	17	15	13
			3	24	22	20	17	14/*15	12/*13	11	10	9
		28 to 45 Degrees	1	54/*58	50/*54	46/*49	40/*42	35/*37	31/*32	27/*28	24/*25	22
			2	46/*49	42/*45	39/*42	34/*36	29/*31	26/*27	23/*24	20/*21	18/*19
			3	46/*49	42/*45	39/*42	34/*36	29/*31	26/*27	23/*24	20/*21	18/*19
	C	0 to 6 Degrees	1	51	46	42	35	30	25	22	19	17
			2	26	24	22	18	16	13	12	10	9
			3	16	15	13/*14	11	10	8	7	6	6
		7 to 27 Degrees	1	49/*52	45/*47	41/*43	35/*36	30/*31	26/*27	23/*24	20/*21	18
			2	26	24	22	18/*19	16	14	12	11	9
			3	17	15	14	12	10	9	8	7	6
		28 to 45 Degrees	1	40/*42	37/*39	34/*36	29/*31	25/*26	22/*23	20	17/*18	16
			2	34/*35	31/*32	29/*30	25	21/*22	19	16/*17	15	13
			3	34/*35	31/*32	29/*30	25	21/*22	19	16/*17	15	13
	D	0 to 6 Degrees	1	42	38	34/*35	29	25	21	18	16	14
			2	22	20	18	15	13	11	10	9	8
			3	14	12	11	9	8	7	6	5	5
		7 to 27 Degrees	1	42/*43	38/*39	35/*36	30	25/*26	22/*23	19/*20	17	15
			2	22	20	18/*19	15/*16	13	11/*12	10	9	8
			3	14	13	12	10	8/*9	7	6	6	5
28 to 45 Degrees		1	34/*36	31/*33	29/*30	25/*26	22	19	17	15	13	
		2	29/*30	26/*28	24/*25	21/*22	18/*19	16	14	12/*13	11	
		3	29/*30	26/*28	24/*25	21/*22	18/*19	16	14	12/*13	11	
1-10 PSF	B	0 to 6 Degrees	1	73/*77	68/*69	62	51/*52	43	37	32	28	25
			2	38	35	31/*32	26/*27	22/*23	19	17	15	13
			3	23/*24	21	19	16	14	12	10	9	8
		7 to 27 Degrees	1	47/*56	47/*56	47/*56	47/*52	43/*44	37/*38	32/*33	29	26
			2	36/*38	33/*34	31	26/*27	22/*23	19/*20	17	15	13
			3	24	22	20	17	14/*15	12/*13	11	10	9
		28 to 45 Degrees	1	47/*57	46/*54	45/*49	40/*42	35/*37	31/*32	27/*28	24/*25	22
			2	46/*49	42/*45	39/*42	34/*36	29/*31	26/*27	23/*24	20/*21	18/*19
			3	46/*49	42/*45	39/*42	34/*36	29/*31	26/*27	23/*24	20/*21	18/*19
	C	0 to 6 Degrees	1	51	46	42	35	30	25	22	19	17
			2	26	24	22	18	16	13	12	10	9
			3	16	15	13/*14	11	10	8	7	6	6
		7 to 27 Degrees	1	47/*52	45/*47	41/*43	35/*36	30/*31	26/*27	23/*24	20/*21	18
			2	26	24	22	18/*19	16	14	12	11	9
			3	17	15	14	12	10	9	8	7	6
		28 to 45 Degrees	1	40/*42	37/*39	34/*36	29/*31	25/*26	22/*23	20	17/*18	16
			2	34/*35	31/*32	29/*30	25	21/*22	19	16/*17	15	13
			3	34/*35	31/*32	29/*30	25	21/*22	19	16/*17	15	13
	D	0 to 6 Degrees	1	42	38	34/*35	29	25	21	18	16	14
			2	22	20	18	15	13	11	10	9	8
			3	14	12	11	9	8	7	6	5	5
		7 to 27 Degrees	1	42/*43	38/*39	35/*36	30	25/*26	22/*23	19/*20	17	15
			2	22	20	18/*19	15/*16	13	11/*12	10	9	8
			3	14	13	12	10	8/*9	7	6	6	5
28 to 45 Degrees		1	34/*36	31/*33	29/*30	25/*26	22	19	17	15	13	
		2	29/*30	26/*28	24/*25	21/*22	18/*19	16	14	12/*13	11	
		3	29/*30	26/*28	24/*25	21/*22	18/*19	16	14	12/*13	11	

RT7	RT-APEX 1x6 Plank Only Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches												
	Portrait Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
11-20 PSF	B	0 to 6 Degrees	1	50/*54	50/*54	50/*54	50/*52	43	37	32	28	25	
			2	38	35	31/*32	26/*27	22/*23	19	17	15	13	
			3	23/*24	21	19	16	14	12	10	9	8	
		7 to 27 Degrees	1	30/*37	30/*37	30/*37	30/*37	30/*37	30/*37	30/*37	30/*33	29	26
			2	30/*37	30/*34	30/*31	26/*27	22/*23	19/*20	17	15	13	
			3	24	22	20	17	14/*15	12/*13	11	10	9	
		28 to 45 Degrees	1	32/*41	32/*40	32/*39	31/*38	30/*37	30/*32	27/*28	24/*25	22	
			2	32/*41	32/*40	32/*39	31/*36	29/*31	26/*27	23/*24	20/*21	18/*19	
			3	32/*41	32/*40	32/*39	31/*36	29/*31	26/*27	23/*24	20/*21	18/*19	
	C	0 to 6 Degrees	1	50/*51	46	42	35	30	25	22	19	17	
			2	26	24	22	18	16	13	12	10	9	
			3	16	15	13/*14	11	10	8	7	6	6	
		7 to 27 Degrees	1	30/*37	30/*37	30/*37	30/*36	30/*31	26/*27	23/*24	20/*21	18	
			2	26	24	22	18/*19	16	14	12	11	9	
			3	17	15	14	12	10	9	8	7	6	
		28 to 45 Degrees	1	31/*38	31/*37	30/*36	29/*31	25/*26	22/*23	20	17/*18	16	
			2	31/*35	31/*32	29/*30	25	21/*22	19	16/*17	15	13	
			3	31/*35	31/*32	29/*30	25	21/*22	19	16/*17	15	13	
	D	0 to 6 Degrees	1	42	38	34/*35	29	25	21	18	16	14	
			2	22	20	18	15	13	11	10	9	8	
			3	14	12	11	9	8	7	6	5	5	
		7 to 27 Degrees	1	30/*37	30/*37	30/*36	30	25/*26	22/*23	19/*20	17	15	
			2	22	20	18/*19	15/*16	13	11/*12	10	9	8	
			3	14	13	12	10	8/*9	7	6	6	5	
28 to 45 Degrees		1	30/*36	30/*33	29/*30	25/*26	22	19	17	15	13		
		2	29/*30	26/*28	24/*25	21/*22	18/*19	16	14	12/*13	11		
		3	29/*30	26/*28	24/*25	21/*22	18/*19	16	14	12/*13	11		
21-30 PSF	B	0 to 6 Degrees	1	42/*45	42/*45	42/*45	42/*45	42/*43	37	32	28	25	
			2	38	35	31/*32	26/*27	22/*23	19	17	15	13	
			3	23/*24	21	19	16	14	12	10	9	8	
		7 to 27 Degrees	1	25/*31	25/*31	25/*31	25/*31	25/*31	25/*31	25/*31	25/*29	25/*26	
			2	25/*31	25/*31	25/*31	25/*27	22/*23	19/*20	17	15	13	
			3	24	22	20	17	14/*15	12/*13	11	10	9	
		28 to 45 Degrees	1	27/*34	27/*34	27/*34	27/*34	27/*32	26/*31	25/*28	24/*25	22	
			2	27/*34	27/*34	27/*34	27/*34	27/*31	26/*27	23/*24	20/*21	18/*19	
			3	27/*34	27/*34	27/*34	27/*34	27/*31	26/*27	23/*24	20/*21	18/*19	
	C	0 to 6 Degrees	1	42/*45	42/*45	42	35	30	25	22	19	17	
			2	26	24	22	18	16	13	12	10	9	
			3	16	15	13/*14	11	10	8	7	6	6	
		7 to 27 Degrees	1	25/*31	25/*31	25/*31	25/*31	25/*31	25/*27	23/*24	20/*21	18	
			2	25/*26	24	22	18/*19	16	14	12	11	9	
			3	17	15	14	12	10	9	8	7	6	
		28 to 45 Degrees	1	27/*33	27/*33	27/*32	26/*31	25/*26	22/*23	20	17/*18	16	
			2	27/*33	27/*32	27/*30	25	21/*22	19	16/*17	15	13	
			3	27/*33	27/*32	27/*30	25	21/*22	19	16/*17	15	13	
	D	0 to 6 Degrees	1	42	38	34/*35	29	25	21	18	16	14	
			2	22	20	18	15	13	11	10	9	8	
			3	14	12	11	9	8	7	6	5	5	
		7 to 27 Degrees	1	25/*31	25/*31	25/*31	25/*30	25/*26	22/*23	19/*20	17	15	
			2	22	20	18/*19	15/*16	13	11/*12	10	9	8	
			3	14	13	12	10	8/*9	7	6	6	5	
28 to 45 Degrees		1	27/*32	26/*32	26/*30	25/*26	22	19	17	15	13		
		2	27/*30	26/*28	24/*25	21/*22	18/*19	16	14	12/*13	11		
		3	27/*30	26/*28	24/*25	21/*22	18/*19	16	14	12/*13	11		

RT7	RT-APEX 1x6 Plank Only Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches												
	Portrait Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
31-40 PSF	B	0 to 6 Degrees	1	32/*35	32/*35	32/*35	32/*35	32/*35	32/*35	32	28	25	
			2	32/*35	32/*35	31/*32	26/*27	22/*23	19	17	15	13	
			3	23/*24	21	19	16	14	12	10	9	8	
		7 to 27 Degrees	1	19/*24	19/*24	19/*24	19/*24	19/*24	19/*24	19/*24	19/*24	19/*24	19/*24
			2	19/*24	19/*24	19/*24	19/*24	19/*23	19/*20	17	15	13	
			3	19/*24	19/*22	19/*20	17	14/*15	12/*13	11	10	9	
		28 to 45 Degrees	1	21/*27	21/*27	21/*27	21/*27	21/*27	21/*27	21/*27	21/*26	21/*25	20/*22
			2	21/*27	21/*27	21/*27	21/*27	21/*27	21/*27	21/*27	21/*24	20/*21	18/*19
			3	21/*27	21/*27	21/*27	21/*27	21/*27	21/*27	21/*27	21/*24	20/*21	18/*19
	C	0 to 6 Degrees	1	32/*35	32/*35	32/*35	32/*35	30	25	22	19	17	
			2	26	24	22	18	16	13	12	10	9	
			3	16	15	13/*14	11	10	8	7	6	6	
		7 to 27 Degrees	1	19/*24	19/*24	19/*24	19/*24	19/*24	19/*24	19/*24	19/*24	19/*21	18
			2	19/*24	19/*24	19/*22	18/*19	16	14	12	11	9	
			3	17	15	14	12	10	9	8	7	6	
		28 to 45 Degrees	1	21/*27	21/*27	21/*27	21/*26	21/*25	20/*23	20	17/*18	16	
			2	21/*27	21/*27	21/*27	21/*25	21/*22	19	16/*17	15	13	
			3	21/*27	21/*27	21/*27	21/*25	21/*22	19	16/*17	15	13	
	D	0 to 6 Degrees	1	32/*35	32/*35	32/*35	29	25	21	18	16	14	
			2	22	20	18	15	13	11	10	9	8	
			3	14	12	11	9	8	7	6	5	5	
		7 to 27 Degrees	1	19/*24	19/*24	19/*24	19/*24	19/*24	19/*23	19/*20	17	15	
			2	19/*22	19/*20	18/*19	15/*16	13	11/*12	10	9	8	
			3	14	13	12	10	8/*9	7	6	6	5	
28 to 45 Degrees		1	21/*27	21/*27	21/*26	21/*25	20/*22	19	17	15	13		
		2	21/*27	21/*27	21/*25	21/*22	18/*19	16	14	12/*13	11		
		3	21/*27	21/*27	21/*25	21/*22	18/*19	16	14	12/*13	11		
41-50 PSF	B	0 to 6 Degrees	1	26/*29	26/*29	26/*29	26/*29	26/*29	26/*29	26/*29	26/*29	26/*28	25
			2	26/*29	26/*29	26/*29	26/*27	22/*23	19	17	15	13	
			3	23/*24	21	19	16	14	12	10	9	8	
		7 to 27 Degrees	1	16/*20	16/*20	16/*20	16/*20	16/*20	16/*20	16/*20	16/*20	16/*20	16/*20
			2	16/*20	16/*20	16/*20	16/*20	16/*20	16/*20	16/*17	15	13	
			3	16/*20	16/*20	16/*20	16/*17	14/*15	12/*13	11	10	9	
		28 to 45 Degrees	1	17/*22	17/*22	17/*22	17/*22	17/*22	17/*22	17/*22	17/*22	17/*22	17/*21
			2	17/*22	17/*22	17/*22	17/*22	17/*22	17/*22	17/*22	17/*22	17/*21	17/*19
			3	17/*22	17/*22	17/*22	17/*22	17/*22	17/*22	17/*22	17/*22	17/*21	17/*19
	C	0 to 6 Degrees	1	26/*29	26/*29	26/*29	26/*29	26/*29	25	22	19	17	
			2	26	24	22	18	16	13	12	10	9	
			3	16	15	13/*14	11	10	8	7	6	6	
		7 to 27 Degrees	1	16/*20	16/*20	16/*20	16/*20	16/*20	16/*20	16/*20	16/*20	16/*20	16/*18
			2	16/*20	16/*20	16/*20	16/*19	16	14	12	11	9	
			3	16/*17	15	14	12	10	9	8	7	6	
		28 to 45 Degrees	1	17/*22	17/*22	17/*22	17/*22	17/*22	17/*21	17/*20	17/*18	16	
			2	17/*22	17/*22	17/*22	17/*22	17/*22	17/*19	16/*17	15	13	
			3	17/*22	17/*22	17/*22	17/*22	17/*22	17/*19	16/*17	15	13	
	D	0 to 6 Degrees	1	26/*29	26/*29	26/*29	26/*29	25	21	18	16	14	
			2	22	20	18	15	13	11	10	9	8	
			3	14	12	11	9	8	7	6	5	5	
		7 to 27 Degrees	1	16/*20	16/*20	16/*20	16/*20	16/*20	16/*20	16/*20	16/*17	15	
			2	16/*20	16/*20	16/*19	15/*16	13	11/*12	10	9	8	
			3	14	13	12	10	8/*9	7	6	6	5	
28 to 45 Degrees		1	17/*22	17/*22	17/*22	17/*22	17/*21	17/*19	16/*17	15	13		
		2	17/*22	17/*22	17/*22	17/*22	17/*19	16	14	12/*13	11		
		3	17/*22	17/*22	17/*22	17/*22	17/*19	16	14	12/*13	11		

RT7	RT-APEX 1x6 Plank Only Installations (60 Cell PV Panels) Maximum Mount Spacing in Inches													
	Portrait Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
51-60 PSF	B	0 to 6 Degrees	1	22/*24	22/*24	22/*24	22/*24	22/*24	22/*24	22/*24	22/*24	22/*24	22/*24	
			2	22/*24	22/*24	22/*24	22/*24	22/*24	22/*23	19	17	15	13	
			3	22/*24	21	19	16	14	12	10	9	8		
		7 to 27 Degrees	1	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17
			2	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*15	13
			3	13/*17	13/*17	13/*17	13/*17	13/*17	13/*15	12/*13	11	10	9	
		28 to 45 Degrees	1	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19
			2	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19
			3	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19
	C	0 to 6 Degrees	1	22/*24	22/*24	22/*24	22/*24	22/*24	22/*24	22/*24	22	19	17	
			2	22/*24	22/*24	22	18	16	13	12	10	9		
			3	16	15	13/*14	11	10	8	7	6	6		
		7 to 27 Degrees	1	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17
			2	13/*17	13/*17	13/*17	13/*17	13/*17	13/*16	13/*14	12	11	9	
			3	13/*17	13/*15	13/*14	12	10	9	8	7	6		
		28 to 45 Degrees	1	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*18	15/*18	14/*16
			2	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*17	15	13
			3	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*17	15	13
	D	0 to 6 Degrees	1	22/*24	22/*24	22/*24	22/*24	22/*24	22/*24	22/*24	21	18	14	
			2	22	20	18	15	13	11	10	9	8		
			3	14	12	11	9	8	7	6	5	5		
		7 to 27 Degrees	1	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*15
			2	13/*17	13/*17	13/*17	13/*16	13	11/*12	10	9	8		
			3	13/*14	13	12	10	8/*9	7	6	6	5		
28 to 45 Degrees		1	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*18	15/*17	14/*15	13		
		2	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*16	14	12/*13	11		
		3	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*16	14	12/*13	11		
61-70 PSF	B	0 to 6 Degrees	1	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	
			2	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19	17	15	13	
			3	19/*21	19/*21	19	16	14	12	10	9	8		
		7 to 27 Degrees	1	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14
			2	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*13
			3	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*13	11	10	9	
		28 to 45 Degrees	1	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16
			2	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16
			3	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16
	C	0 to 6 Degrees	1	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19	17	
			2	19/*21	19/*21	19/*21	18	16	13	12	10	9		
			3	16	15	13/*14	11	10	8	7	6	6		
		7 to 27 Degrees	1	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14
			2	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12	11	9	
			3	12/*14	12/*14	12/*14	12	10	9	8	7	6		
		28 to 45 Degrees	1	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16
			2	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*15	13
			3	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*15	13
	D	0 to 6 Degrees	1	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	18	16	14	
			2	19/*21	19/*20	18	15	13	11	10	9	8		
			3	14	12	11	9	8	7	6	5	5		
		7 to 27 Degrees	1	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14
			2	12/*14	12/*14	12/*14	12/*14	12/*14	12/*13	11/*12	10	9	8	
			3	12/*14	12/*13	12	10	8/*9	7	6	6	5		
28 to 45 Degrees		1	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*15	12/*13	
		2	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*14	12/*13	11	
		3	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*16	13/*14	12/*13	11		

RT8	RT-APEX 1x6 Plank Only Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches											
	Portrait Orientation - ASCE 7-10											
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)								
				110	115	120	130	140	150	160	170	180
0 PSF	B	0 to 6 Degrees	1	67/*68	60/*61	54/*55	45	38	32	28	24/*25	22
			2	34	30	28	23	20	17	15	13	11
			3	21	19	17	14	12	10	9	8	7
		7 to 27 Degrees	1	61/*65	56/*59	51/*54	43/*45	37/*39	32/*34	28/*29	25/*26	22/*23
			2	32/*33	29/*30	27	23	20	17	15	13	12
			3	21	19	17/*18	15	13	11	10	8	7
		28 to 45 Degrees	1	47/*51	44/*47	41/*43	35/*37	31/*32	27/*28	24/*25	21/*22	19/*20
			2	40/*43	37/*39	34/*36	30/*31	26/*27	23	20/*21	18	16
			3	40/*43	37/*39	34/*36	30/*31	26/*27	23	20/*21	18	16
	C	0 to 6 Degrees	1	45	40/*41	37	30/*31	26	22	19	17	15
			2	23	21	19	16	14	12	10	9	8
			3	14	13	12	10	8	7	6	5	5
		7 to 27 Degrees	1	43/*45	39/*41	36/*38	31/*32	26/*27	23/*24	20/*21	18	16
			2	23	21	19	16	14	12	10/*11	9	8
			3	15	13/*14	12	10	9	8	7	6	5
		28 to 45 Degrees	1	35/*37	32/*34	30/*31	26/*27	22/*23	19/*20	17/*18	15/*16	14
			2	30/*31	27/*28	25/*26	22	19	16/*17	14/*15	13	11/*12
			3	30/*31	27/*28	25/*26	22	19	16/*17	14/*15	13	11/*12
	D	0 to 6 Degrees	1	37	33	30	25	21/*22	18/*19	16	14	12
			2	19	17	16	13	11	10	8	7	7
			3	12	11	10	8	7	6	5	5	4
		7 to 27 Degrees	1	36/*38	33/*34	31	26/*27	22/*23	19/*20	17	15	13
			2	19	17/*18	16	13/*14	12	10	9	8	7
			3	12	11	10	9	7	6	6	5	4
28 to 45 Degrees		1	30/*31	28/*29	25/*26	22/*23	19/*20	17	15	13	11/*12	
		2	25/*26	23/*24	21/*22	18/*19	16	14	12	11	10	
		3	25/*26	23/*24	21/*22	18/*19	16	14	12	11	10	
1-10 PSF	B	0 to 6 Degrees	1	64/*68	60/*61	54/*55	45	38	32	28	24/*25	22
			2	34	30	28	23	20	17	15	13	11
			3	21	19	17	14	12	10	9	8	7
		7 to 27 Degrees	1	42/*49	42/*49	42/*49	42/*45	37/*39	32/*34	28/*29	25/*26	22/*23
			2	32/*33	29/*30	27	23	20	17	15	13	12
			3	21	19	17/*18	15	13	11	10	8	7
		28 to 45 Degrees	1	41/*50	40/*47	40/*43	35/*37	31/*32	27/*28	24/*25	21/*22	19/*20
			2	40/*43	37/*39	34/*36	30/*31	26/*27	23	20/*21	18	16
			3	40/*43	37/*39	34/*36	30/*31	26/*27	23	20/*21	18	16
	C	0 to 6 Degrees	1	45	40/*41	37	30/*31	26	22	19	17	15
			2	23	21	19	16	14	12	10	9	8
			3	14	13	12	10	8	7	6	5	5
		7 to 27 Degrees	1	42/*45	39/*41	36/*38	31/*32	26/*27	23/*24	20/*21	18	16
			2	23	21	19	16	14	12	10/*11	9	8
			3	15	13/*14	12	10	9	8	7	6	5
		28 to 45 Degrees	1	35/*37	32/*34	30/*31	26/*27	22/*23	19/*20	17/*18	15/*16	14
			2	30/*31	27/*28	25/*26	22	19	16/*17	14/*15	13	11/*12
			3	30/*31	27/*28	25/*26	22	19	16/*17	14/*15	13	11/*12
	D	0 to 6 Degrees	1	37	33	30	25	21/*22	18/*19	16	14	12
			2	19	17	16	13	11	10	8	7	7
			3	12	11	10	8	7	6	5	5	4
		7 to 27 Degrees	1	36/*38	33/*34	31	26/*27	22/*23	19/*20	17	15	13
			2	19	17/*18	16	13/*14	12	10	9	8	7
			3	12	11	10	9	7	6	6	5	4
28 to 45 Degrees		1	30/*31	28/*29	25/*26	22/*23	19/*20	17	15	13	11/*12	
		2	25/*26	23/*24	21/*22	18/*19	16	14	12	11	10	
		3	25/*26	23/*24	21/*22	18/*19	16	14	12	11	10	

RT8	RT-APEX 1x6 Plank Only Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches												
	Portrait Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
11-20 PSF	B	0 to 6 Degrees	1	44/*47	44/*47	44/*47	44/*45	38	32	28	24/*25	22	
			2	34	30	28	23	20	17	15	13	11	
			3	21	19	17	14	12	10	9	8	7	
		7 to 27 Degrees	1	27/*33	27/*33	27/*33	27/*33	27/*33	27/*33	27/*29	25/*26	22/*23	
			2	27/*33	27/*30	27	23	20	17	15	13	12	
			3	21	19	17/*18	15	13	11	10	8	7	
		28 to 45 Degrees	1	28/*36	28/*35	28/*35	28/*33	27/*32	26/*28	24/*25	21/*22	19/*20	
			2	28/*36	28/*35	28/*35	28/*31	26/*27	23	20/*21	18	16	
			3	28/*36	28/*35	28/*35	28/*31	26/*27	23	20/*21	18	16	
	C	0 to 6 Degrees	1	44/*45	40/*41	37	30/*31	26	22	19	17	15	
			2	23	21	19	16	14	12	10	9	8	
			3	14	13	12	10	8	7	6	5	5	
		7 to 27 Degrees	1	27/*33	27/*33	27/*33	27/*32	26/*27	23/*24	20/*21	18	16	
			2	23	21	19	16	14	12	10/*11	9	8	
			3	15	13/*14	12	10	9	8	7	6	5	
		28 to 45 Degrees	1	28/*33	27/*33	27/*31	26/*27	22/*23	19/*20	17/*18	15/*16	14	
			2	28/*31	27/*28	25/*26	22	19	16/*17	14/*15	13	11/*12	
			3	28/*31	27/*28	25/*26	22	19	16/*17	14/*15	13	11/*12	
	D	0 to 6 Degrees	1	37	33	30	25	21/*22	18/*19	16	14	12	
			2	19	17	16	13	11	10	8	7	7	
			3	12	11	10	8	7	6	5	5	4	
		7 to 27 Degrees	1	27/*33	27/*33	27/*31	26/*27	22/*23	19/*20	17	15	13	
			2	19	17/*18	16	13/*14	12	10	9	8	7	
			3	12	11	10	9	7	6	6	5	4	
28 to 45 Degrees		1	27/*31	26/*29	25/*26	22/*23	19/*20	17	15	13	11/*12		
		2	25/*26	23/*24	21/*22	18/*19	16	14	12	11	10		
		3	25/*26	23/*24	21/*22	18/*19	16	14	12	11	10		
21-30 PSF	B	0 to 6 Degrees	1	36/*40	36/*40	36/*40	36/*40	36/*38	32	28	24/*25	22	
			2	34	30	28	23	20	17	15	13	11	
			3	21	19	17	14	12	10	9	8	7	
		7 to 27 Degrees	1	22/*27	22/*27	22/*27	22/*27	22/*27	22/*27	22/*27	22/*27	22/*26	22/*23
			2	22/*27	22/*27	22/*27	22/*23	20	17	15	13	12	
			3	21	19	17/*18	15	13	11	10	8	7	
		28 to 45 Degrees	1	23/*30	23/*30	23/*30	23/*29	23/*28	23/*27	22/*25	21/*22	19/*20	
			2	23/*30	23/*30	23/*30	23/*29	23/*27	23	20/*21	18	16	
			3	23/*30	23/*30	23/*30	23/*29	23/*27	23	20/*21	18	16	
	C	0 to 6 Degrees	1	36/*40	36/*40	36/*37	30/*31	26	22	19	17	15	
			2	23	21	19	16	14	12	10	9	8	
			3	14	13	12	10	8	7	6	5	5	
		7 to 27 Degrees	1	22/*27	22/*27	22/*27	22/*27	22/*27	22/*24	20/*21	18	16	
			2	22/*23	21	19	16	14	12	10/*11	9	8	
			3	15	13/*14	12	10	9	8	7	6	5	
		28 to 45 Degrees	1	23/*29	23/*29	23/*28	22/*27	22/*23	19/*20	17/*18	15/*16	14	
			2	23/*29	23/*28	23/*26	22	19	16/*17	14/*15	13	11/*12	
			3	23/*29	23/*28	23/*26	22	19	16/*17	14/*15	13	11/*12	
	D	0 to 6 Degrees	1	36/*37	33	30	25	21/*22	18/*19	16	14	12	
			2	19	17	16	13	11	10	8	7	7	
			3	12	11	10	8	7	6	5	5	4	
		7 to 27 Degrees	1	22/*27	22/*27	22/*27	22/*27	22/*23	19/*20	17	15	13	
			2	19	17/*18	16	13/*14	12	10	9	8	7	
			3	12	11	10	9	7	6	6	5	4	
28 to 45 Degrees		1	23/*28	23/*28	22/*26	22/*23	19/*20	17	15	13	11/*12		
		2	23/*26	23/*24	21/*22	18/*19	16	14	12	11	10		
		3	23/*26	23/*24	21/*22	18/*19	16	14	12	11	10		

RT8	RT-APEX 1x6 Plank Only Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches												
	Portrait Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
31-40 PSF	B	0 to 6 Degrees	1	28/*31	28/*31	28/*31	28/*31	28/*31	28/*31	28	24/*25	22	
			2	28/*31	28/*30	28	23	20	17	15	13	11	
			3	21	19	17	14	12	10	9	8	7	
		7 to 27 Degrees	1	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21
			2	17/*21	17/*21	17/*21	17/*21	17/*20	17	15	13	12	
			3	17/*21	17/*19	17/*18	15	13	11	10	8	7	
		28 to 45 Degrees	1	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*23	18/*23	18/*22	18/*20
			2	18/*24	18/*24	18/*24	18/*24	18/*24	18/*24	18/*23	18/*21	18	16
			3	18/*24	18/*24	18/*24	18/*24	18/*24	18/*23	18/*21	18	16	
	C	0 to 6 Degrees	1	28/*31	28/*31	28/*31	28/*31	26	22	19	17	15	
			2	23	21	19	16	14	12	10	9	8	
			3	14	13	12	10	8	7	6	5	5	
		7 to 27 Degrees	1	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*18	16
			2	17/*21	17/*21	17/*19	16	14	12	10/*11	9	8	
			3	15	13/*14	12	10	9	8	7	6	5	
		28 to 45 Degrees	1	18/*24	18/*24	18/*24	18/*23	18/*22	18/*20	17/*18	15/*16	14	
			2	18/*24	18/*24	18/*24	18/*22	18/*19	16/*17	14/*15	13	11/*12	
			3	18/*24	18/*24	18/*24	18/*22	18/*19	16/*17	14/*15	13	11/*12	
	D	0 to 6 Degrees	1	28/*31	28/*31	28/*30	25	21/*22	18/*19	16	14	12	
			2	19	17	16	13	11	10	8	7	7	
			3	12	11	10	8	7	6	5	5	4	
		7 to 27 Degrees	1	17/*21	17/*21	17/*21	17/*21	17/*21	17/*20	17	15	13	
			2	17/*19	17/*18	16	13/*14	12	10	9	8	7	
			3	12	11	10	9	7	6	6	5	4	
28 to 45 Degrees		1	18/*24	18/*23	18/*23	18/*22	18/*20	17	15	13	11/*12		
		2	18/*24	18/*23	18/*22	18/*19	16	14	12	11	10		
		3	18/*24	18/*23	18/*22	18/*19	16	14	12	11	10		
41-50 PSF	B	0 to 6 Degrees	1	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	
			2	23/*25	23/*25	23/*25	23	20	17	15	13	11	
			3	21	19	17	14	12	10	9	8	7	
		7 to 27 Degrees	1	14/*17	14/*17	14/*17	14/*17	14/*17	14/*17	14/*17	14/*17	14/*17	14/*17
			2	14/*17	14/*17	14/*17	14/*17	14/*17	14/*17	14/*17	14/*15	13	12
			3	14/*17	14/*17	14/*17	14/*15	13	11	10	8	7	
		28 to 45 Degrees	1	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*18
			2	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*18	15/*16
			3	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*18	15/*16
	C	0 to 6 Degrees	1	23/*25	23/*25	23/*25	23/*25	23/*25	22	19	17	15	
			2	23	21	19	16	14	12	10	9	8	
			3	14	13	12	10	8	7	6	5	5	
		7 to 27 Degrees	1	14/*17	14/*17	14/*17	14/*17	14/*17	14/*17	14/*17	14/*17	14/*17	14/*16
			2	14/*17	14/*17	14/*17	14/*16	14	12	10/*11	9	8	
			3	14/*15	13/*14	12	10	9	8	7	6	5	
		28 to 45 Degrees	1	15/*19	15/*19	15/*19	15/*19	15/*19	15/*19	15/*18	15/*16	14	
			2	15/*19	15/*19	15/*19	15/*19	15/*19	15/*17	14/*15	13	11/*12	
			3	15/*19	15/*19	15/*19	15/*19	15/*19	15/*17	14/*15	13	11/*12	
	D	0 to 6 Degrees	1	23/*25	23/*25	23/*25	23/*25	21/*22	18/*19	16	14	12	
			2	19	17	16	13	11	10	8	7	7	
			3	12	11	10	8	7	6	5	5	4	
		7 to 27 Degrees	1	14/*17	14/*17	14/*17	14/*17	14/*17	14/*17	14/*17	14/*15	13	
			2	14/*17	14/*17	14/*16	13/*14	12	10	9	8	7	
			3	12	11	10	9	7	6	6	5	4	
28 to 45 Degrees		1	15/*19	15/*19	15/*19	15/*19	15/*18	15/*17	14/*15	13	11/*12		
		2	15/*19	15/*19	15/*19	15/*19	15/*16	14	12	11	10		
		3	15/*19	15/*19	15/*19	15/*19	15/*16	14	12	11	10		

RT8	RT-APEX 1x6 Plank Only Installations (72 Cell PV Panels) Maximum Mount Spacing in Inches													
	Portrait Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
51-60 PSF	B	0 to 6 Degrees	1	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	
			2	19/*21	19/*21	19/*21	19/*21	19/*21	19/*20	17	15	13	11	
			3	19/*21	19	17	14	12	10	9	8	7		
		7 to 27 Degrees	1	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14
			2	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*13	12
			3	12/*14	12/*14	12/*14	12/*14	12/*14	12/*13	11	10	8	7	
		28 to 45 Degrees	1	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*16
			2	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*16
			3	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*16
	C	0 to 6 Degrees	1	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19	17	15	
			2	19/*21	19/*21	19	16	14	12	10	9	8		
			3	14	13	12	10	8	7	6	5	5		
		7 to 27 Degrees	1	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14
			2	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12	10/*11	9	8	
			3	12/*14	12/*14	12	10	9	8	7	6	5		
		28 to 45 Degrees	1	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*16	13/*16	13/*16	13/*14
			2	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*15	13	11/*12	
			3	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*17	13/*15	13	11/*12	
	D	0 to 6 Degrees	1	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	18/*19	16	14	12	
			2	19	17	16	13	11	10	8	7	7		
			3	12	11	10	8	7	6	5	5	4		
		7 to 27 Degrees	1	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*14	12/*13	
			2	12/*14	12/*14	12/*14	12/*14	12/*14	12	10	9	8	7	
			3	12	11	10	9	7	6	6	5	4		
28 to 45 Degrees		1	13/*17	13/*17	13/*17	13/*17	13/*16	13/*16	13/*16	13/*15	12/*13	11/*12		
		2	13/*17	13/*17	13/*17	13/*17	13/*16	13/*14	12	11	10			
		3	13/*17	13/*17	13/*17	13/*17	13/*16	13/*14	12	11	10			
61-70 PSF	B	0 to 6 Degrees	1	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	
			2	17/*18	17/*18	17/*18	17/*18	17/*18	17	15	13	11		
			3	17/*18	17/*18	17	14	12	10	9	8	7		
		7 to 27 Degrees	1	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12
			2	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12
			3	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11	10	8	7	
		28 to 45 Degrees	1	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14
			2	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14
			3	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14
	C	0 to 6 Degrees	1	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17	15	
			2	17/*18	17/*18	17/*18	16	14	12	10	9	8		
			3	14	13	12	10	8	7	6	5	5		
		7 to 27 Degrees	1	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12
			2	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*11	9	8	
			3	10/*12	10/*12	10/*12	10	9	8	7	6	5		
		28 to 45 Degrees	1	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14
			2	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*13	11/*12	
			3	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*13	11/*12	
	D	0 to 6 Degrees	1	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	16	14	12	
			2	17/*18	17	16	13	11	10	8	7	7		
			3	12	11	10	8	7	6	5	5	4		
		7 to 27 Degrees	1	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12
			2	10/*12	10/*12	10/*12	10/*12	10/*12	10/*12	10	9	8	7	
			3	10/*12	10/*11	10	9	7	6	6	5	4		
28 to 45 Degrees		1	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*13	11/*12		
		2	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*12	11	10		
		3	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*14	11/*12	11	10		

RT9	RT-APEX Rafter Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches													
	Landscape Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
0 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	96	
			2	96	96	96	96	96	96	96	91/*92	80/*81	71/*72	
			3	96	96	96	88/*89	76	66	58	51	45		
		7 to 27 Degrees	1	96	96	96	96	96	96	96	96	96	96	96
			2	96	96	96	96	96	95/*96	84/*88	76/*78	68/*70		
			3	96	96	96	84/*87	73/*76	64/*66	57/*58	51/*52	46		
		28 to 45 Degrees	1	96	96	96	96	96	96	96	96	96	96	96
			2	96	96	96	96	96	96	96	96	93/*96	85/*90	
			3	96	96	96	96	96	96	96	96	93/*96	85/*90	
	C	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	92/*96	
			2	96	96	96	96	96	85	73/*74	64/*65	57	50/*51	
			3	88/*89	80/*81	74	62/*63	54	47	41	36	32		
		7 to 27 Degrees	1	96	96	96	96	96	96	96	96	96	96	89/*96
			2	96	96	96	91/*94	79/*82	70/*72	62/*64	55/*57	49/*51		
			3	83/*87	77/*80	71/*73	61/*63	53/*55	47/*48	41/*42	37	33		
		28 to 45 Degrees	1	96	96	96	96	96	96	96	90/*96	82/*96	74/*96	
			2	96	96	96	96	96	96	86/*92	78/*82	70/*74	64/*67	
			3	96	96	96	96	96	96	86/*92	78/*82	70/*74	64/*67	
	D	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	78/*96	
			2	96	96	96	83	71	62	54	48	42/*43		
			3	74/*75	68	62	53	45	39	34	30	27		
		7 to 27 Degrees	1	96	96	96	96	96	96	96	95/*96	85/*96	77/*96	
			2	96	96	90/*94	78/*81	68/*70	60/*61	53/*54	47/*48	42/*43		
			3	71/*74	66/*68	61/*62	52/*54	45/*46	40	35/*36	31/*32	28		
28 to 45 Degrees		1	96	96	96	96	96	96	87/*96	79/*96	71/*96	64/*96		
		2	96	96	96	95/*96	84/*90	75/*79	67/*71	61/*64	55/*57			
		3	96	96	96	95/*96	84/*90	75/*79	67/*71	61/*64	55/*57			
1-10 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	96	
			2	96	96	96	96	96	96	96	91/*92	80/*81	71/*72	
			3	96	96	96	88/*89	76	66	58	51	45		
		7 to 27 Degrees	1	96	96	96	96	96	96	96	96	96	96	96
			2	96	96	96	96	96	95/*96	84/*88	76/*78	68/*70		
			3	96	96	96	84/*87	73/*76	64/*66	57/*58	51/*52	46		
		28 to 45 Degrees	1	96	96	96	96	96	96	96	96	96	96	96
			2	96	96	96	96	96	96	96	96	93/*96	85/*90	
			3	96	96	96	96	96	96	96	96	93/*96	85/*90	
	C	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	92/*96	
			2	96	96	96	96	96	85	73/*74	64/*65	57	50/*51	
			3	88/*89	80/*81	74	62/*63	54	47	41	36	32		
		7 to 27 Degrees	1	96	96	96	96	96	96	96	96	96	96	89/*96
			2	96	96	96	91/*94	79/*82	70/*72	62/*64	55/*57	49/*51		
			3	83/*87	77/*80	71/*73	61/*63	53/*55	47/*48	41/*42	37	33		
		28 to 45 Degrees	1	96	96	96	96	96	96	96	90/*96	82/*96	74/*96	
			2	96	96	96	96	96	96	86/*92	78/*82	70/*74	64/*67	
			3	96	96	96	96	96	96	86/*92	78/*82	70/*74	64/*67	
	D	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	78/*96	
			2	96	96	96	83	71	62	54	48	42/*43		
			3	74/*75	68	62	53	45	39	34	30	27		
		7 to 27 Degrees	1	96	96	96	96	96	96	96	95/*96	85/*96	77/*96	
			2	96	96	90/*94	78/*81	68/*70	60/*61	53/*54	47/*48	42/*43		
			3	71/*74	66/*68	61/*62	52/*54	45/*46	40	35/*36	31/*32	28		
28 to 45 Degrees		1	96	96	96	96	96	96	87/*96	79/*96	71/*96	64/*96		
		2	96	96	96	95/*96	84/*90	75/*79	67/*71	61/*64	55/*57			
		3	96	96	96	95/*96	84/*90	75/*79	67/*71	61/*64	55/*57			

RT9	RT-APEX Rafter Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches													
	Landscape Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
11-20 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	96	
			2	96	96	96	96	96	96	96	91/*92	80/*81	71/*72	
			3	96	96	96	88/*89	76	66	58	51	45		
		7 to 27 Degrees	1	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96
			2	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*88	76/*78	68/*70
			3	77/*96	77/*96	77/*96	77/*87	73/*76	64/*66	57/*58	51/*52	46		
		28 to 45 Degrees	1	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96
			2	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96
			3	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96
	C	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	92/*96	
			2	96	96	96	96	85	73/*74	64/*65	57	50/*51	32	
			3	88/*89	80/*81	74	62/*63	54	47	41	36	32		
		7 to 27 Degrees	1	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96
			2	77/*96	77/*96	77/*96	77/*94	77/*82	70/*72	62/*64	55/*57	49/*51		
			3	77/*87	77/*80	71/*73	61/*63	53/*55	47/*48	41/*42	37	33		
		28 to 45 Degrees	1	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	74/*96
			2	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*82	70/*74	64/*67
			3	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*82	70/*74	64/*67
	D	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	87/*96	78/*96	
			2	96	96	96	83	71	62	54	48	42/*43		
			3	74/*75	68	62	53	45	39	34	30	27		
		7 to 27 Degrees	1	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96	77/*96
			2	77/*96	77/*96	77/*94	77/*81	68/*70	60/*61	53/*54	47/*48	42/*43		
			3	71/*74	66/*68	61/*62	52/*54	45/*46	40	35/*36	31/*32	28		
28 to 45 Degrees		1	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	71/*96	64/*96	
		2	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	
		3	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	75/*96	
21-30 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	96	
			2	96	96	96	96	96	96	96	91/*92	80/*81	71/*72	
			3	96	96	96	88/*89	76	66	58	51	45		
		7 to 27 Degrees	1	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86
			2	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*78	64/*70
			3	64/*86	64/*86	64/*86	64/*86	64/*76	64/*66	57/*58	51/*52	46		
		28 to 45 Degrees	1	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85
			2	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85
			3	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85
	C	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	92/*96	
			2	96	96	96	96	85	73/*74	64/*65	57	50/*51	32	
			3	88/*89	80/*81	74	62/*63	54	47	41	36	32		
		7 to 27 Degrees	1	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86
			2	64/*86	64/*86	64/*86	64/*86	64/*82	64/*72	62/*64	55/*57	49/*51		
			3	64/*86	64/*80	64/*73	61/*63	53/*55	47/*48	41/*42	37	33		
		28 to 45 Degrees	1	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85
			2	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*82	63/*74	63/*67
			3	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*82	63/*74	63/*67	
	D	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	87/*96	78/*96	
			2	96	96	96	83	71	62	54	48	42/*43		
			3	74/*75	68	62	53	45	39	34	30	27		
		7 to 27 Degrees	1	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86	64/*86
			2	64/*86	64/*86	64/*86	64/*81	64/*70	60/*61	53/*54	47/*48	42/*43		
			3	64/*74	64/*68	61/*62	52/*54	45/*46	40	35/*36	31/*32	28		
28 to 45 Degrees		1	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	
		2	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	
		3	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	63/*85	

RT9	RT-APEX Rafter Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches												
	Landscape Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
31-40 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	96
			2	96	96	96	96	96	96	96	91/*92	80/*81	71/*72
			3	96	96	96	88/*89	76	66	58	51	45	
		7 to 27 Degrees	1	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67
			2	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67
			3	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*66	50/*58	50/*52	46
		28 to 45 Degrees	1	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67
			2	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67
			3	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67
	C	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	92/*96
			2	96	96	96	96	96	85	73/*74	64/*65	57	50/*51
			3	88/*89	80/*81	74	62/*63	54	47	41	36	32	
		7 to 27 Degrees	1	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67
			2	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*64	50/*57	49/*51
			3	50/*67	50/*67	50/*67	50/*63	50/*55	47/*48	41/*42	37	33	
		28 to 45 Degrees	1	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67
			2	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67
			3	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67
	D	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	87/*96	78/*96
			2	96	96	96	83	71	62	54	48	42/*43	
			3	74/*75	68	62	53	45	39	34	30	27	
		7 to 27 Degrees	1	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67
			2	50/*67	50/*67	50/*67	50/*67	50/*67	50/*61	50/*54	47/*48	42/*43	
			3	50/*67	50/*67	50/*62	50/*54	45/*46	40	35/*36	31/*32	28	
28 to 45 Degrees		1	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	
		2	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*64	50/*57	
		3	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*67	50/*64	50/*57	
41-50 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	96
			2	96	96	96	96	96	96	96	91/*92	80/*81	71/*72
			3	96	96	96	88/*89	76	66	58	51	45	
		7 to 27 Degrees	1	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55
			2	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55
			3	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*52	41/*46
		28 to 45 Degrees	1	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56
			2	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56
			3	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56
	C	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	92/*96
			2	96	96	96	96	96	85	73/*74	64/*65	57	50/*51
			3	88/*89	80/*81	74	62/*63	54	47	41	36	32	
		7 to 27 Degrees	1	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55
			2	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*51
			3	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*48	41/*42	37	33
		28 to 45 Degrees	1	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56
			2	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56
			3	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56
	D	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	87/*96	78/*96
			2	96	96	96	83	71	62	54	48	42/*43	
			3	74/*75	68	62	53	45	39	34	30	27	
		7 to 27 Degrees	1	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55
			2	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*55	41/*54	41/*48	41/*43
			3	41/*55	41/*55	41/*55	41/*54	41/*46	40	35/*36	31/*32	28	
28 to 45 Degrees		1	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	
		2	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	
		3	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	41/*56	

RT9	RT-APEX Rafter Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches												
	Landscape Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
51-60 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	96
			2	96	96	96	96	96	96	96	91/*92	80/*81	71/*72
			3	96	96	96	88/*89	76	66	58	51	45	
		7 to 27 Degrees	1	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47
			2	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47
			3	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*46
		28 to 45 Degrees	1	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47
			2	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47
			3	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47
	C	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	92/*96
			2	96	96	96	96	85	73/*74	64/*65	57	50/*51	
			3	88/*89	80/*81	74	62/*63	54	47	41	36	32	
		7 to 27 Degrees	1	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47
			2	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47
			3	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*42	35/*37	33
		28 to 45 Degrees	1	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47
			2	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47
			3	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47
	D	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	87/*96	78/*96
			2	96	96	96	83	71	62	54	48	42/*43	
			3	74/*75	68	62	53	45	39	34	30	27	
		7 to 27 Degrees	1	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47
			2	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*43
			3	35/*47	35/*47	35/*47	35/*47	35/*46	35/*40	35/*36	31/*32	28	
28 to 45 Degrees		1	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	
		2	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	
		3	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	35/*47	
61-70 PSF	B	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	96
			2	96	96	96	96	96	96	96	91/*92	80/*81	71/*72
			3	96	96	96	88/*89	76	66	58	51	45	
		7 to 27 Degrees	1	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41
			2	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41
			3	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41
		28 to 45 Degrees	1	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41
			2	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41
			3	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41
	C	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	96	92/*96
			2	96	96	96	96	85	73/*74	64/*65	57	50/*51	
			3	88/*89	80/*81	74	62/*63	54	47	41	36	32	
		7 to 27 Degrees	1	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41
			2	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41
			3	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*37	30/*33
		28 to 45 Degrees	1	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41
			2	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41
			3	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41
D	0 to 6 Degrees	1	96	96	96	96	96	96	96	96	87/*96	78/*96	
		2	96	96	96	83	71	62	54	48	42/*43		
		3	74/*75	68	62	53	45	39	34	30	27		
	7 to 27 Degrees	1	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	
		2	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	
		3	30/*41	30/*41	30/*41	30/*41	30/*41	30/*41	30/*40	30/*36	30/*32	28	
	28 to 45 Degrees	1	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	
		2	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	
		3	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	31/*41	

RT10	RT-APEX Plywood Only Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches											
	Landscape Orientation - ASCE 7-10											
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)								
				110	115	120	130	140	150	160	170	180
0 PSF	B	0 to 6 Degrees	1	96	96	96	83/*84	70	60	52	45/*46	40
			2	62/*63	56/*57	51	43	37	32	27/*28	24	21
			3	38	35	32	27	23	20	17	15	13
		7 to 27 Degrees	1	83/*89	83/*89	83/*89	80/*84	69/*72	60/*62	53/*54	47/*48	42/*43
			2	59/*61	54/*56	50/*51	42/*43	36/*37	32	28	25	22
			3	39	35/*36	32/*33	27/*28	24	21	18	16	14
		28 to 45 Degrees	1	73/*81	70/*77	67/*73	61/*67	56/*60	50/*52	44/*46	39/*41	35/*36
			2	73/*80	69/*73	64/*67	55/*58	48/*50	42/*44	37/*38	33/*34	30
			3	73/*80	69/*73	64/*67	55/*58	48/*50	42/*44	37/*38	33/*34	30
	C	0 to 6 Degrees	1	83	75	68	57	48	41	36	32	28
			2	43	39	35/*36	30	25/*26	22	19	17	15
			3	27	24	22	19	16	14	12	11	9
		7 to 27 Degrees	1	80/*84	73/*76	67/*70	57/*59	49/*50	43/*44	38	33/*34	30
			2	42/*43	38/*39	35/*36	30	26	22/*23	20	17	15/*16
			3	27/*28	25	23	19/*20	17	14/*15	13	11	10
		28 to 45 Degrees	1	61/*66	58/*63	55/*58	48/*50	41/*43	36/*37	32/*33	29	25/*26
			2	55/*57	51/*53	47/*49	40/*41	35/*36	30/*31	27	24	21/*22
			3	55/*57	51/*53	47/*49	40/*41	35/*36	30/*31	27	24	21/*22
	D	0 to 6 Degrees	1	68/*69	62	56	47	40	34/*35	30	26	23
			2	36	32/*33	30	25	21	18	16	14	12/*13
			3	22	20	18/*19	16	13	12	10	9	8
		7 to 27 Degrees	1	68/*70	62/*64	57/*58	48/*49	42	36/*37	32	28	25
			2	36	32/*33	30	25/*26	22	19	17	15	13
			3	23	21	19	16	14	12	11	9	8
28 to 45 Degrees		1	55/*58	51/*53	47/*49	41/*42	35/*36	31/*32	27/*28	24/*25	22	
		2	47/*49	43/*45	40/*41	34/*35	30	26	23	20/*21	18	
		3	47/*49	43/*45	40/*41	34/*35	30	26	23	20/*21	18	
1-10 PSF	B	0 to 6 Degrees	1	70/*72	70/*72	70/*72	70/*72	70	60	52	45/*46	40
			2	62/*63	56/*57	51	43	37	32	27/*28	24	21
			3	38	35	32	27	23	20	17	15	13
		7 to 27 Degrees	1	56/*62	56/*62	56/*62	56/*62	56/*62	55/*61	53/*54	47/*48	42/*43
			2	56/*61	54/*56	50/*51	42/*43	36/*37	32	28	25	22
			3	39	35/*36	32/*33	27/*28	24	21	18	16	14
		28 to 45 Degrees	1	57/*65	55/*63	54/*61	51/*57	48/*54	45/*50	43/*46	39/*41	35/*36
			2	57/*65	55/*63	54/*61	51/*57	48/*50	42/*44	37/*38	33/*34	30
			3	57/*65	55/*63	54/*61	51/*57	48/*50	42/*44	37/*38	33/*34	30
	C	0 to 6 Degrees	1	70/*72	70/*72	68	57	48	41	36	32	28
			2	43	39	35/*36	30	25/*26	22	19	17	15
			3	27	24	22	19	16	14	12	11	9
		7 to 27 Degrees	1	56/*62	56/*62	56/*62	54/*59	49/*50	43/*44	38	33/*34	30
			2	42/*43	38/*39	35/*36	30	26	22/*23	20	17	15/*16
			3	27/*28	25	23	19/*20	17	14/*15	13	11	10
		28 to 45 Degrees	1	51/*57	49/*55	47/*53	44/*49	41/*43	36/*37	32/*33	29	25/*26
			2	51/*57	49/*53	47/*49	40/*41	35/*36	30/*31	27	24	21/*22
			3	51/*57	49/*53	47/*49	40/*41	35/*36	30/*31	27	24	21/*22
	D	0 to 6 Degrees	1	68/*69	62	56	47	40	34/*35	30	26	23
			2	36	32/*33	30	25	21	18	16	14	12/*13
			3	22	20	18/*19	16	13	12	10	9	8
		7 to 27 Degrees	1	56/*62	55/*61	54/*58	48/*49	42	36/*37	32	28	25
			2	36	32/*33	30	25/*26	22	19	17	15	13
			3	23	21	19	16	14	12	11	9	8
28 to 45 Degrees		1	48/*53	46/*51	44/*49	41/*42	35/*36	31/*32	27/*28	24/*25	22	
		2	47/*49	43/*45	40/*41	34/*35	30	26	23	20/*21	18	
		3	47/*49	43/*45	40/*41	34/*35	30	26	23	20/*21	18	

RT10	RT-APEX Plywood Only Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches												
	Landscape Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
11-20 PSF	B	0 to 6 Degrees	1	49/*50	49/*50	49/*50	49/*50	49/*50	49/*50	49/*50	45/*46	40	
			2	49/*50	49/*50	49/*50	43	37	32	27/*28	24	21	
			3	38	35	32	27	23	20	17	15	13	
		7 to 27 Degrees	1	38/*43	38/*43	38/*43	38/*43	38/*43	38/*43	38/*42	37/*41	36/*40	35/*39
			2	38/*43	38/*43	38/*43	38/*43	36/*37	32	28	25	22	
			3	38/*39	35/*36	32/*33	27/*28	24	21	18	16	14	
		28 to 45 Degrees	1	41/*48	41/*47	40/*46	38/*44	37/*42	35/*40	33/*38	32/*36	30/*34	
			2	41/*48	41/*47	40/*46	38/*44	37/*42	35/*40	33/*38	32/*34	30	
			3	41/*48	41/*47	40/*46	38/*44	37/*42	35/*40	33/*38	32/*34	30	
	C	0 to 6 Degrees	1	49/*50	49/*50	49/*50	49/*50	48	41	36	32	28	
			2	43	39	35/*36	30	25/*26	22	19	17	15	
			3	27	24	22	19	16	14	12	11	9	
		7 to 27 Degrees	1	38/*43	38/*43	38/*43	38/*42	36/*40	35/*39	34/*37	33/*34	30	
			2	38/*43	38/*39	35/*36	30	26	22/*23	20	17	15/*16	
			3	27/*28	25	23	19/*20	17	14/*15	13	11	10	
		28 to 45 Degrees	1	38/*44	37/*42	36/*41	34/*39	33/*36	31/*34	29/*32	28/*29	25/*26	
			2	38/*44	37/*42	36/*41	34/*39	33/*36	30/*31	27	24	21/*22	
			3	38/*44	37/*42	36/*41	34/*39	33/*36	30/*31	27	24	21/*22	
	D	0 to 6 Degrees	1	49/*50	49/*50	49/*50	47	40	34/*35	30	26	23	
			2	36	32/*33	30	25	21	18	16	14	12/*13	
			3	22	20	18/*19	16	13	12	10	9	8	
		7 to 27 Degrees	1	38/*43	38/*43	38/*42	36/*40	35/*38	34/*37	32	28	25	
			2	36	32/*33	30	25/*26	22	19	17	15	13	
			3	23	21	19	16	14	12	11	9	8	
28 to 45 Degrees		1	36/*41	35/*40	34/*39	32/*36	30/*34	29/*32	27/*28	24/*25	22		
		2	36/*41	35/*40	34/*39	32/*35	30	26	23	20/*21	18		
		3	36/*41	35/*40	34/*39	32/*35	30	26	23	20/*21	18		
21-30 PSF	B	0 to 6 Degrees	1	41/*44	41/*44	41/*44	41/*44	41/*44	41/*44	41/*44	41/*44	40	
			2	41/*44	41/*44	41/*44	41/*43	37	32	27/*28	24	21	
			3	38	35	32	27	23	20	17	15	13	
		7 to 27 Degrees	1	31/*36	31/*36	31/*36	31/*36	31/*36	31/*36	31/*36	31/*36	31/*35	30/*34
			2	31/*36	31/*36	31/*36	31/*36	31/*36	31/*32	28	25	22	
			3	31/*36	31/*36	31/*33	27/*28	24	21	18	16	14	
		28 to 45 Degrees	1	36/*42	36/*41	35/*41	34/*39	33/*37	31/*36	30/*34	29/*32	28/*31	
			2	36/*42	36/*41	35/*41	34/*39	33/*37	31/*36	30/*34	29/*32	28/*30	
			3	36/*42	36/*41	35/*41	34/*39	33/*37	31/*36	30/*34	29/*32	28/*30	
	C	0 to 6 Degrees	1	41/*44	41/*44	41/*44	41/*44	41/*44	41	36	32	28	
			2	41/*43	39	35/*36	30	25/*26	22	19	17	15	
			3	27	24	22	19	16	14	12	11	9	
		7 to 27 Degrees	1	31/*36	31/*36	31/*36	31/*36	31/*35	31/*34	30/*33	29/*32	28/*30	
			2	31/*36	31/*36	31/*36	30	26	22/*23	20	17	15/*16	
			3	27/*28	25	23	19/*20	17	14/*15	13	11	10	
		28 to 45 Degrees	1	34/*39	33/*38	32/*37	31/*35	29/*33	28/*31	27/*30	25/*28	24/*26	
			2	34/*39	33/*38	32/*37	31/*35	29/*33	28/*31	27	24	21/*22	
			3	34/*39	33/*38	32/*37	31/*35	29/*33	28/*31	27	24	21/*22	
	D	0 to 6 Degrees	1	41/*44	41/*44	41/*44	41/*44	40	34/*35	30	26	23	
			2	36	32/*33	30	25	21	18	16	14	12/*13	
			3	22	20	18/*19	16	13	12	10	9	8	
		7 to 27 Degrees	1	31/*36	31/*36	31/*36	31/*35	30/*34	29/*32	28/*31	27/*28	25	
			2	31/*36	31/*33	30	25/*26	22	19	17	15	13	
			3	23	21	19	16	14	12	11	9	8	
28 to 45 Degrees		1	32/*37	32/*36	31/*35	29/*33	28/*31	26/*29	25/*27	23/*25	22		
		2	32/*37	32/*36	31/*35	29/*33	28/*30	26	23	20/*21	18		
		3	32/*37	32/*36	31/*35	29/*33	28/*30	26	23	20/*21	18		

RT10	RT-APEX Plywood Only Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches													
	Landscape Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
31-40 PSF	B	0 to 6 Degrees	1	32/*34	32/*34	32/*34	32/*34	32/*34	32/*34	32/*34	32/*34	32/*34	32/*34	
			2	32/*34	32/*34	32/*34	32/*34	32/*34	32	27/*28	24	21		
			3	32/*34	32/*34	32	27	23	20	17	15	13		
		7 to 27 Degrees	1	24/*28	24/*28	24/*28	24/*28	24/*28	24/*28	24/*28	24/*28	24/*28	24/*28	24/*28
			2	24/*28	24/*28	24/*28	24/*28	24/*28	24/*28	24/*28	24/*28	24/*25	22	
			3	24/*28	24/*28	24/*28	24/*28	24	21	18	16	14		
		28 to 45 Degrees	1	28/*34	28/*34	28/*34	28/*33	28/*32	27/*31	26/*29	25/*28	24/*27		
			2	28/*34	28/*34	28/*34	28/*33	28/*32	27/*31	26/*29	25/*28	24/*27		
			3	28/*34	28/*34	28/*34	28/*33	28/*32	27/*31	26/*29	25/*28	24/*27		
	C	0 to 6 Degrees	1	32/*34	32/*34	32/*34	32/*34	32/*34	32/*34	32/*34	32/*34	32	28	
			2	32/*34	32/*34	32/*34	30	25/*26	22	19	17	15		
			3	27	24	22	19	16	14	12	11	9		
		7 to 27 Degrees	1	24/*28	24/*28	24/*28	24/*28	24/*28	24/*28	24/*28	24/*27	24/*27	23/*26	
			2	24/*28	24/*28	24/*28	24/*28	24/*26	22/*23	20	17	15/*16		
			3	24/*28	24/*25	23	19/*20	17	14/*15	13	11	10		
		28 to 45 Degrees	1	28/*33	28/*32	27/*32	26/*30	25/*29	24/*27	23/*26	22/*25	21/*24		
			2	28/*33	28/*32	27/*32	26/*30	25/*29	24/*27	23/*26	22/*24	21/*22		
			3	28/*33	28/*32	27/*32	26/*30	25/*29	24/*27	23/*26	22/*24	21/*22		
	D	0 to 6 Degrees	1	32/*34	32/*34	32/*34	32/*34	32/*34	32/*34	32/*34	30	26	23	
			2	32/*34	32/*33	30	25	21	18	16	14	12/*13		
			3	22	20	18/*19	16	13	12	10	9	8		
		7 to 27 Degrees	1	24/*28	24/*28	24/*28	24/*28	24/*28	24/*27	24/*26	23/*25	22/*24		
			2	24/*28	24/*28	24/*28	24/*26	22	19	17	15	13		
			3	23	21	19	16	14	12	11	9	8		
28 to 45 Degrees		1	27/*32	27/*31	26/*30	25/*29	24/*27	23/*26	22/*24	21/*23	20/*22			
		2	27/*32	27/*31	26/*30	25/*29	24/*27	23/*26	22/*23	20/*21	18			
		3	27/*32	27/*31	26/*30	25/*29	24/*27	23/*26	22/*23	20/*21	18			
41-50 PSF	B	0 to 6 Degrees	1	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	
			2	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	24	21		
			3	26/*28	26/*28	26/*28	26/*27	23	20	17	15	13		
		7 to 27 Degrees	1	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	
			2	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*22		
			3	20/*23	20/*23	20/*23	20/*23	20/*23	20/*21	18	16	14		
		28 to 45 Degrees	1	24/*28	24/*28	24/*28	24/*28	24/*28	23/*27	23/*26	22/*25	21/*24		
			2	24/*28	24/*28	24/*28	24/*28	24/*28	23/*27	23/*26	22/*25	21/*24		
			3	24/*28	24/*28	24/*28	24/*28	24/*28	23/*27	23/*26	22/*25	21/*24		
	C	0 to 6 Degrees	1	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	
			2	26/*28	26/*28	26/*28	26/*28	25/*26	22	19	17	15		
			3	26/*27	24	22	19	16	14	12	11	9		
		7 to 27 Degrees	1	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*22		
			2	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20	17	15/*16		
			3	20/*23	20/*23	20/*23	19/*20	17	14/*15	13	11	10		
		28 to 45 Degrees	1	24/*28	24/*28	24/*28	23/*27	22/*25	21/*24	20/*23	20/*22	19/*21		
			2	24/*28	24/*28	24/*28	23/*27	22/*25	21/*24	20/*23	20/*22	19/*21		
			3	24/*28	24/*28	24/*28	23/*27	22/*25	21/*24	20/*23	20/*22	19/*21		
D	0 to 6 Degrees	1	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	26/*28	26	23			
		2	26/*28	26/*28	26/*28	25	21	18	16	14	12/*13			
		3	22	20	18/*19	16	13	12	10	9	8			
	7 to 27 Degrees	1	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*22	19/*21			
		2	20/*23	20/*23	20/*23	20/*23	20/*22	19	17	15	13			
		3	20/*23	20/*21	19	16	14	12	11	9	8			
	28 to 45 Degrees	1	24/*28	23/*27	23/*26	22/*25	21/*24	20/*23	19/*22	18/*21	18/*20			
		2	24/*28	23/*27	23/*26	22/*25	21/*24	20/*23	19/*22	18/*21	18			
		3	24/*28	23/*27	23/*26	22/*25	21/*24	20/*23	19/*22	18/*21	18			

RT10	RT-APEX Plywood Only Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches													
	Landscape Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
51-60 PSF	B	0 to 6 Degrees	1	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	
			2	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	21	
			3	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	20	17	15	13	
		7 to 27 Degrees	1	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19
			2	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19
			3	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*18	16	14	
		28 to 45 Degrees	1	20/*24	20/*24	20/*24	20/*24	20/*24	20/*24	20/*24	20/*24	20/*23	19/*22	19/*22
			2	20/*24	20/*24	20/*24	20/*24	20/*24	20/*24	20/*24	20/*24	20/*23	19/*22	19/*22
			3	20/*24	20/*24	20/*24	20/*24	20/*24	20/*24	20/*24	20/*24	20/*23	19/*22	19/*22
	C	0 to 6 Degrees	1	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	
			2	22/*23	22/*23	22/*23	22/*23	22/*23	22	19	17	15		
			3	22/*23	22/*23	22	19	16	14	12	11	9		
		7 to 27 Degrees	1	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19
			2	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17	15/*16	
			3	17/*19	17/*19	17/*19	17/*19	17	14/*15	13	11	10		
		28 to 45 Degrees	1	20/*24	20/*24	20/*24	20/*24	20/*23	19/*22	18/*21	18/*20	17/*19		
			2	20/*24	20/*24	20/*24	20/*24	20/*23	19/*22	18/*21	18/*20	17/*19		
			3	20/*24	20/*24	20/*24	20/*24	20/*23	19/*22	18/*21	18/*20	17/*19		
	D	0 to 6 Degrees	1	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	22/*23	
			2	22/*23	22/*23	22/*23	22/*23	21	18	16	14	12/*13		
			3	22	20	18/*19	16	13	12	10	9	8		
		7 to 27 Degrees	1	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	
			2	17/*19	17/*19	17/*19	17/*19	17/*19	17/*19	17	15	13		
			3	17/*19	17/*19	17/*19	16	14	12	11	9	8		
28 to 45 Degrees		1	20/*24	20/*24	20/*24	20/*23	19/*22	18/*21	17/*20	17/*19	16/*18			
		2	20/*24	20/*24	20/*24	20/*23	19/*22	18/*21	17/*20	17/*19	16/*18			
		3	20/*24	20/*24	20/*24	20/*23	19/*22	18/*21	17/*20	17/*19	16/*18			
61-70 PSF	B	0 to 6 Degrees	1	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	
			2	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	
			3	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	17	15	13		
		7 to 27 Degrees	1	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	
			2	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	
			3	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14		
		28 to 45 Degrees	1	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*20	17/*20	
			2	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*20	17/*20	
			3	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*20	17/*20	
	C	0 to 6 Degrees	1	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	
			2	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19	17	15		
			3	19/*20	19/*20	19/*20	19	16	14	12	11	9		
		7 to 27 Degrees	1	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	
			2	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	
			3	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*15	13	11	10	
		28 to 45 Degrees	1	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*20	17/*19	16/*18	16/*18	
			2	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*20	17/*19	16/*18	16/*18	
			3	17/*21	17/*21	17/*21	17/*21	17/*21	17/*21	17/*20	17/*19	16/*18	16/*18	
	D	0 to 6 Degrees	1	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	19/*20	
			2	19/*20	19/*20	19/*20	19/*20	19/*20	18	16	14	12/*13		
			3	19/*20	19/*20	18/*19	16	13	12	10	9	8		
		7 to 27 Degrees	1	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	
			2	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*16	14/*15	13	
			3	14/*16	14/*16	14/*16	14/*16	14/*16	14	12	11	9	8	
28 to 45 Degrees		1	17/*21	17/*21	17/*21	17/*20	17/*20	16/*19	16/*18	15/*17	15/*17			
		2	17/*21	17/*21	17/*21	17/*20	17/*20	16/*19	16/*18	15/*17	15/*17			
		3	17/*21	17/*21	17/*21	17/*20	17/*20	16/*19	16/*18	15/*17	15/*17			

RT11	RT-APEX OSB Only Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches											
	Landscape Orientation - ASCE 7-10											
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)								
				110	115	120	130	140	150	160	170	180
0 PSF	B	0 to 6 Degrees	1	91/*92	91/*92	91/*92	91/*92	82	70	61	53	47
			2	72/*73	66	60	50	43	37	32	28	25
			3	45	41	37	31	27	23	20	18	16
		7 to 27 Degrees	1	76/*80	76/*80	76/*80	76/*80	76/*80	69/*71	61/*63	54/*55	48/*49
			2	68/*70	62/*64	57/*59	49/*50	42/*43	37	32/*33	29	25/*26
			3	45/*46	41/*42	38	32	27/*28	24	21	19	16/*17
		28 to 45 Degrees	1	68/*74	65/*70	62/*66	56/*60	51/*54	47/*49	43/*45	39/*41	36/*38
			2	68/*74	65/*70	62/*66	56/*60	51/*54	47/*49	43/*44	38/*39	34/*35
			3	68/*74	65/*70	62/*66	56/*60	51/*54	47/*49	43/*44	38/*39	34/*35
	C	0 to 6 Degrees	1	91/*92	87	79	66	56	48	42	37	33
			2	50	45/*46	41/*42	35	30	26	22	20	17/*18
			3	31	28	26	22	19	16	14	12	11
		7 to 27 Degrees	1	76/*80	76/*80	76/*80	66/*68	57/*58	50/*51	43/*44	39	34/*35
			2	49/*50	45	41/*42	35	30	26	23	20	18
			3	32	29	27	23	19/*20	17	15	13	12
		28 to 45 Degrees	1	56/*60	53/*56	50/*53	45/*48	41/*43	37/*38	33/*35	30/*31	28
			2	56/*60	53/*56	50/*53	45/*48	40/*41	35/*36	31/*32	28	25
			3	56/*60	53/*56	50/*53	45/*48	40/*41	35/*36	31/*32	28	25
	D	0 to 6 Degrees	1	79/*80	72	65/*66	55	47	40	35	31	27
			2	42	38	35	29	25	22	19	17	15
			3	26	24	22	18	16	13/*14	12	10	9
		7 to 27 Degrees	1	76/*80	71/*73	65/*67	56/*57	48/*49	42/*43	37	33	29
			2	41/*42	38	35	29/*30	25/*26	22	19	17	15
			3	27	25	22/*23	19	16/*17	14	12/*13	11	10
28 to 45 Degrees		1	50/*53	48/*50	45/*47	40/*42	36/*37	32/*33	29/*30	26/*27	24/*25	
		2	50/*53	48/*50	45/*47	39/*40	34/*35	30/*31	26/*27	23/*24	21	
		3	50/*53	48/*50	45/*47	39/*40	34/*35	30/*31	26/*27	23/*24	21	
1-10 PSF	B	0 to 6 Degrees	1	62/*64	62/*64	62/*64	62/*64	62/*64	62/*64	61	53	47
			2	62/*64	62/*64	60	50	43	37	32	28	25
			3	45	41	37	31	27	23	20	18	16
		7 to 27 Degrees	1	52/*56	52/*56	52/*56	52/*56	52/*56	51/*55	49/*52	47/*50	45/*48
			2	52/*56	52/*56	52/*56	49/*50	42/*43	37	32/*33	29	25/*26
			3	45/*46	41/*42	38	32	27/*28	24	21	19	16/*17
		28 to 45 Degrees	1	53/*59	52/*57	50/*56	48/*52	45/*49	42/*46	40/*43	37/*40	35/*37
			2	53/*59	52/*57	50/*56	48/*52	45/*49	42/*46	40/*43	37/*39	34/*35
			3	53/*59	52/*57	50/*56	48/*52	45/*49	42/*46	40/*43	37/*39	34/*35
	C	0 to 6 Degrees	1	62/*64	62/*64	62/*64	62/*64	56	48	42	37	33
			2	50	45/*46	41/*42	35	30	26	22	20	17/*18
			3	31	28	26	22	19	16	14	12	11
		7 to 27 Degrees	1	52/*56	52/*56	52/*56	50/*54	48/*51	45/*48	43/*44	39	34/*35
			2	49/*50	45	41/*42	35	30	26	23	20	18
			3	32	29	27	23	19/*20	17	15	13	12
		28 to 45 Degrees	1	47/*52	46/*50	44/*48	41/*44	38/*41	36/*38	33/*35	30/*31	28
			2	47/*52	46/*50	44/*48	41/*44	38/*41	35/*36	31/*32	28	25
			3	47/*52	46/*50	44/*48	41/*44	38/*41	35/*36	31/*32	28	25
	D	0 to 6 Degrees	1	62/*64	62/*64	62/*64	55	47	40	35	31	27
			2	42	38	35	29	25	22	19	17	15
			3	26	24	22	18	16	13/*14	12	10	9
		7 to 27 Degrees	1	52/*56	51/*55	50/*54	47/*51	45/*48	42/*43	37	33	29
			2	41/*42	38	35	29/*30	25/*26	22	19	17	15
			3	27	25	22/*23	19	16/*17	14	12/*13	11	10
28 to 45 Degrees		1	44/*48	43/*46	41/*44	38/*41	35/*37	32/*33	29/*30	26/*27	24/*25	
		2	44/*48	43/*46	41/*44	38/*40	34/*35	30/*31	26/*27	23/*24	21	
		3	44/*48	43/*46	41/*44	38/*40	34/*35	30/*31	26/*27	23/*24	21	

RT11		RT-APEX OSB Only Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches												
Landscape Orientation - ASCE 7-10														
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
11-20 PSF	B	0 to 6 Degrees	1	44/*45	44/*45	44/*45	44/*45	44/*45	44/*45	44/*45	44/*45	44/*45	44/*45	
			2	44/*45	44/*45	44/*45	44/*45	44/*45	43	37	32	28	25	
			3	44/*45	41	37	31	27	23	20	18	16		
		7 to 27 Degrees	1	36/*39	36/*39	36/*39	36/*39	36/*39	36/*39	36/*39	35/*38	34/*37	33/*36	32/*35
			2	36/*39	36/*39	36/*39	36/*39	36/*39	36/*39	35/*37	32/*33	29	25/*26	
			3	36/*39	36/*39	36/*38	32	27/*28	24	21	19	16/*17		
		28 to 45 Degrees	1	39/*44	39/*43	38/*42	36/*40	34/*38	33/*36	31/*34	30/*32	28/*31		
			2	39/*44	39/*43	38/*42	36/*40	34/*38	33/*36	31/*34	30/*32	28/*31		
			3	39/*44	39/*43	38/*42	36/*40	34/*38	33/*36	31/*34	30/*32	28/*31		
	C	0 to 6 Degrees	1	44/*45	44/*45	44/*45	44/*45	44/*45	44/*45	44/*45	42	37	33	
			2	44/*45	44/*45	41/*42	35	30	26	22	20	17/*18		
			3	31	28	26	22	19	16	14	12	11		
		7 to 27 Degrees	1	36/*39	36/*39	36/*39	35/*38	34/*37	33/*35	31/*34	30/*32	29/*31		
			2	36/*39	36/*39	36/*39	35	30	26	23	20	18		
			3	32	29	27	23	19/*20	17	15	13	12		
		28 to 45 Degrees	1	36/*40	35/*39	34/*38	32/*35	30/*33	29/*31	27/*29	25/*27	24/*26		
			2	36/*40	35/*39	34/*38	32/*35	30/*33	29/*31	27/*29	25/*27	24/*25		
			3	36/*40	35/*39	34/*38	32/*35	30/*33	29/*31	27/*29	25/*27	24/*25		
	D	0 to 6 Degrees	1	44/*45	44/*45	44/*45	44/*45	44/*45	44/*45	40	35	31	27	
			2	42	38	35	29	25	22	19	17	15		
			3	26	24	22	18	16	13/*14	12	10	9		
		7 to 27 Degrees	1	36/*39	36/*39	35/*38	34/*36	32/*35	31/*33	30/*32	28/*30	27/*29		
			2	36/*39	36/*38	35	29/*30	25/*26	22	19	17	15		
			3	27	25	22/*23	19	16/*17	14	12/*13	11	10		
28 to 45 Degrees		1	34/*38	33/*37	32/*35	30/*33	28/*31	27/*29	25/*27	23/*25	22/*23			
		2	34/*38	33/*37	32/*35	30/*33	28/*31	27/*29	25/*27	23/*24	21			
		3	34/*38	33/*37	32/*35	30/*33	28/*31	27/*29	25/*27	23/*24	21			
21-30 PSF	B	0 to 6 Degrees	1	37/*39	37/*39	37/*39	37/*39	37/*39	37/*39	37/*39	37/*39	37/*39	37/*39	
			2	38/*39	38/*39	38/*39	38/*39	38/*39	37	32	28	25		
			3	37/*39	37/*39	37	31	27	23	20	18	16		
		7 to 27 Degrees	1	29/*33	29/*33	29/*33	29/*33	29/*33	29/*33	29/*33	29/*32	29/*31	28/*31	
			2	31/*33	31/*33	31/*33	31/*33	31/*33	31/*33	31/*33	30/*32	29	25/*26	
			3	29/*33	29/*33	29/*33	29/*32	27/*28	24	21	19	16/*17		
		28 to 45 Degrees	1	35/*39	34/*38	33/*37	32/*36	31/*34	29/*33	28/*31	27/*30	26/*28		
			2	35/*39	34/*38	33/*37	32/*36	31/*34	29/*33	28/*31	27/*30	26/*28		
			3	35/*39	34/*38	33/*37	32/*36	31/*34	29/*33	28/*31	27/*30	26/*28		
	C	0 to 6 Degrees	1	37/*39	37/*39	37/*39	37/*39	37/*39	37/*39	37/*39	37/*39	36/*37	33	
			2	38/*39	38/*39	38/*39	35	30	26	22	20	17/*18		
			3	31	28	26	22	19	16	14	12	11		
		7 to 27 Degrees	1	29/*33	29/*33	29/*33	29/*33	29/*32	28/*31	27/*30	27/*29	26/*28		
			2	31/*33	31/*33	31/*33	30/*33	29/*30	26	23	20	18		
			3	29/*32	29	27	23	19/*20	17	15	13	12		
		28 to 45 Degrees	1	32/*36	31/*35	30/*34	29/*32	28/*30	26/*28	25/*27	23/*25	22/*24		
			2	32/*36	31/*35	30/*34	29/*32	28/*30	26/*28	25/*27	23/*25	22/*24		
			3	32/*36	31/*35	30/*34	29/*32	28/*30	26/*28	25/*27	23/*25	22/*24		
	D	0 to 6 Degrees	1	37/*39	37/*39	37/*39	37/*39	37/*39	37/*38	35	31	27		
			2	38/*39	38	35	29	25	22	19	17	15		
			3	26	24	22	18	16	13/*14	12	10	9		
		7 to 27 Degrees	1	29/*33	29/*33	29/*33	29/*32	28/*31	27/*29	26/*28	25/*27	24/*26		
			2	31/*33	31/*33	30/*33	29/*30	25/*26	22	19	17	15		
			3	27	25	22/*23	19	16/*17	14	12/*13	11	10		
28 to 45 Degrees		1	31/*34	30/*33	29/*32	27/*30	26/*28	24/*26	23/*25	22/*23	20/*22			
		2	31/*34	30/*33	29/*32	27/*30	26/*28	24/*26	23/*25	22/*23	20/*21			
		3	31/*34	30/*33	29/*32	27/*30	26/*28	24/*26	23/*25	22/*23	20/*21			

RT11	RT-APEX OSB Only Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches													
	Landscape Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
31-40 PSF	B	0 to 6 Degrees	1	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	
			2	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	28	25	
			3	29/*30	29/*30	29/*30	29/*30	29/*30	27	23	20	18	16	
		7 to 27 Degrees	1	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25
			2	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25
			3	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*24	21	19	16/*17	
		28 to 45 Degrees	1	28/*32	28/*32	28/*32	27/*31	26/*29	25/*28	24/*27	23/*26	22/*25	22/*25	
			2	28/*32	28/*32	28/*32	27/*31	26/*29	25/*28	24/*27	23/*26	22/*25	22/*25	
			3	28/*32	28/*32	28/*32	27/*31	26/*29	25/*28	24/*27	23/*26	22/*25	22/*25	
	C	0 to 6 Degrees	1	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	
			2	29/*30	29/*30	29/*30	29/*30	29/*30	26	22	20	17/*18		
			3	29/*30	28	26	22	19	16	14	12	11		
		7 to 27 Degrees	1	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	22/*24	22/*23	
			2	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	23	20	18	
			3	23/*25	23/*25	23/*25	23	19/*20	17	15	13	12		
		28 to 45 Degrees	1	27/*30	27/*30	26/*29	25/*28	24/*26	23/*25	22/*24	21/*23	20/*21	20/*21	
			2	27/*30	27/*30	26/*29	25/*28	24/*26	23/*25	22/*24	21/*23	20/*21	20/*21	
			3	27/*30	27/*30	26/*29	25/*28	24/*26	23/*25	22/*24	21/*23	20/*21	20/*21	
	D	0 to 6 Degrees	1	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	29/*30	27	
			2	29/*30	29/*30	29/*30	29	25	22	19	17	15		
			3	26	24	22	18	16	13/*14	12	10	9		
		7 to 27 Degrees	1	23/*25	23/*25	23/*25	23/*25	23/*25	23/*25	22/*24	21/*23	21/*22		
			2	23/*25	23/*25	23/*25	23/*25	23/*25	22	19	17	15		
			3	23/*25	23/*25	22/*23	19	16/*17	14	12/*13	11	10		
28 to 45 Degrees		1	26/*29	25/*28	25/*28	24/*26	22/*25	21/*23	20/*22	19/*21	18/*20			
		2	26/*29	25/*28	25/*28	24/*26	22/*25	21/*23	20/*22	19/*21	18/*20			
		3	26/*29	25/*28	25/*28	24/*26	22/*25	21/*23	20/*22	19/*21	18/*20			
41-50 PSF	B	0 to 6 Degrees	1	24	24	24	24	24	24	24	24	24		
			2	24	24	24	24	24	24	24	24	24		
			3	24	24	24	24	24	23	20	18	16		
		7 to 27 Degrees	1	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	
			2	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	
			3	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19	16/*17		
		28 to 45 Degrees	1	23/*27	23/*27	23/*27	23/*27	23/*26	22/*25	21/*24	21/*23	20/*22		
			2	23/*27	23/*27	23/*27	23/*27	23/*26	22/*25	21/*24	21/*23	20/*22		
			3	23/*27	23/*27	23/*27	23/*27	23/*26	22/*25	21/*24	21/*23	20/*22		
	C	0 to 6 Degrees	1	24	24	24	24	24	24	24	24	24		
			2	24	24	24	24	24	24	22	20	17/*18		
			3	24	24	24	22	19	16	14	12	11		
		7 to 27 Degrees	1	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21		
			2	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*20		
			3	19/*21	19/*21	19/*21	19/*21	19/*20	17	15	13	12		
		28 to 45 Degrees	1	23/*27	23/*26	23/*25	22/*24	21/*23	20/*22	19/*21	18/*20	18/*19		
			2	23/*27	23/*26	23/*25	22/*24	21/*23	20/*22	19/*21	18/*20	18/*19		
			3	23/*27	23/*26	23/*25	22/*24	21/*23	20/*22	19/*21	18/*20	18/*19		
	D	0 to 6 Degrees	1	24	24	24	24	24	24	24	24			
			2	24	24	24	24	24	22	19	17	15		
			3	24	24	22	18	16	13/*14	12	10	9		
		7 to 27 Degrees	1	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19/*20	18/*19		
			2	19/*21	19/*21	19/*21	19/*21	19/*21	19/*21	19	17	15		
			3	19/*21	19/*21	19/*21	19	16/*17	14	12/*13	11	10		
28 to 45 Degrees		1	23/*26	22/*25	22/*24	21/*23	20/*22	19/*21	18/*20	17/*19	16/*18			
		2	23/*26	22/*25	22/*24	21/*23	20/*22	19/*21	18/*20	17/*19	16/*18			
		3	23/*26	22/*25	22/*24	21/*23	20/*22	19/*21	18/*20	17/*19	16/*18			

RT11	RT-APEX OSB Only Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches													
	Landscape Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
51-60 PSF	B	0 to 6 Degrees	1	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	
			2	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	
			3	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20	18	16		
		7 to 27 Degrees	1	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17
			2	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17
			3	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17
		28 to 45 Degrees	1	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*22	19/*21	18/*21	18/*20
			2	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*22	19/*21	18/*21	18/*20
			3	20/*23	20/*23	20/*23	20/*23	20/*23	20/*23	20/*22	19/*21	18/*21	18/*20	
	C	0 to 6 Degrees	1	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	
			2	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20	17/*18		
			3	20/*21	20/*21	20/*21	20/*21	19	16	14	12	11		
		7 to 27 Degrees	1	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17
			2	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17
			3	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	15	13	12	
		28 to 45 Degrees	1	20/*23	20/*23	20/*23	19/*22	19/*21	18/*20	17/*19	17/*18	16/*18		
			2	20/*23	20/*23	20/*23	19/*22	19/*21	18/*20	17/*19	17/*18	16/*18		
			3	20/*23	20/*23	20/*23	19/*22	19/*21	18/*20	17/*19	17/*18	16/*18		
	D	0 to 6 Degrees	1	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	
			2	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	20/*21	19	17	15	
			3	20/*21	20/*21	20/*21	18	16	13/*14	12	10	9		
		7 to 27 Degrees	1	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	
			2	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	15	
			3	16/*17	16/*17	16/*17	16/*17	16/*17	16/*17	14	12/*13	11	10	
28 to 45 Degrees		1	20/*23	20/*22	19/*22	19/*21	18/*20	17/*19	16/*18	16/*17	15/*16			
		2	20/*23	20/*22	19/*22	19/*21	18/*20	17/*19	16/*18	16/*17	15/*16			
		3	20/*23	20/*22	19/*22	19/*21	18/*20	17/*19	16/*18	16/*17	15/*16			
61-70 PSF	B	0 to 6 Degrees	1	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18		
			2	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18		
			3	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18		
		7 to 27 Degrees	1	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	
			2	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	
			3	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	
		28 to 45 Degrees	1	17/*20	17/*20	17/*20	17/*20	17/*20	17/*20	17/*20	17/*19	17/*19	16/*18	
			2	17/*20	17/*20	17/*20	17/*20	17/*20	17/*20	17/*20	17/*19	17/*19	16/*18	
			3	17/*20	17/*20	17/*20	17/*20	17/*20	17/*20	17/*20	17/*19	17/*19	16/*18	
	C	0 to 6 Degrees	1	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18		
			2	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18		
			3	17/*18	17/*18	17/*18	17/*18	17/*18	16	14	12	11		
		7 to 27 Degrees	1	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	
			2	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	
			3	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	13	12	
		28 to 45 Degrees	1	17/*20	17/*20	17/*20	17/*20	17/*19	16/*18	16/*18	15/*17	15/*16		
			2	17/*20	17/*20	17/*20	17/*20	17/*19	16/*18	16/*18	15/*17	15/*16		
			3	17/*20	17/*20	17/*20	17/*20	17/*19	16/*18	16/*18	15/*17	15/*16		
	D	0 to 6 Degrees	1	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18		
			2	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17/*18	17	15		
			3	17/*18	17/*18	17/*18	17/*18	16	13/*14	12	10	9		
		7 to 27 Degrees	1	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	
			2	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	14/*15	
			3	14/*15	14/*15	14/*15	14/*15	14/*15	14	12/*13	11	10		
28 to 45 Degrees		1	17/*20	17/*20	17/*20	17/*19	16/*18	16/*17	15/*17	14/*16	14/*15			
		2	17/*20	17/*20	17/*20	17/*19	16/*18	16/*17	15/*17	14/*16	14/*15			
		3	17/*20	17/*20	17/*20	17/*19	16/*18	16/*17	15/*17	14/*16	14/*15			

RT12	RT-APEX 1x6 Plank Only Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches											
	Landscape Orientation - ASCE 7-10											
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)								
				110	115	120	130	140	150	160	170	180
0 PSF	B	0 to 6 Degrees	1	96	96	96	87/*88	74	63	55	48	42
			2	65/*66	59/*60	54	45	39	33	29	25	22/*23
			3	40	37	33	28	24	21	18	16	14
		7 to 27 Degrees	1	96	96	96	85/*88	73/*76	63/*65	56/*57	49/*50	44/*45
			2	62/*64	57/*59	52/*54	44/*46	38/*39	33/*34	29/*30	26	23
			3	41	37/*38	34/*35	29	25	22	19	17	15
		28 to 45 Degrees	1	92/*96	85/*92	79/*84	68/*72	60/*63	53/*55	47/*48	42/*43	37/*38
			2	79/*84	73/*77	67/*71	58/*61	50/*53	44/*46	39/*40	35/*36	31/*32
			3	79/*84	73/*77	67/*71	58/*61	50/*53	44/*46	39/*40	35/*36	31/*32
	C	0 to 6 Degrees	1	87/*88	78/*79	71/*72	60	51	43/*44	38	33	29
			2	45	41	37	31	27	23	20	18	16
			3	28	25/*26	23	20	17	14/*15	13	11	10
		7 to 27 Degrees	1	84/*88	77/*80	71/*73	60/*62	52/*53	45/*46	39/*40	35/*36	31/*32
			2	44/*45	40/*41	37/*38	32	27/*28	24	21	18	16
			3	29	26/*27	24	20/*21	18	15	13	12	10
		28 to 45 Degrees	1	68/*72	63/*66	58/*61	50/*52	44/*45	38/*39	34/*35	30/*31	27
			2	58/*61	53/*56	49/*51	42/*44	37/*38	32/*33	28/*29	25/*26	22/*23
			3	58/*61	53/*56	49/*51	42/*44	37/*38	32/*33	28/*29	25/*26	22/*23
	D	0 to 6 Degrees	1	72	65	59	49/*50	42	36	32	28	25
			2	38	34	31	26	22	19	17	15	13
			3	23	21	19	16	14	12	11	9	8
		7 to 27 Degrees	1	71/*74	65/*67	60/*61	51/*52	44/*45	38/*39	33/*34	29/*30	26/*27
			2	37/*38	34/*35	31/*32	27	23	20	17/*18	15	14
			3	24/*25	22	20/*21	17	15	13	11	10	9
28 to 45 Degrees		1	58/*61	54/*56	50/*52	43/*44	37/*38	32/*33	29	25/*26	23	
		2	49/*51	45/*47	42/*43	36/*37	31/*32	27/*28	24	21/*22	19	
		3	49/*51	45/*47	42/*43	36/*37	31/*32	27/*28	24	21/*22	19	
1-10 PSF	B	0 to 6 Degrees	1	96	96	96	87/*88	74	63	55	48	42
			2	65/*66	59/*60	54	45	39	33	29	25	22/*23
			3	40	37	33	28	24	21	18	16	14
		7 to 27 Degrees	1	81/*96	81/*96	81/*96	81/*88	73/*76	63/*65	56/*57	49/*50	44/*45
			2	62/*64	57/*59	52/*54	44/*46	38/*39	33/*34	29/*30	26	23
			3	41	37/*38	34/*35	29	25	22	19	17	15
		28 to 45 Degrees	1	80/*96	79/*92	77/*84	68/*72	60/*63	53/*55	47/*48	42/*43	37/*38
			2	79/*84	73/*77	67/*71	58/*61	50/*53	44/*46	39/*40	35/*36	31/*32
			3	79/*84	73/*77	67/*71	58/*61	50/*53	44/*46	39/*40	35/*36	31/*32
	C	0 to 6 Degrees	1	87/*88	78/*79	71/*72	60	51	43/*44	38	33	29
			2	45	41	37	31	27	23	20	18	16
			3	28	25/*26	23	20	17	14/*15	13	11	10
		7 to 27 Degrees	1	81/*88	77/*80	71/*73	60/*62	52/*53	45/*46	39/*40	35/*36	31/*32
			2	44/*45	40/*41	37/*38	32	27/*28	24	21	18	16
			3	29	26/*27	24	20/*21	18	15	13	12	10
		28 to 45 Degrees	1	68/*72	63/*66	58/*61	50/*52	44/*45	38/*39	34/*35	30/*31	27
			2	58/*61	53/*56	49/*51	42/*44	37/*38	32/*33	28/*29	25/*26	22/*23
			3	58/*61	53/*56	49/*51	42/*44	37/*38	32/*33	28/*29	25/*26	22/*23
	D	0 to 6 Degrees	1	72	65	59	49/*50	42	36	32	28	25
			2	38	34	31	26	22	19	17	15	13
			3	23	21	19	16	14	12	11	9	8
		7 to 27 Degrees	1	71/*74	65/*67	60/*61	51/*52	44/*45	38/*39	33/*34	29/*30	26/*27
			2	37/*38	34/*35	31/*32	27	23	20	17/*18	15	14
			3	24/*25	22	20/*21	17	15	13	11	10	9
28 to 45 Degrees		1	58/*61	54/*56	50/*52	43/*44	37/*38	32/*33	29	25/*26	23	
		2	49/*51	45/*47	42/*43	36/*37	31/*32	27/*28	24	21/*22	19	
		3	49/*51	45/*47	42/*43	36/*37	31/*32	27/*28	24	21/*22	19	

RT12	RT-APEX 1x6 Plank Only Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches												
	Landscape Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
11-20 PSF	B	0 to 6 Degrees	1	86/*92	86/*92	86/*92	86/*88	74	63	55	48	42	
			2	65/*66	59/*60	54	45	39	33	29	25	22/*23	
			3	40	37	33	28	24	21	18	16	14	
		7 to 27 Degrees	1	52/*64	52/*64	52/*64	52/*64	52/*64	52/*64	52/*64	52/*57	49/*50	44/*45
			2	52/*64	52/*59	52/*54	44/*46	38/*39	33/*34	29/*30	26	23	
			3	41	37/*38	34/*35	29	25	22	19	17	15	
		28 to 45 Degrees	1	55/*69	55/*69	55/*67	54/*65	52/*63	51/*55	47/*48	42/*43	37/*38	
			2	55/*69	55/*69	55/*67	54/*61	50/*53	44/*46	39/*40	35/*36	31/*32	
			3	55/*69	55/*69	55/*67	54/*61	50/*53	44/*46	39/*40	35/*36	31/*32	
	C	0 to 6 Degrees	1	86/*88	78/*79	71/*72	60	51	43/*44	38	33	29	
			2	45	41	37	31	27	23	20	18	16	
			3	28	25/*26	23	20	17	14/*15	13	11	10	
		7 to 27 Degrees	1	52/*64	52/*64	52/*64	52/*62	52/*53	45/*46	39/*40	35/*36	31/*32	
			2	44/*45	40/*41	37/*38	32	27/*28	24	21	18	16	
			3	29	26/*27	24	20/*21	18	15	13	12	10	
		28 to 45 Degrees	1	54/*65	53/*64	52/*61	50/*52	44/*45	38/*39	34/*35	30/*31	27	
			2	54/*61	53/*56	49/*51	42/*44	37/*38	32/*33	28/*29	25/*26	22/*23	
			3	54/*61	53/*56	49/*51	42/*44	37/*38	32/*33	28/*29	25/*26	22/*23	
	D	0 to 6 Degrees	1	72	65	59	49/*50	42	36	32	28	25	
			2	38	34	31	26	22	19	17	15	13	
			3	23	21	19	16	14	12	11	9	8	
		7 to 27 Degrees	1	52/*64	52/*64	52/*61	51/*52	44/*45	38/*39	33/*34	29/*30	26/*27	
			2	37/*38	34/*35	31/*32	27	23	20	17/*18	15	14	
			3	24/*25	22	20/*21	17	15	13	11	10	9	
28 to 45 Degrees		1	52/*61	51/*56	50/*52	43/*44	37/*38	32/*33	29	25/*26	23		
		2	49/*51	45/*47	42/*43	36/*37	31/*32	27/*28	24	21/*22	19		
		3	49/*51	45/*47	42/*43	36/*37	31/*32	27/*28	24	21/*22	19		
21-30 PSF	B	0 to 6 Degrees	1	71/*77	71/*77	71/*77	71/*77	71/*74	63	55	48	42	
			2	65/*66	59/*60	54	45	39	33	29	25	22/*23	
			3	40	37	33	28	24	21	18	16	14	
		7 to 27 Degrees	1	43/*53	43/*53	43/*53	43/*53	43/*53	43/*53	43/*53	43/*53	43/*50	43/*45
			2	43/*53	43/*53	43/*53	43/*46	38/*39	33/*34	29/*30	26	23	
			3	41	37/*38	34/*35	29	25	22	19	17	15	
		28 to 45 Degrees	1	46/*58	46/*58	46/*58	46/*57	46/*55	45/*54	42/*48	42/*43	37/*38	
			2	46/*58	46/*58	46/*58	46/*57	46/*53	44/*46	39/*40	35/*36	31/*32	
			3	46/*58	46/*58	46/*58	46/*57	46/*53	44/*46	39/*40	35/*36	31/*32	
	C	0 to 6 Degrees	1	71/*77	71/*77	71/*72	60	51	43/*44	38	33	29	
			2	45	41	37	31	27	23	20	18	16	
			3	28	25/*26	23	20	17	14/*15	13	11	10	
		7 to 27 Degrees	1	43/*53	43/*53	43/*53	43/*53	43/*53	43/*46	39/*40	35/*36	31/*32	
			2	43/*45	40/*41	37/*38	32	27/*28	24	21	18	16	
			3	29	26/*27	24	20/*21	18	15	13	12	10	
		28 to 45 Degrees	1	46/*57	46/*56	46/*55	44/*52	43/*45	38/*39	34/*35	30/*31	27	
			2	46/*57	46/*56	46/*51	42/*44	37/*38	32/*33	28/*29	25/*26	22/*23	
			3	46/*57	46/*56	46/*51	42/*44	37/*38	32/*33	28/*29	25/*26	22/*23	
	D	0 to 6 Degrees	1	71/*72	65	59	49/*50	42	36	32	28	25	
			2	38	34	31	26	22	19	17	15	13	
			3	23	21	19	16	14	12	11	9	8	
		7 to 27 Degrees	1	43/*53	43/*53	43/*53	43/*52	43/*45	38/*39	33/*34	29/*30	26/*27	
			2	37/*38	34/*35	31/*32	27	23	20	17/*18	15	14	
			3	24/*25	22	20/*21	17	15	13	11	10	9	
28 to 45 Degrees		1	46/*55	45/*54	44/*52	42/*44	37/*38	32/*33	29	25/*26	23		
		2	46/*51	45/*47	42/*43	36/*37	31/*32	27/*28	24	21/*22	19		
		3	46/*51	45/*47	42/*43	36/*37	31/*32	27/*28	24	21/*22	19		

RT12	RT-APEX 1x6 Plank Only Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches												
	Landscape Orientation - ASCE 7-10												
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)									
				110	115	120	130	140	150	160	170	180	
31-40 PSF	B	0 to 6 Degrees	1	55/*60	55/*60	55/*60	55/*60	55/*60	55/*60	55	48	42	
			2	55/*60	55/*60	54	45	39	33	29	25	22/*23	
			3	40	37	33	28	24	21	18	16	14	
		7 to 27 Degrees	1	33/*41	33/*41	33/*41	33/*41	33/*41	33/*41	33/*41	33/*41	33/*41	33/*41
			2	33/*41	33/*41	33/*41	33/*41	33/*39	33/*34	29/*30	26	23	
			3	33/*41	33/*38	33/*35	29	25	22	19	17	15	
		28 to 45 Degrees	1	36/*46	36/*46	36/*46	36/*46	36/*46	36/*46	36/*45	36/*44	36/*43	35/*38
			2	36/*46	36/*46	36/*46	36/*46	36/*46	36/*46	36/*45	36/*40	35/*36	31/*32
			3	36/*46	36/*46	36/*46	36/*46	36/*46	36/*45	36/*40	35/*36	31/*32	
	C	0 to 6 Degrees	1	55/*60	55/*60	55/*60	55/*60	51	43/*44	38	33	29	
			2	45	41	37	31	27	23	20	18	16	
			3	28	25/*26	23	20	17	14/*15	13	11	10	
		7 to 27 Degrees	1	33/*41	33/*41	33/*41	33/*41	33/*41	33/*41	33/*40	33/*36	31/*32	
			2	33/*41	33/*41	33/*38	32	27/*28	24	21	18	16	
			3	29	26/*27	24	20/*21	18	15	13	12	10	
		28 to 45 Degrees	1	36/*46	36/*46	36/*46	36/*45	36/*43	35/*39	34/*35	30/*31	27	
			2	36/*46	36/*46	36/*46	36/*44	36/*38	32/*33	28/*29	25/*26	22/*23	
			3	36/*46	36/*46	36/*46	36/*44	36/*38	32/*33	28/*29	25/*26	22/*23	
	D	0 to 6 Degrees	1	55/*60	55/*60	55/*59	49/*50	42	36	32	28	25	
			2	38	34	31	26	22	19	17	15	13	
			3	23	21	19	16	14	12	11	9	8	
		7 to 27 Degrees	1	33/*41	33/*41	33/*41	33/*41	33/*41	33/*39	33/*34	29/*30	26/*27	
			2	33/*38	33/*35	31/*32	27	23	20	17/*18	15	14	
			3	24/*25	22	20/*21	17	15	13	11	10	9	
28 to 45 Degrees		1	36/*46	36/*46	36/*45	36/*43	35/*38	32/*33	29	25/*26	23		
		2	36/*46	36/*46	36/*43	36/*37	31/*32	27/*28	24	21/*22	19		
		3	36/*46	36/*46	36/*43	36/*37	31/*32	27/*28	24	21/*22	19		
41-50 PSF	B	0 to 6 Degrees	1	45/*49	45/*49	45/*49	45/*49	45/*49	45/*49	45/*49	45/*48	42	
			2	45/*49	45/*49	45/*49	45	39	33	29	25	22/*23	
			3	40	37	33	28	24	21	18	16	14	
		7 to 27 Degrees	1	27/*34	27/*34	27/*34	27/*34	27/*34	27/*34	27/*34	27/*34	27/*34	
			2	27/*34	27/*34	27/*34	27/*34	27/*34	27/*34	27/*30	26	23	
			3	27/*34	27/*34	27/*34	27/*29	25	22	19	17	15	
		28 to 45 Degrees	1	30/*38	30/*38	30/*38	30/*38	30/*38	30/*38	30/*38	30/*37	30/*36	
			2	30/*38	30/*38	30/*38	30/*38	30/*38	30/*38	30/*38	30/*36	30/*32	
			3	30/*38	30/*38	30/*38	30/*38	30/*38	30/*38	30/*38	30/*36	30/*32	
	C	0 to 6 Degrees	1	45/*49	45/*49	45/*49	45/*49	45/*49	43/*44	38	33	29	
			2	45	41	37	31	27	23	20	18	16	
			3	28	25/*26	23	20	17	14/*15	13	11	10	
		7 to 27 Degrees	1	27/*34	27/*34	27/*34	27/*34	27/*34	27/*34	27/*34	27/*34	27/*32	
			2	27/*34	27/*34	27/*34	27/*32	27/*28	24	21	18	16	
			3	27/*29	26/*27	24	20/*21	18	15	13	12	10	
		28 to 45 Degrees	1	30/*38	30/*38	30/*38	30/*38	30/*38	30/*37	29/*35	29/*31	27	
			2	30/*38	30/*38	30/*38	30/*38	30/*38	30/*33	28/*29	25/*26	22/*23	
			3	30/*38	30/*38	30/*38	30/*38	30/*38	30/*33	28/*29	25/*26	22/*23	
	D	0 to 6 Degrees	1	45/*49	45/*49	45/*49	45/*49	42	36	32	28	25	
			2	38	34	31	26	22	19	17	15	13	
			3	23	21	19	16	14	12	11	9	8	
		7 to 27 Degrees	1	27/*34	27/*34	27/*34	27/*34	27/*34	27/*34	27/*34	27/*30	26/*27	
			2	27/*34	27/*34	27/*32	27	23	20	17/*18	15	14	
			3	24/*25	22	20/*21	17	15	13	11	10	9	
28 to 45 Degrees		1	30/*38	30/*38	30/*38	30/*38	30/*36	29/*33	28/*29	25/*26	23		
		2	30/*38	30/*38	30/*38	30/*37	30/*32	27/*28	24	21/*22	19		
		3	30/*38	30/*38	30/*38	30/*37	30/*32	27/*28	24	21/*22	19		

RT12	RT-APEX 1x6 Plank Only Installations (60 & 72 Cell PV Panels) Maximum Mount Spacing in Inches													
	Landscape Orientation - ASCE 7-10													
Snow Load	Exposure Category	Roof Angle	Roof Zone	Basic Wind Speed, V (mph)										
				110	115	120	130	140	150	160	170	180		
51-60 PSF	B	0 to 6 Degrees	1	38/*41	38/*41	38/*41	38/*41	38/*41	38/*41	38/*41	38/*41	38/*41	38/*41	38/*41
			2	38/*41	38/*41	38/*41	38/*41	38/*39	33	29	25	22/*23		
			3	38/*40	37	33	28	24	21	18	16	14		
		7 to 27 Degrees	1	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28
			2	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*26	23	
			3	23/*28	23/*28	23/*28	23/*28	23/*25	22	19	17	15		
		28 to 45 Degrees	1	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*32
			2	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*32
			3	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*32
	C	0 to 6 Degrees	1	38/*41	38/*41	38/*41	38/*41	38/*41	38/*41	38/*41	38	33	29	
			2	38/*41	38/*41	37	31	27	23	20	18	16		
			3	28	25/*26	23	20	17	14/*15	13	11	10		
		7 to 27 Degrees	1	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	
			2	23/*28	23/*28	23/*28	23/*28	23/*28	23/*24	21	18	16		
			3	23/*28	23/*27	23/*24	20/*21	18	15	13	12	10		
		28 to 45 Degrees	1	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*32	25/*31	25/*27	
			2	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*29	25/*26	22/*23		
			3	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*33	26/*29	25/*26	22/*23	
	D	0 to 6 Degrees	1	38/*41	38/*41	38/*41	38/*41	38/*41	36	32	28	25		
			2	38	34	31	26	22	19	17	15	13		
			3	23	21	19	16	14	12	11	9	8		
		7 to 27 Degrees	1	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*28	23/*27	
			2	23/*28	23/*28	23/*28	23/*27	23	20	17/*18	15	14		
			3	23/*25	22	20/*21	17	15	13	11	10	9		
28 to 45 Degrees		1	26/*33	26/*33	26/*33	26/*33	26/*32	26/*31	25/*29	24/*26	23			
		2	26/*33	26/*33	26/*33	26/*33	26/*32	26/*28	24	21/*22	19			
		3	26/*33	26/*33	26/*33	26/*33	26/*32	26/*28	24	21/*22	19			
61-70 PSF	B	0 to 6 Degrees	1	33/*36	33/*36	33/*36	33/*36	33/*36	33/*36	33/*36	33/*36	33/*36	33/*36	
			2	33/*36	33/*36	33/*36	33/*36	33/*36	33	29	25	22/*23		
			3	33/*36	33/*36	33	28	24	21	18	16	14		
		7 to 27 Degrees	1	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	
			2	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*23	
			3	20/*25	20/*25	20/*25	20/*25	20/*25	20/*22	19	17	15		
		28 to 45 Degrees	1	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	
			2	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	
			3	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	
	C	0 to 6 Degrees	1	33/*36	33/*36	33/*36	33/*36	33/*36	33/*36	33/*36	33/*36	33	29	
			2	33/*36	33/*36	33/*36	31	27	23	20	18	16		
			3	28	25/*26	23	20	17	14/*15	13	11	10		
		7 to 27 Degrees	1	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	
			2	20/*25	20/*25	20/*25	20/*25	20/*25	20/*24	20/*21	18	16		
			3	20/*25	20/*25	20/*24	20/*21	18	15	13	12	10		
		28 to 45 Degrees	1	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*27	
			2	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*26	22/*23	
			3	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*26	22/*23	
	D	0 to 6 Degrees	1	33/*36	33/*36	33/*36	33/*36	33/*36	33/*36	32	28	25		
			2	33/*36	33/*34	31	26	22	19	17	15	13		
			3	23	21	19	16	14	12	11	9	8		
		7 to 27 Degrees	1	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	20/*25	
			2	20/*25	20/*25	20/*25	20/*25	20/*23	20	17/*18	15	14		
			3	20/*25	20/*22	20/*21	17	15	13	11	10	9		
28 to 45 Degrees		1	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*27	22/*26	21/*23			
		2	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*24	21/*22	19			
		3	22/*28	22/*28	22/*28	22/*28	22/*28	22/*28	22/*24	21/*22	19			

Table Notes for Tables RT1 to RT12 – Tabulated values are based on the following criteria:

1. Building mean roof height = 30 ft maximum.
2. Risk Category = II.
3. Solar panel maximum width = 40 in for Landscape, 68 in for Portrait 60 Cell & 77.5 in for Portrait 72 Cell.
4. Solar panel & rail dead load = approximately 4.0 psf.
5. ASCE 7-10.
6. OSB shall be 24/16 APA rated sheathing minimum (7/16" thick).
7. Plywood shall be 32/16 APA rated sheathing minimum (15/32" thick).
8. 1x6 Planks are assumed to be 0.75" thick x 5.5' wide minimum with a specific gravity of G = 0.5.
9. Sheathing shall be free of defects including, but not limited to water damage and delamination.
10. Roof rafters or trusses spaced at 24" on center maximum.
11. PV panels must be supported per the manufacturer's required orientation, location and/or spacing.
12. Through a maximum of 2 layers of composite asphalt roof shingles or maximum 20 gage metal decking provided the metal is predrilled as wood screws are not designed to penetrate the metal decking. Not valid on concrete roof tile.

Our analysis assumes that the connections and associated hardware are installed in a workmanlike manner in accordance with the RT-APEX Installation Manual and generally accepted standards of construction practice. It is the responsibility of the contractor to verify that the strength of the roof framing meets the minimum properties used in the tests and can safely support the maximum imposed loads stated within this document. Starling Madison Lofquist, Inc. and Roof Tech assume no liability beyond what is specifically shown in this letter. Additional information is available at the Roof Tech web site, <http://www.roof-tech.us/>.

Please feel free to contact me at your convenience if you have any questions.

Respectfully yours,



Expires: 12/31/ 2021

Tres Warner, P.E.
Design Division Manager

Jesse Light, P.E.
Sr. Structural Engineer

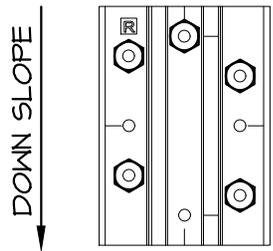
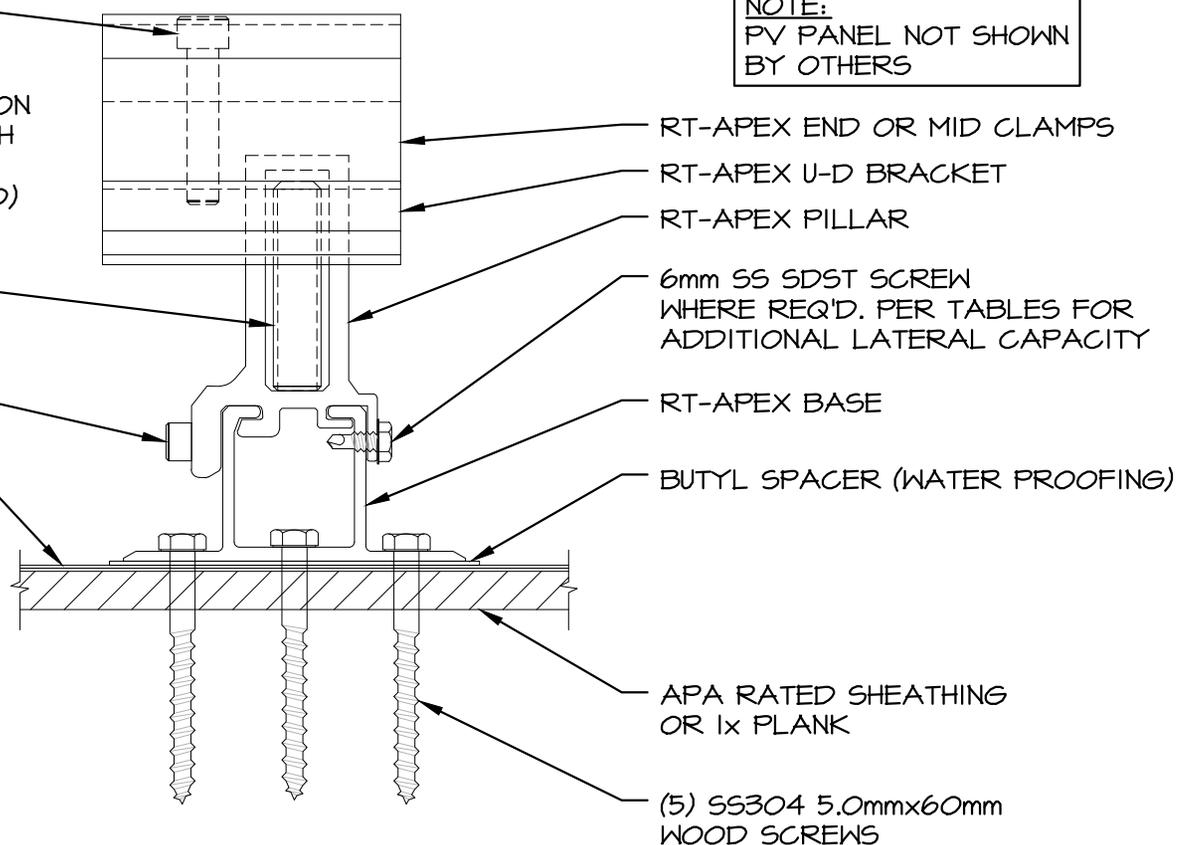
8mm SS SHCS W/ CONICAL WASHER
(INSTALLED WITH THE HIGHER OF
EITHER A MIN. INSTALLATION TORQUE
OF 12 FT-LB OR THE MIN. INSTALLATION
TORQUE INDICATED IN THE ROOF TECH
INSTALLATION MANUAL FOR THE
SPECIFIC PV PANEL BEING INSTALLED)

12mm SS SET SCREW FOR
VERTICAL ADJUSTMENT

6mm SS SHCS SET SCREW
(9 FT-LB MIN. TORQUE)

(2) LAYERS MAX. OF COMPOSITE
ASPHALT SHINGLES & BUILDING
PAPER

NOTE:
PV PANEL NOT SHOWN
BY OTHERS



SCREW PATTERN PLAN

OSB/ PLYWOOD/
1x PLANK ONLY
CONNECTION

1 RT-APEX AT OSB/ PLYWOOD/ 1x PLANK CONNECTION

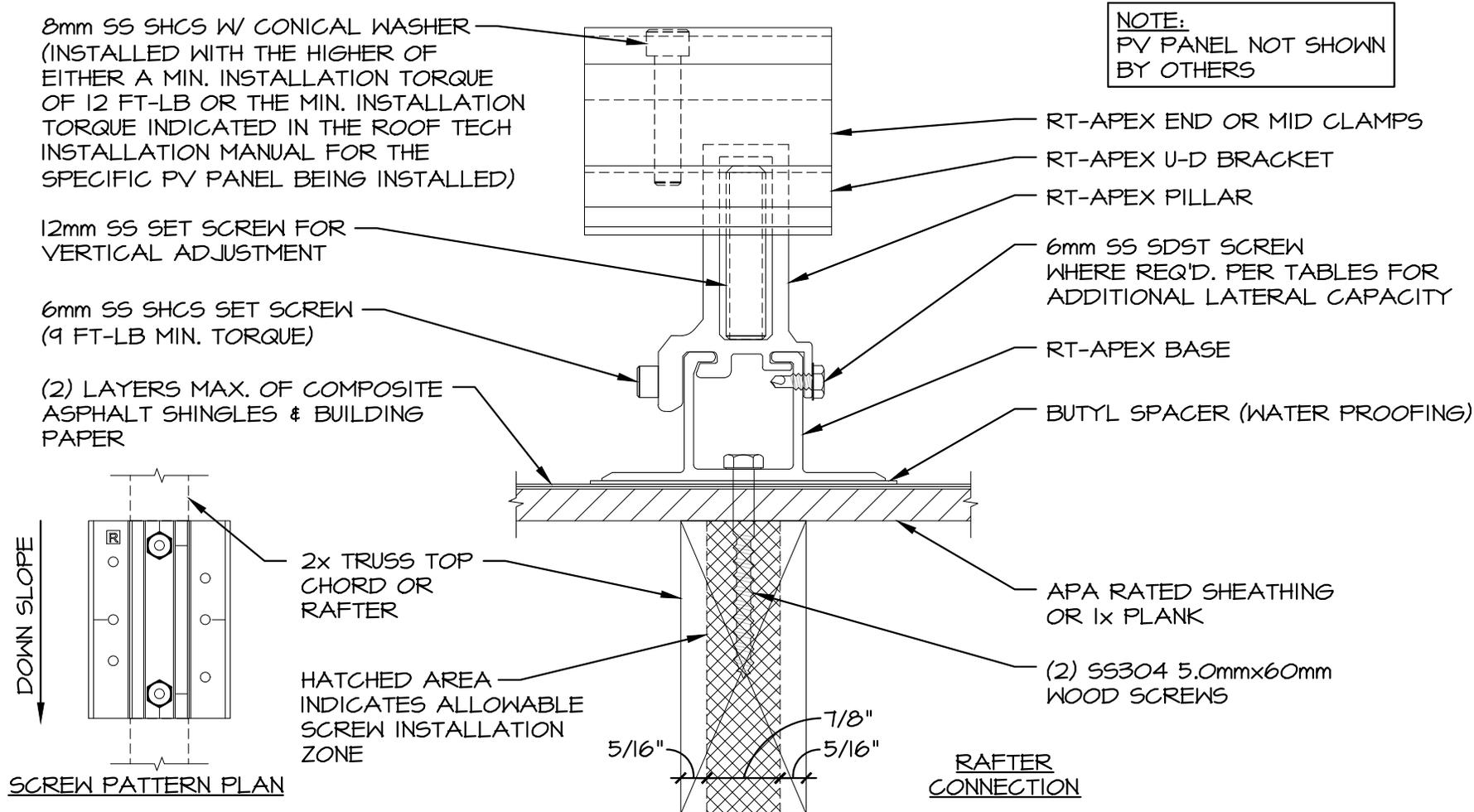
SCALE: 1/4"=1'-0"



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DRAWN BY:	J.S.	DATE:	6-18-19
DESIGNED BY:	J.L.	JOB NO:	471-13
ROOF TECH RT-APEX MOUNT STRUCTURAL ANALYSIS		ROOF TECH, INC. 10620 TREENA ST., SUITE 230 SAN DIEGO, CA 92131	

EXHIBIT A
1 OF 4



2

RT-APEX AT RAFTER CONNECTION

SCALE: 1/4"=1'-0"



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Forensic Engineers

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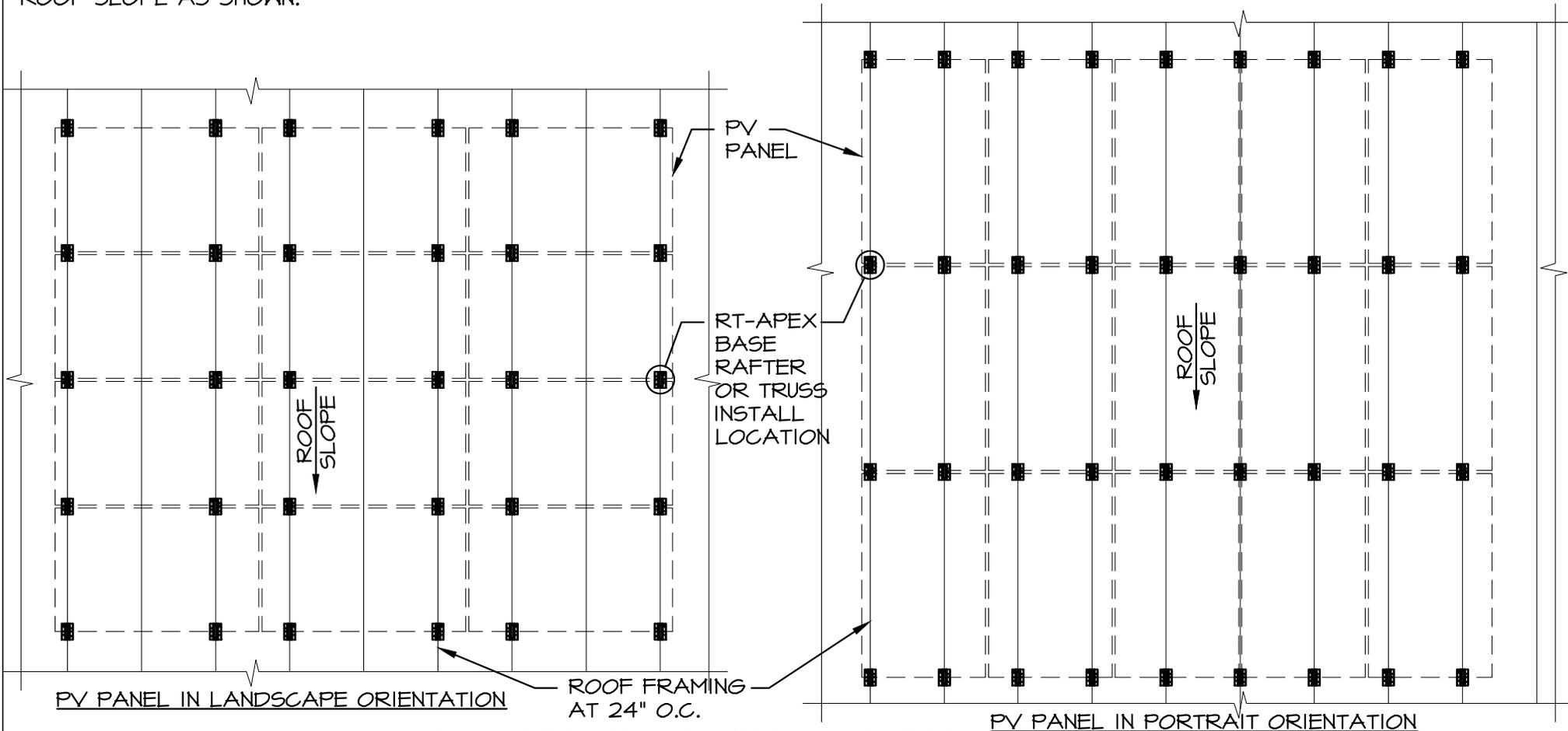
471-13

ROOF TECH
RT-APEX MOUNT
STRUCTURAL ANALYSIS

ROOF TECH, INC.
10620 TREENA ST., SUITE 230
SAN DIEGO, CA 92131

EXHIBIT A
2 OF 4

NOTE: RT-APEX BASE TO BE ORIENTED WITH LONG DIRECTION DOWN ROOF SLOPE AS SHOWN.



PARTIAL FRAMING PLAN (RAFTER INSTALLATION)

3

SCALE: N.T.S.



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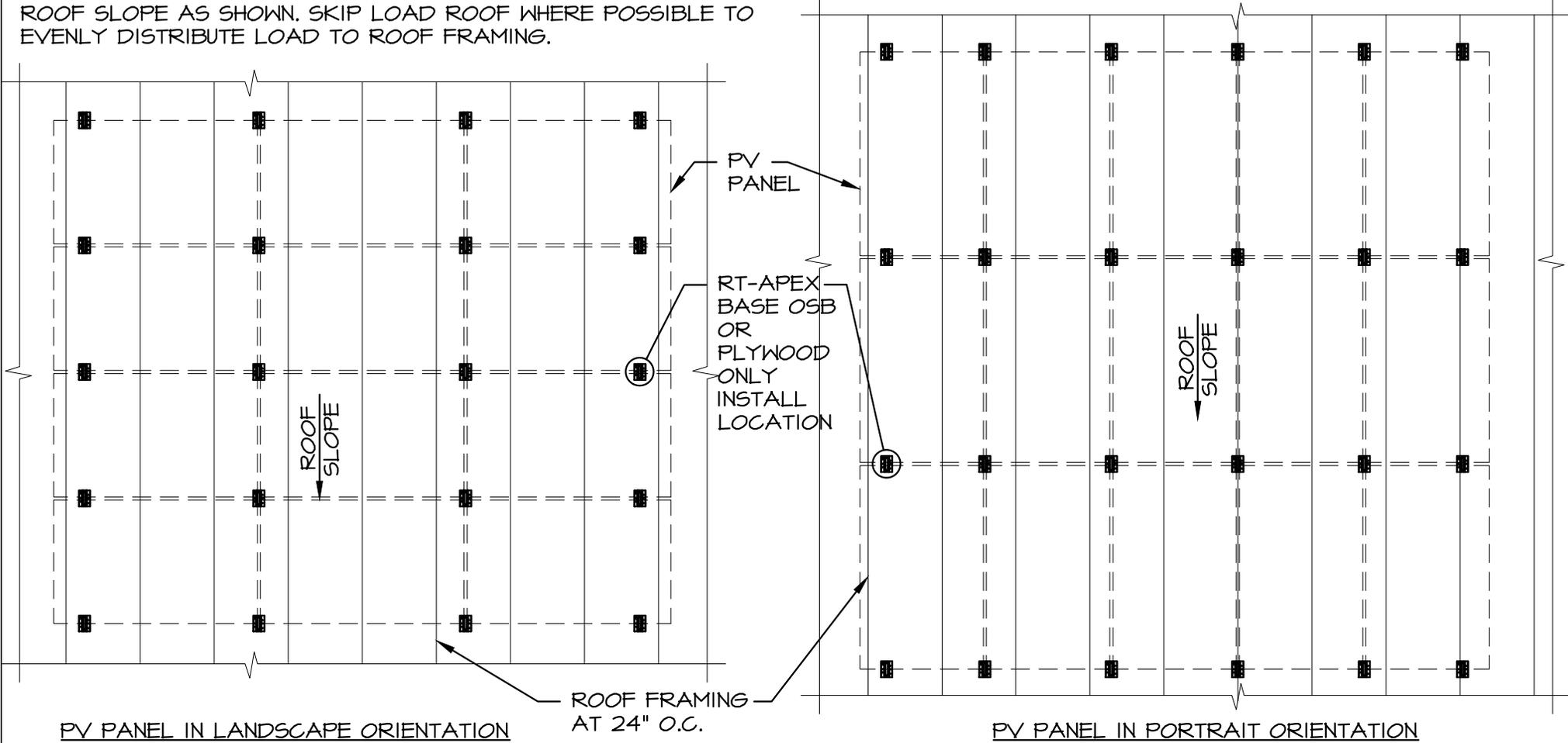
DATE: 6-18-19
JOB NO: 471-13

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RT-APEX MOUNT
STRUCTURAL ANALYSIS

ROOF TECH, INC.
10620 TREENA ST., SUITE 230
SAN DIEGO, CA 92131

EXHIBIT A
3 OF 4

NOTE: RT-APEX BASE TO BE ORIENTED WITH LONG DIRECTION DOWN ROOF SLOPE AS SHOWN. SKIP LOAD ROOF WHERE POSSIBLE TO EVENLY DISTRIBUTE LOAD TO ROOF FRAMING.



4

**PARTIAL FRAMING PLAN
(OSB/PLYWOOD/1x PLANK ONLY INSTALLATION)**

SCALE: 1/4"=1'-0"



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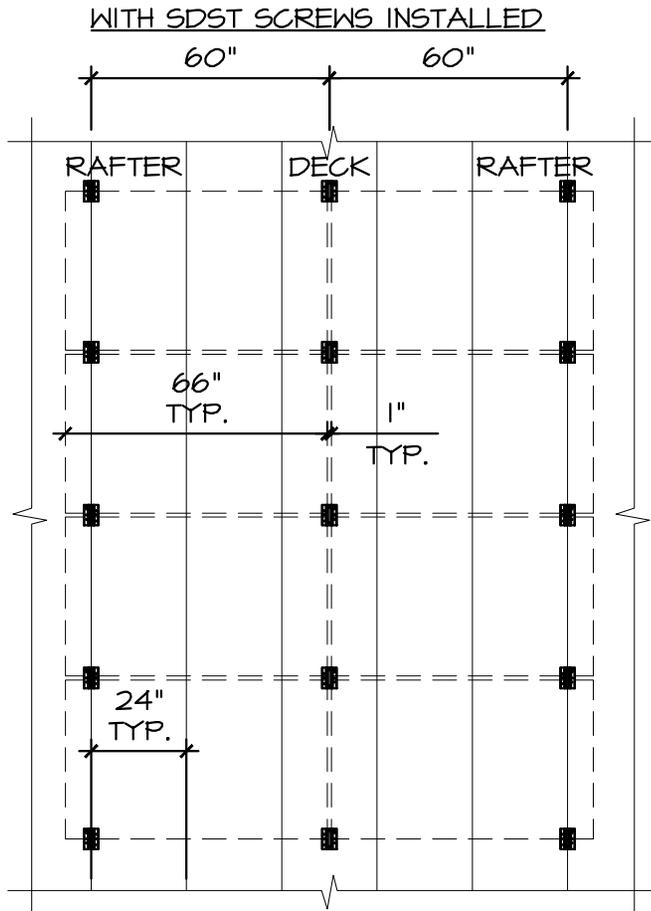
DRAWN BY: J.S.
DESIGNED BY: J.L.

DATE: 6-18-19
JOB NO: 471-13

ROOF TECH
RT-APEX MOUNT
STRUCTURAL ANALYSIS

ROOF TECH, INC.
10620 TREENA ST., SUITE 230
SAN DIEGO, CA 92131

EXHIBIT A
4 OF 4



LANDSCAPE EXAMPLE:

DESIGN CRITERIA:

- 20 PSF GROUND SNOW LOAD
- 110 MPH WIND SPEED
- 7-27 DEGREE ROOF ANGLE
- WIND EXPOSURE 'C'
- ROOF ZONE 2
- RAFTER AND OSB DECKING ONLY COMBINED INSTALALTION

NOTE: SIMILAR PROCEDURE FOR PLYWOOD DECKING ONLY

RAFTER-TO-RAFTER (RtoR) = 71/*96 (in)

DECKING-TO-DECKING (DtoD) = 36/*39 (in)

(* INDICATES WITH SDST SCREWS; WHILE NO * INDICATES NO SDST SCREWS INSTALLED)

$$RtoD = \text{RAFTER-TO-DECKING} = [(RtoR)+(DtoD)]/2$$

FOR NO SDST SCREWS INSTALLED $RtoD = [71in+36in]/2=56.5in$ MAX.

FOR WITH SDST SCREWS INSTALLED $RtoD = [96in+39in]/2=67.5in$ MAX.

PLEASE NOTE: CHECK WITH PV PANEL MANUFACTURER FOR ALLOWABLE SUPPORT LOCATIONS FOR THE PROJECT SPECIFIC DESIGN LOADS. SUPPORT LOCATIONS SHOWN MAY NOT BE ALLOWED FOR ALL PV PANELS.

PARTIAL FRAMING PLAN AND EXAMPLE CALCULATION (COMBINED RAFTER-TO-DECKING ONLY LANDSCAPE INSTALLATION)

SCALE: 1/4"=1'-0"



Consulting Structural and
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fax. (602) 438-2505

DRAWN BY: J.L.
DESIGNED BY: J.L.

DATE: 9-19-19
JOB NO: 471-13

ROOF TECH
RT-APEX MOUNT
STRUCTURAL ANALYSIS

ROOF TECH, INC.
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EXHIBIT B
1 OF 2

PORTRAIT EXAMPLE:

WITH SDST SCREWS INSTALLED

DESIGN CRITERIA:

- 20 PSF GROUND SNOW LOAD
 - 120 MPH WIND SPEED
 - 7-27 DEGREE ROOF ANGLE
 - WIND EXPOSURE 'C'
 - ROOF ZONE I
 - 60 CELL PV PANELS
 - RAFTER AND OSB DECKING ONLY COMBINED INSTALATION
- NOTE: SIMILAR PROCEDURE FOR PLYWOOD DECKING ONLY

RAFTER-TO-RAFTER (RtoR) = 45/*61 (in)

DECKING-TO-DECKING (DtoD) = 21/*23 (in)

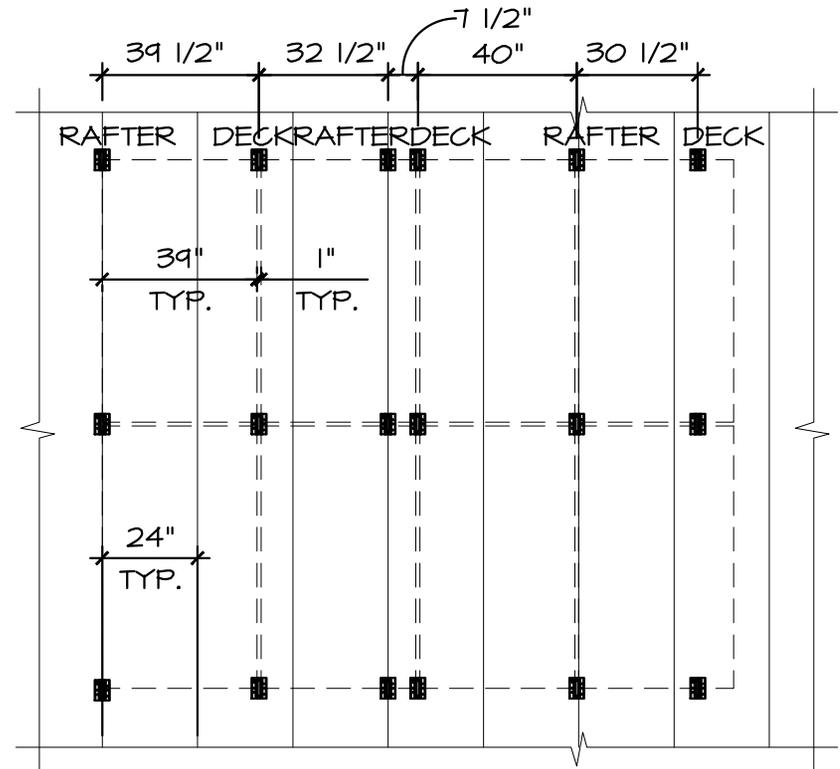
(* INDICATES WITH SDST SCREWS; WHILE NO * INDICATES NO SDST SCREWS INSTALLED)

$$RtoD = \text{RAFTER-TO-DECKING} = [(RtoR)+(DtoD)]/2$$

FOR NO SDST SCREWS INSTALLED $RtoD = [45in+21in]/2=33in \text{ MAX.}$

FOR WITH SDST SCREWS INSTALLED $RtoD = [61in+23in]/2=42in \text{ MAX.}$

PLEASE NOTE: CHECK WITH PV PANEL MANUFACTURER FOR ALLOWABLE SUPPORT LOCATIONS FOR THE PROJECT SPECIFIC DESIGN LOADS. SUPPORT LOCATIONS SHOWN MAY NOT BE ALLOWED FOR ALL PV PANELS.



PARTIAL FRAMING PLAN AND EXAMPLE CALCULATION (COMBINED RAFTER-TO-DECKING ONLY PORTRAIT INSTALLATION)

2

SCALE: 1/4"=1'-0"



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DATE:

9-19-19

DESIGNED BY:

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EXHIBIT B
2 OF 2