

Design Criteria for Span Tables:

Values in the maximum allowable rail span tables provided herein are subject to the following general criteria and additional criteria shown on individual span tables sheets. Values in span tables are based on the same engineering methodology and calculation algorithms used for U-Builder and are provided here for reference.

Building Assumptions

- Building Risk Category: II
- Mean Roof Height: 30 ft
- Roof Pitch: 0°-45°
- Site Elevation: 0 ft

Wind Design Assumptions

- Wind loads used are based on ASCE 7-10 Sec 30.4.2
- Exposure Category B, C, or D
- Basic Wind Speed = 90 – 180 mph
- Level terrain. Topographic factor, $k_{zt} = 1.0$

Snow Design Assumptions

- Ground Snow Load = 0-100 psf
- Exposure Factor coefficients of Partially Exposed condition
- Thermal Factor = 1.0
- Results based on uniform snow load

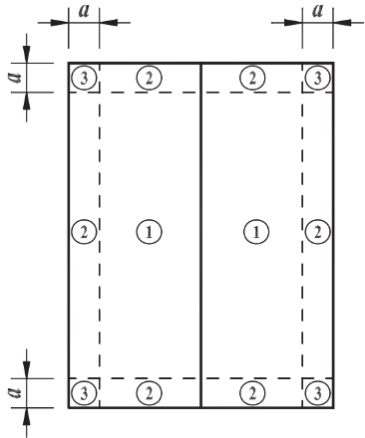
Seismic Design Assumptions

- 0.2-s Spectral Response Acceleration
- $S_s = 1.25$ and 3 per criteria shown on individual span tables sheets.
- $S_1 = 0.5$
- Seismic site class D

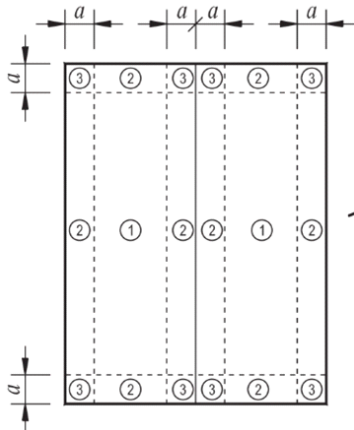
Array Assumptions

- Module orientation and Rail direction per criteria shown on individual span tables sheets.
- Maximum module dimensions of 40.1" x 67" (~19 sq.ft, 47.65 lbs) and 41" x 80" (~23 sq.ft, 58.6 lbs) per criteria shown on individual span tables sheets.
- Minimum distance between modules and roof edge is at least twice the module height above roof surface.
- Modules are parallel to roof surface and maximum height above roof surface is 5" to 10" depending on attachment type.
- Gaps between module rows and columns is 0.25" in to 1" depending on clamp type.
- The most restrictive of all roof zone spans shall be used when any part of the module is attributed to that span.

Zone should be considered as per ASCE 7-10, Fig. 30.4-2A to 30.4-2D

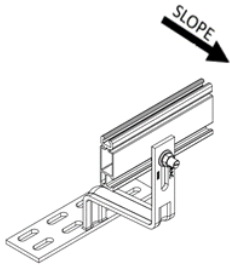


Gable Roofs $\theta \leq 7^\circ$



Gable Roofs $7^\circ < \theta \leq 45^\circ$

Rails can be installed in these possible orientations.

	*CT1
Y+	Alternate orientation not allowed
Y-	



Risk Category
II

30 ft
Roof Height

Ss = 1.25
Seismic

18.66 sq.ft

ORIENTATION

CROSS-SLOPE
Rail Direction

SM
Rail Type

PRO SERIES
Clamp

Solarhooks CTI

SPAN TABLES

* Cells with an asterisk indicates that the L-foot must be oriented in the Y- direction as indicated in the image.



11

30 ft
Roof Height

Ss = 1.25
Seismic

18.66 sq.ft

ORIENTATION

CROSS-SLOPE
Rail Direction

SM
Rail Type

PRO SERIES

Clamp

Solarhooks CTI

SPAN TABLES

[illegible]

• Cells with an asterisk indicates that the L-foot must be oriented in the Y- direction as indicated in the image.

10 Highlighted cell indicate 3-rail system span. Contact Unirac Engineering Services for support.

~~10~~ Highlighted cell with strikethrough indicate 3-rail system span and module clamp allowable capacity exceeds with 3-rails. 4-Rail system required. Contact Unirac Engineering Services for support.



ASCE 7-10
Design Standard

II
Risk Category

30 ft
Roof Height

Ss = 1.25
Seismic

18.66 sq.ft
Module Area

LANDSCAPE
Orientation

CROSS-SLOPE
Rail Direction

SM
Rail Type

PRO SERIES
Clamp

Solarhooks CTI
Attachment

SPAN TABLES

Maximum Allowable Rail Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Basic Wind Speed (mph)																																						
			90			95			100			105			110			115			120			130			140			150			160			170			180		
			Roof Wind Zone																																						
			1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
0	B	0-7	144	144	144	144	144	144	144	144	144	144	144	142	144	144	135	144	144	129	144	139	99	144	130	64	142	106	55	135	83	48	128	67	42	115	58	37	100	52	33
		7-27	145	145	143	145	145	137	145	145	132	145	145	127	145	145	111	145	142	98	145	137	87	145	129	70	145	107	59	140	87	51	134	72	45	128	62	40	113	55	35
		27-45	149	149	149	149	149	149	149	149	149	149	149	149	149	149	144	144	144	133	133	133	115	115	115	101	101	101	88	88	88	78	78	69	69	69	62	62	62	62	62
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		27-45	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	71	71	71	65	65	65	60	60	60	55	55	55	50	50	45	45	45	
	D	0-7	72	72	72	72	72	72	72	72	66	72	72	59	72	72	54	72	49	72	72</																				



11

30 ft

Roof Height

$S_s = 1.25$
Seismic

18.66 sq.ft

LANDSCAPE

CROSS-SLOPE
Rail Direction

SM
Rail Type

PRO SERIES
Clamp

Solarhooks CTI

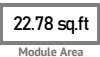
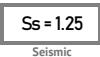
SPAN TABLES

[illegible]

• Cells with an asterisks indicates that the L-foot must be oriented in the Y- direction as indicated in the image.

10 Highlighted cell indicate 3-rail system span. Contact Unirac Engineering Services for support.

16 Highlighted cell with strikethrough indicate 3-rail system span and module clamp allowable capacity exceeds with 3-rails. 4-Rail system required. Contact Unirac Engineering Services for support.



SPAN TABLES

Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Basic Wind Speed (mph)																																															
			90			95			100			105			110			115			120			130			140			150			160			170			180											
			Roof Wind Zone																																															
			1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3									
0	B	0-7	73	73	73	73	73	73	73	73	68	73	73	58	73	73	50	73	73	44	73	69	39	73	55	32	73	46	27	73	38	24	63	33	21	55	29	27	48	26	24									
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		27-45	75	75	75	75	75	75	75	75	75	75	75	75	75	75	70	70	70	65	65	65	57	57	57	49	49	49	44	44	44	45	39	39	39	34	34	34	31	31	31									
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	C	0-7	52	52	52	52	52	47	52	52	40	52	52	35	52	52	32	52	49	29	52	44	26	52																										

* Cells with an asterisk indicates that the L-foot must be oriented in the Y- direction as indicated in the image.



ASCE 7-10
Design Standard

II
Risk Category

30 ft
Roof Height

Ss = 1.25
Seismic

22.78 sq.ft
Module Area

LANDSCAPE
Orientation

CROSS-SLOPE
Rail Direction

SM
Rail Type

PRO SERIES
Clamp

Solarhooks CTI
Attachment

SPAN TABLES

Maximum Allowable Rail Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Basic Wind Speed (mph)																																						
			90			95			100			105			110			115			120			130			140			150			160			170			180		
			Roof Wind Zone																																						
			1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
0	B	0-7	141	141	141	141	141	141	141	141	141	141	141	141	141	134	141	141	128	141	138	92	141	129	63	141	102	54	134	80	47	128	65	41	112	57	36	98	51	48	
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		27-45	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	98	98	98	89	89	89	82	82	82	75	75	75	67	67	67	60	60	60	
	C	0-7	70	70	70	70	70	70	70	70	70	70	70	70	70	63	70	70	57	70	52	70	44	70	60	38	70	52	49	70	45	43	67	40	38	65	54	34			
		7-27	71	71	71	71	71	71	71	71	71	71	71	71	71	68	71	71	61	71	56	69	69	48	65	63	41	62	55	53	59	48	47	56	42	41	53	38	37		
		27-45	99	99	99	99	99	99	99	99	99	99	99	97	97	97	92	92	88	88	88	79	79	71	71	71	62	62	62	55	55	55	49	49	49	44	44	44	44	44	
	D	0-7	70	70	70	70	70	70	64	70	70	58	70	53	70	48	70	44	70	59	37	70	50	48	69	44	42	66	38	36	62	51	32	55	45	29					
		7-27	71	71	71	71	71	71	71	71	71	62	71	57	71	52	69	69	47	65	62	40	61	53	52	58	46	45	55	40	39	52	54	35	49	48	31				
		27-45	106	106	106	106	106	106	102	102	102	96	96	96	91	91	91	85	85	85	80	80	69	69	69	60	60	60	53	53	53	47	47	47	42	42	42	38	38	38	
30	B	0-7	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	63	68	68	54	68	68	47	68	65	41	68	57	36	68	51	48		
		7-27	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	68	71	71	58	70	70	50	67	67	44	64	60	39	61	53	52		
		27-45	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	72	72	72	66	66	66	62	62	62	57	57	57		
	C	0-7	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	57	68	68	52	68	44	68	60	38	68	52	49	68	45	43	65	40	38	63	54	34		
		7-27	71	71	71	71	71	71	71	71	71	71	71	71	71	68	71	71	61	71	56	69	68	48	65	63	41	62	55	53	59	48	47	56	42	41	53	38	37		
		27-45	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	70	70	63	63	63	58	58	58	53	53	53	49	49	49	44	44	44	
	D	0-7	70	70	70	70	70	70	70	70	64	70	58	70	53	70	48	70	44	70	59	37	70	50	48	69	44	42	66	38	36	62	51	32	55	45	29				



11

30 ft

Roof Height

$S_s = 1.25$
Seismic

22.78 sq.ft

LANDSCAPE

CROSS-SLOP
Rail Direction

SM
Rail Type

PRO SERIE
Clamp

Solarhooks CTI

SPAN TABLES

[illegible]

• Cells with an asterisks indicates that the L-foot must be oriented in the Y- direction as indicated in the image.

10 Highlighted cell indicate 3-rail system span. Contact Unirac Engineering Services for support.

16 Highlighted cell with strikethrough indicate 3-rail system span and module clamp allowable capacity exceeds with 3-rails. 4-Rail system required. Contact Unirac Engineering Services for support.



30 ft
Roof Height

Ss = 3.00
Seismic

18.66 sq.ft

ORIENTATION

CROSS-SLOPE
Rail Direction

SM
Rail Type

PRO SERIES

Solarhooks CTI

Attachment

SPAN TABLES

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30 ft
Roof Height

Ss = 3.00
Seismic

18.66 sq.ft

ORIENTATION

CROSS-SLOPE
Rail Direction

SM
Rail Type

PRO SERIES

Solarhooks CTI

SPAN TABLES

• Cells with an asterisk indicates that the L-foot must be oriented in the Y- direction as indicated in the image.

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Category
II

30 ft

Roof Height

Ss = 3.00
Seismic

18.66 sq.ft

LANDSCAPE

CROSS-SLOPE

SM

100 SERIES

Carhooks CTI

SPAN TABLES

[illegible]

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ASCE 7-10
Design Standard

II
Risk Category

30 ft
Roof Height

Ss = 3.00
Seismic

22.78 sq.ft
Module Area

PORTRAIT
Orientation

CROSS-SLOPE
Rail Direction

SM
Rail Type

PRO SERIES
Clamp

Solarhooks CTI
Attachment

SPAN TABLES

Maximum Allowable Rail Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Basic Wind Speed (mph)																																								
			90			95			100			105			110			115			120			130			140			150			160			170			180				
			Roof Wind Zone																																								
			1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		
0	B	0-7	73	73	73	73	73	73	73	73	73	73	68	73	73	58	73	73	50	73	73	44	73	69	39	73	55	32	73	46	27	73	38	24	63	33	21	55	29	27	48	26	24
		7-27	70	70	70	70	70	70	70	70	70	64	70	70	57	70	70	51	70	70	46	70	70	41	70	58	34	70	48	29	70	40	25	69	35	22	62	31	20	54	27	26	
		27-45	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	57	57	57	49	49	44	44	39	39	34	34	34	31	31	31	31		
	C	0-7	73	73	56	73	73	47	73	72	40	73	63	35	73	55	32	73	49	29	73	44	26	69	36	22	58	30	19	50	26	25	43	23	22	38	20	19	33	27	17		
		7-27	70	70	55	70	70	48	70	70	43	70	65	38	70	57	34	70	51	31	70	46	28	70	38	24	65	32	21	56	28	27	48	24	24	42	21	21	37	29	18		
		27-45	65	65	65	65	65	65	65	65	65	61	61	61	56	56	56	52	52	48	48	48	41	41	36	36	32	32	32	28	28	28	28	25	25	25	22	22	22	22	22		
	D	0-7	73	73	43	73	65	37	73	57	33	73	50	29	73	44	27	73	39	24	68	35	22	57	30	28	48	25	24	41	22	21	36	29	19	31	26	16	28	23	14		
		7-27	70	70	45	70	67	39	70	59	35	70	52	32	70	47	29	70	42	26	70	38	24	63	32	20	54	27	26	46	23	23	40	20	20	35	27	17	31	24	16		
		27-45	65	65	65	63	63	63	58	58	58	53	53	53	48	48	48	45	45	45	41	41	41	35	35	35	31	31	31	27	27	27	24	24	24	21	21	21	19	19	19		
10	B	0-7	52	52	52	52	52	52	52	52	52	52	52	52	52	50	52	52	44	52	52	39	52	52	32	52	46	27	52	38	24	52	33	21	52	29	27	48	26	24			
		7-27	52	52	52	52	52	52	52	52	52	52	52	52	52	51	52	52	46	52	52	41	52	52	34	52	48	29	52	40	25	49	35	22	46	31	20	43	27	26			
		27-45	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	49	49	49	44	44	44	39	39	39	34	34	34	31	31	31		
	C	0-7	52	52	52	52	52	47	52	52	40	52	52	35	52	52	32	52	49	29	52	44	26	52	36	22	52	30	19	50	26	25	43	23	22	38	20	19	33	27	17		
		7-27	52	52	52	52	52	48	52	52	43	52	52	38	52	52	34	52	51	31	52	46	28	51	38	24	47	32	21	44	28	27	41	24	24	38	21	21	35	29	18		
		27-45	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	52	52	48	48	48	41	41	36	36	32	32	32	28	28	28	28	25	25	25	22	22	22	22	22		
	D	0-7	52	52	43	52	52	37	52	52	33	52	50	29	52	44	27	52	39	24	52	35	22	52	30	28	48	25	24	41	22	21	36	29	18	31	26	16	28	23	14		
		7-27	52	52	45	52	52	39	52	52	35	52	52	32	52	47	29	52	42	26	51	38	24	47	32	20	43	27	26	40	23	23	37	20	20	34	27	17	31	24	16		
		27-45	57	57	57	57	57	57	57	57	53	53	53	48	48	48	45	45	45	41	41	41	35	35	35	31	31	31	27	27	27	24	24	24	21	21	21	19	19	19	19		
20	B	0-7	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	32	36	36	27	36	36	24	36	33	21	36	29	27	36	26	24		
		7-27	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	29	36	36	25	34	34	22	33	31	20	31	27	26			
		27-45	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	42	42	42	38	38	38	34	34	34	31	31	31			
	C	0-7	36	36	36	36	36	36	36	36	36	36	36	36	36	36	32	36	36	29	36	36	26	36	36	22	36	30	19	36	26	25	36	23	22	34	20	19	33	27	17		
		7-27	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	31	36	36	28	35	35	24	33	32	21	32	28	27	30	24	24	29	21	21	27	29	18			
		27-45	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	40	40	40	40	36	36	32	32	32	28	28	28	25	25	25	22	22	22			
	D	0-7	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	35	36	36	35	36	36	35	36	35	24	36	35	22	31	34	29	19	31	26	16	28	23	14		
		7-27	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	30	23	23	28	20	20	26	27	17	25	24	16		
		27-45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	43	43	43	41	41	41	35	35	35	31	31	27	27	27	24	24	24	21	21	21	19	19	19		
30	B	0-7	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35		
		7-27	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	29	36	36	25	34	34	22	33	31	20	31	27	26		
		27-45	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35		
	C	0-7	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35		
		7-27	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36		
		27-45	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35		
	D	0-7	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36		
		7-27	37	37	37																																						



11

30 ft
Roof Height

Ss = 3.00
Seismic

22.78 sq.ft

ORIENTATION

CROSS-SLOPE

Rail Direction

SM
Rail Type

PRO SERIES

Clamp

Solarhooks CTI

SPAN TABLES

Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Basic Wind Speed (mph)																																						
			90			95			100			105			110			115			120			130			140			150			160			170			180		
			Roof Wind Zone																																						
			1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3			
60	B	0-7	20	20	20	20	20	20	20	22	22	22	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	27	20	20	24	
		7-27	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	20	21	21	26		
		27-45	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21			
	C	0-7	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	19	20	20	25	20	20	22	20	20	19	20	27	17		
		7-27	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	21	21	21	21	21	21	21	21	21	28	16		
		27-45	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	20	19	19	19			
D	0-7	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	28	22	22	24	22	22	21	22	29	18	22	26	16	21	23	14
	7-27	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	23	23	20	22	22	26	21	21	23	21	20	20	20	27	17	19	24	16			
	27-45	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	22	22	22	22	20	20	20	19	19	18	18	18			
70	B	0-7	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	26	17	17	24	
		7-27	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	26		
		27-45	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18		
	C	0-7	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	19	17	26	17	
		7-27	19	19																																					

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~~10~~ Highlighted cell with strikethrough indicate 3-rail system span and module clamp allowable capacity exceeds with 3-rails. 4-Rail system required. Contact Unirac Engineering Services for support.



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Category
II

30 ft

Roof Height

Ss = 3.00

22.78 sq.ft

LANDSCAPE

CROSS-SLOPE
Rail Direction

SM
Rail Type

PRO SERIES
Clamp

Solarhooks CTI

SPAN TABLES

[illegible]

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30 ft
Roof Height

Ss = 1.25
Seismic

18.66 sq.ft

Module Area

ORIENTATION

CROSS-SLOPE
Rail Direction

SM
Rail Type

UAF

Clamp

Solarhooks CTI

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Category

30 ft
Roof Height

Ss = 1.25
Seismic

18.66 sq.ft

ORIENTATION

CROSS-SLOPE
Rail Direction

SM
Rail Type

UAF

Solarhooks CTI

SPAN TABLES

[illegible]

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Maximum Allowable Rail Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

[illegible]

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30 ft
Roof Height

S_S = 1.25

18.66 sq.ft

LANDSCAPE

CROSS-SLOPE
Rail Direction

SM
Rail Type

UAF

Clamp

Solarhooks CTI

SPAN TABLES

[illegible]

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SPAN TABLES

Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Basic Wind Speed (mph)																																							
			90			95			100			105			110			115			120			130			140			150			160			170			180			
			Roof Wind Zone																																							
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3							
0	B	0-7	73	73	73	73	73	73	73	73	68	73	73	73	58	73	73	50	73	73	44	73	69	39	73	55	32	73	46	27	73	38	24	63	35	21	55	29	18	48	26	24
		7-27	73	73	73	73	73	73	73	73	64	73	73	57	73	51	73	73	46	73	71	41	73	58	34	73	48	29	73	40	25	69	35	22	62	31	20	54	27	17		
		27-45	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	70	70	70	65	65	65	57	57	57	49	49	49	44	44	44	45	39	39	39	34	34	31	31		
	C	0-7	73	73	56	73	73	47	73	72	40	73	63	35	73	55	32	73	49	29	73	44	26	69	36	22	58	30	19	50	26	17	43	23	22	38	20	19	33	18	17	
		7-27	73	73	55	73	73	48	73	73	43	73	65	38	73	57	34	73	51	31	73	46	28	73	38	24	65	32	21	56	28	18	48	24	24	42	21	21	37	19	18	
		27-45	75	75	75	73	73	73	67	67	67	61	61	61	56	56	52	52	52	48	48	48	41	41	41	36	36	36	32	32	32	28	28	28	25	25	25	22	22	22		
	D	0-7	73	73	43	73	73	65	37	73	57	33	73	50	29	73	44	27	73	39	24	68	35	22	57	30	19	48	25	24	41	22	21	36	19	18	31	17	16	28	23	14
		7-27	73	73	45	73	73	67	39	73	59	35	73	52	32	73	47	29	73	42	26	73	38	24	63	32	20	54	27	17	46	23	23	40	20	20	35	18	17	31	24	16
		27-45	69	69	69	63	63	63	58	58	58	53	53	48	48	48	45	45	41	41	41	35	35	35	31	31	31	27	27	27	24	24	24	21	21	21	19	19	19			
10	B	0-7	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	44	52	52	39	52	52	32	52	46	27	52	38	24	52	33	21	52	29	18	48	26	24	
		7-27	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	46	52	52	41	52	52	34	52	48	29	52	40	25	49	35	22	46	31	20	43	27	17		
		27-45	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	69	69	69	65	65	65	57	57	57	49	49	49	44	44	44	45	39	39	39	34	34	31	31	31	
	C	0-7	52	52	52	52	52	47	52	52	40	52	52	35	52	52	32	52	49	29	52	44	26	52	36	22																

* Cells with an asterisk indicates that the L-foot must be oriented in the Y- direction as indicated in the image.



11

30 ft
Roof Height

Ss = 1.25
Seismic

22.78 sq.ft

ORIENTATION

CROSS-SLOPE
Rail Direction

SM
Rail Type

UAF

Clamp

Solarhooks CTI

SPAN TABLES

[illegible]

• Cells with an asterisks indicates that the L-root must be oriented in the Y- direction as indicated in the image.

10 Highlighted cell indicate 3-rail system span. Contact Unirac Engineering Services for support.

40 Highlighted cell with strikethrough indicate 3-rail system span and module clamp allowable capacity exceeds with 3-rails. 4-Rail system required. Contact Unirac Engineering Services for support.



Category
II

30 ft

Roof Height

$S_s = 1.25$
Seismic

22.78 sq.ft

LANDSCAPE

CROSS-SLOPE
Rail Direction

SM
Rail Type

UAF

Clamp

Solarhooks CTI

SPAN TABLES

[illegible]

• Cells with an asterisks indicates that the L-foot must be oriented in the Y- direction as indicated in the image.

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30 ft
Roof Height

Ss = 3.00
Seismic

18.66 sq.ft

ORIENTATION

CROSS-SLOPE
Rail Direction

SM
Rail Type

UAF

Solarhooks CTI

Maximum Allowable Rail Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Basic Wind Speed (mph)																																							
			90			95			100			105			110			115			120			130			140			150			160			170			180			
			Roof Wind Zone																																							
			1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3							
0	B	0-7	87	87	87	87	87	87	87	87	82	87	87	70	87	87	60	87	87	53	87	83	46	87	66	38	87	55	33	87	46	28	76	39	25	66	35	22	58	31	19	
		7-27	83	83	83	83	83	83	83	83	77	83	68	83	68	83	61	83	83	55	83	49	83	69	41	83	57	35	83	48	30	82	42	27	73	37	23	65	32	21		
		27-45	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	68	68	59	59	59	59	52	52	52	46	46	46	41	41	37	37	37	37			
	C	0-7	87	87	67	87	87	56	87	86	48	87	75	42	87	66	38	87	59	35	87	52	32	83	43	27	70	36	23	60	32	20	52	28	17	45	24	23	40	22	21	
		7-27	83	83	66	83	83	58	83	83	51	83	77	45	83	69	41	83	61	37	83	55	34	83	45	29	77	39	25	67	33	21	58	29	19	50	26	25	44	23	22	
		27-45	77	77	77	77	77	77	77	77	73	73	73	67	67	67	62	62	62	58	58	58	50	50	50	43	43	43	38	38	38	34	34	34	30	30	30	27	27	27		
	D	0-7	87	87	51	87	78	44	87	68	39	87	60	35	87	53	32	87	47	29	82	42	27	68	36	22	58	31	19	49	26	17	43	23	22	38	20	19	33	18	17	
		7-27	83	83	54	83	80	47	83	71	42	83	63	38	83	56	34	83	50	31	83	45	29	76	38	24	65	32	21	55	28	18	48	24	24	42	22	21	37	19	19	
		27-45	77	77	77	75	75	69	69	69	69	63	63	63	58	58	58	53	53	49	49	49	42	42	42	37	37	37	32	32	32	29	29	29	26	26	26	23	23	23		
10	B	0-7	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	59	42	27	55	37	23	52	32	21			
		7-27	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62				
		27-45	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66				
	C	0-7	62	62	62	62	62	56	62	62	48	62	62	42	62	62	38	62	59	35	62	52	32	62	43	27	62	36	23	60	32	20	52	28	17	45	24	23	40	22	21	
		7-27	62	62	62	62	62	58	62	62	51	62	62	45	62	62	41	62	61	37	62	55	34	61	45	29	56	39	25	52	33	21	49	29	19	45	26	25	42	23	22	
		27-45	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	62	62	58	58	50	50	50	43	43	43	38	38	38	34	34	34	30	30	27	27	27			
	D	0-7	62	62	51	62	62	44	62	62	39	62	60	35	62	53	32	62	47	29	62	42	27	62	36	22	58	31	19	49	26	17	43	23	22	38	20	19	33	18	17	
		7-27	62	62	54	62	62	47	62	62	42	62	62	38	62	56	34	62	50	31	61	45	29	56	38	24	52	32	21	47	28	18	44	24	24	40	22	21	37	19	19	
		27-45	68	68	68	68	68	68	68	68	63	63	63	58	58	58	53	53	49	49	49	42	42	42	37	37	37	32	32	32	29	29	29	26	26	26	23	23	23			
20	B	0-7	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43			
		7-27	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43				
		27-45	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	50	50	45	45	45	41	41	37	37	37		
	C	0-7	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43			
		7-27	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43				
		27-45	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51				
	D	0-7	43	43	43	43	43	43	43	43	43	39	43	43	35	43	43	32	43	43	29	43	42	27	43	36	22	43	31	19	42	26	17	41	23	22	38	20	19	33	18	17
		7-27	43	43	43	43	43	43	43	43	43	42	43	43	38	43	43	34	43	43	31	42	29	40	38	24	37	32	21	35	28	18	33	24	24	32	22	31	30	19	19	
		27-45	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	52	52	52	49	49	49	42	42	42	37	37	37	32	32	32	29	29	29	26	26	26	23	23	23	
30	B	0-7	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42				
		7-27	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43				
		27-45	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42				
	C	0-7	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42			
		7-27	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43				
		27-45	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42				
	D	0-7	43	43	43	43	43	43	43	43	39	43	43	35	43	43	32	43	43	29	43	42	27	43	36	22	43	31	19	42	26	17	41	23	22	38	20	19	33	18	17	
		7-27	43	43	43	43	43	43	43	43	43	42	43	43	38	43	43	34	43	43	31	42	29	40	38	24	37	32	21	35	28	18	33	24	24	32	22	31	30	19		
		27-45	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	40	40	40	36	36	36	32	32	32	29	29	29	26	26	26	23	23	23	
40	B	0-7	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35				
		7-27	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37				
		27-45	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35				
	C	0-7	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35			
		7-27	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37				
		27-45	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35				
	D	0-7	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37												

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10 Highlighted cell with strikethrough indicate 3-rail system span and module clamp allowable capacity exceeds with 3-rails. 4-Rail system required. Contact Unirac Engineering Services for support.



Category
II

30 ft
Roof Height

Ss = 3.00
Seismic

18.66 sq.ft

LANDSCAPE

CROSS-SLOPE
Rail Direction

SM
Rail Type

UAF

Clamp

Solarhooks CTI

Maximum Allowable Rail Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

[illegible]

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30 ft
Roof Height

Ss = 3.00
Seismic

22.78 sq.ft

ORIENTATION

CROSS-SLOPE
Rail Direction

SM
Rail Type

UAF

Solarhooks CTI

SPAN TABLES

Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Basic Wind Speed (mph)																																						
			90			95			100			105			110			115			120			130			140			150			160			170			180		
			Roof Wind Zone																																						
			1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3						
0	B	0-7	73	73	73	73	73	73	73	73	68	73	73	58	73	73	50	73	73	44	73	69	39	73	55	32	73	46	27	73	38	24	63	33	21	55	29	18	48	26	24
		7-27	70	70	70	70	70	70	70	64	70	70	57	70	70	51	70	70	46	70	70	41	70	58	34	70	48	29	70	40	25	69	35	22	62	31	20	54	27	17	
		27-45	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	57	57	57	57	49	49	49	44	44	39	39	39	34	34	31	31	31		
	C	0-7	73	73	56	73	73	47	73	72	40	73	63	35	73	55	32	73	49	29	73	44	26	69	36	22	58	30	19	50	26	17	43	23	22	38	20	19	33	18	17
		7-27	70	70	55	70	70	48	70	70	43	70	65	38	70	57	34	70	51	31	70	46	28	70	38	24	65	32	21	56	28	18	48	24	24	42	21	21	37	19	18
		27-45	65	65	65	65	65	65	65	65	65	61	61	61	56	56	56	52	52	52	48	48	48	41	41	41	36	36	36	32	32	32	28	28	28	25	25	22	22	22	
D	0-7	73	73	43	73	65	37	73	57	33	73	50	29	73	44	27	73	39	24	68	35	22	57	30	19	48	25	24	41	22	21	36	19	18	31	17	16	28	23	14	
	7-27	70	70	45	70	67	39	70	59	35	70	52	32	70	47	29	70	42	26	70	38	24	63	32	20	54	27	17	46	23	23	40	20	20	35	18	17	31	24	16	
	27-45	65	65	65	63	63	63	58	58	58	53	53	53	48	48	48	45	45	45	41	41	41	35	35	35	31	31	31	27	27	27	24	24	24	21	21	21	19	19	19	
10	B	0-7	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52		
		7-27	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52		
		27-45	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56		
	C	0-7	52	52	52	52	52	47	52	52	40	52	52	35	52	52	32	52	49	29	52	44	26	52	36	22	52	30	19	50	26	17	43	23							

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II

30 ft
Roof Height

Ss = 3.00
Seismic

22.78 sq.ft
Module Area

ORIENTATION

CROSS-SLOPE

SM
Rail Type

UAF

Solarhooks CTI

SPAN TABLES

[illegible]

• Cells with an asterisk indicates that the L-foot must be oriented in the Y- direction as indicated in the image.

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ASCE 7-10
Design Standard

II
Risk Category

30 ft
Roof Height

Ss = 3.00
Seismic

22.78 sq.ft
Module Area

LANDSCAPE
Orientation

CROSS-SLOPE
Rail Direction

SM
Rail Type

UAF
Clamp

Solarhooks CTI
Attachment

SPAN TABLES

Maximum Allowable Rail Spans for Rooftop Solar Panels Parallel to the Roof Surface (inches)

Ground Snow Load (psf)	Wind Exposure Category	Roof Tilt Angle (deg)	Basic Wind Speed (mph)																																							
			90			95			100			105			110			115			120			130			140			150			160			170			180			
			Roof Wind Zone																																							
			1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
0	B	0-7	141	141	141	141	141	141	141	141	141	141	141	141	141	141	134	141	128	141	138	92	141	129	63	141	102	54	134	80	47	128	65	41	112	57	36	98	51	32		
		7-27	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	95	128	128	85	128	128	68	128	103	58	128	84	50	128	70	44	127	60	39	110	53	34
		27-45	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	113	113	113	98	98	98	86	86	86	76	76	76	67	67	67	60	60	60	
	C	0-7	141	141	139	141	141	131	141	140	101	141	134	75	141	129	63	141	114	57	140	97	52	131	73	44	119	60	38	101	52	33	86	45	43	75	40	38	66	36	34	
		7-27	128	128	118	128	128	101	128	128	88	128	128	77	128	127	68	128	113	61	128	99	56	128	78	48	128	63	41	114	55	35	98	48	47	85	42	41	74	38	37	
		27-45	118	118	118	118	118	118	118	118	118	118	118	118	118	112	112	103	103	103	95	95	95	82	82	71	71	62	62	62	55	55	55	49	49	49	44	44	44	44	44	
	D	0-7	141	141	127	141	136	81	141	130	64	141	117	58	140	98	53	135	83	48	131	72	44	116	59	37	97	50	32	83	44	42	71	38	36	62	34	32	55	45	29	
		7-27	128	128	93	128	128	80	128	128	70	128	115	62	128	100	57	128	87	52	128	77	47	128	62	40	110	53	34	93	46	45	80	40	39	69	36	35	61	48	31	
		27-45	118	118	118	118	118	118	114	114	114	114	105	105	105	96	96	96	88	88	88	81	81	69	69	60	60	60	53	53	47	47	47	42	42	42	38	38	38	38	38	
10	B	0-7	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	92	100	100	63	100	100	54	100	80	47	100	65	41	100	57	36	98	51	32		
		7-27	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	95	101	101	85	101	101	68	101	101	58	101	84	50	99	70	44	93	60	39	87	53	34			
		27-45	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	98	98	98	86	86	86	76	76	76	67	67	67	60	60	60		
	C	0-7	100	100	100	100	100	100	100	100	100	100	75	100	100	63	100	100	57	100	97	52	100	73	44	100	60	38	100	52	33	86	45	43	75	40	38	66	36	34		
		7-27	101	101	101	101	101	101	101	101	88	101	101	77	101	101	68	101	101	61	101	99	56	101	78	48	96	63	41	88	55	35	82	48	47	75	42	41	69	38	37	
		27-45	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	103	103	95	95	95	82	82	71	71	71	62	62	62	55	55	55	49	49	49	44	44	44	44		
	D	0-7	100	100	100	100	100	81	100	100	64	100	100	58	100	98	53	100	83	48	100	72	44	100	59	37	97	50	32	83	44	42	71	38	36	62	34	32	55	45	29	
		7-27	101	101	93	101	101	80	101	101	70	101	101	62	101	100	57	101	87	52	101	77	47	95	62	40	87	53	34	79	46	45	73	40	39	66	36	35	61	48	31	
		27-45	106	106	106	106	106	106	106	106	106	105	105	105	96	96	96	88	88	88	81	81	69	69	60	60	60	53	53	47	47	47	42	42	42	38	38	38	38	38		
20	B	0-7	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	63	70	70	54	70	70	47	70	65	41	70	57	36	70	51	32			
		7-27	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	68	71	71	58	70	70	50	67	67	44	64	60	39	61	53	34			
		27-45	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	75	75	67	67	60	60	60			
	C	0-7	70	70	70	70	70	70	70	70	70	70	70	70	70	63	70	70	57	70	52	70	44	70	44	70	60	38	70	52	33	70	45	43	67	40	38	65	36	34		
		7-27	71	71	71	71	71	71	71	71	71	71	71	71	71	68	71	71	61	71	56	69	69	48	65	63	41	62	55	35	59	48	47	56	42	41	53	38	37			
		27-45	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	79	79	71	71	71	62	62	62	55	55	55	49	49	49	44	44	44			
	D	0-7	70	70	70	70	70	70	70	64	70	70	58	70	70	53	70	48	70	44	70	59	37	70	50	32	69	44	42	66	38	36	62	34	32	55	45	29				
		7-27	71	71	71	71	71	71	71	71	71	71	62	71	71	57	71	52	69	69	47	65	62	40	61	53	34	58	46	45	55	40	39	52	36	35	49	48	31			
		27-45	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	80	80	69	69	60	60	60	53	53	47	47	47	42	42	42	38	38	38				
30	B	0-7	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	63	68	68	54	68	68	47	68	65	41	68	57	36	68	51	32			
		7-27	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	68	70	68	70	58	70	70	50	67	67	44	64	60	39	61	53	34			
		27-45	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	66	66	66	62	62	62	57	57	57				
	C	0-7	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	57	68	68	52	68	68	44	68	60	38	68	52	33	68	45	43	65	40	38	63	36	34		
		7-27	70	70	70	70	70	70	70	70	70	70	70	70	70	68	70	61	70	69	69	48	65	63	41	62	55	35	59	48	47	56	42	41	53	38	37					
		27-45	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	63	63	63	58	58	58	53	53	53	49	49	49	44	44	44			
	D	0-7	70	70	70	70	70	70	70	70	64	70	70	58	70	53	70	48	70	44	70	59	37	70	50	32	69	44	42	66	38	36	62	34	32	55	45	29</				



Category
II

30 ft

Roof Height

Ss = 3.00
Seismic

22.78 sq.ft

LANDSCAPE

CROSS-SLOPE
Rail Direction

SM
Rail Type

UAF

Clamp

Solarhooks CTI

SPAN TABLES

[illegible]

• Cells with an asterisks indicates that the L-foot must be oriented in the Y- direction as indicated in the image.

10 Highlighted cell indicate 3-rail system span. Contact Unirac Engineering Services for support.

16 Highlighted cell with strikethrough indicate 3-rail system span and module clamp allowable capacity exceeds with 3-rails. 4-Rail system required. Contact Unirac Engineering Services for support.