



11/17/2017

Attn: Mr. Marshall Green  
Quick Mount PV  
2700 Mitchell Dr.  
Walnut Creek, CA, 94598

RE: Quick Mount PV QHook Mount System for use with  
Everest CrossRail 48-S PV Panel Mounting System

SEI Project No.: 17054.00

Dear Mr. Green

Structural Enginuity Inc. (SEI) has completed its review of the Quickmount PV QHook Mount System for use in conjunction with the Everest CrossRail 48-S PV Panel Mounting System. The QHook product line includes the Quick Hook for Side Mount Rails (QMHS & QMHL) mounts.

The review was based on the following reference data:

- Moment Engineering+Design, CrossRail PV Panel Mounting System Evaluation, January 13, 2017
- Applied Materials & Engineering, Laboratory Load Test of the QMHS with 6061 Base Plate, Project Number 114490C, March 18, 2015
- Applied Materials & Engineering, Laboratory Load Test of the QMHL with 6061 Base Plate, Project Number 114490C, March 10, 2015
- Structural Enginuity, Inc., Quick Mount PV Quick Hook Compliance Letter, Project Number 16054.00, October 16, 2017

SEI has determined that the QHook Mount is suitable for use with the Everest CrossRail 48-S System. The approved installation and allowable loads for the Quick Mount PV QHook products is outlined in the Structural Enginuity, Inc. letters referenced above. The allowable load values are shown below, no additional load duration factors may be applied to these values.

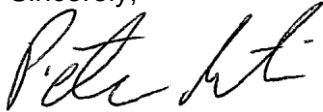
**Table 1: QHook Allowable Loads**

Load Direction	Mount Type	Allowable Load
Uplift	QMHSS	506 lb.
	QMHLs	418 lb.
Lateral	QMHSS	367 lb.
	QMHLs	323 lb.
Compression	QMHSS	378 lb.
	QMHLs	338 lb.

SEI has prepared allowable rail span charts for the Everest CrossRail 48-S System used in conjunction with the Quick Mount PV QHook products. These span tables serve as a quick reference for looking up maximum rail spans based on building and site conditions and follow the 2016 CBC, 2015 IBC/IRC and applicable ASCE 7-10 load cases. The tables take into account the strength of the rail system as well as the allowable tension, compression, and lateral forces of the QHook Mount. A site specific analysis is required if the site conditions or building characteristics do not meet the requirements listed in the attached tables. In all cases, the tables are meant to be used in conjunction with Everest CrossRail System Structural Report and Calculations and all requirements listed are still applicable for these tables including edge zones and edge distances.

Please contact our office if you have any further questions relating to this matter.

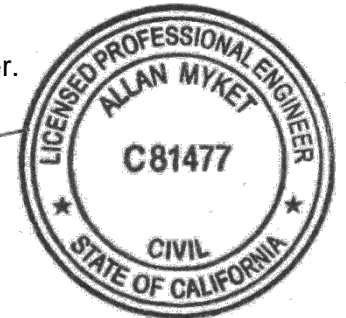
Sincerely,



Peter Martin  
Engineer II  
[pmartin@structuralenginuityinc.com](mailto:pmartin@structuralenginuityinc.com)



Allan T. Myket, P.E.  
President/Founder  
[amyket@structuralenginuityinc.com](mailto:amyket@structuralenginuityinc.com)



11/28/2017

**Structural Enginuity Inc.**

**Rail Spans (in.) for Everest 48-S Rails for use with QMHSS Products**

<b>Table 1A</b>		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		Roof Angle: $7 < \theta \leq 27$ degrees																	
Exposure <b>B</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
<b>Roofs &gt;7° to 27°</b>	110	91	80	58	43	34	28	83	80	58	43	34	28	69	69	58	43	34	28
	115	91	80	57	42	34	28	79	79	57	42	34	28	66	66	57	42	34	28
	120	91	80	57	42	33	28	76	76	57	42	33	28	63	63	57	42	33	28
	130	89	79	55	41	33	27	71	71	55	41	33	27	58	58	55	41	33	27
	140	86	77	53	40	32	27	65	65	53	40	32	27	49	49	49	40	32	27
	150	80	75	52	39	32	27	61	61	52	39	32	27	43	43	43	39	32	27
	160	75	72	50	38	31	26	57	57	50	38	31	26	37	37	37	37	31	26
	170	71	68	48	37	30	26	51	51	48	37	30	26	33	33	33	33	30	26
	180	67	65	47	36	30	25	45	45	45	36	30	25	29	29	29	29	29	25
	200	60	59	43	34	28	24	36	36	36	34	28	24	23	23	23	23	23	23

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHLS Products**

<b>Table 1B</b>		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		Roof Angle: $7 < \theta \leq 27$ degrees																	
Exposure <b>B</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >7° to 27°	110	91	80	52	38	30	25	83	80	52	38	30	25	68	68	52	38	30	25
	115	91	79	51	38	30	25	79	79	51	38	30	25	62	62	51	38	30	25
	120	91	77	51	38	30	25	76	76	51	38	30	25	56	56	51	38	30	25
	130	89	74	49	37	29	24	71	71	49	37	29	24	48	48	48	37	29	24
	140	86	70	48	36	29	24	64	64	48	36	29	24	41	41	41	36	29	24
	150	80	67	46	35	28	24	55	55	46	35	28	24	35	35	35	35	28	24
	160	75	64	45	34	28	23	48	48	45	34	28	23	31	31	31	31	28	23
	170	71	61	43	33	27	23	42	42	42	33	27	23	27	27	27	27	27	23
	180	67	58	42	32	27	22	37	37	37	32	27	22	24	24	24	24	24	22
	200	59	53	39	31	25	22	30	30	30	30	25	22	19	19	19	19	19	19

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHSS Products**

<b>Table 2A</b>		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		Roof Angle: $7 < \theta \leq 27$ degrees																	
Exposure <b>C</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >7° to 27°	110	89	79	55	41	33	27	71	71	55	41	33	27	57	57	55	41	33	27
	115	88	78	54	41	32	27	67	67	54	41	32	27	52	52	52	41	32	27
	120	85	76	53	40	32	27	65	65	53	40	32	27	48	48	48	40	32	27
	130	78	74	51	39	31	26	59	59	51	39	31	26	40	40	40	39	31	26
	140	73	70	49	38	31	26	54	54	49	38	31	26	35	35	35	35	31	26
	150	68	66	47	36	30	25	47	47	47	36	30	25	30	30	30	30	30	25
	160	64	62	45	35	29	25	41	41	41	35	29	25	26	26	26	26	26	25
	170	50	59	43	34	28	24	36	36	36	34	28	24	23	23	23	23	23	23
	180	57	55	41	33	27	23	32	32	32	32	27	23	21	21	21	21	21	21
	200	50	49	38	31	26	22	26	26	26	26	26	22	17	17	17	17	17	17

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHLS Products**

<b>Table 2B</b>		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		Roof Angle: $7 < \theta \leq 27$ degrees																	
Exposure <b>C</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >7° to 27°	110	89	74	49	37	29	24	71	71	49	37	29	24	47	47	47	37	29	24
	115	88	72	48	36	29	24	67	67	48	36	29	24	43	43	43	36	29	24
	120	85	70	47	36	29	24	62	62	47	36	29	24	39	39	39	36	29	24
	130	78	66	46	35	28	24	52	52	46	35	28	24	33	33	33	33	28	24
	140	73	62	44	34	27	23	45	45	44	34	27	23	29	29	29	29	27	23
	150	68	59	42	33	27	23	39	39	39	33	27	23	25	25	25	25	25	23
	160	64	55	40	32	26	22	34	34	34	32	26	22	22	22	22	22	22	22
	170	50	52	39	31	25	22	30	30	30	30	25	22	19	19	19	19	19	19
	180	51	49	37	29	25	21	26	26	26	26	25	21	17	17	17	17	17	17
	200	41	41	34	27	23	20	21	21	21	21	21	20	14	14	14	14	14	14

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHSS Products**

<b>Table 3A</b>		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		Roof Angle: $7 < \theta \leq 27$ degrees																	
Exposure <b>D</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >7° to 27°	110	85	76	53	40	32	27	65	65	53	40	32	27	48	48	48	40	32	27
	115	81	75	52	39	32	27	62	62	52	39	32	27	44	44	44	39	32	27
	120	78	74	51	39	31	26	59	59	51	39	31	26	40	40	40	39	31	26
	130	73	69	49	37	31	26	53	53	49	37	31	26	34	34	34	34	31	26
	140	67	65	46	36	30	25	45	45	45	36	30	25	29	29	29	29	29	25
	150	63	61	44	35	29	24	39	39	39	35	29	24	25	25	25	25	25	24
	160	58	57	42	34	28	24	34	34	34	34	28	24	22	22	22	22	22	22
	170	55	54	40	32	27	23	30	30	30	30	27	23	20	20	20	20	20	20
	180	52	50	38	31	26	23	27	27	27	27	26	23	17	17	17	17	17	17
	200	42	42	35	29	24	21	22	22	22	22	22	21	14	14	14	14	14	14

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHLS Products**

<b>Table 3B</b>		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		Roof Angle: $7 < \theta \leq 27$ degrees																	
Exposure <b>D</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >7° to 27°	110	85	70	47	36	29	24	62	62	47	36	29	24	40	40	40	36	29	24
	115	81	68	46	35	28	24	57	57	46	35	28	24	36	36	36	35	28	24
	120	78	66	45	35	28	24	52	52	45	35	28	24	33	33	33	33	28	24
	130	73	62	43	34	27	23	44	44	43	34	27	23	28	28	28	28	27	23
	140	67	58	42	32	27	22	37	37	37	32	27	22	24	24	24	24	24	22
	150	63	54	40	31	26	22	32	32	32	31	26	22	21	21	21	21	21	21
	160	55	51	38	30	25	21	28	28	28	28	25	21	18	18	18	18	18	18
	170	49	48	36	29	24	21	25	25	25	25	24	21	16	16	16	16	16	16
	180	43	43	34	28	23	20	22	22	22	22	22	20	14	14	14	14	14	14
	200	34	34	31	26	22	19	18	18	18	18	18	18	12	12	12	12	12	12

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"



**Rail Spans (in.) for Everest 48-S Rails for use with QMHSS Products**

<b>Table 4A</b>		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		Roof Angle: $27 < \theta \leq 45$ degrees																	
Exposure <b>B</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	87	75	52	39	32	26	87	75	52	39	32	26	87	75	52	39	32	26
	115	86	73	51	39	31	26	86	73	51	39	31	26	86	73	51	39	31	26
	120	84	71	49	38	31	26	84	71	49	38	31	26	84	71	49	38	31	26
	130	81	67	47	37	30	25	81	67	47	37	30	25	81	67	47	37	30	25
	140	77	62	45	35	29	25	75	62	45	35	29	25	75	62	45	35	29	25
	150	72	58	43	34	28	24	71	58	43	34	28	24	71	58	43	34	28	24
	160	65	55	41	33	27	23	65	55	41	33	27	23	65	55	41	33	27	23
	170	59	51	39	31	26	23	59	51	39	31	26	23	59	51	39	31	26	23
	180	53	48	37	30	25	22	53	48	37	30	25	22	53	48	37	30	25	22
	200	44	42	33	28	24	21	44	42	33	28	24	21	44	42	33	28	24	21

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHLS Products**

<b>Table 4B</b>		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		Roof Angle: $27 < \theta \leq 45$ degrees																	
Exposure <b>B</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	87	68	46	35	28	24	87	68	46	35	28	24	87	68	46	35	28	24
	115	86	66	45	34	28	23	86	66	45	34	28	23	86	66	45	34	28	23
	120	84	63	44	34	27	23	84	63	44	34	27	23	84	63	44	34	27	23
	130	81	59	42	33	27	23	81	59	42	33	27	23	81	59	42	33	27	23
	140	72	56	40	32	26	22	72	56	40	32	26	22	72	56	40	32	26	22
	150	65	52	38	30	25	21	65	52	38	30	25	21	65	52	38	30	25	21
	160	58	49	37	29	24	21	58	49	37	29	24	21	58	49	37	29	24	21
	170	52	46	35	28	23	20	52	46	35	28	23	20	52	46	35	28	23	20
	180	47	43	33	27	23	20	47	43	33	27	23	20	47	43	33	27	23	20
	200	39	38	30	25	21	18	39	38	30	25	21	18	39	38	30	25	21	18

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHSS Products**

<b>Table 5A</b>		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		Roof Angle: $27 < \theta \leq 45$ degrees																	
Exposure <b>C</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	81	66	47	37	30	25	81	66	47	37	30	25	81	66	47	37	30	25
	115	79	64	46	36	29	25	77	64	46	36	29	25	77	64	46	36	29	25
	120	76	61	45	35	29	24	74	61	45	35	29	24	74	61	45	35	29	24
	130	69	57	42	33	28	24	69	57	42	33	28	24	69	57	42	33	28	24
	140	61	53	40	32	27	23	61	53	40	32	27	23	61	53	40	32	27	23
	150	54	49	37	30	26	22	54	49	37	30	26	22	54	49	37	30	26	22
	160	49	45	35	29	25	21	49	45	35	29	25	21	49	45	35	29	25	21
	170	44	42	33	28	24	21	44	42	33	28	24	21	44	42	33	28	24	21
	180	39	39	31	26	23	20	39	39	31	26	23	20	39	39	31	26	23	20
	200	32	32	28	24	21	18	32	32	28	24	21	18	32	32	28	24	21	18

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHLS Products**

<b>Table 5B</b>		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		Roof Angle: $27 < \theta \leq 45$ degrees																	
Exposure <b>C</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	81	59	42	33	27	23	81	59	42	33	27	23	81	59	42	33	27	23
	115	76	57	41	32	26	22	76	57	41	32	26	22	76	57	41	32	26	22
	120	71	55	40	31	26	22	71	55	40	31	26	22	71	55	40	31	26	22
	130	62	51	38	30	25	21	62	51	38	30	25	21	62	51	38	30	25	21
	140	55	47	35	29	24	20	55	47	35	29	24	20	55	47	35	29	24	20
	150	49	43	33	27	23	20	49	43	33	27	23	20	49	43	33	27	23	20
	160	43	40	32	26	22	19	43	40	32	26	22	19	43	40	32	26	22	19
	170	39	37	30	25	21	18	39	37	30	25	21	18	39	37	30	25	21	18
	180	35	35	28	23	20	18	35	35	28	23	20	18	35	35	28	23	20	18
	200	29	29	25	21	18	16	29	29	25	21	18	16	29	29	25	21	18	16

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHSS Products**

<b>Table 6A</b>		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		Roof Angle: $27 < \theta \leq 45$ degrees																	
Exposure <b>D</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	76	62	45	35	29	24	74	62	45	35	29	24	74	62	45	35	29	24
	115	73	59	43	34	28	24	72	59	43	34	28	24	72	59	43	34	28	24
	120	69	57	42	33	28	24	69	57	42	33	28	24	69	57	42	33	28	24
	130	60	52	39	32	27	23	60	52	39	32	27	23	60	52	39	32	27	23
	140	53	48	37	30	25	22	53	48	37	30	25	22	53	48	37	30	25	22
	150	47	44	35	29	24	21	47	44	35	29	24	21	47	44	35	29	24	21
	160	42	40	32	27	23	20	42	40	32	27	23	20	42	40	32	27	23	20
	170	37	37	30	26	22	19	37	37	30	26	22	19	37	37	30	26	22	19
	180	34	34	28	24	21	19	34	34	28	24	21	19	34	34	28	24	21	19
	200	28	28	25	22	19	17	28	28	25	22	19	17	28	28	25	22	19	17

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHLS Products**

<b>Table 6B</b>		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		Roof Angle: $27 < \theta \leq 45$ degrees																	
Exposure <b>D</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	71	55	40	31	26	22	71	55	40	31	26	22	71	55	40	31	26	22
	115	66	53	39	31	25	22	66	53	39	31	25	22	66	53	39	31	25	22
	120	61	51	38	30	25	21	61	51	38	30	25	21	61	51	38	30	25	21
	130	54	46	35	28	24	20	54	46	35	28	24	20	54	46	35	28	24	20
	140	47	43	33	27	23	20	47	43	33	27	23	20	47	43	33	27	23	20
	150	42	39	31	25	22	19	42	39	31	25	22	19	42	39	31	25	22	19
	160	37	36	29	24	21	18	37	36	29	24	21	18	37	36	29	24	21	18
	170	33	33	27	23	20	17	33	33	27	23	20	17	33	33	27	23	20	17
	180	30	30	25	22	19	17	30	30	25	22	19	17	30	30	25	22	19	17
	200	25	25	22	19	17	15	25	25	22	19	17	15	25	25	22	19	17	15

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHSS Products**

<b>Table 7A</b>		Roof Height: 0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle: $7 < \theta \leq 27$ degrees																	
Exposure <b>B</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
<b>Roofs &gt;7° to 27°</b>	110	91	80	66	55	48	43	83	80	66	55	48	43	69	69	66	55	48	43
	115	91	80	66	55	48	43	79	79	66	55	48	43	66	66	66	55	48	43
	120	91	80	66	55	48	43	76	76	66	55	48	43	63	63	63	55	48	43
	130	89	79	66	55	48	43	71	71	66	55	48	43	58	58	58	55	48	43
	140	86	77	64	55	48	43	65	65	64	55	48	43	53	53	53	53	48	43
	150	80	75	63	55	48	42	61	61	61	55	48	42	50	50	50	50	48	42
	160	75	73	62	55	48	42	57	57	57	55	48	42	47	47	47	47	47	42
	170	71	71	61	54	48	41	54	54	54	54	48	41	44	44	44	44	44	41
	180	67	67	59	53	47	40	50	50	50	50	47	40	41	41	41	41	41	40
	200	60	60	57	51	45	39	45	45	45	45	45	39	37	37	37	37	37	37

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHLS Products**

<b>Table 7B</b>		Roof Height: 0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle: $7 < \theta \leq 27$ degrees																	
Exposure <b>B</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
<b>Roofs &gt;7° to 27°</b>	110	91	80	66	55	48	40	83	80	66	55	48	40	69	69	66	55	48	40
	115	91	80	66	55	48	40	79	79	66	55	48	40	66	66	66	55	48	40
	120	91	80	66	55	48	40	76	76	66	55	48	40	63	63	63	55	48	40
	130	89	79	66	55	47	39	71	71	66	55	47	39	58	58	58	55	47	39
	140	86	77	64	55	46	38	65	65	64	55	46	38	53	53	53	53	46	38
	150	80	75	63	55	45	38	61	61	61	55	45	38	50	50	50	50	45	38
	160	75	73	62	55	44	37	57	57	57	55	44	37	47	47	47	47	44	37
	170	71	71	61	53	43	36	54	54	54	53	43	36	43	43	43	43	43	36
	180	67	67	59	52	42	36	50	50	50	50	42	36	38	38	38	38	38	36
	200	60	60	57	49	40	34	45	45	45	45	40	34	31	31	31	31	31	31

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"



**Rail Spans (in.) for Everest 48-S Rails for use with QMHSS Products**

<b>Table 8A</b>		Roof Height: 0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle: $7 < \theta \leq 27$ degrees																	
Exposure <b>C</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >7° to 27°	110	89	79	66	55	48	43	71	71	66	55	48	43	58	58	58	55	48	43
	115	88	78	65	55	48	43	67	67	65	55	48	43	55	55	55	55	48	43
	120	85	76	64	55	48	43	65	65	64	55	48	43	53	53	53	53	48	43
	130	78	74	63	55	48	42	59	59	59	55	48	42	49	49	49	49	48	42
	140	73	72	61	54	48	41	55	55	55	54	48	41	45	45	45	45	45	41
	150	68	68	60	53	48	40	51	51	51	51	48	40	42	42	42	42	42	40
	160	64	64	58	52	46	39	48	48	48	48	46	39	39	39	39	39	39	39
	170	50	60	57	51	45	38	45	45	45	45	45	38	37	37	37	37	37	37
	180	57	57	55	50	44	37	42	42	42	42	42	37	33	33	33	33	33	33
	200	51	51	51	48	41	36	38	38	38	38	38	36	27	27	27	27	27	27

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHLS Products**

<b>Table 8B</b>		Roof Height: 0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle: $7 < \theta \leq 27$ degrees																	
Exposure <b>C</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >7° to 27°	110	89	79	66	55	47	39	71	71	66	55	47	39	58	58	58	55	47	39
	115	88	78	65	55	46	39	67	67	65	55	46	39	55	55	55	55	46	39
	120	85	76	64	55	46	38	65	65	64	55	46	38	53	53	53	53	46	38
	130	78	74	63	55	45	38	59	59	59	55	45	38	49	49	49	49	45	38
	140	73	72	61	54	44	37	55	55	55	54	44	37	45	45	45	45	44	37
	150	68	68	60	52	43	36	51	51	51	51	43	36	40	40	40	40	40	36
	160	64	64	58	50	41	35	48	48	48	48	41	35	35	35	35	35	35	35
	170	50	60	57	49	40	34	45	45	45	45	40	34	31	31	31	31	31	31
	180	57	57	55	47	39	34	42	42	42	42	39	34	27	27	27	27	27	27
	200	51	51	51	44	37	32	34	34	34	34	34	32	22	22	22	22	22	22

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHSS Products**

<b>Table 9A</b>		Roof Height: 0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle: $7 < \theta \leq 27$ degrees																	
Exposure <b>D</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >7° to 27°	110	85	76	64	55	48	43	65	65	64	55	48	43	53	53	53	53	48	43
	115	81	75	63	55	48	42	62	62	62	55	48	42	50	50	50	50	48	42
	120	78	74	63	55	48	42	59	59	59	55	48	42	48	48	48	48	48	42
	130	73	72	61	54	48	41	54	54	54	54	48	41	44	44	44	44	44	41
	140	67	67	59	53	47	40	50	50	50	50	47	40	41	41	41	41	41	40
	150	63	63	58	52	46	39	47	47	47	47	46	39	38	38	38	38	38	38
	160	58	58	56	50	45	38	44	44	44	44	44	38	35	35	35	35	35	35
	170	55	55	55	49	43	37	41	41	41	41	41	37	31	31	31	31	31	31
	180	52	52	52	48	42	36	39	39	39	39	39	36	28	28	28	28	28	28
	200	46	46	46	46	39	34	34	34	34	34	34	34	22	22	22	22	22	22

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHLS Products**

<b>Table 9B</b>		Roof Height: 0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle: $7 < \theta \leq 27$ degrees																	
Exposure <b>D</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >7° to 27°	110	85	76	64	55	46	38	65	65	64	55	46	38	53	53	53	53	46	38
	115	81	75	63	55	45	38	62	62	62	55	45	38	50	50	50	50	45	38
	120	78	74	63	55	45	38	59	59	59	55	45	38	48	48	48	48	45	38
	130	73	72	61	53	44	37	54	54	54	53	44	37	44	44	44	44	44	37
	140	67	67	59	52	42	36	50	50	50	50	42	36	38	38	38	38	38	36
	150	63	63	58	50	41	35	47	47	47	47	41	35	33	33	33	33	33	33
	160	58	58	56	48	40	34	44	44	44	44	40	34	29	29	29	29	29	29
	170	55	55	55	46	39	33	40	40	40	40	39	33	26	26	26	26	26	26
	180	52	52	52	44	37	32	35	35	35	35	35	32	23	23	23	23	23	23
	200	46	46	46	41	35	30	28	28	28	28	28	28	18	18	18	18	18	18

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHSS Products**

<b>Table 10A</b>		Roof Height: 0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle: $27 < \theta \leq 45$ degrees																	
Exposure <b>B</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	87	75	63	54	47	42	87	75	63	54	47	42	87	75	63	54	47	42
	115	86	74	62	54	47	42	86	74	62	54	47	42	86	74	62	54	47	42
	120	84	73	62	54	47	41	84	73	62	54	47	41	84	73	62	54	47	41
	130	81	71	60	53	47	40	81	71	60	53	47	40	81	71	60	53	47	40
	140	77	69	59	52	46	39	75	69	59	52	46	39	75	69	59	52	46	39
	150	73	67	57	51	45	38	71	67	57	51	45	38	71	67	57	51	45	38
	160	69	64	56	50	43	37	66	64	56	50	43	37	66	64	56	50	43	37
	170	66	62	54	49	42	36	62	62	54	49	42	36	62	62	54	49	42	36
	180	63	60	53	48	41	35	59	59	53	48	41	35	59	59	53	48	41	35
	200	57	56	50	44	38	33	53	53	50	44	38	33	53	53	50	44	38	33

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHLS Products**

<b>Table 10B</b>		Roof Height: 0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle: $27 < \theta \leq 45$ degrees																	
Exposure <b>B</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	87	75	63	54	45	38	87	75	63	54	45	38	87	75	63	54	45	38
	115	86	74	62	54	44	37	86	74	62	54	44	37	86	74	62	54	44	37
	120	84	73	62	54	44	37	84	73	62	54	44	37	84	73	62	54	44	37
	130	81	71	60	52	43	36	81	71	60	52	43	36	81	71	60	52	43	36
	140	77	69	59	50	41	35	75	69	59	50	41	35	75	69	59	50	41	35
	150	73	67	57	48	40	34	71	67	57	48	40	34	71	67	57	48	40	34
	160	69	64	56	47	39	33	66	64	56	47	39	33	66	64	56	47	39	33
	170	66	62	54	45	37	32	62	62	54	45	37	32	62	62	54	45	37	32
	180	63	60	53	43	36	31	59	59	53	43	36	31	59	59	53	43	36	31
	200	57	56	48	40	34	29	53	53	48	40	34	29	53	53	48	40	34	29

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHSS Products**

<b>Table 11A</b>		Roof Height: 0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle: $27 < \theta \leq 45$ degrees																	
Exposure <b>C</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	81	71	60	53	47	40	81	71	60	53	47	40	81	71	60	53	47	40
	115	79	70	59	52	47	40	77	70	59	52	47	40	77	70	59	52	47	40
	120	76	68	58	52	46	39	74	68	58	52	46	39	74	68	58	52	46	39
	130	72	66	57	50	44	38	69	66	57	50	44	38	69	66	57	50	44	38
	140	67	63	55	49	43	37	64	63	55	49	43	37	64	63	55	49	43	37
	150	63	60	53	48	41	35	60	60	53	48	41	35	60	60	53	48	41	35
	160	60	58	51	46	39	34	56	56	51	46	39	34	56	56	51	46	39	34
	170	56	56	50	44	38	33	53	53	50	44	38	33	53	53	50	44	38	33
	180	54	54	48	42	36	32	50	50	48	42	36	32	50	50	48	42	36	32
	200	48	48	44	38	33	29	44	44	44	38	33	29	44	44	44	38	33	29

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHLS Products**

<b>Table 11B</b>		Roof Height: 0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle: $27 < \theta \leq 45$ degrees																	
Exposure <b>C</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	81	71	60	52	43	36	81	71	60	52	43	36	81	71	60	52	43	36
	115	79	70	59	51	42	35	77	70	59	51	42	35	77	70	59	51	42	35
	120	76	68	58	50	41	35	74	68	58	50	41	35	74	68	58	50	41	35
	130	72	66	57	48	40	34	69	66	57	48	40	34	69	66	57	48	40	34
	140	67	63	55	46	38	33	64	63	55	46	38	33	64	63	55	46	38	33
	150	63	60	53	43	37	32	60	60	53	43	37	32	60	60	53	43	37	32
	160	60	58	50	41	35	30	56	56	50	41	35	30	56	56	50	41	35	30
	170	56	56	47	39	34	29	53	53	47	39	34	29	53	53	47	39	34	29
	180	54	54	45	37	32	28	50	50	45	37	32	28	50	50	45	37	32	28
	200	46	46	40	34	30	26	44	44	40	34	30	26	44	44	40	34	30	26

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"



**Rail Spans (in.) for Everest 48-S Rails for use with QMHSS Products**

<b>Table 12A</b>		Roof Height: 0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle: $27 < \theta \leq 45$ degrees																	
Exposure <b>D</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	76	68	58	52	46	39	74	68	58	52	46	39	74	68	58	52	46	39
	115	73	67	57	51	45	38	72	67	57	51	45	38	72	67	57	51	45	38
	120	71	65	56	50	44	38	69	65	56	50	44	38	69	65	56	50	44	38
	130	67	63	55	49	42	36	63	63	55	49	42	36	63	63	55	49	42	36
	140	62	60	53	48	40	35	59	59	53	48	40	35	59	59	53	48	40	35
	150	59	57	51	45	39	34	55	55	51	45	39	34	55	55	51	45	39	34
	160	55	55	49	43	37	32	51	51	49	43	37	32	51	51	49	43	37	32
	170	52	52	47	41	35	31	48	48	47	41	35	31	48	48	47	41	35	31
	180	49	49	45	39	34	30	45	45	45	39	34	30	45	45	45	39	34	30
	200	44	44	40	35	31	27	41	41	40	35	31	27	41	41	40	35	31	27

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"

**Rail Spans (in.) for Everest 48-S Rails for use with QMHLS Products**

<b>Table 12B</b>		Roof Height: 0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle: $27 < \theta \leq 45$ degrees																	
Exposure <b>D</b>	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Roof Snow Load (psf)						Roof Snow Load (psf)						Roof Snow Load (psf)					
		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	76	68	58	50	41	35	74	68	58	50	41	35	74	68	58	50	41	35
	115	73	67	57	49	40	34	72	67	57	49	40	34	72	67	57	49	40	34
	120	71	65	56	48	39	34	69	65	56	48	39	34	69	65	56	48	39	34
	130	67	63	55	45	38	33	63	63	55	45	38	33	63	63	55	45	38	33
	140	62	60	53	43	36	31	59	59	53	43	36	31	59	59	53	43	36	31
	150	59	57	49	41	35	30	55	55	49	41	35	30	55	55	49	41	35	30
	160	55	55	46	39	33	29	51	51	46	39	33	29	51	51	46	39	33	29
	170	52	52	43	36	32	28	48	48	43	36	32	28	48	48	43	36	32	28
	180	48	48	41	35	30	27	45	45	41	35	30	27	45	45	41	35	30	27
	200	40	40	36	31	27	24	40	40	36	31	27	24	40	40	36	31	27	24

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable tension, compression, and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"