



11/16/2017

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

RE: Quick Mount PV QBlock Mount System for use with Everest CrossRail 48 PV Panel Mounting System SEI Project No.: 17054.00

Dear Mr. Green

Structural Enginuity Inc. (SEI) has completed its review of the Quickmount PV QBlock Mount System for use in conjunction with the Everest CrossRail 48 PV Panel Mounting System. The QBlock product line includes the E-Mount (QMSE), E-Mount Lag (QMSE-LAG), Classic Composition Mount (QMSC), and the Classic Shake Mount (QMLC).

The review was based on the following reference data:

- Moment Engineering+Design, CrossRail PV Panel Mounting System Evaluation, January 13, 2017
- Applied Materials & Engineering, Quick Mount PV Load Testing, Project Number 108443C, May 22, 2009
- Applied Materials & Engineering, Quick Mount PV Load Testing, Project Number 108443C, May 22, 2009
- Applied Materials & Engineering, Laboratory Load Testing of the QMSE-Lag, Project Number 114490C, October 29, 2014
- ICC Evaluation Service, Quick Mount PV Roof Mounts, ESR-2835, April 2015
- ICC Evaluation Service, Quick Mount PV Roof Mounts, ESR-3744, November 2016

SEI has determined that the QMSE, QMSE-Lag, QMSC, and QMLC mounts are suitable for use with the Everest CrossRail 48 System. The approved installation and allowable loads for the Quick Mount PV QBlock products is outlined in the ICC reports (ESR-2835 & ESR-3744). These values are shown below, no additional load duration factors may be applied to these values.

**Table 1: QMSE, QMSC, & QMLC Roof Mounts**

Load Direction	Specific Gravity of Lumber Rafter	Allowable Load
Uplift	0.5	811
	0.36	436
Lateral	0.5	671
	0.36	634

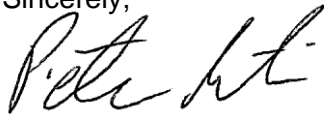
**Table 2: QMSE-LAG Roof Mount**

Load Direction	Specific Gravity of Lumber Rafter	Allowable Load
Uplift	0.5	732
	-	-
Lateral	0.5	526
	-	-

SEI has prepared allowable rail span charts for the Everest CrossRail 48 System used in conjunction with the Quick Mount PV QBlock 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 uplift and lateral forces of the QBlock mounts. 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,



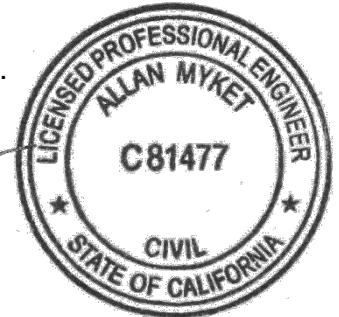
Peter Martin  
Engineer II

[pmartin@structuralengenuityinc.com](mailto:pmartin@structuralengenuityinc.com)



Allan T. Myket, P.E.  
President/Founder

[amyket@structuralengenuityinc.com](mailto:amyket@structuralengenuityinc.com)



11/28/2017

**Structural Engenuity Inc.**

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 1A</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species:	Douglas Fir					
														Specific Gravity:	0.5					
Exposure	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)						
<b>B</b>		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	94	87	76	65	57	51	88	87	76	65	57	51	76	76	76	65	57	51	
	115	94	87	76	65	57	51	85	85	76	65	57	51	73	73	73	65	57	51	
	120	94	87	76	65	57	51	83	83	76	65	57	51	70	70	70	65	57	51	
	130	93	86	75	65	57	51	78	78	75	65	57	51	65	65	65	65	57	51	
	140	90	85	74	65	57	51	68	68	68	65	57	51	56	56	56	56	56	51	
	150	86	83	73	65	57	51	68	68	68	65	57	51	56	56	56	56	56	51	
	160	82	82	72	63	57	51	64	64	64	63	57	51	52	52	52	52	52	51	
	170	78	78	70	62	57	51	60	60	60	60	57	51	49	49	49	49	49	49	
	180	74	74	69	61	56	51	57	57	57	57	56	51	46	46	46	46	46	46	
	200	68	68	65	59	54	50	51	51	51	51	51	50	38	38	38	38	38	38	

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 1B</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species:	Western Cedar					
														Specific Gravity:	0.36					
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	94	87	76	65	57	51	88	87	76	65	57	51	71	71	71	65	57	51	
	115	94	87	76	65	57	51	85	85	76	65	57	51	65	65	65	65	57	51	
	120	94	87	76	65	57	51	83	83	76	65	57	51	59	59	59	59	57	51	
	130	93	86	75	65	57	51	78	78	75	65	57	51	50	50	50	50	50	50	
	140	90	85	74	65	57	51	67	67	67	65	57	51	42	42	42	42	42	42	
	150	86	83	73	65	57	51	58	58	58	58	57	51	37	37	37	37	37	37	
	160	82	82	72	63	57	51	50	50	50	50	50	50	32	32	32	32	32	32	
	170	78	78	70	62	57	51	44	44	44	44	44	44	28	28	28	28	28	28	
	180	74	74	69	61	56	51	39	39	39	39	39	39	25	25	25	25	25	25	
	200	61	61	61	59	54	50	31	31	31	31	31	31	20	20	20	20	20	20	

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE-Lag Products**

<b>Table 1C</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species:	Douglas Fir					
														Specific Gravity:	0.5					
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	94	87	76	65	57	51	88	87	76	65	57	51	76	76	76	65	57	51	
	115	94	87	76	65	57	51	85	85	76	65	57	51	73	73	73	65	57	51	
	120	94	87	76	65	57	51	83	83	76	65	57	51	70	70	70	65	57	51	
	130	93	86	75	65	57	51	78	78	75	65	57	51	65	65	65	65	57	51	
	140	90	85	74	65	57	51	68	68	68	65	57	51	56	56	56	56	56	51	
	150	86	83	73	65	57	51	68	68	68	65	57	51	56	56	56	56	56	51	
	160	82	82	72	63	57	51	64	64	64	63	57	51	52	52	52	52	52	51	
	170	78	78	70	62	57	51	60	60	60	60	57	51	47	47	47	47	47	47	
	180	74	74	69	61	56	51	57	57	57	57	56	51	42	42	42	42	42	42	
	200	68	68	65	59	54	50	51	51	51	51	51	50	34	34	34	34	34	34	

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 2A</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species:	Douglas Fir					
														Specific Gravity:	0.5					
Exposure	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)						
<b>C</b>		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	93	86	75	65	57	51	78	78	75	65	57	51	65	65	65	65	57	51	
	115	91	85	75	65	57	51	75	75	75	65	57	51	62	62	62	62	57	51	
	120	89	85	74	65	57	51	72	72	72	65	57	51	59	59	59	59	57	51	
	130	84	83	73	64	57	51	67	67	67	64	57	51	54	54	54	54	54	51	
	140	80	80	71	63	57	51	62	62	62	62	57	51	50	50	50	50	50	50	
	150	76	76	69	61	56	51	57	57	57	57	56	51	47	47	47	47	47	47	
	160	72	72	67	60	55	51	54	54	54	54	54	51	42	42	42	42	42	42	
	170	67	67	65	59	54	50	50	50	50	50	50	50	37	37	37	37	37	37	
	180	63	63	63	58	53	49	48	48	48	48	48	48	33	33	33	33	33	33	
	200	57	57	57	55	51	48	41	41	41	41	41	41	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 uplift and lateral values of Quick Mount products per ICC reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 2B</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species:	Western Cedar					
														Specific Gravity:	0.36					
Exposure	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)						
<b>C</b>		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	93	86	75	65	57	51	78	78	75	65	57	51	49	49	49	49	49	49	
	115	91	85	75	65	57	51	71	71	71	65	57	51	45	45	45	45	45	45	
	120	89	85	74	65	57	51	65	65	65	65	57	51	41	41	41	41	41	41	
	130	84	83	73	64	57	51	55	55	55	55	55	51	35	35	35	35	35	35	
	140	80	80	71	63	57	51	47	47	47	47	47	47	30	30	30	30	30	30	
	150	76	76	69	61	56	51	40	40	40	40	40	40	26	26	26	26	26	26	
	160	69	69	67	60	55	51	35	35	35	35	35	35	23	23	23	23	23	23	
	170	61	61	61	59	54	50	31	31	31	31	31	31	20	20	20	20	20	20	
	180	54	54	54	54	53	49	28	28	28	28	28	28	18	18	18	18	18	18	
	200	43	43	43	43	43	43	22	22	22	22	22	22	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 uplift and lateral values of Quick Mount products per ICC reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest X48 Rails for use with QMSE-Lag Products**

<b>Table 2C</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species:	Douglas Fir					
														Specific Gravity:	0.5					
Exposure	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)						
<b>C</b>		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	93	86	75	65	57	51	78	78	75	65	57	51	65	65	65	65	57	51	
	115	91	85	75	65	57	51	75	75	75	65	57	51	62	62	62	62	57	51	
	120	89	85	74	65	57	51	72	72	72	65	57	51	59	59	59	59	57	51	
	130	84	83	73	64	57	51	67	67	67	64	57	51	54	54	54	54	54	51	
	140	80	80	71	63	57	51	62	62	62	62	57	51	50	50	50	50	50	50	
	150	76	76	69	61	56	51	57	57	57	57	56	51	43	43	43	43	43	43	
	160	72	72	67	60	55	51	54	54	54	54	54	51	38	38	38	38	38	38	
	170	67	67	65	59	54	50	50	50	50	50	50	50	34	34	34	34	34	34	
	180	63	63	63	58	53	49	46	46	46	46	46	46	30	30	30	30	30	30	
	200	57	57	57	55	51	48	37	37	37	37	37	37	24	24	24	24	24	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 uplift and lateral values of Quick Mount products per ICC reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"



**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 3A</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species:	Douglas Fir					
														Specific Gravity:	0.5					
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	
<b>Roofs &gt; 7° to 27°</b>	110	90	85	74	65	57	51	72	72	74	65	57	51	59	59	59	59	57	51	
	115	87	84	73	65	57	51	69	69	69	65	57	51	57	57	57	57	57	51	
	120	84	83	73	64	57	51	66	66	66	64	57	51	54	54	54	54	54	51	
	130	79	79	71	63	57	51	61	61	61	61	57	51	50	50	50	50	50	50	
	140	74	74	69	61	56	51	56	56	56	56	56	51	46	46	46	46	46	46	
	150	70	70	67	60	55	51	53	53	53	53	53	51	40	40	40	40	40	40	
	160	66	66	65	58	54	50	49	49	49	49	49	49	35	35	35	35	35	35	
	170	62	62	62	57	52	49	46	46	46	46	46	46	31	31	31	31	31	31	
	180	58	58	58	55	51	48	43	43	43	43	43	43	28	28	28	28	28	28	
	200	52	52	52	52	49	46	35	35	35	35	35	35	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 uplift and lateral values of Quick Mount products per ICC reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 3B</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species:	Western Cedar					
														Specific Gravity:	0.36					
Exposure	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)						
<b>D</b>		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	
Roofs > 7° to 27°	110	90	85	74	65	57	51	65	65	65	65	57	51	41	41	41	41	41	41	
	115	87	84	73	65	57	51	59	59	59	59	57	51	38	38	38	38	38	38	
	120	84	83	73	64	57	51	54	54	54	54	54	51	35	35	35	35	35	35	
	130	79	79	71	63	57	51	46	46	46	46	46	46	29	29	29	29	29	29	
	140	74	74	69	61	56	51	39	39	39	39	39	39	25	25	25	25	25	25	
	150	66	66	66	60	55	51	34	34	34	34	34	34	22	22	22	22	22	22	
	160	58	58	58	58	54	50	30	30	30	30	30	30	19	19	19	19	19	19	
	170	51	51	51	51	51	49	26	26	26	26	26	26	17	17	17	17	17	17	
	180	45	45	45	45	45	45	23	23	23	23	23	23	15	15	15	15	15	15	
	200	36	36	36	36	36	36	19	19	19	19	19	19	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 uplift and lateral values of Quick Mount products per ICC reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest X48 Rails for use with QMSE-Lag Products**

<b>Table 3C</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species:	Douglas Fir					
														Specific Gravity:	0.5					
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	
<b>Roofs &gt; 7° to 27°</b>	110	90	85	74	65	57	51	72	72	74	65	57	51	59	59	59	59	57	51	
	115	87	84	73	65	57	51	69	69	69	65	57	51	57	57	57	57	57	51	
	120	84	83	73	64	57	51	66	66	66	64	57	51	54	54	54	54	54	51	
	130	79	79	71	63	57	51	61	61	61	61	57	51	49	49	49	49	49	49	
	140	74	74	69	61	56	51	56	56	56	56	56	51	42	42	42	42	42	42	
	150	70	70	67	60	55	51	53	53	53	53	53	51	36	36	36	36	36	36	
	160	66	66	65	58	54	50	49	49	49	49	49	49	32	32	32	32	32	32	
	170	62	62	62	57	52	49	44	44	44	44	44	44	28	28	28	28	28	28	
	180	58	58	58	55	51	48	39	39	39	39	39	39	25	25	25	25	25	25	
	200	52	52	52	52	49	46	31	31	31	31	31	31	20	20	20	20	20	20	

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 4A</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait						
		Roof Angle:	27 < $\theta$ ≤ 45 degrees											Rafter Species:	Douglas Fir						
															Specific Gravity:	0.5					
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;27° to 45°</b>	110	91	86	73	64	56	51	91	86	73	64	56	51	91	86	73	64	56	51		
	115	89	85	73	64	56	51	89	85	73	64	56	51	89	85	73	64	56	51		
	120	87	84	72	64	56	51	84	84	72	64	56	51	87	84	72	64	56	51		
	130	84	82	70	61	56	51	84	82	70	62	56	51	84	82	70	62	56	51		
	140	81	79	68	61	55	51	81	79	68	61	55	51	81	79	68	61	55	51		
	150	79	76	67	60	54	50	78	76	67	60	54	50	78	76	67	60	54	50		
	160	77	73	65	58	53	50	74	73	65	58	53	50	74	73	65	58	53	50		
	170	73	71	63	57	52	49	70	70	63	57	52	49	70	70	63	57	52	49		
	180	70	69	61	56	51	48	66	66	61	56	51	48	66	66	61	56	51	48		
	200	64	64	58	53	49	46	59	59	58	53	49	46	59	59	58	53	49	46		

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 4B</b>		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Western Cedar Specific Gravity: 0.36															
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;27° to 45°</b>	110	91	86	73	64	56	51	91	86	73	64	56	51	91	86	73	64	56	51
	115	89	85	73	64	56	51	89	85	73	64	56	51	89	85	73	64	56	51
	120	87	84	72	64	56	51	84	84	72	64	56	51	87	84	72	64	56	51
	130	84	82	70	61	56	51	84	82	70	62	56	51	84	82	70	62	56	51
	140	81	79	68	61	55	51	81	79	68	61	55	51	81	79	68	61	55	51
	150	79	76	67	60	54	50	78	76	67	60	54	50	78	76	67	60	54	50
	160	77	73	65	58	53	50	73	73	65	58	53	50	73	73	65	58	53	50
	170	73	71	63	57	52	49	64	64	63	57	52	49	64	64	63	57	52	49
	180	69	69	61	56	51	48	57	57	57	56	51	48	57	57	57	56	51	48
	200	55	55	55	53	49	46	45	45	45	45	45	45	45	45	45	45	45	45

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE-Lag Products**

<b>Table 4C</b>		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
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;27° to 45°</b>	110	91	86	73	64	56	51	91	86	73	64	56	51	91	86	73	64	56	51
	115	89	85	73	64	56	51	89	85	73	64	56	51	89	85	73	64	56	51
	120	87	84	72	64	56	51	84	84	72	64	56	51	87	84	72	64	56	51
	130	84	82	70	61	56	51	84	82	70	62	56	51	84	82	70	62	56	51
	140	81	79	68	61	55	51	81	79	68	61	55	51	81	79	68	61	55	51
	150	79	76	67	60	54	50	78	76	67	60	54	50	78	76	67	60	54	50
	160	77	73	65	58	53	50	74	73	65	58	53	50	74	73	65	58	53	50
	170	73	71	63	57	52	49	70	70	63	57	52	49	70	70	63	57	52	49
	180	70	69	61	56	51	48	66	66	61	56	51	48	66	66	61	56	51	48
	200	64	64	58	53	49	46	59	59	58	53	49	46	59	59	58	53	49	46

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 5A</b>		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
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
<b>Roofs &gt;27° to 45°</b>	110	84	82	70	62	56	51	84	82	70	62	56	51	84	82	70	62	56	51
	115	83	80	69	61	56	51	83	80	69	61	56	51	83	80	69	61	56	51
	120	81	78	68	61	55	51	81	78	68	61	55	51	81	78	68	61	55	51
	130	78	75	66	59	54	50	77	75	66	59	54	50	77	75	66	59	54	50
	140	75	72	64	57	53	49	72	72	64	57	53	49	72	72	64	57	53	49
	150	71	69	62	56	52	48	67	67	62	56	52	48	67	67	62	56	52	48
	160	67	66	60	54	50	47	63	63	60	54	50	47	63	63	60	54	50	47
	170	64	64	58	53	49	46	59	59	58	53	49	46	59	59	58	53	49	46
	180	60	60	56	51	48	45	56	56	56	51	48	45	56	56	56	51	48	45
	200	54	54	52	48	45	43	50	50	50	48	45	43	50	50	50	48	45	43

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 5B</b>		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Western Cedar Specific Gravity: 0.36															
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
<b>Roofs &gt;27° to 45°</b>	110	84	82	70	62	56	51	84	82	70	62	56	51	84	82	70	62	56	51
	115	83	80	69	61	56	51	83	80	69	61	56	51	83	80	69	61	56	51
	120	81	78	68	61	55	51	81	78	68	61	55	51	81	78	68	61	55	51
	130	78	75	66	59	54	50	77	75	66	59	54	50	77	75	66	59	54	50
	140	75	72	64	57	53	49	68	68	64	57	53	49	68	68	64	57	53	49
	150	71	69	62	56	52	48	58	58	58	56	52	48	58	58	58	56	52	48
	160	62	62	60	54	50	47	51	51	51	51	50	47	51	51	51	51	50	47
	170	54	54	54	53	49	46	45	45	45	45	45	45	45	45	45	45	45	45
	180	48	48	48	48	48	45	40	40	40	40	40	40	40	40	40	40	40	40
	200	38	38	38	38	38	38	32	32	32	32	32	32	32	32	32	32	32	32

Notes:

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



**Rail Spans (in.) for Everest X48 Rails for use with QMSE-Lag Products**

<b>Table 5C</b>		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		Roof Angle: $27 < \theta \leq 45$ degrees											Rafter Species: Douglas Fir						
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
<b>Roofs &gt;27° to 45°</b>	110	84	82	70	62	56	51	84	82	70	62	56	51	84	82	70	62	56	51
	115	83	80	69	61	56	51	83	80	69	61	56	51	83	80	69	61	56	51
	120	81	78	68	61	55	51	81	78	68	61	55	51	81	78	68	61	55	51
	130	78	75	66	59	54	50	77	75	66	59	54	50	77	75	66	59	54	50
	140	75	72	64	57	53	49	72	72	64	57	53	49	72	72	64	57	53	49
	150	71	69	62	56	52	48	67	67	62	56	52	48	67	67	62	56	52	48
	160	67	66	60	54	50	47	63	63	60	54	50	47	63	63	60	54	50	47
	170	64	64	58	53	49	46	59	59	58	53	49	46	59	59	58	53	49	46
	180	60	60	56	51	48	45	56	56	56	51	48	45	56	56	56	51	48	45
	200	54	54	52	48	45	43	50	50	50	48	45	43	50	50	50	48	45	43

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 6A</b>		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
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
<b>Roofs &gt;27° to 45°</b>	110	81	78	68	61	55	51	81	78	68	61	55	51	81	78	68	61	55	51
	115	79	76	67	60	55	50	79	76	67	60	55	50	79	76	67	60	55	50
	120	78	74	66	59	54	50	76	74	66	59	54	50	76	74	66	59	54	50
	130	74	72	63	57	53	49	71	71	63	57	53	49	71	71	63	57	53	49
	140	70	69	61	55	51	48	66	66	61	55	51	48	66	66	61	55	51	48
	150	66	66	59	54	50	47	61	61	59	54	50	47	61	61	59	54	50	47
	160	62	62	57	52	49	46	57	57	57	52	49	46	57	57	57	52	49	46
	170	59	59	55	51	47	44	54	54	54	51	47	44	54	54	54	51	46	44
	180	55	55	53	49	46	43	51	51	51	49	46	43	51	51	51	49	46	43
	200	50	50	49	46	43	41	46	46	46	46	43	41	46	46	46	46	43	41

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 6B</b>		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Western Cedar Specific Gravity: 0.36															
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
<b>Roofs &gt;27° to 45°</b>	110	81	78	68	61	55	51	81	78	68	61	55	51	81	78	68	61	55	51
	115	79	76	67	60	55	50	79	76	67	60	55	50	79	76	67	60	55	50
	120	78	74	66	59	54	50	76	74	66	59	54	50	76	74	66	59	54	50
	130	74	72	63	57	53	49	66	66	63	57	53	49	66	66	63	57	53	49
	140	69	69	61	55	51	48	56	56	56	55	51	48	56	56	56	55	51	48
	150	59	59	59	54	50	47	49	49	49	49	49	47	49	49	49	49	49	47
	160	52	52	52	52	49	46	42	42	42	42	42	42	42	42	42	42	42	42
	170	45	45	45	45	45	44	37	37	37	37	37	37	37	37	37	37	37	37
	180	40	40	40	40	40	40	33	33	33	33	33	33	33	33	33	33	33	33
	200	32	32	32	32	32	32	27	27	27	27	27	27	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 uplift and lateral values of Quick Mount products per ICC reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

**Rail Spans (in.) for Everest X48 Rails for use with QMSE-Lag Products**

<b>Table 6C</b>		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
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
<b>Roofs &gt;27° to 45°</b>	110	81	78	68	61	55	51	81	78	68	61	55	51	81	78	68	61	55	51
	115	79	76	67	60	55	50	79	76	67	60	55	50	79	76	67	60	55	50
	120	78	74	66	59	54	50	76	74	66	59	54	50	76	74	66	59	54	50
	130	74	72	63	57	53	49	71	71	63	57	53	49	71	71	63	57	53	49
	140	70	69	61	55	51	48	66	66	61	55	51	48	66	66	61	55	51	48
	150	66	66	59	54	50	47	61	61	59	54	50	47	61	61	59	54	50	47
	160	62	62	57	52	49	46	57	57	57	52	49	46	57	57	57	52	49	46
	170	59	59	55	51	47	44	54	54	54	51	47	44	54	54	54	51	46	44
	180	55	55	53	49	46	43	51	51	51	49	46	43	51	51	51	49	46	43
	200	50	50	49	46	43	41	45	45	45	45	43	41	45	45	45	45	43	41

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 7A</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Landscape					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species:	Douglas Fir					
														Specific Gravity:	0.5					
Exposure	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)						
<b>B</b>		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	94	87	76	65	57	51	88	87	76	65	57	51	76	76	76	65	57	51	
	115	94	87	76	65	57	51	85	85	76	65	57	51	73	73	73	65	57	51	
	120	94	87	76	65	57	51	83	83	76	65	57	51	70	70	70	65	57	51	
	130	93	86	75	65	57	51	78	78	75	65	57	51	65	65	65	65	57	51	
	140	90	85	74	65	57	51	68	68	68	65	57	51	56	56	56	56	56	51	
	150	86	83	73	65	57	51	68	68	68	65	57	51	56	56	56	56	56	51	
	160	82	82	72	63	57	51	64	64	64	63	57	51	52	52	52	52	52	51	
	170	78	78	70	62	57	51	60	60	60	60	57	51	49	49	49	49	49	49	
	180	74	74	69	61	56	51	57	57	57	57	56	51	46	46	46	46	46	46	
	200	68	68	65	59	54	50	51	51	51	51	51	50	41	41	41	41	41	41	

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 7B</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Landscape					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species:	Western Cedar					
														Specific Gravity:	0.36					
Exposure	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)						
<b>B</b>		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	94	87	76	65	57	51	88	87	76	65	57	51	76	76	76	65	57	51	
	115	94	87	76	65	57	51	85	85	76	65	57	51	73	73	73	65	57	51	
	120	94	87	76	65	57	51	83	83	76	65	57	51	70	70	70	65	57	51	
	130	93	86	75	65	57	51	78	78	75	65	57	51	65	65	65	65	57	51	
	140	90	85	74	65	57	51	68	68	68	65	57	51	56	56	56	56	56	51	
	150	86	83	73	65	57	51	68	68	68	65	57	51	56	56	56	56	56	51	
	160	82	82	72	63	57	51	64	64	64	63	57	51	51	51	51	51	51	51	
	170	78	78	70	62	57	51	60	60	60	60	57	51	45	45	45	45	45	45	
	180	74	74	69	61	56	51	57	57	57	57	56	51	40	40	40	40	40	40	
	200	68	68	65	59	54	50	50	50	50	50	50	50	32	32	32	32	32	32	

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE-Lag Products**

<b>Table 7C</b>		Roof Height:	0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species: Douglas Fir						
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	94	87	76	65	57	51	88	87	76	65	57	51	76	76	76	65	57	51	
	115	94	87	76	65	57	51	85	85	76	65	57	51	73	73	73	65	57	51	
	120	94	87	76	65	57	51	83	83	76	65	57	51	70	70	70	65	57	51	
	130	93	86	75	65	57	51	78	78	75	65	57	51	65	65	65	65	57	51	
	140	90	85	74	65	57	51	68	68	68	65	57	51	56	56	56	56	56	51	
	150	86	83	73	65	57	51	68	68	68	65	57	51	56	56	56	56	56	51	
	160	82	82	72	63	57	51	64	64	64	63	57	51	52	52	52	52	52	51	
	170	78	78	70	62	57	51	60	60	60	60	57	51	49	49	49	49	49	49	
	180	74	74	69	61	56	51	57	57	57	57	56	51	46	46	46	46	46	46	
	200	68	68	65	59	54	50	51	51	51	51	51	50	41	41	41	41	41	41	

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 8A</b>		Roof Height:	0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species: Douglas Fir						
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
<b>Roofs &gt; 7° to 27°</b>	110	93	86	75	65	57	51	78	78	75	65	57	51	65	65	65	65	57	51	
	115	91	85	75	65	57	51	75	75	75	65	57	51	62	62	62	62	57	51	
	120	89	85	74	65	57	51	72	72	72	65	57	51	59	59	59	59	57	51	
	130	84	83	73	64	57	51	67	67	67	64	57	51	54	54	54	54	54	51	
	140	80	80	71	63	57	51	62	62	62	62	57	51	50	50	50	50	50	50	
	150	76	76	69	61	56	51	57	57	57	57	56	51	47	47	47	47	47	47	
	160	72	72	67	60	55	51	54	54	54	54	54	51	44	44	44	44	44	44	
	170	67	67	65	59	54	50	50	50	50	50	50	50	41	41	41	41	41	41	
	180	63	63	63	58	53	49	48	48	48	48	48	48	39	39	39	39	39	39	
	200	57	57	57	55	51	48	43	43	43	43	43	43	35	35	35	35	35	35	

Notes:

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



**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 8B</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Landscape					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species:	Western Cedar					
														Specific Gravity:	0.36					
Exposure	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)						
<b>C</b>		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	93	86	75	65	57	51	78	78	75	65	57	51	65	65	65	65	57	51	
	115	91	85	75	65	57	51	75	75	75	65	57	51	62	62	62	62	57	51	
	120	89	85	74	65	57	51	72	72	72	65	57	51	59	59	59	59	57	51	
	130	84	83	73	64	57	51	67	67	67	64	57	51	54	54	54	54	54	51	
	140	80	80	71	63	57	51	62	62	62	62	57	51	48	48	48	48	48	48	
	150	76	76	69	61	56	51	57	57	57	57	56	51	41	41	41	41	41	41	
	160	72	72	67	60	55	51	54	54	54	54	54	51	36	36	36	36	36	36	
	170	67	67	65	59	54	50	49	49	49	49	49	49	32	32	32	32	32	32	
	180	63	63	63	58	53	49	44	44	44	44	44	44	28	28	28	28	28	28	
	200	57	57	57	55	51	48	35	35	35	35	35	35	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 uplift and lateral values of Quick Mount products per ICC reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"

**Rail Spans (in.) for Everest X48 Rails for use with QMSE-Lag Products**

<b>Table 8C</b>		Roof Height:	0 - 30 feet											Panel Orientation: Landscape					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species: Douglas Fir					
		Specific Gravity: 0.5																	
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
<b>Roofs &gt; 7° to 27°</b>	110	93	86	75	65	57	51	78	78	75	65	57	51	65	65	65	65	57	51
	115	91	85	75	65	57	51	75	75	75	65	57	51	62	62	62	62	57	51
	120	89	85	74	65	57	51	72	72	72	65	57	51	59	59	59	59	57	51
	130	84	83	73	64	57	51	67	67	67	64	57	51	54	54	54	54	54	51
	140	80	80	71	63	57	51	62	62	62	62	57	51	50	50	50	50	50	50
	150	76	76	69	61	56	51	57	57	57	57	56	51	47	47	47	47	47	47
	160	72	72	67	60	55	51	54	54	54	54	54	51	44	44	44	44	44	44
	170	67	67	65	59	54	50	50	50	50	50	50	50	41	41	41	41	41	41
	180	63	63	63	58	53	49	48	48	48	48	48	48	39	39	39	39	39	39
	200	57	57	57	55	51	48	43	43	43	43	43	43	35	35	35	35	35	35

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 9A</b>		Roof Height:	0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species: Douglas Fir						
<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
<b>Roofs &gt; 7° to 27°</b>	110	90	85	74	65	57	51	72	72	74	65	57	51	59	59	59	59	57	51	
	115	87	84	73	65	57	51	69	69	69	65	57	51	57	57	57	57	57	51	
	120	84	83	73	64	57	51	66	66	66	64	57	51	54	54	54	54	54	51	
	130	79	79	71	63	57	51	61	61	61	61	57	51	50	50	50	50	50	50	
	140	74	74	69	61	56	51	56	56	56	56	56	51	46	46	46	46	46	46	
	150	70	70	67	60	55	51	53	53	53	53	53	51	43	43	43	43	43	43	
	160	66	66	65	58	54	50	49	49	49	49	49	49	40	40	40	40	40	40	
	170	62	62	62	57	52	49	46	46	46	46	46	46	38	38	38	38	38	38	
	180	58	58	58	55	51	48	44	44	44	44	44	44	36	36	36	36	36	36	
	200	52	52	52	52	49	46	39	39	39	39	39	39	32	32	32	32	32	32	

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 9B</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Landscape					
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species:	Western Cedar					
														Specific Gravity:	0.36					
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	
<b>Roofs &gt; 7° to 27°</b>	110	90	85	74	65	57	51	72	72	74	65	57	51	59	59	59	59	57	51	
	115	87	84	73	65	57	51	69	69	69	65	57	51	57	57	57	57	57	51	
	120	84	83	73	64	57	51	66	66	66	64	57	51	54	54	54	54	54	51	
	130	79	79	71	63	57	51	61	61	61	61	57	51	47	47	47	47	47	47	
	140	74	74	69	61	56	51	56	56	56	56	56	51	40	40	40	40	40	40	
	150	70	70	67	60	55	51	53	53	53	53	53	51	35	35	35	35	35	35	
	160	66	66	65	58	54	50	47	47	47	47	47	47	30	30	30	30	30	30	
	170	62	62	62	57	52	49	42	42	42	42	42	42	27	27	27	27	27	27	
	180	58	58	58	55	51	48	37	37	37	37	37	37	24	24	24	24	24	24	
	200	52	52	52	52	49	46	30	30	30	30	30	30	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 uplift and lateral values of Quick Mount products per ICC reports.
2. Panels are assumed to be in landscape orientation with a maximum width of 42"

**Rail Spans (in.) for Everest X48 Rails for use with QMSE-Lag Products**

<b>Table 9C</b>		Roof Height:	0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle:	7 < $\theta$ ≤ 27 degrees											Rafter Species: Douglas Fir						
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
<b>Roofs &gt; 7° to 27°</b>	110	90	85	74	65	57	51	72	72	74	65	57	51	59	59	59	59	57	51	
	115	87	84	73	65	57	51	69	69	69	65	57	51	57	57	57	57	57	51	
	120	84	83	73	64	57	51	66	66	66	64	57	51	54	54	54	54	54	51	
	130	79	79	71	63	57	51	61	61	61	61	57	51	50	50	50	50	50	50	
	140	74	74	69	61	56	51	56	56	56	56	56	51	46	46	46	46	46	46	
	150	70	70	67	60	55	51	53	53	53	53	53	51	43	43	43	43	43	43	
	160	66	66	65	58	54	50	49	49	49	49	49	49	40	40	40	40	40	40	
	170	62	62	62	57	52	49	46	46	46	46	46	46	38	38	38	38	38	38	
	180	58	58	58	55	51	48	44	44	44	44	44	44	36	36	36	36	36	36	
	200	52	52	52	52	49	46	39	39	39	39	39	39	32	32	32	32	32	32	

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 10A</b>		Roof Height:	0 - 30 feet											Panel Orientation:	Landscape						
		Roof Angle:	27 < $\theta$ ≤ 45 degrees											Rafter Species:	Douglas Fir						
															Specific Gravity:	0.5					
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;27° to 45°</b>	110	91	86	73	64	56	51	91	86	73	64	56	51	91	86	73	64	56	51		
	115	89	85	73	64	56	51	89	85	73	64	56	51	89	85	73	64	56	51		
	120	87	84	72	64	56	51	84	84	72	64	56	51	87	84	72	64	56	51		
	130	84	82	70	61	56	51	84	82	70	62	56	51	84	82	70	62	56	51		
	140	81	79	68	61	55	51	81	79	68	61	55	51	81	79	68	61	55	51		
	150	79	76	67	60	54	50	78	76	67	60	54	50	78	76	67	60	54	50		
	160	77	73	65	58	53	50	74	73	65	58	53	50	74	73	65	58	53	50		
	170	73	71	63	57	52	49	70	70	63	57	52	49	70	70	63	57	52	49		
	180	70	69	61	56	51	48	66	66	61	56	51	48	66	66	61	56	51	48		
	200	64	64	58	53	49	46	59	59	58	53	49	46	59	59	58	53	49	46		

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 10B</b>		Roof Height: 0 - 30 feet		Panel Orientation: Landscape															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Western Cedar Specific Gravity: 0.36															
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;27° to 45°</b>	110	91	86	73	64	56	51	91	86	73	64	56	51	91	86	73	64	56	51
	115	89	85	73	64	56	51	89	85	73	64	56	51	89	85	73	64	56	51
	120	87	84	72	64	56	51	84	84	72	64	56	51	87	84	72	64	56	51
	130	84	82	70	61	56	51	84	82	70	62	56	51	84	82	70	62	56	51
	140	81	79	68	61	55	51	81	79	68	61	55	51	81	79	68	61	55	51
	150	79	76	67	60	54	50	78	76	67	60	54	50	78	76	67	60	54	50
	160	77	73	65	58	53	50	74	73	65	58	53	50	74	73	65	58	53	50
	170	73	71	63	57	52	49	70	70	63	57	52	49	70	70	63	57	52	49
	180	70	69	61	56	51	48	66	66	61	56	51	48	66	66	61	56	51	48
	200	64	64	58	53	49	46	59	59	58	53	49	46	59	59	58	53	49	46

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE-Lag Products**

<b>Table 10C</b>		Roof Height: 0 - 30 feet		Panel Orientation: Landscape															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
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;27° to 45°</b>	110	91	86	73	64	56	51	91	86	73	64	56	51	91	86	73	64	56	51
	115	89	85	73	64	56	51	89	85	73	64	56	51	89	85	73	64	56	51
	120	87	84	72	64	56	51	84	84	72	64	56	51	87	84	72	64	56	51
	130	84	82	70	61	56	51	84	82	70	62	56	51	84	82	70	62	56	51
	140	81	79	68	61	55	51	81	79	68	61	55	51	81	79	68	61	55	51
	150	79	76	67	60	54	50	78	76	67	60	54	50	78	76	67	60	54	50
	160	77	73	65	58	53	50	74	73	65	58	53	50	74	73	65	58	53	50
	170	73	71	63	57	52	49	70	70	63	57	52	49	70	70	63	57	52	49
	180	70	69	61	56	51	48	66	66	61	56	51	48	66	66	61	56	51	48
	200	64	64	58	53	49	46	59	59	58	53	49	46	59	59	58	53	49	46

Notes:

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



**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 11A</b>		Roof Height: 0 - 30 feet		Panel Orientation: Landscape															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
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
<b>Roofs &gt;27° to 45°</b>	110	84	82	70	62	56	51	84	82	70	62	56	51	84	82	70	62	56	51
	115	83	80	69	61	56	51	83	80	69	61	56	51	83	80	69	61	56	51
	120	81	78	68	61	55	51	81	78	68	61	55	51	81	78	68	61	55	51
	130	78	75	66	59	54	50	77	75	66	59	54	50	77	75	66	59	54	50
	140	75	72	64	57	53	49	72	72	64	57	53	49	72	72	64	57	53	49
	150	71	69	62	56	52	48	67	67	62	56	52	48	67	67	62	56	52	48
	160	67	66	60	54	50	47	63	63	60	54	50	47	63	63	60	54	50	47
	170	64	64	58	53	49	46	59	59	58	53	49	46	59	59	58	53	49	46
	180	60	60	56	51	48	45	56	56	56	51	48	45	56	56	56	51	48	45
	200	54	54	52	48	45	43	50	50	50	48	45	43	50	50	50	48	45	43

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 11B</b>		Roof Height: 0 - 30 feet		Panel Orientation: Landscape															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Western Cedar Specific Gravity: 0.36															
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
<b>Roofs &gt;27° to 45°</b>	110	84	82	70	62	56	51	84	82	70	62	56	51	84	82	70	62	56	51
	115	83	80	69	61	56	51	83	80	69	61	56	51	83	80	69	61	56	51
	120	81	78	68	61	55	51	81	78	68	61	55	51	81	78	68	61	55	51
	130	78	75	66	59	54	50	77	75	66	59	54	50	77	75	66	59	54	50
	140	75	72	64	57	53	49	72	72	64	57	53	49	72	72	64	57	53	49
	150	71	69	62	56	52	48	67	67	62	56	52	48	67	67	62	56	52	48
	160	67	66	60	54	50	47	63	63	60	54	50	47	63	63	60	54	50	47
	170	64	64	58	53	49	46	59	59	58	53	49	46	59	59	58	53	49	46
	180	60	60	56	51	48	45	56	56	56	51	48	45	56	56	56	51	48	45
	200	54	54	52	48	45	43	50	50	50	48	45	43	50	50	50	48	45	43

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE-Lag Products**

<b>Table 11C</b>		Roof Height: 0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle: $27 < \theta \leq 45$ degrees											Rafter Species: Douglas Fir						
Exposure	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)					
<b>C</b>		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
<b>Roofs &gt;27° to 45°</b>	110	84	82	70	62	56	51	84	82	70	62	56	51	84	82	70	62	56	51
	115	83	80	69	61	56	51	83	80	69	61	56	51	83	80	69	61	56	51
	120	81	78	68	61	55	51	81	78	68	61	55	51	81	78	68	61	55	51
	130	78	75	66	59	54	50	77	75	66	59	54	50	77	75	66	59	54	50
	140	75	72	64	57	53	49	72	72	64	57	53	49	72	72	64	57	53	49
	150	71	69	62	56	52	48	67	67	62	56	52	48	67	67	62	56	52	48
	160	67	66	60	54	50	47	63	63	60	54	50	47	63	63	60	54	50	47
	170	64	64	58	53	49	46	59	59	58	53	49	46	59	59	58	53	49	46
	180	60	60	56	51	48	45	56	56	56	51	48	45	56	56	56	51	48	45
	200	54	54	52	48	45	43	50	50	50	48	45	43	50	50	50	48	45	43

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 12A</b>		Roof Height: 0 - 30 feet												Panel Orientation: Landscape					
		Roof Angle: $27 < \theta \leq 45$ degrees												Rafter Species: Douglas Fir					
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
<b>Roofs &gt;27° to 45°</b>	110	81	78	68	61	55	51	81	78	68	61	55	51	81	78	68	61	55	51
	115	79	76	67	60	55	50	79	76	67	60	55	50	79	76	67	60	55	50
	120	78	74	66	59	54	50	76	74	66	59	54	50	76	74	66	59	54	50
	130	74	72	63	57	53	49	71	71	63	57	53	49	71	71	63	57	53	49
	140	70	69	61	55	51	48	66	66	61	55	51	48	66	66	61	55	51	48
	150	66	66	59	54	50	47	61	61	59	54	50	47	61	61	59	54	50	47
	160	62	62	57	52	49	46	57	57	57	52	49	46	57	57	57	52	49	46
	170	59	59	55	51	47	44	54	54	54	51	47	44	54	54	54	51	46	44
	180	55	55	53	49	46	43	51	51	51	49	46	43	51	51	51	49	46	43
	200	50	50	49	46	43	41	46	46	46	46	43	41	46	46	46	46	43	41

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE, QMSC, QMLC Products**

<b>Table 12B</b>		Roof Height: 0 - 30 feet		Panel Orientation: Landscape															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Western Cedar Specific Gravity: 0.36															
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
<b>Roofs &gt;27° to 45°</b>	110	81	78	68	61	55	51	81	78	68	61	55	51	81	78	68	61	55	51
	115	79	76	67	60	55	50	79	76	67	60	55	50	79	76	67	60	55	50
	120	78	74	66	59	54	50	76	74	66	59	54	50	76	74	66	59	54	50
	130	74	72	63	57	53	49	71	71	63	57	53	49	71	71	63	57	53	49
	140	70	69	61	55	51	48	66	66	61	55	51	48	66	66	61	55	51	48
	150	66	66	59	54	50	47	61	61	59	54	50	47	61	61	59	54	50	47
	160	62	62	57	52	49	46	57	57	57	52	49	46	57	57	57	52	49	46
	170	59	59	55	51	47	44	54	54	54	51	47	44	54	54	54	51	46	44
	180	55	55	53	49	46	43	51	51	51	49	46	43	51	51	51	49	46	43
	200	50	50	49	46	43	41	43	43	43	43	43	41	43	43	43	43	43	41

Notes:

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

**Rail Spans (in.) for Everest X48 Rails for use with QMSE-Lag Products**

<b>Table 12C</b>		Roof Height: 0 - 30 feet		Panel Orientation: Landscape															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Douglas Fir		Specific Gravity: 0.5													
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
<b>Roofs &gt;27° to 45°</b>	110	81	78	68	61	55	51	81	78	68	61	55	51	81	78	68	61	55	51
	115	79	76	67	60	55	50	79	76	67	60	55	50	79	76	67	60	55	50
	120	78	74	66	59	54	50	76	74	66	59	54	50	76	74	66	59	54	50
	130	74	72	63	57	53	49	71	71	63	57	53	49	71	71	63	57	53	49
	140	70	69	61	55	51	48	66	66	61	55	51	48	66	66	61	55	51	48
	150	66	66	59	54	50	47	61	61	59	54	50	47	61	61	59	54	50	47
	160	62	62	57	52	49	46	57	57	57	52	49	46	57	57	57	52	49	46
	170	59	59	55	51	47	44	54	54	54	51	47	44	54	54	54	51	46	44
	180	55	55	53	49	46	43	51	51	51	49	46	43	51	51	51	49	46	43
	200	50	50	49	46	43	41	46	46	46	46	43	41	46	46	46	46	43	41

Notes:

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