



4/26/2017

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

RE: Quick Mount PV QBase 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 QBase Mount System for use in conjunction with the Everest CrossRail 48 PV Panel Mounting System. The QBase product line includes the Composition Mount (QMNC), Metal, Shake, & Slate Mount (QMNS), Standard Flat Tile Mount (QMSFT), Universal Tile Mount (QMLC), and the Low Slope Mount (QMLSH).

The review was based on the following reference data:

- Moment Engineering+Design, CrossRail PV Panel Mounting System Evaluation, January 13, 2017
- Applied Materials & Engineering, New Construction Composition Mount (QMNC 3-3/4" Finished Height) Load Testing, Project Number 111114C, March 23, 2011
- Applied Materials & Engineering, Quick Mount QBase with 6.5" Post as Used in Low Slope Mount (QMLSH-7) & Universal Tile Mount (QMUTM) Load Testing, Project Number 111316C, July 5, 2011
- Applied Materials & Engineering, Low Slope Mount QMLSH-9 Hardware Load Testing, Project Number 111203C, May 5, 2011
- Applied Materials & Engineering, Low Slope Mount QMLSH-12 Hardware Load Testing, Project Number 111204C, May 9, 2011
- Eclipse Engineering, Allowable Load Capacities for the Quick Mount PV QBase Mount system, June 19, 2014


SEI has determined that the QMNC, QMNS, QMSFT, QMUTM, and QMLSH mounts are suitable for use with the Everest CrossRail 48 System. The approved installation and allowable loads for the Quick Mount PV QBase products is outlined in the Eclipse Engineering report referenced above. The allowable load values are shown below, no additional load duration factors may be applied to these values.

Table 1: QBase Roof Mounts					
Load Direction	Specific Gravity of Lumber Rafter	QMNC, QMNS, QMSFT	QMUTM, QMLSH-7	QMLSH-9	QMLSH-12
Tension	0.5	1179 lb.			
Shear - Parallel to Rafter	0.5	686 lb.	257 lb.	257 lb.	168 lb.
Shear - Perpendicular to Rafter	0.5	464 lb.	171 lb.	216 lb.	122 lb.

SEI has prepared allowable rail span charts for the Everest CrossRail 48 System used in conjunction with the Quick Mount PV QBase 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 and shear forces of the QBase 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,



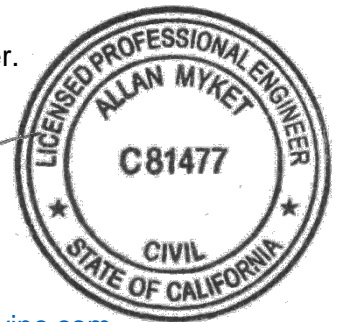
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4/26/17

**Structural Engenuity Inc.**

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMNC, QMNS, & QMSFT Products**

<b>Table 1A</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
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	96	89	78	66	58	52	90	89	78	66	58	52	78	78	78	66	58	52
	115	96	89	78	66	58	52	87	87	78	66	58	52	75	75	75	66	58	52
	120	96	89	78	66	58	52	85	85	78	66	58	52	71	71	71	66	58	52
	130	95	88	77	66	58	52	80	80	77	66	58	52	66	66	66	66	58	52
	140	92	87	76	66	58	52	69	69	69	66	58	52	57	57	57	57	57	52
	150	88	85	74	66	58	52	69	69	69	66	58	52	57	57	57	57	57	52
	160	84	84	73	64	58	52	65	65	65	64	58	52	53	53	53	53	53	52
	170	80	80	71	63	58	52	61	61	61	61	58	52	50	50	50	50	50	50
	180	76	76	70	62	57	52	58	58	58	58	57	52	47	47	47	47	47	47
	200	69	69	66	60	55	51	52	52	52	52	52	51	42	42	42	42	42	42

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMUTM & QMLSH-7 Products**

<b>Table 1B</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
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	96	89	78	66	58	52	90	89	78	66	58	52	78	78	78	66	58	52
	115	96	89	78	66	58	52	87	87	78	66	58	52	75	75	75	66	58	52
	120	96	89	78	66	58	52	85	85	78	66	58	52	71	71	71	66	58	52
	130	95	88	77	66	58	52	80	80	77	66	58	52	66	66	66	66	58	52
	140	92	87	76	66	58	52	69	69	69	66	58	52	57	57	57	57	57	52
	150	88	85	74	66	58	52	69	69	69	66	58	52	57	57	57	57	57	52
	160	84	84	73	64	58	52	65	65	65	64	58	52	53	53	53	53	53	52
	170	80	80	71	63	58	52	61	61	61	61	58	52	50	50	50	50	50	50
	180	76	76	70	62	57	52	58	58	58	58	57	52	47	47	47	47	47	47
	200	69	69	66	60	55	51	52	52	52	52	52	51	42	42	42	42	42	42

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMLSH-9 Products**

<b>Table 1C</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
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	96	89	78	66	58	52	90	89	78	66	58	52	78	78	78	66	58	52
	115	96	89	78	66	58	52	87	87	78	66	58	52	75	75	75	66	58	52
	120	96	89	78	66	58	52	85	85	78	66	58	52	71	71	71	66	58	52
	130	95	88	77	66	58	52	80	80	77	66	58	52	66	66	66	66	58	52
	140	92	87	76	66	58	52	69	69	69	66	58	52	57	57	57	57	57	52
	150	88	85	74	66	58	52	69	69	69	66	58	52	57	57	57	57	57	52
	160	84	84	73	64	58	52	65	65	65	64	58	52	53	53	53	53	53	52
	170	80	80	71	63	58	52	61	61	61	61	58	52	50	50	50	50	50	50
	180	76	76	70	62	57	52	58	58	58	58	57	52	47	47	47	47	47	47
	200	69	69	66	60	55	51	52	52	52	52	52	51	42	42	42	42	42	42

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMLSH-12 Products**

<b>Table 1D</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
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	96	89	78	62	49	40	90	89	78	62	49	40	78	78	78	62	49	40
	115	96	89	78	62	49	40	87	87	78	62	49	40	75	75	75	62	49	40
	120	96	89	78	62	49	40	85	85	78	62	49	40	71	71	71	62	49	40
	130	95	88	77	62	49	40	80	80	77	62	49	40	66	66	66	62	49	40
	140	92	87	76	62	49	40	69	69	69	62	49	40	57	57	57	57	49	40
	150	88	85	74	62	49	40	69	69	69	62	49	40	57	57	57	57	49	40
	160	84	84	73	62	49	40	65	65	65	62	49	40	53	53	53	53	49	40
	170	80	80	71	62	49	40	61	61	61	61	49	40	50	50	50	50	49	40
	180	76	76	70	62	49	40	58	58	58	58	49	40	47	47	47	47	47	40
	200	69	69	66	60	49	40	52	52	52	52	49	40	42	42	42	42	42	40

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMNC, QMNS, & QMSFT Products**

<b>Table 2A</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
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	95	88	77	66	58	52	80	80	77	66	58	52	66	66	66	66	58	52
	115	93	87	77	66	58	52	77	77	77	66	58	52	63	63	63	63	58	52
	120	91	87	76	66	58	52	73	73	73	66	58	52	60	60	60	60	58	52
	130	86	85	74	65	58	52	68	68	68	65	58	52	55	55	55	55	55	52
	140	82	82	72	64	58	52	63	63	63	63	58	52	51	51	51	51	51	51
	150	78	78	70	62	57	52	58	58	58	58	57	52	48	48	48	48	48	48
	160	73	73	68	61	56	52	55	55	55	55	55	52	45	45	45	45	45	45
	170	68	68	66	60	55	51	51	51	51	51	51	51	42	42	42	42	42	42
	180	64	64	64	59	54	50	49	49	49	49	49	49	40	40	40	40	40	40
	200	58	58	58	56	52	49	44	44	44	44	44	44	36	36	36	36	36	36

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMUTM & QMLSH-7 Products**

<b>Table 2B</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
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	95	88	77	66	58	52	80	80	77	66	58	52	66	66	66	66	58	52
	115	93	87	77	66	58	52	77	77	77	66	58	52	63	63	63	63	58	52
	120	91	87	76	66	58	52	73	73	73	66	58	52	60	60	60	60	58	52
	130	86	85	74	65	58	52	68	68	68	65	58	52	55	55	55	55	55	52
	140	82	82	72	64	58	52	63	63	63	63	58	52	51	51	51	51	51	51
	150	78	78	70	62	57	52	58	58	58	58	57	52	48	48	48	48	48	48
	160	73	73	68	61	56	52	55	55	55	55	55	52	45	45	45	45	45	45
	170	68	68	66	60	55	51	51	51	51	51	51	51	42	42	42	42	42	42
	180	64	64	64	59	54	50	49	49	49	49	49	49	40	40	40	40	40	40
	200	58	58	58	56	52	49	44	44	44	44	44	44	36	36	36	36	36	36

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"



**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMLSH-9 Products**

<b>Table 2C</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
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	95	88	77	66	58	52	80	80	77	66	58	52	66	66	66	66	58	52
	115	93	87	77	66	58	52	77	77	77	66	58	52	63	63	63	63	58	52
	120	91	87	76	66	58	52	73	73	73	66	58	52	60	60	60	60	58	52
	130	86	85	74	65	58	52	68	68	68	65	58	52	55	55	55	55	55	52
	140	82	82	72	64	58	52	63	63	63	63	58	52	51	51	51	51	51	51
	150	78	78	70	62	57	52	58	58	58	58	57	52	48	48	48	48	48	48
	160	73	73	68	61	56	52	55	55	55	55	55	52	45	45	45	45	45	45
	170	68	68	66	60	55	51	51	51	51	51	51	51	42	42	42	42	42	42
	180	64	64	64	59	54	50	49	49	49	49	49	49	40	40	40	40	40	40
	200	58	58	58	56	52	49	44	44	44	44	44	44	36	36	36	36	36	36

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMLSH-12 Products**

<b>Table 2D</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
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	95	88	77	62	49	40	80	80	77	62	49	40	66	66	66	62	49	40
	115	93	87	77	62	49	40	77	77	77	62	49	40	63	63	63	62	49	40
	120	91	87	76	62	49	40	73	73	73	62	49	40	60	60	60	60	49	40
	130	86	85	74	62	49	40	68	68	68	62	49	40	55	55	55	55	49	40
	140	82	82	72	62	49	40	63	63	63	62	49	40	51	51	51	51	49	40
	150	78	78	70	62	49	40	58	58	58	58	49	40	48	48	48	48	48	40
	160	73	73	68	61	49	40	55	55	55	55	49	40	45	45	45	45	45	40
	170	68	68	66	60	49	40	51	51	51	51	49	40	42	42	42	42	42	40
	180	64	64	64	59	49	40	49	49	49	49	49	40	40	40	40	40	40	40
	200	58	58	58	56	49	40	44	44	44	44	44	40	36	36	36	36	36	36

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMNC, QMNS, & QMSFT Products**

<b>Table 3A</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
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	92	87	76	66	58	52	73	73	76	66	58	52	60	60	60	60	58	52
	115	89	86	75	66	58	52	70	70	70	66	58	52	58	58	58	58	58	52
	120	86	85	74	65	58	52	67	67	67	65	58	52	55	55	55	55	55	52
	130	81	81	72	64	58	52	62	62	62	62	58	52	51	51	51	51	51	51
	140	76	76	70	62	57	52	57	57	57	57	57	52	47	47	47	47	47	47
	150	71	71	68	61	56	52	54	54	54	54	54	52	44	44	44	44	44	44
	160	67	67	66	59	55	51	50	50	50	50	50	50	41	41	41	41	41	41
	170	63	63	63	58	53	50	47	47	47	47	47	47	47	39	39	39	39	39
	180	59	59	59	56	52	49	45	45	45	45	45	45	45	37	37	37	37	37
	200	53	53	53	53	50	47	40	40	40	40	40	40	40	33	33	33	33	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 uplift and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMUTM & QMLSH-7 Products**

<b>Table 3B</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
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	92	87	76	66	58	52	73	73	76	66	58	52	60	60	60	60	58	52
	115	89	86	75	66	58	52	70	70	70	66	58	52	58	58	58	58	58	52
	120	86	85	74	65	58	52	67	67	67	65	58	52	55	55	55	55	55	52
	130	81	81	72	64	58	52	62	62	62	62	58	52	51	51	51	51	51	51
	140	76	76	70	62	57	52	57	57	57	57	57	52	47	47	47	47	47	47
	150	71	71	68	61	56	52	54	54	54	54	54	52	44	44	44	44	44	44
	160	67	67	66	59	55	51	50	50	50	50	50	50	41	41	41	41	41	41
	170	63	63	63	58	53	50	47	47	47	47	47	47	39	39	39	39	39	39
	180	59	59	59	56	52	49	45	45	45	45	45	45	37	37	37	37	37	37
	200	53	53	53	53	50	47	40	40	40	40	40	40	33	33	33	33	33	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 uplift and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMLSH-9 Products**

<b>Table 3C</b>		Roof Height: 0 - 30 feet											Rafter Species: Douglas Fir						
		Roof Angle: 7 - 27 degrees											Specific Gravity: 0.50						
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	92	87	76	66	58	52	73	73	76	66	58	52	60	60	60	60	58	52
	115	89	86	75	66	58	52	70	70	70	66	58	52	58	58	58	58	58	52
	120	86	85	74	65	58	52	67	67	67	65	58	52	55	55	55	55	55	52
	130	81	81	72	64	58	52	62	62	62	62	58	52	51	51	51	51	51	51
	140	76	76	70	62	57	52	57	57	57	57	57	52	47	47	47	47	47	47
	150	71	71	68	61	56	52	54	54	54	54	54	52	44	44	44	44	44	44
	160	67	67	66	59	55	51	50	50	50	50	50	50	41	41	41	41	41	41
	170	63	63	63	58	53	50	47	47	47	47	47	47	39	39	39	39	39	39
	180	59	59	59	56	52	49	45	45	45	45	45	45	37	37	37	37	37	37
	200	53	53	53	53	50	47	40	40	40	40	40	40	33	33	33	33	33	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 uplift and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMLSH-12 Products**

<b>Table 3D</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
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	92	87	76	62	49	40	73	73	76	62	49	40	60	60	60	60	49	40
	115	89	86	75	62	49	40	70	70	70	62	49	40	58	58	58	58	49	40
	120	86	85	74	62	49	40	67	67	67	62	49	40	55	55	55	55	49	40
	130	81	81	72	62	49	40	62	62	62	62	49	40	51	51	51	51	49	40
	140	76	76	70	62	49	40	57	57	57	57	49	40	47	47	47	47	47	40
	150	71	71	68	61	49	40	54	54	54	54	49	40	44	44	44	44	44	40
	160	67	67	66	59	49	40	50	50	50	50	49	40	41	41	41	41	41	40
	170	63	63	63	58	49	40	47	47	47	47	47	40	39	39	39	39	39	39
	180	59	59	59	56	49	40	45	45	45	45	45	40	37	37	37	37	37	37
	200	53	53	53	53	49	40	40	40	40	40	40	40	33	33	33	33	33	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 uplift and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMNC, QMNS, & QMSFT Products**

<b>Table 4A</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
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	93	88	75	65	57	52	93	88	75	65	57	52	93	88	75	65	57	52
	115	91	87	74	65	57	52	91	87	74	65	57	52	91	87	74	65	57	52
	120	89	86	73	65	57	52	86	86	73	65	57	52	89	86	73	65	57	52
	130	86	84	71	62	57	52	86	84	71	63	57	52	86	84	71	63	57	52
	140	83	81	69	62	56	52	83	81	69	62	56	52	83	81	69	62	56	52
	150	81	78	68	61	55	51	80	78	68	61	55	51	80	78	68	61	55	51
	160	79	75	66	59	54	51	76	75	66	59	54	51	76	75	66	59	54	51
	170	75	72	64	58	53	50	71	71	64	58	53	50	71	71	64	58	53	50
	180	71	70	62	57	52	49	67	67	62	57	52	49	67	67	62	57	52	49
	200	65	65	59	54	50	47	60	60	59	54	50	47	60	60	59	54	50	47

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMUTM & QMLSH-7 Products**

<b>Table 4B</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
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	93	88	75	65	57	51	93	88	75	65	57	51	93	88	75	65	57	51
	115	91	87	74	65	57	51	91	87	74	65	57	51	91	87	74	65	57	51
	120	89	86	73	65	57	51	86	86	73	65	57	51	89	86	73	65	57	51
	130	86	84	71	62	57	51	86	84	71	63	57	51	86	84	71	63	57	51
	140	83	81	69	62	56	51	83	81	69	62	56	51	83	81	69	62	56	51
	150	81	78	68	61	55	51	80	78	68	61	55	51	80	78	68	61	55	51
	160	79	75	66	59	54	51	76	75	66	59	54	51	76	75	66	59	54	51
	170	75	72	64	58	53	50	71	71	64	58	53	50	71	71	64	58	53	50
	180	71	70	62	57	52	49	67	67	62	57	52	49	67	67	62	57	52	49
	200	65	65	59	54	50	47	60	60	59	54	50	47	60	60	59	54	50	47

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"



**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMLSH-9 Products**

<b>Table 4C</b>		Roof Height: 0 - 30 feet											Rafter Species: Douglas Fir						
		Roof Angle: 27 - 45 degrees											Specific Gravity: 0.50						
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	93	88	75	65	57	51	93	88	75	65	57	51	93	88	75	65	57	51
	115	91	87	74	65	57	51	91	87	74	65	57	51	91	87	74	65	57	51
	120	89	86	73	65	57	51	86	86	73	65	57	51	89	86	73	65	57	51
	130	86	84	71	62	57	51	86	84	71	63	57	51	86	84	71	63	57	51
	140	83	81	69	62	56	51	83	81	69	62	56	51	83	81	69	62	56	51
	150	81	78	68	61	55	51	80	78	68	61	55	51	80	78	68	61	55	51
	160	79	75	66	59	54	51	76	75	66	59	54	51	76	75	66	59	54	51
	170	75	72	64	58	53	50	71	71	64	58	53	50	71	71	64	58	53	50
	180	71	70	62	57	52	49	67	67	62	57	52	49	67	67	62	57	52	49
	200	65	65	59	54	50	47	60	60	59	54	50	47	60	60	59	54	50	47

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMLSH-12 Products**

<b>Table 4D</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
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	93	88	70	51	41	33	93	88	70	51	41	33	93	88	70	51	41	33
	115	91	87	70	51	41	33	91	87	70	51	41	33	91	87	70	51	41	33
	120	89	86	70	51	41	33	86	86	70	51	41	33	89	86	70	51	41	33
	130	86	84	70	51	41	33	86	84	70	51	41	33	86	84	70	51	41	33
	140	83	81	69	51	41	33	83	81	69	51	41	33	83	81	69	51	41	33
	150	81	78	68	51	41	33	80	78	68	51	41	33	80	78	68	51	41	33
	160	79	75	66	51	41	33	76	75	66	51	41	33	76	75	66	51	41	33
	170	75	72	64	51	41	33	71	71	64	51	41	33	71	71	64	51	41	33
	180	71	70	62	51	41	33	67	67	62	51	41	33	67	67	62	51	41	33
	200	65	65	59	51	41	33	60	60	59	51	41	33	60	60	59	51	41	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 uplift and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMNC, QMNS, & QMSFT Products**

<b>Table 5A</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
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	86	84	71	63	57	52	86	84	71	63	57	52	86	84	71	63	57	52
	115	85	82	70	62	57	52	85	82	70	62	57	52	85	82	70	62	57	52
	120	83	80	69	62	56	52	83	80	69	62	56	52	83	80	69	62	56	52
	130	80	77	67	60	55	51	79	77	67	60	55	51	79	77	67	60	55	51
	140	77	73	65	58	54	50	73	73	65	58	54	50	73	73	65	58	54	50
	150	72	70	63	57	53	49	68	68	63	57	53	49	68	68	63	57	53	49
	160	68	67	61	55	51	48	64	64	61	55	51	48	64	64	61	55	51	48
	170	65	65	59	54	50	47	60	60	59	54	50	47	60	60	59	54	50	47
	180	61	61	57	52	49	46	57	57	57	52	49	46	57	57	57	52	49	46
	200	55	55	53	49	46	44	51	51	51	49	46	44	51	51	51	49	46	44

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMUTM & QMLSH-7 Products**

<b>Table 5B</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
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	86	84	71	63	57	51	86	84	71	63	57	51	86	84	71	63	57	51
	115	85	82	70	62	57	51	85	82	70	62	57	51	85	82	70	62	57	51
	120	83	80	69	62	56	51	83	80	69	62	56	51	83	80	69	62	56	51
	130	80	77	67	60	55	51	79	77	67	60	55	51	79	77	67	60	55	51
	140	77	73	65	58	54	50	73	73	65	58	54	50	73	73	65	58	54	50
	150	72	70	63	57	53	49	68	68	63	57	53	49	68	68	63	57	53	49
	160	68	67	61	55	51	48	64	64	61	55	51	48	64	64	61	55	51	48
	170	65	65	59	54	50	47	60	60	59	54	50	47	60	60	59	54	50	47
	180	61	61	57	52	49	46	57	57	57	52	49	46	57	57	57	52	49	46
	200	55	55	53	49	46	44	51	51	51	49	46	44	51	51	51	49	46	44

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMLSH-9 Products**

<b>Table 5C</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
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	86	84	71	63	57	51	86	84	71	63	57	51	86	84	71	63	57	51
	115	85	82	70	62	57	51	85	82	70	62	57	51	85	82	70	62	57	51
	120	83	80	69	62	56	51	83	80	69	62	56	51	83	80	69	62	56	51
	130	80	77	67	60	55	51	79	77	67	60	55	51	79	77	67	60	55	51
	140	77	73	65	58	54	50	73	73	65	58	54	50	73	73	65	58	54	50
	150	72	70	63	57	53	49	68	68	63	57	53	49	68	68	63	57	53	49
	160	68	67	61	55	51	48	64	64	61	55	51	48	64	64	61	55	51	48
	170	65	65	59	54	50	47	60	60	59	54	50	47	60	60	59	54	50	47
	180	61	61	57	52	49	46	57	57	57	52	49	46	57	57	57	52	49	46
	200	55	55	53	49	46	44	51	51	51	49	46	44	51	51	51	49	46	44

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMLSH-12 Products**

<b>Table 5D</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
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	86	84	70	51	41	33	86	84	70	51	41	33	86	84	70	51	41	33
	115	85	82	70	51	41	33	85	82	70	51	41	33	85	82	70	51	41	33
	120	83	80	69	51	41	33	83	80	69	51	41	33	83	80	69	51	41	33
	130	80	77	67	51	41	33	79	77	67	51	41	33	79	77	67	51	41	33
	140	77	73	65	51	41	33	73	73	65	51	41	33	73	73	65	51	41	33
	150	72	70	63	51	41	33	68	68	63	51	41	33	68	68	63	51	41	33
	160	68	67	61	51	41	33	64	64	61	51	41	33	64	64	61	51	41	33
	170	65	65	59	51	41	33	60	60	59	51	41	33	60	60	59	51	41	33
	180	61	61	57	51	41	33	57	57	57	51	41	33	57	57	57	51	41	33
	200	55	55	53	49	41	33	51	51	51	49	41	33	51	51	51	49	41	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 uplift and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMNC, QMNS, & QMSFT Products**

<b>Table 6A</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
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	83	80	69	62	56	52	83	80	69	62	56	52	83	80	69	62	56	52
	115	81	78	68	61	56	51	81	78	68	61	56	51	81	78	68	61	56	51
	120	80	76	67	60	55	51	78	76	67	60	55	51	78	76	67	60	55	51
	130	76	73	64	58	54	50	72	72	64	58	54	50	72	72	64	58	54	50
	140	71	70	62	56	52	49	67	67	62	56	52	49	67	67	62	56	52	49
	150	67	67	60	55	51	48	62	62	60	55	51	48	62	62	60	55	51	48
	160	63	63	58	53	50	47	58	58	58	53	50	47	58	58	58	53	50	47
	170	60	60	56	52	48	45	55	55	55	52	48	45	55	55	55	52	47	45
	180	56	56	54	50	47	44	52	52	52	50	47	44	52	52	52	50	47	44
	200	51	51	50	47	44	42	47	47	47	47	44	42	47	47	47	47	44	42

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMUTM & QMLSH-7 Products**

<b>Table 6B</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
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	83	80	69	62	56	51	83	80	69	62	56	51	83	80	69	62	56	51
	115	81	78	68	61	56	51	81	78	68	61	56	51	81	78	68	61	56	51
	120	80	76	67	60	55	51	78	76	67	60	55	51	78	76	67	60	55	51
	130	76	73	64	58	54	50	72	72	64	58	54	50	72	72	64	58	54	50
	140	71	70	62	56	52	49	67	67	62	56	52	49	67	67	62	56	52	49
	150	67	67	60	55	51	48	62	62	60	55	51	48	62	62	60	55	51	48
	160	63	63	58	53	50	47	58	58	58	53	50	47	58	58	58	53	50	47
	170	60	60	56	52	48	45	55	55	55	52	48	45	55	55	55	52	47	45
	180	56	56	54	50	47	44	52	52	52	50	47	44	52	52	52	50	47	44
	200	51	51	50	47	44	42	47	47	47	47	44	42	47	47	47	47	44	42

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"



**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMLSH-9 Products**

<b>Table 6C</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
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	83	80	69	62	56	51	83	80	69	62	56	51	83	80	69	62	56	51
	115	81	78	68	61	56	51	81	78	68	61	56	51	81	78	68	61	56	51
	120	80	76	67	60	55	51	78	76	67	60	55	51	78	76	67	60	55	51
	130	76	73	64	58	54	50	72	72	64	58	54	50	72	72	64	58	54	50
	140	71	70	62	56	52	49	67	67	62	56	52	49	67	67	62	56	52	49
	150	67	67	60	55	51	48	62	62	60	55	51	48	62	62	60	55	51	48
	160	63	63	58	53	50	47	58	58	58	53	50	47	58	58	58	53	50	47
	170	60	60	56	52	48	45	55	55	55	52	48	45	55	55	55	52	47	45
	180	56	56	54	50	47	44	52	52	52	50	47	44	52	52	52	50	47	44
	200	51	51	50	47	44	42	47	47	47	47	44	42	47	47	47	47	44	42

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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"

**Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMLSH-12 Products**

<b>Table 6D</b>		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
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	83	80	69	51	41	33	83	80	69	51	41	33	83	80	69	51	41	33
	115	81	78	68	51	41	33	81	78	68	51	41	33	81	78	68	51	41	33
	120	80	76	67	51	41	33	78	76	67	51	41	33	78	76	67	51	41	33
	130	76	73	64	51	41	33	72	72	64	51	41	33	72	72	64	51	41	33
	140	71	70	62	51	41	33	67	67	62	51	41	33	67	67	62	51	41	33
	150	67	67	60	51	41	33	62	62	60	51	41	33	62	62	60	51	41	33
	160	63	63	58	51	41	33	58	58	58	51	41	33	58	58	58	51	41	33
	170	60	60	56	51	41	33	55	55	55	51	41	33	55	55	55	51	41	33
	180	56	56	54	50	41	33	52	52	52	50	41	33	52	52	52	50	41	33
	200	51	51	50	47	41	33	47	47	47	47	41	33	47	47	47	47	41	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 uplift and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"