



4/26/2017

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

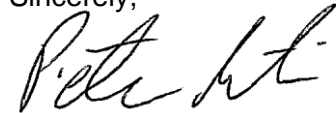
Table 2: QMSE-LAG Roof Mount

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,



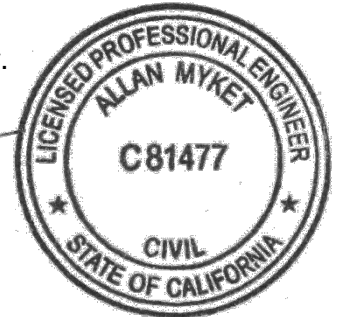
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4/26/17

Structural Engenuity Inc.

Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMSE, QMSC, QMLC Products

Table 1A		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
Exposure 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	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	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 66"

Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMSE, QMSC, QMLC Products

Table 1B		Roof Height: 0 - 30 feet						Rafter Species: Western Cedar											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.36											
Exposure 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	96	89	78	66	58	52	90	89	78	66	58	52	72	72	72	66	58	52
	115	96	89	78	66	58	52	87	87	78	66	58	52	66	66	66	66	58	52
	120	96	89	78	66	58	52	85	85	78	66	58	52	60	60	60	60	58	52
	130	95	88	77	66	58	52	80	80	77	66	58	52	50	50	50	50	50	50
	140	92	87	76	66	58	52	68	68	68	66	58	52	43	43	43	43	43	43
	150	88	85	74	66	58	52	58	58	58	58	58	52	37	37	37	37	37	37
	160	84	84	73	64	58	52	51	51	51	51	51	51	33	33	33	33	33	33
	170	80	80	71	63	58	52	45	45	45	45	45	45	29	29	29	29	29	29
	180	76	76	70	62	57	52	40	40	40	40	40	40	26	26	26	26	26	26
	200	62	62	62	60	55	51	32	32	32	32	32	32	21	21	21	21	21	21

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 66"

Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMSE-Lag Products

Table 1C		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
Exposure 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	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	48	48	48	48	48	48
	180	76	76	70	62	57	52	58	58	58	58	57	52	43	43	43	43	43	43
	200	69	69	66	60	55	51	52	52	52	52	52	51	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 66"

Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMSE, QMSC, QMLC Products

Table 2A		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
Exposure C	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	43	43	43	43	43	43
	170	68	68	66	60	55	51	51	51	51	51	51	51	38	38	38	38	38	38
	180	64	64	64	59	54	50	49	49	49	49	49	49	34	34	34	34	34	34
	200	58	58	58	56	52	49	42	42	42	42	42	42	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 66"

Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMSE, QMSC, QMLC Products

Table 2B		Roof Height: 0 - 30 feet						Rafter Species: Western Cedar											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.36											
Exposure C	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	79	79	77	66	58	52	50	50	50	50	50	50
	115	93	87	77	66	58	52	72	72	72	66	58	52	46	46	46	46	46	46
	120	91	87	76	66	58	52	66	66	66	66	58	52	42	42	42	42	42	42
	130	86	85	74	65	58	52	55	55	55	55	55	52	35	35	35	35	35	35
	140	82	82	72	64	58	52	47	47	47	47	47	47	30	30	30	30	30	30
	150	78	78	70	62	57	52	41	41	41	41	41	41	26	26	26	26	26	26
	160	70	70	68	61	56	52	36	36	36	36	36	36	23	23	23	23	23	23
	170	62	62	62	60	55	51	31	31	31	31	31	31	20	20	20	20	20	20
	180	54	54	54	54	54	50	28	28	28	28	28	28	18	18	18	18	18	18
	200	44	44	44	44	44	44	22	22	22	22	22	22	15	15	15	15	15	15

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 66"

Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMSE-Lag Products

Table 2C		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
Exposure C	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	44	44	44	44	44	44
	160	73	73	68	61	56	52	55	55	55	55	55	52	39	39	39	39	39	39
	170	68	68	66	60	55	51	51	51	51	51	51	51	34	34	34	34	34	34
	180	64	64	64	59	54	50	47	47	47	47	47	47	30	30	30	30	30	30
	200	58	58	58	56	52	49	38	38	38	38	38	38	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 66"

Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMSE, QMSC, QMLC Products

Table 3A		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
Exposure D	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	41	41	41	41	41	41
	160	67	67	66	59	55	51	50	50	50	50	50	50	36	36	36	36	36	36
	170	63	63	63	58	53	50	47	47	47	47	47	47	32	32	32	32	32	32
	180	59	59	59	56	52	49	44	44	44	44	44	44	28	28	28	28	28	28
	200	53	53	53	53	50	47	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 portrait orientation with a maximum length of 66"

Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMSE, QMSC, QMLC Products

Table 3B		Roof Height: 0 - 30 feet											Rafter Species: Western Cedar						
		Roof Angle: 7 - 27 degrees											Specific Gravity: 0.36						
Exposure D	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	66	66	66	66	58	52	42	42	42	42	42	42
	115	89	86	75	66	58	52	60	60	60	60	58	52	38	38	38	38	38	38
	120	86	85	74	65	58	52	55	55	55	55	55	52	35	35	35	35	35	35
	130	81	81	72	64	58	52	46	46	46	46	46	46	30	30	30	30	30	30
	140	76	76	70	62	57	52	40	40	40	40	40	40	25	25	25	25	25	25
	150	67	67	67	61	56	52	34	34	34	34	34	34	22	22	22	22	22	22
	160	59	59	59	59	55	51	30	30	30	30	30	30	19	19	19	19	19	19
	170	51	51	51	51	51	50	26	26	26	26	26	26	17	17	17	17	17	17
	180	46	46	46	46	46	46	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 66"

Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMSE-Lag Products

Table 3C		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 7 - 27 degrees						Specific Gravity: 0.50											
Exposure D	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	50	50	50	50	50	50
	140	76	76	70	62	57	52	57	57	57	57	57	52	43	43	43	43	43	43
	150	71	71	68	61	56	52	54	54	54	54	54	52	37	37	37	37	37	37
	160	67	67	66	59	55	51	50	50	50	50	50	50	32	32	32	32	32	32
	170	63	63	63	58	53	50	44	44	44	44	44	44	29	29	29	29	29	29
	180	59	59	59	56	52	49	39	39	39	39	39	39	26	26	26	26	26	26
	200	53	53	53	53	50	47	32	32	32	32	32	32	21	21	21	21	21	21

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 66"

Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMSE, QMSC, QMLC Products

Table 4A		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
Exposure 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 ICC 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 QMSE, QMSC, QMLC Products

Table 4B		Roof Height: 0 - 30 feet											Rafter Species: Western Cedar						
		Roof Angle: 27 - 45 degrees											Specific Gravity: 0.36						
Exposure 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	73	73	66	59	54	51	73	73	66	59	54	51
	170	75	72	64	58	53	50	64	64	64	58	53	50	64	64	64	58	53	50
	180	69	69	62	57	52	49	57	57	57	57	52	49	57	57	57	57	52	49
	200	55	55	55	54	50	47	46	46	46	46	46	46	46	46	46	46	46	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 66"

Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMSE-Lag Products

Table 4C		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
Exposure 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 ICC 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 QMSE, QMSC, QMLC Products

Table 5A		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
Exposure C	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 ICC 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 QMSE, QMSC, QMLC Products

Table 5B		Roof Height: 0 - 30 feet Roof Angle: 27 - 45 degrees											Rafter Species: Western Cedar Specific Gravity: 0.36						
Exposure C	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	68	68	65	58	54	50	68	68	65	58	54	50
	150	71	70	63	57	53	49	59	59	59	57	53	49	59	59	59	57	53	49
	160	62	62	61	55	51	48	51	51	51	51	51	48	51	51	51	51	51	48
	170	55	55	55	54	50	47	45	45	45	45	45	45	45	45	45	45	45	45
	180	48	48	48	48	48	46	40	40	40	40	40	40	40	40	40	40	40	40
	200	39	39	39	39	39	39	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 66"

Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMSE-Lag Products

Table 5C		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
Exposure C	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 ICC 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 QMSE, QMSC, QMLC Products

Table 6A		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
Exposure D	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 ICC 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 QMSE, QMSC, QMLC Products

Table 6B		Roof Height: 0 - 30 feet Roof Angle: 27 - 45 degrees											Rafter Species: Western Cedar Specific Gravity: 0.36						
Exposure D	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	67	67	64	58	54	50	67	67	64	58	54	50
	140	69	69	62	56	52	49	57	57	57	56	52	49	57	57	57	56	52	49
	150	60	60	60	55	51	48	49	49	49	49	49	48	49	49	49	49	49	48
	160	52	52	52	52	50	47	43	43	43	43	43	43	43	43	43	43	43	43
	170	46	46	46	46	46	45	38	38	38	38	38	38	38	38	38	38	38	38
	180	41	41	41	41	41	41	34	34	34	34	34	34	34	34	34	34	34	34
	200	33	33	33	33	33	33	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 66"

Rail Spans (in.) for Everest Crossrail 48 Roof Mount for use with QMSE-Lag Products

Table 6C		Roof Height: 0 - 30 feet						Rafter Species: Douglas Fir											
		Roof Angle: 27 - 45 degrees						Specific Gravity: 0.50											
Exposure D	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	45	45	45	45	44	42	45	45	45	45	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 ICC reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 66"