



12/29/2017

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

RE: Quick Mount PV QBase Mount System for use with
Unirac Solarmount Light Flush-to-Roof Rail 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 Unirac Solarmount Light Flush-to-Roof Rail System. The QBase product line includes the Composition Mount (QMNC), Metal, Shake, & Slate Mount (QMNS), Standard Flat Tile Mount (QMSFT), Universal Tile Mount (QMUTM), and the Low Slope Mount (QMLSH).

The review was based on the following reference data:

- Unirac, Design & Engineering Guide – Solarmount: Flush-to-Roof Design, May 19, 2016
- 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

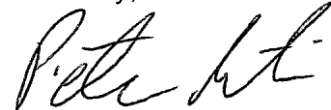
SEI has determined that the QMNC, QMNS, QMSFT, QMUTM, and QMLSH mounts are suitable for use with the Unirac Solarmount Light System. The approved installation and allowable loads for the Quick Mount PV QBase products is outlined in the Eclipse Engineering report referenced above. The allowable load values 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 Unirac Solarmount Light 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 Unirac Solarmount 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

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

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12/29/2017

Structural Engenuity Inc.

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMNC, QMNS, & QMSFT Products

Table 1A		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $7 < \theta \leq 27$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
Exposure B	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	84	72	60	54	84	84	84	72	60	54	72	72	72	72	60	54
	115	96	84	84	72	60	54	78	78	78	72	60	54	72	72	72	72	60	54
	120	96	84	84	72	60	54	78	78	78	72	60	54	66	66	66	66	60	54
	130	96	84	78	72	60	54	72	72	72	72	60	54	60	60	60	60	60	54
	140	84	84	78	72	60	54	72	72	72	72	60	54	54	54	54	54	54	54
	150	84	84	78	72	60	54	66	66	66	66	60	54	48	48	48	48	48	48
	160	78	78	78	72	60	54	60	60	60	60	60	54	48	48	48	48	48	48
	170	78	78	78	72	60	54	54	54	54	54	54	54	42	42	42	42	42	42
	180	72	72	72	72	60	54	54	54	54	54	54	54	36	36	36	36	36	36
	200	66	66	66	66	60	54	48	48	48	48	48	48	30	30	30	30	30	30

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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMUTM & QMLSH-7 Products

Table 1B		Roof Height: 0 - 30 feet											Panel Orientation: Portrait							
		Roof Angle: $7 < \theta \leq 27$ degrees											Rafter Species: Douglas Fir							
Exposure B		Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
			Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	84	72	60	54	84	84	84	72	60	54	72	72	72	72	60	54	
	115	96	84	84	72	60	54	78	78	78	72	60	54	72	72	72	72	60	54	
	120	96	84	84	72	60	54	78	78	78	72	60	54	66	66	66	66	60	54	
	130	96	84	78	72	60	54	72	72	72	72	60	54	60	60	60	60	60	54	
	140	84	84	78	72	60	54	72	72	72	72	60	54	54	54	54	54	54	54	
	150	84	84	78	72	60	54	66	66	66	66	60	54	48	48	48	48	48	48	
	160	78	78	78	72	60	54	60	60	60	60	60	54	48	48	48	48	48	48	
	170	78	78	78	72	60	54	54	54	54	54	54	54	42	42	42	42	42	42	
	180	72	72	72	72	60	54	54	54	54	54	54	54	36	36	36	36	36	36	
	200	66	66	66	66	60	54	48	48	48	48	48	48	30	30	30	30	30	30	

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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-9 Products

Table 1C		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < θ ≤ 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						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)						
B		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	
Roofs > 7° to 27°	110	96	96	84	72	60	54	84	84	84	72	60	54	72	72	72	72	60	54	
	115	96	84	84	72	60	54	78	78	78	72	60	54	72	72	72	72	60	54	
	120	96	84	84	72	60	54	78	78	78	72	60	54	66	66	66	66	60	54	
	130	96	84	78	72	60	54	72	72	72	72	60	54	60	60	60	60	60	54	
	140	84	84	78	72	60	54	72	72	72	72	60	54	54	54	54	54	54	54	
	150	84	84	78	72	60	54	66	66	66	66	60	54	48	48	48	48	48	48	
	160	78	78	78	72	60	54	60	60	60	60	60	54	48	48	48	48	48	48	
	170	78	78	78	72	60	54	54	54	54	54	54	54	42	42	42	42	42	42	
	180	72	72	72	72	60	54	54	54	54	54	54	54	36	36	36	36	36	36	
	200	66	66	66	66	60	54	48	48	48	48	48	48	30	30	30	30	30	30	

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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-12 Products

Table 1D		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $7 < \theta \leq 27$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
Exposure B	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	84	61	48	39	84	84	84	61	48	39	72	72	72	61	48	39
	115	96	84	84	61	48	39	78	78	78	61	48	39	72	72	72	61	48	39
	120	96	84	84	61	48	39	78	78	78	61	48	39	66	66	66	61	48	39
	130	96	84	78	61	48	39	72	72	72	61	48	39	60	60	60	60	48	39
	140	84	84	78	61	48	39	72	72	72	61	48	39	54	54	54	54	48	39
	150	84	84	78	61	48	39	66	66	66	61	48	39	48	48	48	48	48	39
	160	78	78	78	61	48	39	60	60	60	60	48	39	48	48	48	48	48	39
	170	78	78	78	61	48	39	54	54	54	54	48	39	42	42	42	42	42	39
	180	72	72	72	61	48	39	54	54	54	54	48	39	36	36	36	36	36	36
	200	66	66	66	61	48	39	48	48	48	48	48	39	30	30	30	30	30	30

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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMNC, QMNS, & QMSFT Products

Table 2A		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < θ ≤ 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						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)						
C		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	
Roofs > 7° to 27°	110	96	84	78	72	60	54	72	72	72	72	60	54	60	60	60	60	60	54	
	115	84	84	78	72	60	54	72	72	72	72	60	54	60	60	60	60	60	54	
	120	84	84	78	72	60	54	72	72	72	72	60	54	54	54	54	54	54	54	
	130	84	84	78	72	60	54	66	66	66	66	60	54	48	48	48	48	48	48	
	140	78	78	78	72	60	54	60	60	60	60	60	54	42	42	42	42	42	42	
	150	78	78	78	72	60	54	54	54	54	54	54	54	42	42	42	42	42	42	
	160	72	72	72	72	60	54	48	48	48	48	48	48	36	36	36	36	36	36	
	170	66	66	66	66	60	54	42	42	42	42	42	42	30	30	30	30	30	30	
	180	66	66	66	66	60	54	42	42	42	42	42	42	30	30	30	30	30	30	
	200	54	54	54	54	54	54	36	36	36	36	36	36	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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMUTM & QMLSH-7 Products

Table 2B		Roof Height: 0 - 30 feet											Panel Orientation: Portrait							
		Roof Angle: $7 < \theta \leq 27$ degrees											Rafter Species: Douglas Fir							
													Specific Gravity: 0.5							
Exposure C	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	84	78	72	60	54	72	72	72	72	60	54	60	60	60	60	60	54	
	115	84	84	78	72	60	54	72	72	72	72	60	54	60	60	60	60	60	54	
	120	84	84	78	72	60	54	72	72	72	72	60	54	54	54	54	54	54	54	
	130	84	84	78	72	60	54	66	66	66	66	60	54	48	48	48	48	48	48	
	140	78	78	78	72	60	54	60	60	60	60	60	54	42	42	42	42	42	42	
	150	78	78	78	72	60	54	54	54	54	54	54	54	42	42	42	42	42	42	
	160	72	72	72	72	60	54	48	48	48	48	48	48	36	36	36	36	36	36	
	170	66	66	66	66	60	54	42	42	42	42	42	42	30	30	30	30	30	30	
	180	66	66	66	66	60	54	42	42	42	42	42	42	30	30	30	30	30	30	
	200	54	54	54	54	54	54	36	36	36	36	36	36	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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-9 Products

Table 2C		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $7 < \theta \leq 27$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
Exposure C	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	84	78	72	60	54	72	72	72	72	60	54	60	60	60	60	60	54
	115	84	84	78	72	60	54	72	72	72	72	60	54	60	60	60	60	60	54
	120	84	84	78	72	60	54	72	72	72	72	60	54	54	54	54	54	54	54
	130	84	84	78	72	60	54	66	66	66	66	60	54	48	48	48	48	48	48
	140	78	78	78	72	60	54	60	60	60	60	60	54	42	42	42	42	42	42
	150	78	78	78	72	60	54	54	54	54	54	54	54	42	42	42	42	42	42
	160	72	72	72	72	60	54	48	48	48	48	48	48	36	36	36	36	36	36
	170	66	66	66	66	60	54	42	42	42	42	42	42	30	30	30	30	30	30
	180	66	66	66	66	60	54	42	42	42	42	42	42	30	30	30	30	30	30
	200	54	54	54	54	54	54	36	36	36	36	36	36	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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-12 Products

Table 2D		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < θ ≤ 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						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)						
C		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	
Roofs > 7° to 27°	110	96	84	78	61	48	39	72	72	72	61	48	39	60	60	60	60	48	39	
	115	84	84	78	61	48	39	72	72	72	61	48	39	60	60	60	60	48	39	
	120	84	84	78	61	48	39	72	72	72	61	48	39	54	54	54	54	48	39	
	130	84	84	78	61	48	39	66	66	66	61	48	39	48	48	48	48	48	39	
	140	78	78	78	61	48	39	60	60	60	60	48	39	42	42	42	42	42	39	
	150	78	78	78	61	48	39	54	54	54	54	48	39	42	42	42	42	42	39	
	160	72	72	72	61	48	39	48	48	48	48	48	39	36	36	36	36	36	36	
	170	66	66	66	61	48	39	42	42	42	42	42	39	30	30	30	30	30	30	
	180	66	66	66	61	48	39	42	42	42	42	42	39	30	30	30	30	30	30	
	200	54	54	54	54	48	39	36	36	36	36	36	36	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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMNC, QMNS, & QMSFT Products

Table 3A		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < θ ≤ 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						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)						
D		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	
Roofs > 7° to 27°	110	84	84	78	72	60	54	72	72	72	72	60	54	54	54	54	54	54	54	
	115	84	84	78	72	60	54	66	66	66	66	60	54	48	48	48	48	48	48	
	120	84	84	78	72	60	54	66	66	66	66	60	54	48	48	48	48	48	48	
	130	78	78	78	72	60	54	60	60	60	60	60	54	42	42	42	42	42	42	
	140	72	72	72	72	60	54	54	54	54	54	54	54	36	36	36	36	36	36	
	150	72	72	72	72	60	54	48	48	48	48	48	48	36	36	36	36	36	36	
	160	66	66	66	66	60	54	42	42	42	42	42	42	30	30	30	30	30	30	
	170	60	60	60	60	60	54	42	42	42	42	42	42	24	24	24	24	24	24	
	180	60	60	60	60	60	54	36	36	36	36	36	36	24	24	24	24	24	24	
	200	48	48	48	48	48	48	30	30	30	30	30	30	18	18	18	18	18	18	

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMUTM & QMLSH-7 Products

Table 3B		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $7 < \theta \leq 27$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
Exposure D	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	84	84	78	72	60	54	72	72	72	72	60	54	54	54	54	54	54	54
	115	84	84	78	72	60	54	66	66	66	66	60	54	48	48	48	48	48	48
	120	84	84	78	72	60	54	66	66	66	66	60	54	48	48	48	48	48	48
	130	78	78	78	72	60	54	60	60	60	60	60	54	42	42	42	42	42	42
	140	72	72	72	72	60	54	54	54	54	54	54	54	36	36	36	36	36	36
	150	72	72	72	72	60	54	48	48	48	48	48	48	36	36	36	36	36	36
	160	66	66	66	66	60	54	42	42	42	42	42	42	30	30	30	30	30	30
	170	60	60	60	60	60	54	42	42	42	42	42	42	24	24	24	24	24	24
	180	60	60	60	60	60	54	36	36	36	36	36	36	24	24	24	24	24	24
	200	48	48	48	48	48	48	30	30	30	30	30	30	18	18	18	18	18	18

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-9 Products

Table 3C		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $7 < \theta \leq 27$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
Exposure D	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	84	84	78	72	60	54	72	72	72	72	60	54	54	54	54	54	54	54
	115	84	84	78	72	60	54	66	66	66	66	60	54	48	48	48	48	48	48
	120	84	84	78	72	60	54	66	66	66	66	60	54	48	48	48	48	48	48
	130	78	78	78	72	60	54	60	60	60	60	60	54	42	42	42	42	42	42
	140	72	72	72	72	60	54	54	54	54	54	54	54	36	36	36	36	36	36
	150	72	72	72	72	60	54	48	48	48	48	48	48	36	36	36	36	36	36
	160	66	66	66	66	60	54	42	42	42	42	42	42	30	30	30	30	30	30
	170	60	60	60	60	60	54	42	42	42	42	42	42	24	24	24	24	24	24
	180	60	60	60	60	60	54	36	36	36	36	36	36	24	24	24	24	24	24
	200	48	48	48	48	48	48	30	30	30	30	30	30	18	18	18	18	18	18

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-12 Products

Table 3D		Roof Height:	0 - 30 feet											Panel Orientation:	Portrait					
		Roof Angle:	7 < θ ≤ 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						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)						
D		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	
Roofs > 7° to 27°	110	84	84	78	61	48	39	72	72	72	61	48	39	54	54	54	54	48	39	
	115	84	84	78	61	48	39	66	66	66	61	48	39	48	48	48	48	48	39	
	120	84	84	78	61	48	39	66	66	66	61	48	39	48	48	48	48	48	39	
	130	78	78	78	61	48	39	60	60	60	60	48	39	42	42	42	42	42	39	
	140	72	72	72	61	48	39	54	54	54	54	48	39	36	36	36	36	36	36	
	150	72	72	72	61	48	39	48	48	48	48	48	39	36	36	36	36	36	36	
	160	66	66	66	61	48	39	42	42	42	42	42	39	30	30	30	30	30	30	
	170	60	60	60	60	48	39	42	42	42	42	42	39	24	24	24	24	24	24	
	180	60	60	60	60	48	39	36	36	36	36	36	36	24	24	24	24	24	24	
	200	48	48	48	48	48	39	30	30	30	30	30	30	18	18	18	18	18	18	

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMNC, QMNS, & QMSFT Products

Table 4A		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	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	84	84	84	78	66	54	84	84	84	78	66	54	84	84	84	78	66	54
	115	84	84	84	78	66	54	84	84	84	78	66	54	84	84	84	78	66	54
	120	84	84	84	78	66	54	84	84	84	78	66	54	84	84	84	78	66	54
	130	84	84	78	78	66	54	84	84	78	78	66	54	84	84	78	78	66	54
	140	78	78	78	78	66	54	78	78	78	78	66	54	78	78	78	78	66	54
	150	78	78	78	72	66	54	78	78	78	72	66	54	78	78	78	72	66	54
	160	78	78	72	72	66	54	72	72	72	72	66	54	72	72	72	72	66	54
	170	72	72	72	72	66	54	72	72	72	72	66	54	72	72	72	72	66	54
	180	72	72	72	66	66	54	66	66	66	66	66	54	66	66	66	66	66	54
	200	66	66	66	60	60	54	60	60	60	60	60	54	60	60	60	60	60	54

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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMUTM & QMLSH-7 Products

Table 4B		Roof Height: 0 - 30 feet											Panel Orientation: Portrait							
		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						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)						
B		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	
Roofs >27° to 45°	110	84	84	84	77	61	50	84	84	84	77	61	50	84	84	84	77	61	50	
	115	84	84	84	77	61	50	84	84	84	77	61	50	84	84	84	77	61	50	
	120	84	84	84	77	61	50	84	84	84	77	61	50	84	84	84	77	61	50	
	130	84	84	78	77	61	50	84	84	78	77	61	50	84	84	78	77	61	50	
	140	78	78	78	77	61	50	78	78	78	77	61	50	78	78	78	77	61	50	
	150	78	78	78	72	61	50	78	78	78	72	61	50	78	78	78	72	61	50	
	160	78	78	72	72	61	50	72	72	72	72	61	50	72	72	72	72	61	50	
	170	72	72	72	72	61	50	72	72	72	72	61	50	72	72	72	72	61	50	
	180	72	72	72	66	61	50	66	66	66	66	61	50	66	66	66	66	61	50	
	200	66	66	66	60	60	50	60	60	60	60	60	50	60	60	60	60	60	50	

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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-9 Products

Table 4C		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		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					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)					
B		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	84	84	84	77	61	50	84	84	84	77	61	50	84	84	84	77	61	50
	115	84	84	84	77	61	50	84	84	84	77	61	50	84	84	84	77	61	50
	120	84	84	84	77	61	50	84	84	84	77	61	50	84	84	84	77	61	50
	130	84	84	78	77	61	50	84	84	78	77	61	50	84	84	78	77	61	50
	140	78	78	78	77	61	50	78	78	78	77	61	50	78	78	78	77	61	50
	150	78	78	78	72	61	50	78	78	78	72	61	50	78	78	78	72	61	50
	160	78	78	72	72	61	50	72	72	72	72	61	50	72	72	72	72	61	50
	170	72	72	72	72	61	50	72	72	72	72	61	50	72	72	72	72	61	50
	180	72	72	72	66	61	50	66	66	66	66	61	50	66	66	66	66	61	50
	200	66	66	66	60	60	50	60	60	60	60	60	50	60	60	60	60	60	50

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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-12 Products

Table 4D		Roof Height: 0 - 30 feet						Roof Angle: $27 < \theta \leq 45$ degrees						Panel Orientation: Portrait					
		Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
Exposure B	Ultimate Wind Speed, V (mph)	Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	84	84	69	51	40	33	84	84	69	51	40	33	84	84	69	51	40	33
	115	84	84	69	51	40	33	84	84	69	51	40	33	84	84	69	51	40	33
	120	84	84	69	51	40	33	84	84	69	51	40	33	84	84	69	51	40	33
	130	84	84	69	51	40	33	84	84	69	51	40	33	84	84	69	51	40	33
	140	78	78	69	51	40	33	78	78	69	51	40	33	78	78	69	51	40	33
	150	78	78	69	51	40	33	78	78	69	51	40	33	78	78	69	51	40	33
	160	78	78	69	51	40	33	72	72	69	51	40	33	72	72	69	51	40	33
	170	72	72	69	51	40	33	72	72	69	51	40	33	72	72	69	51	40	33
	180	72	72	69	51	40	33	66	66	66	51	40	33	66	66	66	51	40	33
	200	66	66	66	51	40	33	60	60	60	51	40	33	60	60	60	51	40	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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMNC, QMNS, & QMSFT Products

Table 5A		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
Exposure C	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	84	84	78	78	66	54	84	84	78	78	66	54	84	84	78	78	66	54
	115	84	84	78	78	66	54	78	78	78	78	66	54	78	78	78	78	66	54
	120	78	78	78	72	66	54	78	78	78	72	66	54	78	78	78	72	66	54
	130	78	78	78	72	66	54	72	72	72	72	66	54	72	72	72	72	66	54
	140	72	72	72	72	66	54	72	72	72	72	66	54	72	72	72	72	66	54
	150	72	72	72	66	66	54	66	66	66	66	66	54	66	66	66	66	66	54
	160	66	66	66	66	60	54	60	60	60	60	60	54	60	60	60	60	60	54
	170	66	66	66	60	60	54	54	54	54	54	54	54	54	54	54	54	54	54
	180	60	60	60	60	54	54	54	54	54	54	54	54	54	54	54	54	54	54
	200	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMUTM & QMLSH-7 Products

Table 5B		Roof Height: 0 - 30 feet											Panel Orientation: Portrait							
		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						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)						
C		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	
Roofs >27° to 45°	110	84	84	78	77	61	50	84	84	78	77	61	50	84	84	78	77	61	50	
	115	84	84	78	77	61	50	78	78	78	77	61	50	78	78	78	77	61	50	
	120	78	78	78	72	61	50	78	78	78	72	61	50	78	78	78	72	61	50	
	130	78	78	78	72	61	50	72	72	72	72	61	50	72	72	72	72	61	50	
	140	72	72	72	72	61	50	72	72	72	72	61	50	72	72	72	72	61	50	
	150	72	72	72	66	61	50	66	66	66	66	61	50	66	66	66	66	61	50	
	160	66	66	66	66	60	50	60	60	60	60	60	50	60	60	60	60	60	50	
	170	66	66	66	60	60	50	54	54	54	54	54	50	54	54	54	54	54	50	
	180	60	60	60	60	54	50	54	54	54	54	54	50	54	54	54	54	54	50	
	200	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	

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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-9 Products

Table 5C		Roof Height: 0 - 30 feet											Panel Orientation: Portrait							
		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						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)						
C		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	
Roofs >27° to 45°	110	84	84	78	77	61	50	84	84	78	77	61	50	84	84	78	77	61	50	
	115	84	84	78	77	61	50	78	78	78	77	61	50	78	78	78	77	61	50	
	120	78	78	78	72	61	50	78	78	78	72	61	50	78	78	78	72	61	50	
	130	78	78	78	72	61	50	72	72	72	72	61	50	72	72	72	72	61	50	
	140	72	72	72	72	61	50	72	72	72	72	61	50	72	72	72	72	61	50	
	150	72	72	72	66	61	50	66	66	66	66	61	50	66	66	66	66	61	50	
	160	66	66	66	66	60	50	60	60	60	60	60	50	60	60	60	60	60	50	
	170	66	66	66	60	60	50	54	54	54	54	54	50	54	54	54	54	54	50	
	180	60	60	60	60	54	50	54	54	54	54	54	50	54	54	54	54	54	50	
	200	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	

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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-12 Products

Table 5D		Roof Height: 0 - 30 feet											Panel Orientation: Portrait						
		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					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)					
C		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	84	84	69	51	40	33	84	84	69	51	40	33	84	84	69	51	40	33
	115	84	84	69	51	40	33	78	78	69	51	40	33	78	78	69	51	40	33
	120	78	78	69	51	40	33	78	78	69	51	40	33	78	78	69	51	40	33
	130	78	78	69	51	40	33	72	72	69	51	40	33	72	72	69	51	40	33
	140	72	72	69	51	40	33	72	72	69	51	40	33	72	72	69	51	40	33
	150	72	72	69	51	40	33	66	66	66	51	40	33	66	66	66	51	40	33
	160	66	66	66	51	40	33	60	60	60	51	40	33	60	60	60	51	40	33
	170	66	66	66	51	40	33	54	54	54	51	40	33	54	54	54	51	40	33
	180	60	60	60	51	40	33	54	54	54	51	40	33	54	54	54	51	40	33
	200	48	48	48	48	40	33	48	48	48	48	40	33	48	48	48	48	40	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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMNC, QMNS, & QMSFT Products

Table 6A		Roof Height: 0 - 30 feet		Panel Orientation: Portrait															
		Roof Angle: $27 < \theta \leq 45$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
Exposure D	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	78	78	78	72	66	54	78	78	78	72	66	54	78	78	78	72	66	54
	115	78	78	78	72	66	54	78	78	78	72	66	54	78	78	78	72	66	54
	120	78	78	78	72	66	54	72	72	72	72	66	54	72	72	72	72	66	54
	130	72	72	72	72	66	54	72	72	72	72	66	54	72	72	72	72	66	54
	140	72	72	72	66	66	54	66	66	66	66	66	54	66	66	66	66	66	54
	150	66	66	66	66	60	54	60	60	60	60	60	54	60	60	60	60	60	54
	160	60	60	60	60	60	54	54	54	54	54	54	54	54	54	54	54	54	54
	170	60	60	60	60	54	54	48	48	48	48	48	48	48	48	48	48	48	48
	180	54	54	54	54	54	48	48	48	48	48	48	48	48	48	48	48	48	48
200	48	48	48	48	48	48	42	42	42	42	42	42	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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMUTM & QMLSH-7 Products

Table 6B		Roof Height: 0 - 30 feet						Roof Angle: $27 < \theta \leq 45$ degrees						Panel Orientation: Portrait					
		Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
Exposure	Ultimate Wind Speed, V (mph)	Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	78	78	78	72	61	50	78	78	78	72	61	50	78	78	78	72	61	50
	115	78	78	78	72	61	50	78	78	78	72	61	50	78	78	78	72	61	50
	120	78	78	78	72	61	50	72	72	72	72	61	50	72	72	72	72	61	50
	130	72	72	72	72	61	50	72	72	72	72	61	50	72	72	72	72	61	50
	140	72	72	72	66	61	50	66	66	66	66	61	50	66	66	66	66	61	50
	150	66	66	66	66	60	50	60	60	60	60	60	50	60	60	60	60	60	50
	160	60	60	60	60	60	50	54	54	54	54	54	50	54	54	54	54	54	50
	170	60	60	60	60	54	50	48	48	48	48	48	48	48	48	48	48	48	48
	180	54	54	54	54	54	48	48	48	48	48	48	48	48	48	48	48	48	48
	200	48	48	48	48	48	48	42	42	42	42	42	42	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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-9 Products

Table 6C		Roof Height: 0 - 30 feet											Panel Orientation: Portrait							
		Roof Angle: $27 < \theta \leq 45$ degrees											Rafter Species: Douglas Fir							
Exposure D		Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1					Roof Wind Pressure Zone 2					Roof Wind Pressure Zone 3							
			Ground Snow Load (psf)					Ground Snow Load (psf)					Ground 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	78	78	78	72	61	50	78	78	78	72	61	50	78	78	78	72	61	50	
	115	78	78	78	72	61	50	78	78	78	72	61	50	78	78	78	72	61	50	
	120	78	78	78	72	61	50	72	72	72	72	61	50	72	72	72	72	61	50	
	130	72	72	72	72	61	50	72	72	72	72	61	50	72	72	72	72	61	50	
	140	72	72	72	66	61	50	66	66	66	66	61	50	66	66	66	66	61	50	
	150	66	66	66	66	60	50	60	60	60	60	60	50	60	60	60	60	60	50	
	160	60	60	60	60	60	50	54	54	54	54	54	50	54	54	54	54	54	50	
	170	60	60	60	60	54	50	48	48	48	48	48	48	48	48	48	48	48	48	
	180	54	54	54	54	54	48	48	48	48	48	48	48	48	48	48	48	48	48	
200	48	48	48	48	48	48	42	42	42	42	42	42	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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-12 Products

Table 6D		Roof Height: 0 - 30 feet						Roof Angle: $27 < \theta \leq 45$ degrees						Panel Orientation: Portrait					
		Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
Exposure	Ultimate Wind Speed, V (mph)	Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	78	78	69	51	40	33	78	78	69	51	40	33	78	78	69	51	40	33
	115	78	78	69	51	40	33	78	78	69	51	40	33	78	78	69	51	40	33
	120	78	78	69	51	40	33	72	72	69	51	40	33	72	72	69	51	40	33
	130	72	72	69	51	40	33	72	72	69	51	40	33	72	72	69	51	40	33
	140	72	72	69	51	40	33	66	66	66	51	40	33	66	66	66	51	40	33
	150	66	66	66	51	40	33	60	60	60	51	40	33	60	60	60	51	40	33
	160	60	60	60	51	40	33	54	54	54	51	40	33	54	54	54	51	40	33
	170	60	60	60	51	40	33	48	48	48	48	40	33	48	48	48	48	40	33
	180	54	54	54	51	40	33	48	48	48	48	40	33	48	48	48	48	40	33
	200	48	48	48	48	40	33	42	42	42	42	40	33	42	42	42	42	40	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 67"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMNC, QMNS, & QMSFT Products

Table 7A		Roof Height:	0 - 30 feet											Panel Orientation: Landscape					
		Roof Angle:	7 < θ ≤ 27 degrees											Rafter Species: Douglas Fir					
Exposure B		Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1					Roof Wind Pressure Zone 2					Roof Wind Pressure Zone 3						
			Ground Snow Load (psf)					Ground Snow Load (psf)					Ground Snow Load (psf)						
			0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40
Roofs > 7° to 27°	110	96	96	96	84	84	72	96	96	96	84	84	72	84	84	84	84	84	72
	115	96	96	96	84	84	72	96	96	96	84	84	72	78	78	78	78	78	72
	120	96	96	96	84	84	72	84	84	84	84	84	72	78	78	78	78	78	72
	130	96	96	96	84	84	72	84	84	84	84	84	72	78	78	78	78	78	72
	140	96	96	96	84	84	72	84	84	84	84	84	72	72	72	72	72	72	72
	150	96	96	84	84	78	72	78	78	78	78	78	72	66	66	66	66	66	66
	160	96	96	84	84	78	72	78	78	78	78	78	72	60	60	60	60	60	60
	170	84	84	84	84	78	72	72	72	72	72	72	72	60	60	60	60	60	60
	180	84	84	84	84	78	72	72	72	72	72	72	72	54	54	54	54	54	54
	200	78	78	78	78	78	72	60	60	60	60	60	60	48	48	48	48	48	48

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMUTM & QMLSH-7 Products

Table 7B		Roof Height: 0 - 30 feet		Panel Orientation: Landscape															
		Roof Angle: $7 < \theta \leq 27$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
Exposure B	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	96	84	84	72	96	96	96	84	84	72	84	84	84	84	84	72
	115	96	96	96	84	84	72	96	96	96	84	84	72	78	78	78	78	78	72
	120	96	96	96	84	84	72	84	84	84	84	84	72	78	78	78	78	78	72
	130	96	96	96	84	84	72	84	84	84	84	84	72	78	78	78	78	78	72
	140	96	96	96	84	84	72	84	84	84	84	84	72	72	72	72	72	72	72
	150	96	96	84	84	78	72	78	78	78	78	78	72	66	66	66	66	66	66
	160	96	96	84	84	78	72	78	78	78	78	78	72	60	60	60	60	60	60
	170	84	84	84	84	78	72	72	72	72	72	72	72	60	60	60	60	60	60
	180	84	84	84	84	78	72	72	72	72	72	72	72	54	54	54	54	54	54
	200	78	78	78	78	78	72	60	60	60	60	60	60	48	48	48	48	48	48

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-9 Products

Table 7C		Roof Height:	0 - 30 feet											Panel Orientation:	Landscape					
		Roof Angle:	7 < θ ≤ 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						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)						
B		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	
Roofs > 7° to 27°	110	96	96	96	84	84	72	96	96	96	84	84	72	84	84	84	84	84	72	
	115	96	96	96	84	84	72	96	96	96	84	84	72	78	78	78	78	78	72	
	120	96	96	96	84	84	72	84	84	84	84	84	72	78	78	78	78	78	72	
	130	96	96	96	84	84	72	84	84	84	84	84	72	78	78	78	78	78	72	
	140	96	96	96	84	84	72	84	84	84	84	84	72	72	72	72	72	72	72	
	150	96	96	84	84	78	72	78	78	78	78	78	72	66	66	66	66	66	66	
	160	96	96	84	84	78	72	78	78	78	78	78	72	60	60	60	60	60	60	
	170	84	84	84	84	78	72	72	72	72	72	72	72	60	60	60	60	60	60	
	180	84	84	84	84	78	72	72	72	72	72	72	72	54	54	54	54	54	54	
	200	78	78	78	78	78	72	60	60	60	60	60	60	48	48	48	48	48	48	

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-12 Products

Table 7D		Roof Height:	0 - 30 feet											Panel Orientation: Landscape					
		Roof Angle:	7 < θ ≤ 27 degrees											Rafter Species: Douglas Fir					
Exposure B		Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1					Roof Wind Pressure Zone 2					Roof Wind Pressure Zone 3						
			Ground Snow Load (psf)					Ground Snow Load (psf)					Ground Snow Load (psf)						
			0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40
Roofs > 7° to 27°	110	96	96	96	84	76	63	96	96	96	84	76	63	84	84	84	84	76	63
	115	96	96	96	84	76	63	96	96	96	84	76	63	78	78	78	78	76	63
	120	96	96	96	84	76	63	84	84	84	84	76	63	78	78	78	78	76	63
	130	96	96	96	84	76	63	84	84	84	84	76	63	78	78	78	78	76	63
	140	96	96	96	84	76	63	84	84	84	84	76	63	72	72	72	72	72	63
	150	96	96	84	84	76	63	78	78	78	78	76	63	66	66	66	66	66	63
	160	96	96	84	84	76	63	78	78	78	78	76	63	60	60	60	60	60	60
	170	84	84	84	84	76	63	72	72	72	72	72	63	60	60	60	60	60	60
	180	84	84	84	84	76	63	72	72	72	72	72	63	54	54	54	54	54	54
	200	78	78	78	78	76	63	60	60	60	60	60	60	48	48	48	48	48	48

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMNC, QMNS, & QMSFT Products

Table 8A		Roof Height:	0 - 30 feet											Panel Orientation:	Landscape					
		Roof Angle:	7 < θ ≤ 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						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)						
C		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	
Roofs > 7° to 27°	110	96	96	96	84	84	72	84	84	84	84	84	72	78	78	78	78	78	72	
	115	96	96	96	84	84	72	84	84	84	84	84	72	72	72	72	72	72	72	
	120	96	96	84	84	84	72	78	78	78	78	78	72	72	72	72	72	72	72	
	130	96	96	84	84	78	72	78	78	78	78	78	72	66	66	66	66	66	66	
	140	84	84	84	84	78	72	72	72	72	72	72	72	60	60	60	60	60	60	
	150	84	84	84	84	78	72	72	72	72	72	72	72	54	54	54	54	54	54	
	160	84	84	84	78	78	72	66	66	66	66	66	66	48	48	48	48	48	48	
	170	78	78	78	78	78	72	60	60	60	60	60	60	48	48	48	48	48	48	
	180	78	78	78	78	78	72	54	54	54	54	54	54	42	42	42	42	42	42	
	200	72	72	72	72	72	72	48	48	48	48	48	48	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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMUTM & QMLSH-7 Products

Table 8B		Roof Height: 0 - 30 feet		Panel Orientation: Landscape															
		Roof Angle: $7 < \theta \leq 27$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
Exposure C	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	96	84	84	72	84	84	84	84	84	72	78	78	78	78	78	72
	115	96	96	96	84	84	72	84	84	84	84	84	72	72	72	72	72	72	72
	120	96	96	84	84	84	72	78	78	78	78	78	72	72	72	72	72	72	72
	130	96	96	84	84	78	72	78	78	78	78	78	72	66	66	66	66	66	66
	140	84	84	84	84	78	72	72	72	72	72	72	72	60	60	60	60	60	60
	150	84	84	84	84	78	72	72	72	72	72	72	72	54	54	54	54	54	54
	160	84	84	84	78	78	72	66	66	66	66	66	66	48	48	48	48	48	48
	170	78	78	78	78	78	72	60	60	60	60	60	60	48	48	48	48	48	48
	180	78	78	78	78	78	72	54	54	54	54	54	54	42	42	42	42	42	42
	200	72	72	72	72	72	72	48	48	48	48	48	48	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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-9 Products

Table 8C		Roof Height: 0 - 30 feet		Panel Orientation: Landscape															
		Roof Angle: $7 < \theta \leq 27$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
Exposure C	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	96	84	84	72	84	84	84	84	84	72	78	78	78	78	78	72
	115	96	96	96	84	84	72	84	84	84	84	84	72	72	72	72	72	72	72
	120	96	96	84	84	84	72	78	78	78	78	78	72	72	72	72	72	72	72
	130	96	96	84	84	78	72	78	78	78	78	78	72	66	66	66	66	66	66
	140	84	84	84	84	78	72	72	72	72	72	72	72	60	60	60	60	60	60
	150	84	84	84	84	78	72	72	72	72	72	72	72	54	54	54	54	54	54
	160	84	84	84	78	78	72	66	66	66	66	66	66	48	48	48	48	48	48
	170	78	78	78	78	78	72	60	60	60	60	60	60	48	48	48	48	48	48
	180	78	78	78	78	78	72	54	54	54	54	54	54	42	42	42	42	42	42
	200	72	72	72	72	72	72	48	48	48	48	48	48	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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-12 Products

Table 8D		Roof Height:	0 - 30 feet											Panel Orientation:	Landscape					
		Roof Angle:	7 < θ ≤ 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						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)						
C		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	
Roofs > 7° to 27°	110	96	96	96	84	76	63	84	84	84	84	76	63	78	78	78	78	76	63	
	115	96	96	96	84	76	63	84	84	84	84	76	63	72	72	72	72	72	63	
	120	96	96	84	84	76	63	78	78	78	78	76	63	72	72	72	72	72	63	
	130	96	96	84	84	76	63	78	78	78	78	76	63	66	66	66	66	66	63	
	140	84	84	84	84	76	63	72	72	72	72	72	63	60	60	60	60	60	60	
	150	84	84	84	84	76	63	72	72	72	72	72	63	54	54	54	54	54	54	
	160	84	84	84	78	76	63	66	66	66	66	66	63	48	48	48	48	48	48	
	170	78	78	78	78	76	63	60	60	60	60	60	60	48	48	48	48	48	48	
	180	78	78	78	78	76	63	54	54	54	54	54	54	42	42	42	42	42	42	
	200	72	72	72	72	72	63	48	48	48	48	48	48	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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMNC, QMNS, & QMSFT Products

Table 9A		Roof Height:	0 - 30 feet											Panel Orientation: Landscape						
		Roof Angle:	7 < θ ≤ 27 degrees											Rafter Species: Douglas Fir						
D		Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
			Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	84	84	84	72	78	78	78	78	78	72	72	72	72	72	72	72	
	115	96	96	84	84	78	72	78	78	78	78	78	72	66	66	66	66	66	66	
	120	96	96	84	84	78	72	78	78	78	78	78	72	66	66	66	66	66	66	
	130	84	84	84	84	78	72	72	72	72	72	72	72	60	60	60	60	60	60	
	140	84	84	84	84	78	72	66	66	66	66	66	66	54	54	54	54	54	54	
	150	84	84	84	78	78	72	66	66	66	66	66	66	48	48	48	48	48	48	
	160	78	78	78	78	78	72	60	60	60	60	60	60	42	42	42	42	42	42	
	170	78	78	78	78	78	72	54	54	54	54	54	54	42	42	42	42	42	42	
	180	72	72	72	72	72	72	48	48	48	48	48	48	36	36	36	36	36	36	
	200	66	66	66	66	66	66	42	42	42	42	42	42	30	30	30	30	30	30	

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMUTM & QMLSH-7 Products

Table 9B		Roof Height: 0 - 30 feet						Roof Angle: $7 < \theta \leq 27$ degrees						Panel Orientation: Landscape					
		Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
Exposure D	Ultimate Wind Speed, V (mph)	Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	84	84	84	72	78	78	78	78	78	72	72	72	72	72	72	72
	115	96	96	84	84	78	72	78	78	78	78	78	72	66	66	66	66	66	66
	120	96	96	84	84	78	72	78	78	78	78	78	72	66	66	66	66	66	66
	130	84	84	84	84	78	72	72	72	72	72	72	72	60	60	60	60	60	60
	140	84	84	84	84	78	72	66	66	66	66	66	66	66	54	54	54	54	54
	150	84	84	84	78	78	72	66	66	66	66	66	66	66	48	48	48	48	48
	160	78	78	78	78	78	72	60	60	60	60	60	60	60	42	42	42	42	42
	170	78	78	78	78	78	72	54	54	54	54	54	54	54	42	42	42	42	42
	180	72	72	72	72	72	72	48	48	48	48	48	48	48	36	36	36	36	36
	200	66	66	66	66	66	66	42	42	42	42	42	42	42	30	30	30	30	30

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-9 Products

Table 9C		Roof Height:	0 - 30 feet											Panel Orientation:	Landscape					
		Roof Angle:	7 < θ ≤ 27 degrees											Rafter Species:	Douglas Fir					
														Specific Gravity:	0.5					
Exposure D	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	84	84	84	72	78	78	78	78	78	72	72	72	72	72	72	72	
	115	96	96	84	84	78	72	78	78	78	78	78	72	66	66	66	66	66	66	
	120	96	96	84	84	78	72	78	78	78	78	78	72	66	66	66	66	66	66	
	130	84	84	84	84	78	72	72	72	72	72	72	72	60	60	60	60	60	60	
	140	84	84	84	84	78	72	66	66	66	66	66	66	54	54	54	54	54	54	
	150	84	84	84	78	78	72	66	66	66	66	66	66	48	48	48	48	48	48	
	160	78	78	78	78	78	72	60	60	60	60	60	60	42	42	42	42	42	42	
	170	78	78	78	78	78	72	54	54	54	54	54	54	42	42	42	42	42	42	
	180	72	72	72	72	72	72	48	48	48	48	48	48	36	36	36	36	36	36	
	200	66	66	66	66	66	66	42	42	42	42	42	42	30	30	30	30	30	30	

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-12 Products

Table 9D		Roof Height: 0 - 30 feet		Panel Orientation: Landscape															
		Roof Angle: $7 < \theta \leq 27$ degrees		Rafter Species: Douglas Fir Specific Gravity: 0.5															
Exposure D	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	84	84	76	63	78	78	78	78	76	63	72	72	72	72	72	63
	115	96	96	84	84	76	63	78	78	78	78	76	63	66	66	66	66	66	63
	120	96	96	84	84	76	63	78	78	78	78	76	63	66	66	66	66	66	63
	130	84	84	84	84	76	63	72	72	72	72	72	63	60	60	60	60	60	60
	140	84	84	84	84	76	63	66	66	66	66	66	63	54	54	54	54	54	54
	150	84	84	84	78	76	63	66	66	66	66	66	63	48	48	48	48	48	48
	160	78	78	78	78	76	63	60	60	60	60	60	60	42	42	42	42	42	42
	170	78	78	78	78	76	63	54	54	54	54	54	54	42	42	42	42	42	42
	180	72	72	72	72	72	63	48	48	48	48	48	48	36	36	36	36	36	36
	200	66	66	66	66	66	63	42	42	42	42	42	42	30	30	30	30	30	30

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMNC, QMNS, & QMSFT Products

Table 10A		Roof Height: 0 - 30 feet						Roof Angle: $27 < \theta \leq 45$ degrees						Panel Orientation: Landscape					
		Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
Exposure	Ultimate Wind Speed, V (mph)	Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	96	96	84	84	84	96	96	96	84	84	84	96	96	96	84	84	84
	115	96	96	96	84	84	84	96	96	96	84	84	84	96	96	96	84	84	84
	120	96	96	96	84	84	84	96	96	96	84	84	84	96	96	96	84	84	84
	130	96	96	84	84	84	84	96	96	84	84	84	84	96	96	84	84	84	84
	140	96	96	84	84	84	78	84	84	84	84	84	78	84	84	84	84	84	78
	150	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	160	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	170	84	84	84	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	180	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	200	78	78	78	78	72	72	72	72	72	72	72	72	72	72	72	72	72	72

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMUTM & QMLSH-7 Products

Table 10B		Roof Height: 0 - 30 feet						Roof Angle: $27 < \theta \leq 45$ degrees						Panel Orientation: Landscape					
		Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
Exposure	Ultimate Wind Speed, V (mph)	Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	96	96	84	84	81	96	96	96	84	84	81	96	96	96	84	84	81
	115	96	96	96	84	84	81	96	96	96	84	84	81	96	96	96	84	84	81
	120	96	96	96	84	84	81	96	96	96	84	84	81	96	96	96	84	84	81
	130	96	96	84	84	84	81	96	96	84	84	84	81	96	96	84	84	84	81
	140	96	96	84	84	84	78	84	84	84	84	84	78	84	84	84	84	84	78
	150	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	160	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	170	84	84	84	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	180	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	200	78	78	78	78	72	72	72	72	72	72	72	72	72	72	72	72	72	72

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-9 Products

Table 10C		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					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)					
B		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	96	96	96	84	84	81	96	96	96	84	84	81	96	96	96	84	84	81
	115	96	96	96	84	84	81	96	96	96	84	84	81	96	96	96	84	84	81
	120	96	96	96	84	84	81	96	96	96	84	84	81	96	96	96	84	84	81
	130	96	96	84	84	84	81	96	96	84	84	84	81	96	96	84	84	84	81
	140	96	96	84	84	84	78	84	84	84	84	84	78	84	84	84	84	84	78
	150	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	160	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	170	84	84	84	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	180	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	200	78	78	78	78	72	72	72	72	72	72	72	72	72	72	72	72	72	72

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-12 Products

Table 10D		Roof Height: 0 - 30 feet						Roof Angle: $27 < \theta \leq 45$ degrees						Panel Orientation: Landscape					
		Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
Exposure B	Ultimate Wind Speed, V (mph)	Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	96	96	81	64	53	96	96	96	81	64	53	96	96	96	81	64	53
	115	96	96	96	81	64	53	96	96	96	81	64	53	96	96	96	81	64	53
	120	96	96	96	81	64	53	96	96	96	81	64	53	96	96	96	81	64	53
	130	96	96	84	81	64	53	96	96	84	81	64	53	96	96	84	81	64	53
	140	96	96	84	81	64	53	84	84	84	81	64	53	84	84	84	81	64	53
	150	84	84	84	81	64	53	84	84	84	81	64	53	84	84	84	81	64	53
	160	84	84	84	81	64	53	84	84	84	81	64	53	84	84	84	81	64	53
	170	84	84	84	78	64	53	78	78	78	78	64	53	78	78	78	78	64	53
	180	78	78	78	78	64	53	78	78	78	78	64	53	78	78	78	78	64	53
	200	78	78	78	78	64	53	72	72	72	72	64	53	72	72	72	72	64	53

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMNC, QMNS, & QMSFT Products

Table 11A		Roof Height: 0 - 30 feet						Roof Angle: $27 < \theta \leq 45$ degrees						Panel Orientation: Landscape					
		Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
Exposure	Ultimate Wind Speed, V (mph)	Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	96	84	84	84	84	96	96	84	84	84	84	96	96	84	84	84	84
	115	96	96	84	84	84	78	96	96	84	84	84	78	96	96	84	84	84	78
	120	84	84	84	84	84	78	84	84	84	84	84	78	84	84	84	84	84	78
	130	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	140	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	150	84	84	84	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	160	78	78	78	78	78	72	78	78	78	78	78	72	78	78	78	78	78	72
	170	78	78	78	78	72	72	72	72	72	72	72	72	72	72	72	72	72	72
	180	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
	200	66	66	66	66	66	66	60	60	60	60	60	60	60	60	60	60	60	60

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMUTM & QMLSH-7 Products

Table 11B		Roof Height: 0 - 30 feet						Roof Angle: $27 < \theta \leq 45$ degrees						Panel Orientation: Landscape					
		Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
Exposure	Ultimate Wind Speed, V (mph)	Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	96	84	84	84	81	96	96	84	84	84	81	96	96	84	84	84	81
	115	96	96	84	84	84	78	96	96	84	84	84	78	96	96	84	84	84	78
	120	84	84	84	84	84	78	84	84	84	84	84	78	84	84	84	84	84	78
	130	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	140	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	150	84	84	84	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	160	78	78	78	78	78	72	78	78	78	78	78	72	78	78	78	78	78	72
	170	78	78	78	78	72	72	72	72	72	72	72	72	72	72	72	72	72	72
	180	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
	200	66	66	66	66	66	66	60	60	60	60	60	60	60	60	60	60	60	60

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-9 Products

Table 11C		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					
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground Snow Load (psf)					
C		0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
Roofs >27° to 45°	110	96	96	84	84	84	81	96	96	84	84	84	81	96	96	84	84	84	81
	115	96	96	84	84	84	78	96	96	84	84	84	78	96	96	84	84	84	78
	120	84	84	84	84	84	78	84	84	84	84	84	78	84	84	84	84	84	78
	130	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	140	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	150	84	84	84	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	160	78	78	78	78	78	72	78	78	78	78	78	72	78	78	78	78	78	72
	170	78	78	78	78	72	72	72	72	72	72	72	72	72	72	72	72	72	72
	180	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
	200	66	66	66	66	66	66	60	60	60	60	60	60	60	60	60	60	60	60

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-12 Products

Table 11D		Roof Height: 0 - 30 feet						Roof Angle: $27 < \theta \leq 45$ degrees						Panel Orientation: Landscape					
		Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
Exposure	Ultimate Wind Speed, V (mph)	Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	96	96	84	81	64	53	96	96	84	81	64	53	96	96	84	81	64	53
	115	96	96	84	81	64	53	96	96	84	81	64	53	96	96	84	81	64	53
	120	84	84	84	81	64	53	84	84	84	81	64	53	84	84	84	81	64	53
	130	84	84	84	81	64	53	84	84	84	81	64	53	84	84	84	81	64	53
	140	84	84	84	81	64	53	84	84	84	81	64	53	84	84	84	81	64	53
	150	84	84	84	78	64	53	78	78	78	78	64	53	78	78	78	78	64	53
	160	78	78	78	78	64	53	78	78	78	78	64	53	78	78	78	78	64	53
	170	78	78	78	78	64	53	72	72	72	72	64	53	72	72	72	72	64	53
	180	72	72	72	72	64	53	72	72	72	72	64	53	72	72	72	72	64	53
	200	66	66	66	66	64	53	60	60	60	60	60	53	60	60	60	60	60	53

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMNC, QMNS, & QMSFT Products

Table 12A		Roof Height: 0 - 30 feet						Roof Angle: $27 < \theta \leq 45$ degrees						Panel Orientation: Landscape					
		Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
Exposure	Ultimate Wind Speed, V (mph)	Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	84	84	84	84	84	78	84	84	84	84	84	78	84	84	84	84	84	78
	115	84	84	84	84	84	78	84	84	84	84	84	78	84	84	84	84	84	78
	120	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	130	84	84	84	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	140	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	150	78	78	78	78	78	72	72	72	72	72	72	72	72	72	72	72	72	72
	160	78	78	78	78	72	72	72	72	72	72	72	72	72	72	72	72	72	72
	170	72	72	72	72	72	72	66	66	66	66	66	66	66	66	66	66	66	66
	180	72	72	72	72	72	66	66	66	66	66	66	66	66	66	66	66	66	66
	200	60	60	60	60	60	60	54	54	54	54	54	54	54	54	54	54	54	54

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMUTM & QMLSH-7 Products

Table 12B		Roof Height: 0 - 30 feet						Roof Angle: $27 < \theta \leq 45$ degrees						Panel Orientation: Landscape					
		Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
Exposure	Ultimate Wind Speed, V (mph)	Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	84	84	84	84	84	78	84	84	84	84	84	78	84	84	84	84	84	78
	115	84	84	84	84	84	78	84	84	84	84	84	78	84	84	84	84	84	78
	120	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78
	130	84	84	84	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	140	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	150	78	78	78	78	78	72	72	72	72	72	72	72	72	72	72	72	72	72
	160	78	78	78	78	72	72	72	72	72	72	72	72	72	72	72	72	72	72
	170	72	72	72	72	72	72	66	66	66	66	66	66	66	66	66	66	66	66
	180	72	72	72	72	72	66	66	66	66	66	66	66	66	66	66	66	66	66
	200	60	60	60	60	60	60	54	54	54	54	54	54	54	54	54	54	54	54

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-9 Products

Table 12C		Roof Height: 0 - 30 feet											Panel Orientation: Landscape							
		Roof Angle: $27 < \theta \leq 45$ degrees											Rafter Species: Douglas Fir							
Exposure D	Ultimate Wind Speed, V (mph)	Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3						
		Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	84	84	84	84	84	78	84	84	84	84	84	78	84	84	84	84	84	78	
	115	84	84	84	84	84	78	84	84	84	84	84	78	84	84	84	84	84	78	
	120	84	84	84	84	78	78	84	84	84	84	78	78	84	84	84	84	78	78	
	130	84	84	84	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	
	140	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	
	150	78	78	78	78	78	72	72	72	72	72	72	72	72	72	72	72	72	72	
	160	78	78	78	78	72	72	72	72	72	72	72	72	72	72	72	72	72	72	
	170	72	72	72	72	72	72	66	66	66	66	66	66	66	66	66	66	66	66	
	180	72	72	72	72	72	66	66	66	66	66	66	66	66	66	66	66	66	66	
	200	60	60	60	60	60	60	54	54	54	54	54	54	54	54	54	54	54	54	

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 landscape orientation with a maximum width of 42"

Rail Spans (in.) for Unirac Solarmount Light Rails for use with QMLSH-12 Products

Table 12D		Roof Height: 0 - 30 feet						Roof Angle: $27 < \theta \leq 45$ degrees						Panel Orientation: Landscape					
		Roof Wind Pressure Zone 1						Roof Wind Pressure Zone 2						Roof Wind Pressure Zone 3					
Exposure D	Ultimate Wind Speed, V (mph)	Ground Snow Load (psf)						Ground Snow Load (psf)						Ground 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	84	84	84	81	64	53	84	84	84	81	64	53	84	84	84	81	64	53
	115	84	84	84	81	64	53	84	84	84	81	64	53	84	84	84	81	64	53
	120	84	84	84	81	64	53	84	84	84	81	64	53	84	84	84	81	64	53
	130	84	84	84	78	64	53	78	78	78	78	64	53	78	78	78	78	64	53
	140	78	78	78	78	64	53	78	78	78	78	64	53	78	78	78	78	64	53
	150	78	78	78	78	64	53	72	72	72	72	64	53	72	72	72	72	64	53
	160	78	78	78	78	64	53	72	72	72	72	64	53	72	72	72	72	64	53
	170	72	72	72	72	64	53	66	66	66	66	64	53	66	66	66	66	64	53
	180	72	72	72	72	64	53	66	66	66	66	64	53	66	66	66	66	64	53
	200	60	60	60	60	60	53	54	54	54	54	54	53	54	54	54	54	54	53

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 landscape orientation with a maximum width of 42"