



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
IronRidge XR10 Roof Flush Mount System

SEI Project No.: 17054.00

Dear Mr. Green

Structural Engenuity Inc. (SEI) has completed its review of the Quickmount PV QBase Mount System for use in conjunction with the IronRidge XR10 Rail, Roof Flush Mount 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:

- Starling Madison Lofquist, Inc., IronRidge XR10 Rail, Roof Flush Mounting System – Structural Analysis, March 14, 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 IronRidge XR10 Rail, Roof Flush Mount 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 IronRidge XR10 Rail 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 IronRidge XR10 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 for IronRidge Series XR10 Roof Mount for use with QMNC, QMNS, & QMSFT Products

Table 1A		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	7 < θ ≤ 27 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	1					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	75	65	55	49	43	39	35	33	31	29		
	105	75	65	55	49	43	39	35	33	31	29		
	110	75	65	55	49	43	39	35	33	31	29		
	120	75	65	55	49	43	39	35	33	31	29		
	130	75	65	55	49	43	39	35	33	31	29		
	140	71	65	55	49	43	39	35	33	31	29		
	150	66	65	55	49	43	39	35	33	31	29		
	160	62	62	54	48	43	39	35	33	31	29		
Category C	100	75	65	55	49	43	39	35	33	31	29		
	105	75	65	55	49	43	39	35	33	31	29		
	110	75	65	55	49	43	39	35	33	31	29		
	120	70	65	55	49	43	39	35	33	31	29		
	130	65	64	54	48	43	39	35	33	31	29		
	140	60	60	53	48	43	39	35	33	31	29		
	150	56	56	52	47	43	39	35	33	31	29		
	160	53	53	51	46	42	39	35	33	31	29		
Category D	100	75	65	55	49	43	39	35	33	31	29		
	105	73	65	55	49	43	39	35	33	31	29		
	110	70	65	55	49	43	39	35	33	31	29		
	120	64	64	54	48	43	39	35	33	31	29		
	130	60	60	53	47	43	39	35	33	31	29		
	140	55	55	52	46	42	39	35	33	31	29		
	150	52	52	50	46	42	39	35	33	31	29		
	160	49	49	49	45	41	38	35	33	31	29		
170	46	46	46	44	40	37	35	33	31	29			

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMUTM & QMLSH-7 Products

Table 1B		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	7 < θ ≤ 27 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	1					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	75	65	55	49	43	39	35	33	31	29		
	105	75	65	55	49	43	39	35	33	31	29		
	110	75	65	55	49	43	39	35	33	31	29		
	120	75	65	55	49	43	39	35	33	31	29		
	130	75	65	55	49	43	39	35	33	31	29		
	140	71	65	55	49	43	39	35	33	31	29		
	150	66	65	55	49	43	39	35	33	31	29		
	160	62	62	54	48	43	39	35	33	31	29		
Category C	100	75	65	55	49	43	39	35	33	31	29		
	105	75	65	55	49	43	39	35	33	31	29		
	110	75	65	55	49	43	39	35	33	31	29		
	120	70	65	55	49	43	39	35	33	31	29		
	130	65	64	54	48	43	39	35	33	31	29		
	140	60	60	53	48	43	39	35	33	31	29		
	150	56	56	52	47	43	39	35	33	31	29		
	160	53	53	51	46	42	39	35	33	31	29		
Category D	100	75	65	55	49	43	39	35	33	31	29		
	105	73	65	55	49	43	39	35	33	31	29		
	110	70	65	55	49	43	39	35	33	31	29		
	120	64	64	54	48	43	39	35	33	31	29		
	130	60	60	53	47	43	39	35	33	31	29		
	140	55	55	52	46	42	39	35	33	31	29		
	150	52	52	50	46	42	39	35	33	31	29		
	160	49	49	49	45	41	38	35	33	31	29		
170	46	46	46	44	40	37	35	33	31	29			

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMLSH-9 Products

Table 1C		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	7 < θ ≤ 27 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	1					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	75	65	55	49	43	39	35	33	31	29		
	105	75	65	55	49	43	39	35	33	31	29		
	110	75	65	55	49	43	39	35	33	31	29		
	120	75	65	55	49	43	39	35	33	31	29		
	130	75	65	55	49	43	39	35	33	31	29		
	140	71	65	55	49	43	39	35	33	31	29		
	150	66	65	55	49	43	39	35	33	31	29		
	160	62	62	54	48	43	39	35	33	31	29		
Category C	100	75	65	55	49	43	39	35	33	31	29		
	105	75	65	55	49	43	39	35	33	31	29		
	110	75	65	55	49	43	39	35	33	31	29		
	120	70	65	55	49	43	39	35	33	31	29		
	130	65	64	54	48	43	39	35	33	31	29		
	140	60	60	53	48	43	39	35	33	31	29		
	150	56	56	52	47	43	39	35	33	31	29		
	160	53	53	51	46	42	39	35	33	31	29		
Category D	100	75	65	55	49	43	39	35	33	31	29		
	105	73	65	55	49	43	39	35	33	31	29		
	110	70	65	55	49	43	39	35	33	31	29		
	120	64	64	54	48	43	39	35	33	31	29		
	130	60	60	53	47	43	39	35	33	31	29		
	140	55	55	52	46	42	39	35	33	31	29		
	150	52	52	50	46	42	39	35	33	31	29		
	160	49	49	49	45	41	38	35	33	31	29		
170	46	46	46	44	40	37	35	33	31	29			

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMLSH-12 Products

Table 1D		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	7 < θ ≤ 27 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	1					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	75	65	55	49	43	39	33	29	25	23		
	105	75	65	55	49	43	39	33	29	25	23		
	110	75	65	55	49	43	39	33	29	25	23		
	120	75	65	55	49	43	39	33	29	25	23		
	130	75	65	55	49	43	39	33	29	25	23		
	140	71	65	55	49	43	39	33	29	25	23		
	150	66	65	55	49	43	39	33	29	25	23		
	160	62	62	54	48	43	39	33	29	25	23		
Category C	100	75	65	55	49	43	39	33	29	25	23		
	105	75	65	55	49	43	39	33	29	25	23		
	110	75	65	55	49	43	39	33	29	25	23		
	120	70	65	55	49	43	39	33	29	25	23		
	130	65	64	54	48	43	39	33	29	25	23		
	140	60	60	53	48	43	39	33	29	25	23		
	150	56	56	52	47	43	39	33	29	25	23		
	160	53	53	51	46	42	39	33	29	25	23		
Category D	100	75	65	55	49	43	39	33	29	25	23		
	105	73	65	55	49	43	39	33	29	25	23		
	110	70	65	55	49	43	39	33	29	25	23		
	120	64	64	54	48	43	39	33	29	25	23		
	130	60	60	53	47	43	39	33	29	25	23		
	140	55	55	52	46	42	39	33	29	25	23		
	150	52	52	50	46	42	39	33	29	25	23		
	160	49	49	49	45	41	38	33	29	25	23		
170	46	46	46	44	40	37	33	29	25	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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMNC, QMNS, & QMSFT Products

Table 2A		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	7 < θ ≤ 27 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	2					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	72	65	55	49	43	39	35	33	31	29		
	105	69	65	55	49	43	39	35	33	31	29		
	110	66	65	55	49	43	39	35	33	31	29		
	120	60	60	55	49	43	39	35	33	31	29		
	130	56	56	55	211	43	39	35	33	31	29		
	140	52	52	52	49	43	39	35	33	31	29		
	150	49	49	49	49	43	39	35	33	31	29		
	160	46	46	46	46	43	39	35	33	31	29		
Category C	100	61	61	55	49	43	39	35	33	31	29		
	105	58	58	55	49	43	39	35	33	31	29		
	110	56	56	55	49	43	39	35	33	31	29		
	120	51	51	51	49	43	39	35	33	31	29		
	130	48	48	48	48	43	39	35	33	31	29		
	140	44	44	44	44	43	39	35	33	31	29		
	150	41	41	41	41	41	39	35	33	31	29		
	160	39	39	39	39	39	39	35	33	31	29		
Category D	100	56	56	55	49	43	39	35	33	31	29		
	105	54	54	54	49	43	39	35	33	31	29		
	110	52	52	52	49	43	39	35	33	31	29		
	120	47	47	47	47	43	39	35	33	31	29		
	130	44	44	44	44	43	39	35	33	31	29		
	140	41	41	41	41	41	39	35	33	31	29		
	150	38	38	38	38	38	38	35	33	31	29		
	160	36	36	36	36	36	36	35	33	31	29		
	170	33	33	33	33	33	33	33	33	31	29		

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMUTM & QMLSH-7 Products

Table 2B		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	7 < θ ≤ 27 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	2					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	72	65	55	49	43	39	35	33	31	29		
	105	69	65	55	49	43	39	35	33	31	29		
	110	66	65	55	49	43	39	35	33	31	29		
	120	60	60	55	49	43	39	35	33	31	29		
	130	56	56	55	93	43	39	35	33	31	29		
	140	52	52	52	49	43	39	35	33	31	29		
	150	49	49	49	49	43	39	35	33	31	29		
	160	46	46	46	46	43	39	35	33	31	29		
Category C	100	61	61	55	49	43	39	35	33	31	29		
	105	58	58	55	49	43	39	35	33	31	29		
	110	56	56	55	49	43	39	35	33	31	29		
	120	51	51	51	49	43	39	35	33	31	29		
	130	48	48	48	48	43	39	35	33	31	29		
	140	44	44	44	44	43	39	35	33	31	29		
	150	41	41	41	41	41	39	35	33	31	29		
	160	39	39	39	39	39	39	35	33	31	29		
Category D	100	56	56	55	49	43	39	35	33	31	29		
	105	54	54	54	49	43	39	35	33	31	29		
	110	52	52	52	49	43	39	35	33	31	29		
	120	47	47	47	47	43	39	35	33	31	29		
	130	44	44	44	44	43	39	35	33	31	29		
	140	41	41	41	41	41	39	35	33	31	29		
	150	38	38	38	38	38	38	35	33	31	29		
	160	36	36	36	36	36	36	35	33	31	29		
170	33	33	33	33	33	33	33	33	31	29			

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMLSH-9 Products

Table 2C		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	7 < θ ≤ 27 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	2					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	72	65	55	49	43	39	35	33	31	29		
	105	69	65	55	49	43	39	35	33	31	29		
	110	66	65	55	49	43	39	35	33	31	29		
	120	60	60	55	49	43	39	35	33	31	29		
	130	56	56	55	93	43	39	35	33	31	29		
	140	52	52	52	49	43	39	35	33	31	29		
	150	49	49	49	49	43	39	35	33	31	29		
	160	46	46	46	46	43	39	35	33	31	29		
Category C	100	61	61	55	49	43	39	35	33	31	29		
	105	58	58	55	49	43	39	35	33	31	29		
	110	56	56	55	49	43	39	35	33	31	29		
	120	51	51	51	49	43	39	35	33	31	29		
	130	48	48	48	48	43	39	35	33	31	29		
	140	44	44	44	44	43	39	35	33	31	29		
	150	41	41	41	41	41	39	35	33	31	29		
	160	39	39	39	39	39	39	35	33	31	29		
Category D	100	56	56	55	49	43	39	35	33	31	29		
	105	54	54	54	49	43	39	35	33	31	29		
	110	52	52	52	49	43	39	35	33	31	29		
	120	47	47	47	47	43	39	35	33	31	29		
	130	44	44	44	44	43	39	35	33	31	29		
	140	41	41	41	41	41	39	35	33	31	29		
	150	38	38	38	38	38	38	35	33	31	29		
	160	36	36	36	36	36	36	35	33	31	29		
170	33	33	33	33	33	33	33	33	31	29			

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMLSH-12 Products

Table 2D		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	7 < θ ≤ 27 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	2					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	72	65	55	49	43	39	33	29	25	23		
	105	69	65	55	49	43	39	33	29	25	23		
	110	66	65	55	49	43	39	33	29	25	23		
	120	60	60	55	49	43	39	33	29	25	23		
	130	56	56	55	61	43	39	33	29	25	23		
	140	52	52	52	49	43	39	33	29	25	23		
	150	49	49	49	49	43	39	33	29	25	23		
	160	46	46	46	46	43	39	33	29	25	23		
Category C	100	61	61	55	49	43	39	33	29	25	23		
	105	58	58	55	49	43	39	33	29	25	23		
	110	56	56	55	49	43	39	33	29	25	23		
	120	51	51	51	49	43	39	33	29	25	23		
	130	48	48	48	48	43	39	33	29	25	23		
	140	44	44	44	44	43	39	33	29	25	23		
	150	41	41	41	41	41	39	33	29	25	23		
	160	39	39	39	39	39	39	33	29	25	23		
Category D	100	56	56	55	49	43	39	33	29	25	23		
	105	54	54	54	49	43	39	33	29	25	23		
	110	52	52	52	49	43	39	33	29	25	23		
	120	47	47	47	47	43	39	33	29	25	23		
	130	44	44	44	44	43	39	33	29	25	23		
	140	41	41	41	41	41	39	33	29	25	23		
	150	38	38	38	38	38	38	33	29	25	23		
	160	36	36	36	36	36	36	33	29	25	23		
	170	33	33	33	33	33	33	33	29	25	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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMNC, QMNS, & QMSFT Products

Table 3A		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	7 < θ ≤ 27 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	3					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	59	59	55	49	43	39	35	33	31	29		
	105	56	56	55	49	43	39	35	33	31	29		
	110	54	54	54	49	43	39	35	33	31	29		
	120	49	49	49	49	43	39	35	33	31	29		
	130	46	46	46	46	43	39	35	33	31	29		
	140	42	42	42	42	42	39	35	33	31	29		
	150	40	40	40	40	40	39	35	33	31	29		
	160	37	37	38	38	38	37	35	33	31	29		
Category C	100	50	50	50	49	43	39	35	33	31	29		
	105	48	48	48	48	43	39	35	33	31	29		
	110	45	45	45	45	43	39	35	33	31	29		
	120	42	42	42	42	42	39	35	33	31	29		
	130	39	39	39	39	39	39	35	33	31	29		
	140	36	36	36	36	36	36	35	33	31	29		
	150	33	33	33	33	33	33	33	33	31	29		
	160	31	31	31	31	31	31	31	33	31	29		
Category D	100	46	46	46	46	43	39	39	29	31	29		
	105	44	44	44	44	43	39	39	33	31	29		
	110	42	42	42	42	42	39	39	33	31	29		
	120	38	38	38	38	38	38	38	33	31	29		
	130	35	35	35	35	35	35	35	33	31	29		
	140	33	33	33	33	33	33	33	33	31	29		
	150	31	31	31	31	31	31	31	31	31	29		
	160	29	29	29	29	29	29	29	29	29	29		
170	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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMUTM & QMLSH-7 Products

Table 3B		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	7 < θ ≤ 27 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	3					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	59	59	55	49	43	39	35	33	31	29		
	105	56	56	55	49	43	39	35	33	31	29		
	110	54	54	54	49	43	39	35	33	31	29		
	120	49	49	49	49	43	39	35	33	31	29		
	130	46	46	46	46	43	39	35	33	31	29		
	140	42	42	42	42	42	39	35	33	31	29		
	150	40	40	40	40	40	39	35	33	31	29		
	160	37	37	38	38	38	37	35	33	31	29		
Category C	100	50	50	50	49	43	39	35	33	31	29		
	105	48	48	48	48	43	39	35	33	31	29		
	110	45	45	45	45	43	39	35	33	31	29		
	120	42	42	42	42	42	39	35	33	31	29		
	130	39	39	39	39	39	39	35	33	31	29		
	140	36	36	36	36	36	36	35	33	31	29		
	150	33	33	33	33	33	33	33	33	31	29		
	160	31	31	31	31	31	31	31	33	31	29		
Category D	100	46	46	46	46	43	39	39	29	31	29		
	105	44	44	44	44	43	39	39	33	31	29		
	110	42	42	42	42	42	39	39	33	31	29		
	120	38	38	38	38	38	38	38	33	31	29		
	130	35	35	35	35	35	35	35	33	31	29		
	140	33	33	33	33	33	33	33	33	31	29		
	150	31	31	31	31	31	31	31	31	31	29		
	160	29	29	29	29	29	29	29	29	29	29		
	170	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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMLSH-9 Products

Table 3C		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	7 < θ ≤ 27 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	3					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	59	59	55	49	43	39	35	33	31	29		
	105	56	56	55	49	43	39	35	33	31	29		
	110	54	54	54	49	43	39	35	33	31	29		
	120	49	49	49	49	43	39	35	33	31	29		
	130	46	46	46	46	43	39	35	33	31	29		
	140	42	42	42	42	42	39	35	33	31	29		
	150	40	40	40	40	40	39	35	33	31	29		
	160	37	37	38	38	38	37	35	33	31	29		
Category C	100	50	50	50	49	43	39	35	33	31	29		
	105	48	48	48	48	43	39	35	33	31	29		
	110	45	45	45	45	43	39	35	33	31	29		
	120	42	42	42	42	42	39	35	33	31	29		
	130	39	39	39	39	39	39	35	33	31	29		
	140	36	36	36	36	36	36	35	33	31	29		
	150	33	33	33	33	33	33	33	33	31	29		
	160	31	31	31	31	31	31	31	33	31	29		
Category D	100	46	46	46	46	43	39	39	29	31	29		
	105	44	44	44	44	43	39	39	33	31	29		
	110	42	42	42	42	42	39	39	33	31	29		
	120	38	38	38	38	38	38	38	33	31	29		
	130	35	35	35	35	35	35	35	33	31	29		
	140	33	33	33	33	33	33	33	33	31	29		
	150	31	31	31	31	31	31	31	31	31	29		
	160	29	29	29	29	29	29	29	29	29	29		
	170	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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMLSH-12 Products

Table 3D		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	7 < θ ≤ 27 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	3					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	59	59	55	49	43	39	33	29	25	23		
	105	56	56	55	49	43	39	33	29	25	23		
	110	54	54	54	49	43	39	33	29	25	23		
	120	49	49	49	49	43	39	33	29	25	23		
	130	46	46	46	46	43	39	33	29	25	23		
	140	42	42	42	42	42	39	33	29	25	23		
	150	40	40	40	40	40	39	33	29	25	23		
	160	37	37	38	38	38	37	33	29	25	23		
Category C	100	50	50	50	49	43	39	33	29	25	23		
	105	48	48	48	48	43	39	33	29	25	23		
	110	45	45	45	45	43	39	33	29	25	23		
	120	42	42	42	42	42	39	33	29	25	23		
	130	39	39	39	39	39	39	33	29	25	23		
	140	36	36	36	36	36	36	33	29	25	23		
	150	33	33	33	33	33	33	33	29	25	23		
	160	31	31	31	31	31	31	31	29	25	23		
Category D	100	46	46	46	46	43	39	33	29	25	23		
	105	44	44	44	44	43	39	33	29	25	23		
	110	42	42	42	42	42	39	33	29	25	23		
	120	38	38	38	38	38	38	33	29	25	23		
	130	35	35	35	35	35	35	33	29	25	23		
	140	33	33	33	33	33	33	33	29	25	23		
	150	31	31	31	31	31	31	31	29	25	23		
	160	29	29	29	29	29	29	29	29	25	23		
	170	27	27	27	27	27	27	27	27	25	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 test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMNC, QMNS, & QMSFT Products

Table 4A		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	27 < θ ≤ 45 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	1					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	72	66	57	51	45	41	38	35	33	31		
	105	72	66	57	51	45	41	38	35	33	31		
	110	71	65	57	50	45	41	38	35	33	31		
	120	67	63	55	49	45	41	38	35	33	31		
	130	64	61	54	48	44	41	38	35	33	31		
	140	61	59	52	47	43	40	38	35	33	31		
	150	58	57	51	46	43	40	37	35	33	31		
	160	55	55	49	45	42	39	37	35	33	31		
Category C	100	68	63	55	50	45	41	38	35	33	31		
	105	66	62	54	49	45	41	38	35	33	31		
	110	64	61	54	48	44	41	38	35	33	31		
	120	60	58	52	47	43	40	38	35	33	31		
	130	57	56	50	46	42	39	37	35	33	31		
	140	54	54	48	44	41	39	37	35	33	31		
	150	51	51	47	43	40	38	36	34	33	31		
	160	48	48	45	42	39	37	35	33	32	31		
Category D	100	64	61	54	48	44	41	38	35	33	31		
	105	62	60	53	48	44	41	38	35	33	31		
	110	60	58	52	47	43	40	38	35	33	31		
	120	56	56	50	46	42	39	37	35	33	31		
	130	53	53	48	44	41	39	36	35	33	31		
	140	50	50	46	43	40	38	36	34	32	31		
	150	47	47	45	41	39	37	35	33	32	31		
	160	45	45	43	40	38	36	34	33	31	30		
170	43	43	41	39	37	35	33	32	31	29			

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMUTM & QMLSH-7 Products

Table 4B		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	27 < θ ≤ 45 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	1					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	72	66	57	51	45	41	38	35	33	30		
	105	72	66	57	51	45	41	38	35	33	30		
	110	71	65	57	50	45	41	38	35	33	30		
	120	67	63	55	49	45	41	38	35	33	30		
	130	64	61	54	48	44	41	38	35	33	30		
	140	61	59	52	47	43	40	38	35	33	30		
	150	58	57	51	46	43	40	37	35	33	30		
	160	55	55	49	45	42	39	37	35	33	30		
Category C	100	68	63	55	50	45	41	38	35	33	30		
	105	66	62	54	49	45	41	38	35	33	30		
	110	64	61	54	48	44	41	38	35	33	30		
	120	60	58	52	47	43	40	38	35	33	30		
	130	57	56	50	46	42	39	37	35	33	30		
	140	54	54	48	44	41	39	37	35	33	30		
	150	51	51	47	43	40	38	36	34	33	30		
	160	48	48	45	42	39	37	35	33	32	30		
Category D	100	64	61	54	48	44	41	38	35	33	30		
	105	62	60	53	48	44	41	38	35	33	30		
	110	60	58	52	47	43	40	38	35	33	30		
	120	56	56	50	46	42	39	37	35	33	30		
	130	53	53	48	44	41	39	36	35	33	30		
	140	50	50	46	43	40	38	36	34	32	30		
	150	47	47	45	41	39	37	35	33	32	30		
	160	45	45	43	40	38	36	34	33	31	30		
	170	43	43	41	39	37	35	33	32	31	29		

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMLSH-9 Products

Table 4C		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	27 < θ ≤ 45 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	1					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	72	66	57	51	45	41	38	35	33	30		
	105	72	66	57	51	45	41	38	35	33	30		
	110	71	65	57	50	45	41	38	35	33	30		
	120	67	63	55	49	45	41	38	35	33	30		
	130	64	61	54	48	44	41	38	35	33	30		
	140	61	59	52	47	43	40	38	35	33	30		
	150	58	57	51	46	43	40	37	35	33	30		
	160	55	55	49	45	42	39	37	35	33	30		
Category C	100	68	63	55	50	45	41	38	35	33	30		
	105	66	62	54	49	45	41	38	35	33	30		
	110	64	61	54	48	44	41	38	35	33	30		
	120	60	58	52	47	43	40	38	35	33	30		
	130	57	56	50	46	42	39	37	35	33	30		
	140	54	54	48	44	41	39	37	35	33	30		
	150	51	51	47	43	40	38	36	34	33	30		
	160	48	48	45	42	39	37	35	33	32	30		
Category D	100	64	61	54	48	44	41	38	35	33	30		
	105	62	60	53	48	44	41	38	35	33	30		
	110	60	58	52	47	43	40	38	35	33	30		
	120	56	56	50	46	42	39	37	35	33	30		
	130	53	53	48	44	41	39	36	35	33	30		
	140	50	50	46	43	40	38	36	34	32	30		
	150	47	47	45	41	39	37	35	33	32	30		
	160	45	45	43	40	38	36	34	33	31	30		
	170	43	43	41	39	37	35	33	32	31	29		

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMLSH-12 Products

Table 4D		Roof Height:	0-30 ft		Panel Orientation:	Portrait					
		Roof Angle:	27 < θ ≤ 45		degrees						
		Roof Wind Zone:	1		Specific Gravity:	0.50					
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	72	66	57	50	40	33	28	24	22	19
	105	72	66	57	50	40	33	28	24	22	19
	110	71	65	57	50	40	33	28	24	22	19
	120	67	63	55	49	40	33	28	24	22	19
	130	64	61	54	48	40	33	28	24	22	19
	140	61	59	52	47	40	33	28	24	22	19
	150	58	57	51	46	40	33	28	24	22	19
	160	55	55	49	45	40	33	28	24	22	19
Category C	100	68	63	55	50	40	33	28	24	22	19
	105	66	62	54	49	40	33	28	24	22	19
	110	64	61	54	48	40	33	28	24	22	19
	120	60	58	52	47	40	33	28	24	22	19
	130	57	56	50	46	40	33	28	24	22	19
	140	54	54	48	44	40	33	28	24	22	19
	150	51	51	47	43	40	33	28	24	22	19
	160	48	48	45	42	39	33	28	24	22	19
Category D	100	64	61	54	48	40	33	28	24	22	19
	105	62	60	53	48	40	33	28	24	22	19
	110	60	58	52	47	40	33	28	24	22	19
	120	56	56	50	46	40	33	28	24	22	19
	130	53	53	48	44	40	33	28	24	22	19
	140	50	50	46	43	40	33	28	24	22	19
	150	47	47	45	41	39	33	28	24	22	19
	160	45	45	43	40	38	33	28	24	22	19
	170	43	43	41	39	37	33	28	24	22	19

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable uplift and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMNC, QMNS, & QMSFT Products

Table 5A		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	27 < θ ≤ 45 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	2					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	72	66	57	51	45	41	38	35	33	31		
	105	72	66	57	51	45	41	38	35	33	31		
	110	71	65	57	50	45	41	38	35	33	31		
	120	67	63	55	49	45	41	38	35	33	31		
	130	64	61	54	48	44	41	38	35	33	31		
	140	60	59	52	47	43	40	38	35	33	31		
	150	56	56	51	46	43	40	37	35	33	31		
	160	53	53	49	45	42	39	37	35	33	31		
Category C	100	68	63	55	50	45	41	38	35	33	31		
	105	66	62	54	49	45	41	38	35	33	31		
	110	64	61	54	48	44	41	38	35	33	31		
	120	59	58	52	47	43	40	38	35	33	31		
	130	55	55	50	46	42	39	37	35	33	31		
	140	51	51	48	44	41	39	37	35	33	31		
	150	48	48	47	43	40	38	36	34	33	31		
	160	45	45	45	42	39	37	35	33	32	31		
Category D	100	64	61	54	48	44	41	38	35	33	31		
	105	62	60	53	48	44	41	38	35	33	31		
	110	59	58	52	47	43	40	38	35	33	31		
	120	55	55	50	46	42	39	37	35	33	31		
	130	51	51	48	44	41	39	36	35	33	31		
	140	47	47	46	43	40	38	36	34	32	31		
	150	44	44	44	41	39	37	35	33	32	31		
	160	42	42	42	40	38	36	34	33	31	30		
	170	39	39	39	39	37	35	33	32	31	29		

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMUTM & QMLSH-7 Products

Table 5B		Roof Height:	0-30 ft		Panel Orientation:	Portrait					
		Roof Angle:	27 < θ ≤ 45 degrees		Rafter Species:	Douglas Fir					
		Roof Wind Zone:	2		Specific Gravity:	0.50					
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	72	66	57	51	45	41	38	35	33	30
	105	72	66	57	51	45	41	38	35	33	30
	110	71	65	57	50	45	41	38	35	33	30
	120	67	63	55	49	45	41	38	35	33	30
	130	64	61	54	48	44	41	38	35	33	30
	140	60	59	52	47	43	40	38	35	33	30
	150	56	56	51	46	43	40	37	35	33	30
	160	53	53	49	45	42	39	37	35	33	30
Category C	100	68	63	55	50	45	41	38	35	33	30
	105	66	62	54	49	45	41	38	35	33	30
	110	64	61	54	48	44	41	38	35	33	30
	120	59	58	52	47	43	40	38	35	33	30
	130	55	55	50	46	42	39	37	35	33	30
	140	51	51	48	44	41	39	37	35	33	30
	150	48	48	47	43	40	38	36	34	33	30
	160	45	45	45	42	39	37	35	33	32	30
Category D	100	64	61	54	48	44	41	38	35	33	30
	105	62	60	53	48	44	41	38	35	33	30
	110	59	58	52	47	43	40	38	35	33	30
	120	55	55	50	46	42	39	37	35	33	30
	130	51	51	48	44	41	39	36	35	33	30
	140	47	47	46	43	40	38	36	34	32	30
	150	44	44	44	41	39	37	35	33	32	30
	160	42	42	42	40	38	36	34	33	31	30
170	39	39	39	39	37	35	33	32	31	29	

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMLSH-9 Products

Table 5C		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	27 < θ ≤ 45 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	2					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	72	66	57	51	45	41	38	35	33	30		
	105	72	66	57	51	45	41	38	35	33	30		
	110	71	65	57	50	45	41	38	35	33	30		
	120	67	63	55	49	45	41	38	35	33	30		
	130	64	61	54	48	44	41	38	35	33	30		
	140	60	59	52	47	43	40	38	35	33	30		
	150	56	56	51	46	43	40	37	35	33	30		
	160	53	53	49	45	42	39	37	35	33	30		
Category C	100	68	63	55	50	45	41	38	35	33	30		
	105	66	62	54	49	45	41	38	35	33	30		
	110	64	61	54	48	44	41	38	35	33	30		
	120	59	58	52	47	43	40	38	35	33	30		
	130	55	55	50	46	42	39	37	35	33	30		
	140	51	51	48	44	41	39	37	35	33	30		
	150	48	48	47	43	40	38	36	34	33	30		
	160	45	45	45	42	39	37	35	33	32	30		
Category D	100	64	61	54	48	44	41	38	35	33	30		
	105	62	60	53	48	44	41	38	35	33	30		
	110	59	58	52	47	43	40	38	35	33	30		
	120	55	55	50	46	42	39	37	35	33	30		
	130	51	51	48	44	41	39	36	35	33	30		
	140	47	47	46	43	40	38	36	34	32	30		
	150	44	44	44	41	39	37	35	33	32	30		
	160	42	42	42	40	38	36	34	33	31	30		
170	39	39	39	39	37	35	33	32	31	29			

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMLSH-12 Products

Table 5D		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	27 < θ ≤ 45 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	2					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	72	66	57	50	40	33	28	24	22	19		
	105	72	66	57	50	40	33	28	24	22	19		
	110	71	65	57	50	40	33	28	24	22	19		
	120	67	63	55	49	40	33	28	24	22	19		
	130	64	61	54	48	40	33	28	24	22	19		
	140	60	59	52	47	40	33	28	24	22	19		
	150	56	56	51	46	40	33	28	24	22	19		
	160	53	53	49	45	40	33	28	24	22	19		
Category C	100	68	63	55	50	40	33	28	24	22	19		
	105	66	62	54	49	40	33	28	24	22	19		
	110	64	61	54	48	40	33	28	24	22	19		
	120	59	58	52	47	40	33	28	24	22	19		
	130	55	55	50	46	40	33	28	24	22	19		
	140	51	51	48	44	40	33	28	24	22	19		
	150	48	48	47	43	40	33	28	24	22	19		
	160	45	45	45	42	39	33	28	24	22	19		
Category D	100	64	61	54	48	40	33	28	24	22	19		
	105	62	60	53	48	40	33	28	24	22	19		
	110	59	58	52	47	40	33	28	24	22	19		
	120	55	55	50	46	40	33	28	24	22	19		
	130	51	51	48	44	40	33	28	24	22	19		
	140	47	47	46	43	40	33	28	24	22	19		
	150	44	44	44	41	39	33	28	24	22	19		
	160	42	42	42	40	38	33	28	24	22	19		
170	39	39	39	39	37	33	28	24	22	19			

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable uplift and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMNC, QMNS, & QMSFT Products

Table 6A		Roof Height:	0-30 ft		Panel Orientation:	Portrait					
		Roof Angle:	27 < θ ≤ 45 degrees		Rafter Species:	Douglas Fir					
		Roof Wind Zone:	3		Specific Gravity:	0.50					
XR10 Rail	Wind Speed	Ground Snow Load									
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf
Category B	100	72	66	57	51	45	41	38	35	33	31
	105	72	66	57	51	45	41	38	35	33	31
	110	71	65	57	50	45	41	38	35	33	31
	120	67	63	55	49	45	41	38	35	33	31
	130	64	61	54	48	44	41	38	35	33	31
	140	60	59	52	47	43	40	38	35	33	31
	150	56	56	51	46	43	40	37	35	33	31
	160	53	53	49	45	42	39	37	35	33	31
Category C	100	68	63	55	50	45	41	38	35	33	31
	105	66	62	54	49	45	41	38	35	33	31
	110	64	61	54	48	44	41	38	35	33	31
	120	59	58	52	47	43	40	38	35	33	31
	130	55	55	50	46	42	39	37	35	33	31
	140	51	51	48	44	41	39	37	35	33	31
	150	48	48	47	43	40	38	36	34	33	31
	160	45	45	45	42	39	37	35	33	32	31
Category D	100	64	61	54	48	44	41	38	35	33	31
	105	62	60	53	48	44	41	38	35	33	31
	110	59	58	52	47	43	40	38	35	33	31
	120	55	55	50	46	42	39	37	35	33	31
	130	51	51	48	44	41	39	36	35	33	31
	140	47	47	46	43	40	38	36	34	32	31
	150	44	44	44	41	39	37	35	33	32	31
	160	42	42	42	40	38	36	34	33	31	30
170	39	39	39	39	37	35	33	32	31	29	

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMUTM & QMLSH-7 Products

Table 6B		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	27 < θ ≤ 45 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	3					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	72	66	57	51	45	41	38	35	33	30		
	105	72	66	57	51	45	41	38	35	33	30		
	110	71	65	57	50	45	41	38	35	33	30		
	120	67	63	55	49	45	41	38	35	33	30		
	130	64	61	54	48	44	41	38	35	33	30		
	140	60	59	52	47	43	40	38	35	33	30		
	150	56	56	51	46	43	40	37	35	33	30		
	160	53	53	49	45	42	39	37	35	33	30		
Category C	100	68	63	55	50	45	41	38	35	33	30		
	105	66	62	54	49	45	41	38	35	33	30		
	110	64	61	54	48	44	41	38	35	33	30		
	120	59	58	52	47	43	40	38	35	33	30		
	130	55	55	50	46	42	39	37	35	33	30		
	140	51	51	48	44	41	39	37	35	33	30		
	150	48	48	47	43	40	38	36	34	33	30		
	160	45	45	45	42	39	37	35	33	32	30		
Category D	100	64	61	54	48	44	41	38	35	33	30		
	105	62	60	53	48	44	41	38	35	33	30		
	110	59	58	52	47	43	40	38	35	33	30		
	120	55	55	50	46	42	39	37	35	33	30		
	130	51	51	48	44	41	39	36	35	33	30		
	140	47	47	46	43	40	38	36	34	32	30		
	150	44	44	44	41	39	37	35	33	32	30		
	160	42	42	42	40	38	36	34	33	31	30		
170	39	39	39	39	37	35	33	32	31	29			

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMLSH-9 Products

Table 6C		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	27 < θ ≤ 45 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	3					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	72	66	57	51	45	41	38	35	33	30		
	105	72	66	57	51	45	41	38	35	33	30		
	110	71	65	57	50	45	41	38	35	33	30		
	120	67	63	55	49	45	41	38	35	33	30		
	130	64	61	54	48	44	41	38	35	33	30		
	140	60	59	52	47	43	40	38	35	33	30		
	150	56	56	51	46	43	40	37	35	33	30		
	160	53	53	49	45	42	39	37	35	33	30		
Category C	100	68	63	55	50	45	41	38	35	33	30		
	105	66	62	54	49	45	41	38	35	33	30		
	110	64	61	54	48	44	41	38	35	33	30		
	120	59	58	52	47	43	40	38	35	33	30		
	130	55	55	50	46	42	39	37	35	33	30		
	140	51	51	48	44	41	39	37	35	33	30		
	150	48	48	47	43	40	38	36	34	33	30		
	160	45	45	45	42	39	37	35	33	32	30		
Category D	100	64	61	54	48	44	41	38	35	33	30		
	105	62	60	53	48	44	41	38	35	33	30		
	110	59	58	52	47	43	40	38	35	33	30		
	120	55	55	50	46	42	39	37	35	33	30		
	130	51	51	48	44	41	39	36	35	33	30		
	140	47	47	46	43	40	38	36	34	32	30		
	150	44	44	44	41	39	37	35	33	32	30		
	160	42	42	42	40	38	36	34	33	31	30		
170	39	39	39	39	37	35	33	32	31	29			

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable 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 67.5"

Rail Spans for IronRidge Series XR10 Roof Mount for use with QMLSH-12 Products

Table 6D		Roof Height:	0-30 ft					Panel Orientation:	Portrait				
		Roof Angle:	27 < θ ≤ 45 degrees					Rafter Species:	Douglas Fir				
		Roof Wind Zone:	3					Specific Gravity:	0.50				
XR10 Rail	Wind Speed	Ground Snow Load											
Exposure	mph	0 psf	10 psf	20 psf	30 psf	40 psf	50 psf	60 psf	70 psf	80 psf	90 psf		
Category B	100	72	66	57	50	40	33	28	24	22	19		
	105	72	66	57	50	40	33	28	24	22	19		
	110	71	65	57	50	40	33	28	24	22	19		
	120	67	63	55	49	40	33	28	24	22	19		
	130	64	61	54	48	40	33	28	24	22	19		
	140	60	59	52	47	40	33	28	24	22	19		
	150	56	56	51	46	40	33	28	24	22	19		
	160	53	53	49	45	40	33	28	24	22	19		
Category C	100	68	63	55	50	40	33	28	24	22	19		
	105	66	62	54	49	40	33	28	24	22	19		
	110	64	61	54	48	40	33	28	24	22	19		
	120	59	58	52	47	40	33	28	24	22	19		
	130	55	55	50	46	40	33	28	24	22	19		
	140	51	51	48	44	40	33	28	24	22	19		
	150	48	48	47	43	40	33	28	24	22	19		
	160	45	45	45	42	39	33	28	24	22	19		
Category D	100	64	61	54	48	40	33	28	24	22	19		
	105	62	60	53	48	40	33	28	24	22	19		
	110	59	58	52	47	40	33	28	24	22	19		
	120	55	55	50	46	40	33	28	24	22	19		
	130	51	51	48	44	40	33	28	24	22	19		
	140	47	47	46	43	40	33	28	24	22	19		
	150	44	44	44	41	39	33	28	24	22	19		
	160	42	42	42	40	38	33	28	24	22	19		
	170	39	39	39	39	37	33	28	24	22	19		

Notes:

1. Tables are based on critical rail span for load combinations as specified in chapter 2 of the ASCE 7-10 and allowable uplift and lateral values of Quick Mount products per test reports.
2. Panels are assumed to be in portrait orientation with a maximum length of 67.5"