



4/26/2017

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

RE: Quick Mount PV QBase Mount System for use with
IronRidge XR100 Roof Flush Mount 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 IronRidge XR100 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 (QMLC), and the Low Slope Mount (QMLSH).

The review was based on the following reference data:

- Starling Madison Lofquist, Inc., IronRidge XR100 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

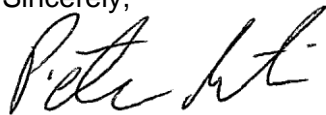
SEI has determined that the QMNC, QMNS, QMSFT, QMUTM, and QMLSH mounts are suitable for use with the IronRidge XR100 Rail, Roof Flush Mount System. The approved installation and allowable loads for the Quick Mount PV QBase products is outlined in the Eclipse Engineering report referenced above. The allowable 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 XR100 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 XR100 Structural Report and Calculations and all requirements listed are still applicable for these tables including edge zones and edge distances.

Please contact our office if you have any further questions relating to this matter.

Sincerely,



Peter Martin
Engineer II

pmartin@structuralengenuityinc.com



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

amyket@structuralengenuityinc.com 4/26/17



Structural Engenuity Inc.

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMNC, QMNS, & QMSFT Products

| Table 1A | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 7 - 27 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 1 | | | | | | | | | |
| XR100 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 | 112 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 105 | 112 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 110 | 112 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 120 | 112 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 130 | 112 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 140 | 105 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 150 | 98 | 96 | 82 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 160 | 92 | 92 | 81 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| Category C | 170 | 87 | 87 | 79 | 71 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 100 | 112 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 105 | 112 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 110 | 112 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 120 | 103 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 130 | 96 | 95 | 82 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 140 | 89 | 89 | 80 | 71 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 150 | 84 | 84 | 78 | 70 | 64 | 58 | 53 | 49 | 46 | 43 | |
| Category D | 160 | 79 | 79 | 76 | 69 | 63 | 58 | 53 | 49 | 46 | 43 | |
| | 170 | 74 | 74 | 74 | 67 | 62 | 57 | 53 | 49 | 46 | 43 | |
| | 100 | 112 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 105 | 108 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 110 | 103 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 120 | 95 | 95 | 82 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 130 | 88 | 88 | 80 | 71 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 140 | 82 | 82 | 78 | 70 | 63 | 58 | 53 | 49 | 46 | 43 | |
| 150 | 77 | 77 | 76 | 68 | 62 | 58 | 53 | 49 | 46 | 43 | | |
| 160 | 73 | 73 | 73 | 67 | 61 | 57 | 53 | 49 | 46 | 43 | | |
| 170 | 68 | 68 | 68 | 65 | 60 | 56 | 53 | 49 | 46 | 43 | | |

Notes:

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

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMUTM & QMLSH-7 Products

| Table 1B | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 7 - 27 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 1 | | | | | | | | | |
| XR100 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 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 105 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 150 | 98 | 96 | 82 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 160 | 92 | 92 | 81 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| Category C | 170 | 87 | 87 | 79 | 71 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 100 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 103 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 96 | 95 | 82 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 89 | 89 | 80 | 71 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 150 | 84 | 84 | 78 | 70 | 64 | 58 | 50 | 44 | 39 | 35 | |
| Category D | 160 | 79 | 79 | 76 | 69 | 63 | 58 | 50 | 44 | 39 | 35 | |
| | 170 | 74 | 74 | 74 | 67 | 62 | 57 | 50 | 44 | 39 | 35 | |
| | 100 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 108 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 103 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 95 | 95 | 82 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 88 | 88 | 80 | 71 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 82 | 82 | 78 | 70 | 63 | 58 | 50 | 44 | 39 | 35 | |
| 150 | 77 | 77 | 76 | 68 | 62 | 58 | 50 | 44 | 39 | 35 | | |
| 160 | 73 | 73 | 73 | 67 | 61 | 57 | 50 | 44 | 39 | 35 | | |
| 170 | 68 | 68 | 68 | 65 | 60 | 56 | 50 | 44 | 39 | 35 | | |

Notes:

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

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMLSH-9 Products

| Table 1C | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 7 - 27 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 1 | | | | | | | | | |
| XR100 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 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 105 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 150 | 98 | 96 | 82 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 160 | 92 | 92 | 81 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| Category C | 170 | 87 | 87 | 79 | 71 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 100 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 103 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 96 | 95 | 82 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 89 | 89 | 80 | 71 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 150 | 84 | 84 | 78 | 70 | 64 | 58 | 50 | 44 | 39 | 35 | |
| Category D | 160 | 79 | 79 | 76 | 69 | 63 | 58 | 50 | 44 | 39 | 35 | |
| | 170 | 74 | 74 | 74 | 67 | 62 | 57 | 50 | 44 | 39 | 35 | |
| | 100 | 112 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 108 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 103 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 95 | 95 | 82 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 88 | 88 | 80 | 71 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 82 | 82 | 78 | 70 | 63 | 58 | 50 | 44 | 39 | 35 | |
| 150 | 77 | 77 | 76 | 68 | 62 | 58 | 50 | 44 | 39 | 35 | | |
| 160 | 73 | 73 | 73 | 67 | 61 | 57 | 50 | 44 | 39 | 35 | | |
| 170 | 68 | 68 | 68 | 65 | 60 | 56 | 50 | 44 | 39 | 35 | | |

Notes:

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

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMLSH-12 Products

| Table 1D | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 7 - 27 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 1 | | | | | | | | | |
| XR100 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 | 112 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 105 | 112 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 110 | 112 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 120 | 112 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 130 | 112 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 140 | 105 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 150 | 98 | 96 | 82 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 160 | 92 | 92 | 81 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| Category C | 170 | 87 | 87 | 79 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 100 | 112 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 105 | 112 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 110 | 112 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 120 | 103 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 130 | 96 | 95 | 82 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 140 | 89 | 89 | 80 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 150 | 84 | 84 | 78 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| Category D | 160 | 79 | 79 | 76 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 170 | 74 | 74 | 74 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 100 | 112 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 105 | 108 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 110 | 103 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 120 | 95 | 95 | 82 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 130 | 88 | 88 | 80 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 140 | 82 | 82 | 78 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| 150 | 77 | 77 | 76 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| 160 | 73 | 73 | 73 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| 170 | 68 | 68 | 68 | 61 | 47 | 39 | 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 XR100 Roof Mount for use with QMNC, QMNS, & QMSFT Products

| Table 2A | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 7 - 27 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 2 | | | | | | | | | |
| XR100 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 | 106 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 105 | 102 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 110 | 97 | 97 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 120 | 90 | 90 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 130 | 83 | 83 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 140 | 77 | 77 | 77 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 150 | 73 | 73 | 73 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 160 | 68 | 68 | 68 | 68 | 64 | 58 | 53 | 49 | 46 | 43 | |
| Category C | 100 | 91 | 91 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 105 | 87 | 87 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 110 | 83 | 83 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 120 | 76 | 76 | 76 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 130 | 71 | 71 | 71 | 71 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 140 | 66 | 66 | 66 | 66 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 150 | 62 | 62 | 62 | 62 | 62 | 58 | 53 | 49 | 46 | 43 | |
| | 160 | 58 | 58 | 58 | 58 | 58 | 58 | 53 | 49 | 46 | 43 | |
| Category D | 100 | 84 | 84 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 105 | 80 | 80 | 80 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 110 | 77 | 77 | 77 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 120 | 70 | 70 | 70 | 70 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 130 | 65 | 65 | 65 | 65 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 140 | 61 | 61 | 61 | 61 | 61 | 58 | 53 | 49 | 46 | 43 | |
| | 150 | 57 | 57 | 57 | 57 | 57 | 57 | 53 | 49 | 46 | 43 | |
| | 160 | 53 | 53 | 53 | 53 | 53 | 53 | 53 | 49 | 46 | 43 | |
| | 170 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 49 | 46 | 43 | |

Notes:

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

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMUTM & QMLSH-7 Products

| Table 2B | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 7 - 27 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 2 | | | | | | | | | |
| XR100 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 | 106 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 102 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 97 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 90 | 90 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 83 | 83 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 77 | 77 | 77 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 150 | 73 | 73 | 73 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 160 | 68 | 68 | 68 | 68 | 64 | 58 | 50 | 44 | 39 | 35 | |
| Category C | 100 | 91 | 91 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 87 | 87 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 83 | 83 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 76 | 76 | 76 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 71 | 71 | 71 | 71 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 66 | 66 | 66 | 66 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 150 | 62 | 62 | 62 | 62 | 62 | 58 | 50 | 44 | 39 | 35 | |
| | 160 | 58 | 58 | 58 | 58 | 58 | 58 | 50 | 44 | 39 | 35 | |
| Category D | 100 | 84 | 84 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 80 | 80 | 80 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 77 | 77 | 77 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 70 | 70 | 70 | 70 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 65 | 65 | 65 | 65 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 61 | 61 | 61 | 61 | 61 | 58 | 50 | 44 | 39 | 35 | |
| | 150 | 57 | 57 | 57 | 57 | 57 | 57 | 50 | 44 | 39 | 35 | |
| | 160 | 53 | 53 | 53 | 53 | 53 | 53 | 50 | 44 | 39 | 35 | |
| | 170 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 44 | 39 | 35 | |

Notes:

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

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMLSH-9 Products

| Table 2C | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 7 - 27 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 2 | | | | | | | | | |
| XR100 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 | 106 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 102 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 97 | 97 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 90 | 90 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 83 | 83 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 77 | 77 | 77 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 150 | 73 | 73 | 73 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 160 | 68 | 68 | 68 | 68 | 64 | 58 | 50 | 44 | 39 | 35 | |
| Category C | 100 | 91 | 91 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 87 | 87 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 83 | 83 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 76 | 76 | 76 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 71 | 71 | 71 | 71 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 66 | 66 | 66 | 66 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 150 | 62 | 62 | 62 | 62 | 62 | 58 | 50 | 44 | 39 | 35 | |
| | 160 | 58 | 58 | 58 | 58 | 58 | 58 | 50 | 44 | 39 | 35 | |
| Category D | 100 | 84 | 84 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 80 | 80 | 80 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 77 | 77 | 77 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 70 | 70 | 70 | 70 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 65 | 65 | 65 | 65 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 61 | 61 | 61 | 61 | 61 | 58 | 50 | 44 | 39 | 35 | |
| | 150 | 57 | 57 | 57 | 57 | 57 | 57 | 50 | 44 | 39 | 35 | |
| | 160 | 53 | 53 | 53 | 53 | 53 | 53 | 50 | 44 | 39 | 35 | |
| | 170 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 44 | 39 | 35 | |

Notes:

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

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMLSH-12 Products

| Table 2D | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | | |
|-----------------|------------|------------------|----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|--|
| | | Roof Angle: | 7 - 27 degrees | | | | | Specific Gravity: | 0.50 | | | | |
| | | Roof Wind Zone: | 2 | | | | | | | | | | |
| XR100 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 | 106 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 105 | 102 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 110 | 97 | 97 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 120 | 90 | 90 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 130 | 83 | 83 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 140 | 77 | 77 | 77 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 150 | 73 | 73 | 73 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 160 | 68 | 68 | 68 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| Category C | 100 | 91 | 91 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 105 | 87 | 87 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 110 | 83 | 83 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 120 | 76 | 76 | 76 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 130 | 71 | 71 | 71 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 140 | 66 | 66 | 66 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 150 | 62 | 62 | 62 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 160 | 58 | 58 | 58 | 58 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| Category D | 100 | 84 | 84 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 105 | 80 | 80 | 80 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 110 | 77 | 77 | 77 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 120 | 70 | 70 | 70 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 130 | 65 | 65 | 65 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 140 | 61 | 61 | 61 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 150 | 57 | 57 | 57 | 57 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 160 | 53 | 53 | 53 | 53 | 47 | 39 | 33 | 29 | 25 | 23 | | |
| | 170 | 50 | 50 | 50 | 50 | 47 | 39 | 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 XR100 Roof Mount for use with QMNC, QMNS, & QMSFT Products

| Table 3A | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 7 - 27 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 3 | | | | | | | | | |
| XR100 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 | 87 | 87 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 105 | 83 | 83 | 83 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 110 | 80 | 80 | 80 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 120 | 73 | 73 | 73 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 130 | 68 | 68 | 68 | 68 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 140 | 63 | 63 | 63 | 63 | 63 | 58 | 53 | 49 | 46 | 43 | |
| | 150 | 59 | 59 | 59 | 59 | 59 | 58 | 53 | 49 | 46 | 43 | |
| | 160 | 56 | 56 | 56 | 56 | 56 | 56 | 53 | 49 | 46 | 43 | |
| Category C | 100 | 74 | 74 | 74 | 72 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 105 | 71 | 71 | 71 | 71 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 110 | 68 | 68 | 68 | 68 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 120 | 62 | 62 | 62 | 62 | 62 | 58 | 53 | 49 | 46 | 43 | |
| | 130 | 58 | 58 | 58 | 58 | 58 | 58 | 53 | 49 | 46 | 43 | |
| | 140 | 54 | 54 | 54 | 54 | 54 | 54 | 53 | 49 | 46 | 43 | |
| | 150 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 49 | 46 | 43 | |
| | 160 | 47 | 47 | 47 | 47 | 47 | 47 | 47 | 47 | 46 | 43 | |
| Category D | 100 | 68 | 68 | 68 | 68 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 105 | 65 | 65 | 65 | 65 | 64 | 58 | 53 | 49 | 46 | 43 | |
| | 110 | 62 | 62 | 62 | 62 | 62 | 58 | 53 | 49 | 46 | 43 | |
| | 120 | 57 | 57 | 57 | 57 | 57 | 57 | 53 | 49 | 46 | 43 | |
| | 130 | 53 | 53 | 53 | 53 | 53 | 53 | 53 | 49 | 46 | 43 | |
| | 140 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 46 | 43 | |
| | 150 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 43 | |
| | 160 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | |
| | 170 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | |

Notes:

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

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMUTM & QMLSH-7 Products

| Table 3B | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 7 - 27 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 3 | | | | | | | | | |
| XR100 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 | 87 | 87 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 83 | 83 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 80 | 80 | 80 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 73 | 73 | 73 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 68 | 68 | 68 | 68 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 63 | 63 | 63 | 63 | 63 | 58 | 50 | 44 | 39 | 35 | |
| | 150 | 59 | 59 | 59 | 59 | 59 | 58 | 50 | 44 | 39 | 35 | |
| | 160 | 56 | 56 | 56 | 56 | 56 | 56 | 50 | 44 | 39 | 35 | |
| Category C | 100 | 74 | 74 | 74 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 71 | 71 | 71 | 71 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 68 | 68 | 68 | 68 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 62 | 62 | 62 | 62 | 62 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 58 | 58 | 58 | 58 | 58 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 54 | 54 | 54 | 54 | 54 | 54 | 50 | 44 | 39 | 35 | |
| | 150 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 44 | 39 | 35 | |
| | 160 | 47 | 47 | 47 | 47 | 47 | 47 | 47 | 44 | 39 | 35 | |
| Category D | 100 | 68 | 68 | 68 | 68 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 65 | 65 | 65 | 65 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 62 | 62 | 62 | 62 | 62 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 57 | 57 | 57 | 57 | 57 | 57 | 50 | 44 | 39 | 35 | |
| | 130 | 53 | 53 | 53 | 53 | 53 | 53 | 50 | 44 | 39 | 35 | |
| | 140 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 44 | 39 | 35 | |
| | 150 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 44 | 39 | 35 | |
| | 160 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 39 | 35 | |
| | 170 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 39 | 35 | |

Notes:

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

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMLSH-9 Products

| Table 3C | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 7 - 27 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 3 | | | | | | | | | |
| XR100 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 | 87 | 87 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 83 | 83 | 83 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 80 | 80 | 80 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 73 | 73 | 73 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 68 | 68 | 68 | 68 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 63 | 63 | 63 | 63 | 63 | 58 | 50 | 44 | 39 | 35 | |
| | 150 | 59 | 59 | 59 | 59 | 59 | 58 | 50 | 44 | 39 | 35 | |
| | 160 | 56 | 56 | 56 | 56 | 56 | 56 | 50 | 44 | 39 | 35 | |
| Category C | 100 | 74 | 74 | 74 | 72 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 71 | 71 | 71 | 71 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 68 | 68 | 68 | 68 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 62 | 62 | 62 | 62 | 62 | 58 | 50 | 44 | 39 | 35 | |
| | 130 | 58 | 58 | 58 | 58 | 58 | 58 | 50 | 44 | 39 | 35 | |
| | 140 | 54 | 54 | 54 | 54 | 54 | 54 | 50 | 44 | 39 | 35 | |
| | 150 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 44 | 39 | 35 | |
| | 160 | 47 | 47 | 47 | 47 | 47 | 47 | 47 | 44 | 39 | 35 | |
| Category D | 100 | 68 | 68 | 68 | 68 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 105 | 65 | 65 | 65 | 65 | 64 | 58 | 50 | 44 | 39 | 35 | |
| | 110 | 62 | 62 | 62 | 62 | 62 | 58 | 50 | 44 | 39 | 35 | |
| | 120 | 57 | 57 | 57 | 57 | 57 | 57 | 50 | 44 | 39 | 35 | |
| | 130 | 53 | 53 | 53 | 53 | 53 | 53 | 50 | 44 | 39 | 35 | |
| | 140 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 44 | 39 | 35 | |
| | 150 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 44 | 39 | 35 | |
| | 160 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 39 | 35 | |
| | 170 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 39 | 35 | |

Notes:

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

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMLSH-12 Products

| Table 3D | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 7 - 27 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 3 | | | | | | | | | |
| XR100 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 | 87 | 87 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 105 | 83 | 83 | 83 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 110 | 80 | 80 | 80 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 120 | 73 | 73 | 73 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 130 | 68 | 68 | 68 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 140 | 63 | 63 | 63 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 150 | 59 | 59 | 59 | 59 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 160 | 56 | 56 | 56 | 56 | 47 | 39 | 33 | 29 | 25 | 23 | |
| Category C | 100 | 74 | 74 | 74 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 105 | 71 | 71 | 71 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 110 | 68 | 68 | 68 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 120 | 62 | 62 | 62 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 130 | 58 | 58 | 58 | 58 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 140 | 54 | 54 | 54 | 54 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 150 | 50 | 50 | 50 | 50 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 160 | 47 | 47 | 47 | 47 | 47 | 39 | 33 | 29 | 25 | 23 | |
| Category D | 100 | 68 | 68 | 68 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 105 | 65 | 65 | 65 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 110 | 62 | 62 | 62 | 61 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 120 | 57 | 57 | 57 | 57 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 130 | 53 | 53 | 53 | 53 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 140 | 49 | 49 | 49 | 49 | 47 | 39 | 33 | 29 | 25 | 23 | |
| | 150 | 46 | 46 | 46 | 46 | 46 | 39 | 33 | 29 | 25 | 23 | |
| | 160 | 43 | 43 | 43 | 43 | 43 | 39 | 33 | 29 | 25 | 23 | |
| 170 | 41 | 41 | 41 | 41 | 41 | 39 | 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 XR100 Roof Mount for use with QMNC, QMNS, & QMSFT Products

| Table 4A | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | | |
|-----------------|------------|------------------|-----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|--|
| | | Roof Angle: | 28 - 45 degrees | | | | | Specific Gravity: | 0.50 | | | | |
| | | Roof Wind Zone: | 1 | | | | | | | | | | |
| XR100 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 | 107 | 98 | 84 | 75 | 67 | 61 | 56 | 52 | 49 | 46 | | |
| | 105 | 107 | 98 | 84 | 75 | 67 | 61 | 56 | 52 | 49 | 46 | | |
| | 110 | 106 | 97 | 84 | 75 | 67 | 61 | 56 | 52 | 49 | 46 | | |
| | 120 | 101 | 94 | 82 | 74 | 67 | 61 | 56 | 52 | 49 | 46 | | |
| | 130 | 96 | 91 | 80 | 72 | 66 | 61 | 56 | 52 | 49 | 46 | | |
| | 140 | 91 | 88 | 78 | 70 | 65 | 60 | 56 | 52 | 49 | 46 | | |
| | 150 | 87 | 85 | 76 | 69 | 64 | 59 | 56 | 52 | 49 | 46 | | |
| | 160 | 83 | 82 | 74 | 67 | 62 | 58 | 55 | 52 | 49 | 46 | | |
| Category C | 100 | 101 | 94 | 82 | 74 | 67 | 61 | 56 | 52 | 49 | 46 | | |
| | 105 | 98 | 93 | 81 | 73 | 67 | 61 | 56 | 52 | 49 | 46 | | |
| | 110 | 95 | 91 | 80 | 72 | 66 | 61 | 56 | 52 | 49 | 46 | | |
| | 120 | 90 | 87 | 77 | 70 | 65 | 60 | 56 | 52 | 49 | 46 | | |
| | 130 | 85 | 84 | 75 | 68 | 63 | 59 | 56 | 52 | 49 | 46 | | |
| | 140 | 81 | 80 | 72 | 66 | 62 | 58 | 55 | 52 | 49 | 46 | | |
| | 150 | 77 | 76 | 70 | 65 | 60 | 57 | 53 | 51 | 49 | 46 | | |
| | 160 | 73 | 73 | 68 | 63 | 59 | 55 | 52 | 50 | 48 | 46 | | |
| Category D | 100 | 96 | 91 | 80 | 72 | 66 | 61 | 56 | 52 | 49 | 46 | | |
| | 105 | 93 | 89 | 79 | 71 | 65 | 61 | 56 | 52 | 49 | 46 | | |
| | 110 | 90 | 87 | 77 | 70 | 65 | 60 | 56 | 52 | 49 | 46 | | |
| | 120 | 85 | 83 | 75 | 68 | 63 | 59 | 55 | 52 | 49 | 46 | | |
| | 130 | 80 | 80 | 72 | 66 | 61 | 58 | 54 | 52 | 49 | 46 | | |
| | 140 | 75 | 75 | 70 | 64 | 60 | 56 | 53 | 51 | 48 | 46 | | |
| | 150 | 71 | 71 | 67 | 62 | 58 | 55 | 52 | 50 | 48 | 46 | | |
| | 160 | 68 | 68 | 65 | 60 | 57 | 54 | 51 | 49 | 47 | 45 | | |
| | 170 | 64 | 64 | 52 | 58 | 55 | 52 | 50 | 48 | 46 | 44 | | |

Notes:

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

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMUTM & QMLSH-7 Products

| Table 4B | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|-----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 28 - 45 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 1 | | | | | | | | | |
| XR100 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 | 107 | 98 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 105 | 107 | 98 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 110 | 106 | 97 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 120 | 101 | 94 | 82 | 74 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 130 | 96 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 140 | 91 | 88 | 78 | 70 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 150 | 87 | 85 | 76 | 69 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 160 | 83 | 82 | 74 | 67 | 61 | 50 | 43 | 37 | 33 | 30 | |
| Category C | 100 | 101 | 94 | 82 | 74 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 105 | 98 | 93 | 81 | 73 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 110 | 95 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 120 | 90 | 87 | 77 | 70 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 130 | 85 | 84 | 75 | 68 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 140 | 81 | 80 | 72 | 66 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 150 | 77 | 76 | 70 | 65 | 60 | 50 | 43 | 37 | 33 | 30 | |
| | 160 | 73 | 73 | 68 | 63 | 59 | 50 | 43 | 37 | 33 | 30 | |
| Category D | 100 | 96 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 105 | 93 | 89 | 79 | 71 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 110 | 90 | 87 | 77 | 70 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 120 | 85 | 83 | 75 | 68 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 130 | 80 | 80 | 72 | 66 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 140 | 75 | 75 | 70 | 64 | 60 | 50 | 43 | 37 | 33 | 30 | |
| | 150 | 71 | 71 | 67 | 62 | 58 | 50 | 43 | 37 | 33 | 30 | |
| | 160 | 68 | 68 | 65 | 60 | 57 | 50 | 43 | 37 | 33 | 30 | |
| | 170 | 64 | 64 | 52 | 58 | 55 | 50 | 43 | 37 | 33 | 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 67.5"

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMLSH-9 Products

| Table 4C | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|-----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 28 - 45 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 1 | | | | | | | | | |
| XR100 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 | 107 | 98 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 105 | 107 | 98 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 110 | 106 | 97 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 120 | 101 | 94 | 82 | 74 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 130 | 96 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 140 | 91 | 88 | 78 | 70 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 150 | 87 | 85 | 76 | 69 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 160 | 83 | 82 | 74 | 67 | 61 | 50 | 43 | 37 | 33 | 30 | |
| Category C | 100 | 101 | 94 | 82 | 74 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 105 | 98 | 93 | 81 | 73 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 110 | 95 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 120 | 90 | 87 | 77 | 70 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 130 | 85 | 84 | 75 | 68 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 140 | 81 | 80 | 72 | 66 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 150 | 77 | 76 | 70 | 65 | 60 | 50 | 43 | 37 | 33 | 30 | |
| | 160 | 73 | 73 | 68 | 63 | 59 | 50 | 43 | 37 | 33 | 30 | |
| Category D | 100 | 96 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 105 | 93 | 89 | 79 | 71 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 110 | 90 | 87 | 77 | 70 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 120 | 85 | 83 | 75 | 68 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 130 | 80 | 80 | 72 | 66 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 140 | 75 | 75 | 70 | 64 | 60 | 50 | 43 | 37 | 33 | 30 | |
| | 150 | 71 | 71 | 67 | 62 | 58 | 50 | 43 | 37 | 33 | 30 | |
| | 160 | 68 | 68 | 65 | 60 | 57 | 50 | 43 | 37 | 33 | 30 | |
| | 170 | 64 | 64 | 52 | 58 | 55 | 50 | 43 | 37 | 33 | 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 67.5"

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMLSH-12 Products

| Table 4D | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|-----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 28 - 45 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 1 | | | | | | | | | |
| XR100 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 | 107 | 98 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 105 | 107 | 98 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 110 | 106 | 97 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 120 | 101 | 94 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 130 | 96 | 91 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 140 | 91 | 88 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 150 | 87 | 85 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 160 | 83 | 82 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| Category C | 100 | 101 | 94 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 105 | 98 | 93 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 110 | 95 | 91 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 120 | 90 | 87 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 130 | 85 | 84 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 140 | 81 | 80 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 150 | 77 | 76 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 160 | 73 | 73 | 68 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| Category D | 100 | 96 | 91 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 105 | 93 | 89 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 110 | 90 | 87 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 120 | 85 | 83 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 130 | 80 | 80 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 140 | 75 | 75 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 150 | 71 | 71 | 67 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 160 | 68 | 68 | 65 | 50 | 40 | 33 | 28 | 24 | 22 | 19 | |
| | 170 | 64 | 64 | 52 | 50 | 40 | 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 XR100 Roof Mount for use with QMNC, QMNS, & QMSFT Products

| Table 5A | | Roof Height: | 0-30 ft | | | | | Rafter Species: | Douglas Fir | | | |
|-----------------|------------|------------------|-----------------|--------|--------|--------|--------|-------------------|-------------|--------|--------|--|
| | | Roof Angle: | 28 - 45 degrees | | | | | Specific Gravity: | 0.50 | | | |
| | | Roof Wind Zone: | 2 | | | | | | | | | |
| XR100 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 | 107 | 98 | 84 | 75 | 67 | 61 | 56 | 52 | 49 | 46 | |
| | 105 | 107 | 98 | 84 | 75 | 67 | 61 | 56 | 52 | 49 | 46 | |
| | 110 | 106 | 97 | 84 | 75 | 67 | 61 | 56 | 52 | 49 | 46 | |
| | 120 | 101 | 94 | 82 | 74 | 67 | 61 | 56 | 52 | 49 | 46 | |
| | 130 | 94 | 91 | 80 | 72 | 66 | 61 | 56 | 52 | 49 | 46 | |
| | 140 | 88 | 88 | 78 | 70 | 65 | 60 | 56 | 52 | 49 | 46 | |
| | 150 | 83 | 83 | 76 | 69 | 64 | 59 | 56 | 52 | 49 | 46 | |
| | 160 | 78 | 78 | 74 | 67 | 62 | 58 | 55 | 52 | 49 | 46 | |
| Category C | 100 | 101 | 94 | 82 | 74 | 67 | 61 | 56 | 52 | 49 | 46 | |
| | 105 | 98 | 93 | 81 | 73 | 67 | 61 | 56 | 52 | 49 | 46 | |
| | 110 | 94 | 91 | 80 | 72 | 66 | 61 | 56 | 52 | 49 | 46 | |
| | 120 | 87 | 87 | 77 | 70 | 65 | 60 | 56 | 52 | 49 | 46 | |
| | 130 | 81 | 81 | 75 | 68 | 63 | 59 | 56 | 52 | 49 | 46 | |
| | 140 | 76 | 76 | 72 | 66 | 62 | 58 | 55 | 52 | 49 | 46 | |
| | 150 | 71 | 71 | 70 | 65 | 60 | 57 | 53 | 51 | 49 | 46 | |
| | 160 | 67 | 67 | 67 | 63 | 59 | 55 | 52 | 50 | 48 | 46 | |
| Category D | 100 | 95 | 91 | 80 | 72 | 66 | 61 | 56 | 52 | 49 | 46 | |
| | 105 | 91 | 89 | 79 | 71 | 65 | 61 | 56 | 52 | 49 | 46 | |
| | 110 | 87 | 87 | 77 | 70 | 65 | 60 | 56 | 52 | 49 | 46 | |
| | 120 | 81 | 81 | 75 | 68 | 63 | 59 | 55 | 52 | 49 | 46 | |
| | 130 | 75 | 75 | 72 | 66 | 61 | 58 | 54 | 52 | 49 | 46 | |
| | 140 | 70 | 70 | 70 | 64 | 60 | 56 | 53 | 51 | 48 | 46 | |
| | 150 | 66 | 66 | 66 | 62 | 58 | 55 | 52 | 50 | 48 | 46 | |
| | 160 | 62 | 62 | 62 | 60 | 57 | 54 | 51 | 49 | 47 | 45 | |
| 170 | 59 | 59 | 59 | 58 | 55 | 52 | 50 | 48 | 46 | 44 | | |

Notes:

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

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMUTM & QMLSH-7 Products

| Table 5B | | Roof Height: | 0-30 ft | | | | Rafter Species: | Douglas Fir | | | | |
|-----------------|------------|------------------|-----------------|--------|--------|--------|-------------------|-------------|--------|--------|--------|--|
| | | Roof Angle: | 28 - 45 degrees | | | | Specific Gravity: | 0.50 | | | | |
| | | Roof Wind Zone: | 2 | | | | | | | | | |
| XR100 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 | 107 | 98 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 105 | 107 | 98 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 110 | 106 | 97 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 120 | 101 | 94 | 82 | 74 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 130 | 94 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 140 | 88 | 88 | 78 | 70 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 150 | 83 | 83 | 76 | 69 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 160 | 78 | 78 | 74 | 67 | 61 | 50 | 43 | 37 | 33 | 30 | |
| Category C | 100 | 101 | 94 | 82 | 74 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 105 | 98 | 93 | 81 | 73 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 110 | 94 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 120 | 87 | 87 | 77 | 70 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 130 | 81 | 81 | 75 | 68 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 140 | 76 | 76 | 72 | 66 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 150 | 71 | 71 | 70 | 65 | 60 | 50 | 43 | 37 | 33 | 30 | |
| | 160 | 67 | 67 | 67 | 63 | 59 | 50 | 43 | 37 | 33 | 30 | |
| Category D | 100 | 95 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 105 | 91 | 89 | 79 | 71 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 110 | 87 | 87 | 77 | 70 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 120 | 81 | 81 | 75 | 68 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 130 | 75 | 75 | 72 | 66 | 61 | 50 | 43 | 37 | 33 | 30 | |
| | 140 | 70 | 70 | 70 | 64 | 60 | 50 | 43 | 37 | 33 | 30 | |
| | 150 | 66 | 66 | 66 | 62 | 58 | 50 | 43 | 37 | 33 | 30 | |
| | 160 | 62 | 62 | 62 | 60 | 57 | 50 | 43 | 37 | 33 | 30 | |
| 170 | 59 | 59 | 59 | 58 | 55 | 50 | 43 | 37 | 33 | 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 67.5"

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMLSH-9 Products

| Table 5C | | Roof Height: | 0-30 ft | | Rafter Species: | Douglas Fir | | | | | |
|-----------------|------------|------------------|-----------------|--------|-------------------|-------------|--------|--------|--------|--------|--------|
| | | Roof Angle: | 28 - 45 degrees | | Specific Gravity: | 0.50 | | | | | |
| | | Roof Wind Zone: | 2 | | | | | | | | |
| XR100 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 | 107 | 98 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 105 | 107 | 98 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 110 | 106 | 97 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 120 | 101 | 94 | 82 | 74 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 130 | 94 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 140 | 88 | 88 | 78 | 70 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 150 | 83 | 83 | 76 | 69 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 160 | 78 | 78 | 74 | 67 | 61 | 50 | 43 | 37 | 33 | 30 |
| Category C | 170 | 74 | 74 | 72 | 66 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 100 | 101 | 94 | 82 | 74 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 105 | 98 | 93 | 81 | 73 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 110 | 94 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 120 | 87 | 87 | 77 | 70 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 130 | 81 | 81 | 75 | 68 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 140 | 76 | 76 | 72 | 66 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 150 | 71 | 71 | 70 | 65 | 60 | 50 | 43 | 37 | 33 | 30 |
| Category D | 160 | 67 | 67 | 67 | 63 | 59 | 50 | 43 | 37 | 33 | 30 |
| | 170 | 64 | 64 | 64 | 61 | 57 | 50 | 43 | 37 | 33 | 30 |
| | 100 | 95 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 105 | 91 | 89 | 79 | 71 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 110 | 87 | 87 | 77 | 70 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 120 | 81 | 81 | 75 | 68 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 130 | 75 | 75 | 72 | 66 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 140 | 70 | 70 | 70 | 64 | 60 | 50 | 43 | 37 | 33 | 30 |
| 150 | 66 | 66 | 66 | 62 | 58 | 50 | 43 | 37 | 33 | 30 | |
| 160 | 62 | 62 | 62 | 60 | 57 | 50 | 43 | 37 | 33 | 30 | |
| 170 | 59 | 59 | 59 | 58 | 55 | 50 | 43 | 37 | 33 | 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 67.5"

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMLSH-12 Products

| Table 5D | | Roof Height: 0-30 ft | | Rafter Species: Douglas Fir | | Roof Angle: 28 - 45 degrees | | Specific Gravity: 0.50 | | Roof Wind Zone: 2 | |
|-----------------|------------|----------------------|--------|-----------------------------|--------|-----------------------------|--------|------------------------|--------|-------------------|--------|
| XR100 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 | 107 | 98 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 105 | 107 | 98 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 110 | 106 | 97 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 120 | 101 | 94 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 130 | 94 | 91 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 140 | 88 | 88 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 150 | 83 | 83 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 160 | 78 | 78 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| Category C | 100 | 101 | 94 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 105 | 98 | 93 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 110 | 94 | 91 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 120 | 87 | 87 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 130 | 81 | 81 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 140 | 76 | 76 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 150 | 71 | 71 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 160 | 67 | 67 | 67 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| Category D | 100 | 95 | 91 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 105 | 91 | 89 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 110 | 87 | 87 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 120 | 81 | 81 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 130 | 75 | 75 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 140 | 70 | 70 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 150 | 66 | 66 | 66 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 160 | 62 | 62 | 62 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 170 | 59 | 59 | 59 | 50 | 40 | 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 XR100 Roof Mount for use with QMNC, QMNS, & QMSFT Products

| Table 6A | | Roof Height: | 0-30 ft | | Rafter Species: | Douglas Fir | | | | | |
|-----------------|------------|------------------|-----------------|--------|-------------------|-------------|--------|--------|--------|--------|--------|
| | | Roof Angle: | 28 - 45 degrees | | Specific Gravity: | 0.50 | | | | | |
| | | Roof Wind Zone: | 3 | | | | | | | | |
| XR100 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 | 107 | 98 | 84 | 75 | 67 | 61 | 56 | 52 | 49 | 46 |
| | 105 | 107 | 98 | 84 | 75 | 67 | 61 | 56 | 52 | 49 | 46 |
| | 110 | 106 | 97 | 84 | 75 | 67 | 61 | 56 | 52 | 49 | 46 |
| | 120 | 101 | 94 | 82 | 74 | 67 | 61 | 56 | 52 | 49 | 46 |
| | 130 | 94 | 91 | 80 | 72 | 66 | 61 | 56 | 52 | 49 | 46 |
| | 140 | 88 | 88 | 78 | 70 | 65 | 60 | 56 | 52 | 49 | 46 |
| | 150 | 83 | 83 | 76 | 69 | 64 | 59 | 56 | 52 | 49 | 46 |
| | 160 | 78 | 78 | 74 | 67 | 62 | 58 | 55 | 52 | 49 | 46 |
| Category C | 100 | 101 | 94 | 82 | 74 | 67 | 61 | 56 | 52 | 49 | 46 |
| | 105 | 98 | 93 | 81 | 73 | 67 | 61 | 56 | 52 | 49 | 46 |
| | 110 | 94 | 91 | 80 | 72 | 66 | 61 | 56 | 52 | 49 | 46 |
| | 120 | 87 | 87 | 77 | 70 | 65 | 60 | 56 | 52 | 49 | 46 |
| | 130 | 81 | 81 | 75 | 68 | 63 | 59 | 56 | 52 | 49 | 46 |
| | 140 | 76 | 76 | 72 | 66 | 62 | 58 | 55 | 52 | 49 | 46 |
| | 150 | 71 | 71 | 70 | 65 | 60 | 57 | 53 | 51 | 49 | 46 |
| | 160 | 67 | 67 | 67 | 63 | 59 | 55 | 52 | 50 | 48 | 46 |
| Category D | 100 | 95 | 91 | 80 | 72 | 66 | 61 | 56 | 52 | 49 | 46 |
| | 105 | 91 | 89 | 79 | 71 | 65 | 61 | 56 | 52 | 49 | 46 |
| | 110 | 87 | 87 | 77 | 70 | 65 | 60 | 56 | 52 | 49 | 46 |
| | 120 | 81 | 81 | 75 | 68 | 63 | 59 | 55 | 52 | 49 | 46 |
| | 130 | 75 | 75 | 72 | 66 | 61 | 58 | 54 | 52 | 49 | 46 |
| | 140 | 70 | 70 | 70 | 64 | 60 | 56 | 53 | 51 | 48 | 46 |
| | 150 | 66 | 66 | 66 | 62 | 58 | 55 | 52 | 50 | 48 | 46 |
| | 160 | 62 | 62 | 62 | 60 | 57 | 54 | 51 | 49 | 47 | 45 |
| 170 | 59 | 59 | 59 | 58 | 55 | 52 | 50 | 48 | 46 | 44 | |

Notes:

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

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMUTM & QMLSH-7 Products

| Table 6B | | Roof Height: | 0-30 ft | | Rafter Species: | Douglas Fir | | | | | |
|-----------------|------------|------------------|-----------------|--------|-------------------|-------------|--------|--------|--------|--------|--------|
| | | Roof Angle: | 28 - 45 degrees | | Specific Gravity: | 0.50 | | | | | |
| | | Roof Wind Zone: | 3 | | | | | | | | |
| XR100 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 | 107 | 98 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 105 | 107 | 98 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 110 | 106 | 97 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 120 | 101 | 94 | 82 | 74 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 130 | 94 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 140 | 88 | 88 | 78 | 70 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 150 | 83 | 83 | 76 | 69 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 160 | 78 | 78 | 74 | 67 | 61 | 50 | 43 | 37 | 33 | 30 |
| Category C | 100 | 101 | 94 | 82 | 74 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 105 | 98 | 93 | 81 | 73 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 110 | 94 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 120 | 87 | 87 | 77 | 70 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 130 | 81 | 81 | 75 | 68 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 140 | 76 | 76 | 72 | 66 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 150 | 71 | 71 | 70 | 65 | 60 | 50 | 43 | 37 | 33 | 30 |
| | 160 | 67 | 67 | 67 | 63 | 59 | 50 | 43 | 37 | 33 | 30 |
| Category D | 100 | 95 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 105 | 91 | 89 | 79 | 71 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 110 | 87 | 87 | 77 | 70 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 120 | 81 | 81 | 75 | 68 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 130 | 75 | 75 | 72 | 66 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 140 | 70 | 70 | 70 | 64 | 60 | 50 | 43 | 37 | 33 | 30 |
| | 150 | 66 | 66 | 66 | 62 | 58 | 50 | 43 | 37 | 33 | 30 |
| | 160 | 62 | 62 | 62 | 60 | 57 | 50 | 43 | 37 | 33 | 30 |
| 170 | 59 | 59 | 59 | 58 | 55 | 50 | 43 | 37 | 33 | 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 67.5"

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMLSH-9 Products

| Table 6C | | Roof Height: | 0-30 ft | | Rafter Species: | Douglas Fir | | | | | |
|-----------------|------------|------------------|-----------------|--------|-------------------|-------------|--------|--------|--------|--------|--------|
| | | Roof Angle: | 28 - 45 degrees | | Specific Gravity: | 0.50 | | | | | |
| | | Roof Wind Zone: | 3 | | | | | | | | |
| XR100 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 | 107 | 98 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 105 | 107 | 98 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 110 | 106 | 97 | 84 | 75 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 120 | 101 | 94 | 82 | 74 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 130 | 94 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 140 | 88 | 88 | 78 | 70 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 150 | 83 | 83 | 76 | 69 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 160 | 78 | 78 | 74 | 67 | 61 | 50 | 43 | 37 | 33 | 30 |
| Category C | 100 | 101 | 94 | 82 | 74 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 105 | 98 | 93 | 81 | 73 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 110 | 94 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 120 | 87 | 87 | 77 | 70 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 130 | 81 | 81 | 75 | 68 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 140 | 76 | 76 | 72 | 66 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 150 | 71 | 71 | 70 | 65 | 60 | 50 | 43 | 37 | 33 | 30 |
| | 160 | 67 | 67 | 67 | 63 | 59 | 50 | 43 | 37 | 33 | 30 |
| Category D | 100 | 95 | 91 | 80 | 72 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 105 | 91 | 89 | 79 | 71 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 110 | 87 | 87 | 77 | 70 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 120 | 81 | 81 | 75 | 68 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 130 | 75 | 75 | 72 | 66 | 61 | 50 | 43 | 37 | 33 | 30 |
| | 140 | 70 | 70 | 70 | 64 | 60 | 50 | 43 | 37 | 33 | 30 |
| | 150 | 66 | 66 | 66 | 62 | 58 | 50 | 43 | 37 | 33 | 30 |
| | 160 | 62 | 62 | 62 | 60 | 57 | 50 | 43 | 37 | 33 | 30 |
| 170 | 59 | 59 | 59 | 58 | 55 | 50 | 43 | 37 | 33 | 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 67.5"

Rail Spans for IronRidge Series XR100 Roof Mount for use with QMLSH-12 Products

| Table 6D | | Roof Height: | 0-30 ft | | Rafter Species: | Douglas Fir | | | | | |
|-----------------|------------|------------------|-----------------|--------|-------------------|-------------|--------|--------|--------|--------|--------|
| | | Roof Angle: | 28 - 45 degrees | | Specific Gravity: | 0.50 | | | | | |
| | | Roof Wind Zone: | 3 | | | | | | | | |
| XR100 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 | 107 | 98 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 105 | 107 | 98 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 110 | 106 | 97 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 120 | 101 | 94 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 130 | 94 | 91 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 140 | 88 | 88 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 150 | 83 | 83 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 160 | 78 | 78 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| Category C | 100 | 101 | 94 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 105 | 98 | 93 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 110 | 94 | 91 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 120 | 87 | 87 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 130 | 81 | 81 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 140 | 76 | 76 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 150 | 71 | 71 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 160 | 67 | 67 | 67 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| Category D | 100 | 95 | 91 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 105 | 91 | 89 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 110 | 87 | 87 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 120 | 81 | 81 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 130 | 75 | 75 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 140 | 70 | 70 | 69 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 150 | 66 | 66 | 66 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 160 | 62 | 62 | 62 | 50 | 40 | 33 | 28 | 24 | 22 | 19 |
| | 170 | 59 | 59 | 59 | 50 | 40 | 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"