



Certificate: 70131735

Master Contract: 266909

Project: 80238341

Date Issued: 2025-06-17

The system listed is designed to provide bonding/grounding, and mechanical stability for photovoltaic modules. The system is secured to the roof with the L-Foot components through the roofing material to building structure. Modules are secured to the racking system with stainless steel or aluminum mid clamps and Aluminum end clamps. The modules are bonded to the racking system with the stainless-steel bonding mid clamps with piercing points. The system is grounded with 10 AWG copper wire to bonding/grounding lugs. Fire ratings of Class A with Type 1, 2, 3 (with metallic frame), 4 (with trim), 5 (with trim), 10(with metallic frame), 19, 22, 25, 29, or 30 for steep slope. Class A with Type 1, 2, 29 or 30 for low slope. Tested at 5" interstitial gap which allows installation at any stand-off height.

The grounding of the system is intended to comply with the latest edition of the National Electrical Code, to include NEC 250 & 690. Local codes compliance is required, in addition to national codes. All grounding/bonding connections are to be torqued in accordance with the Installation Manual and the settings used during the certification testing for the current edition of the project report.

SolarMount Tilt Legs is a variation of the SolarMount system that utilizes structural standoff attachments to achieve a range of module tilt angles. The SolarMount Tilt Legs installation instructions are captured in an Installation Addendum that covers both the SolarMount Tilt Legs system and the NXT Tilt Legs system. SolarMount Tilt Legs has mechanical load ratings independent of the SolarMount and NXT UMount mechanical load ratings.

The system may employ optimizers/micro-inverters and used for grounding when installed per installation instructions.

Latest SolarMount Install Manual revision: PUB2025MAY10

Latest SolarMount NXT Tilt Legs Installation Addendum revision: PUB2025APR25 & PUB2025APR25-Trinity

SolarMount UL 2703 Mechanical Load ratings:

Module Area up to 22.2 sq ft	
Downward Design Load (lb/ft ²)	113.5
Upward Design Load (lb/ft ²)	50.7
Down-Slope Load (lb/ft ²)	16.13

Module Area up to 27.12 sq ft	
Downward Design Load (lb/ft ²)	33.9
Upward Design Load (lb/ft ²)	33.9
Down-Slope Load (lb/ft ²)	16.5

Module Area up to 29.49 sq ft	
Downward Design Load (lb/ft ²)	31.18
Upward Design Load (lb/ft ²)	31.18
Down-Slope Load (lb/ft ²)	9.8

Module Area up to 33.43 sq ft	
Downward Design Load (lb/ft ²)	27.79
Upward Design Load (lb/ft ²)	28.05
Down-Slope Load (lb/ft ²)	9.8



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Module Area up to 27.73 sq ft note: Modules racking system installed with SM Light Rail (2 nd generation)	
Downward Design Load (lb/ft ²)	37.85
Upward Design Load (lb/ft ²)	37.85
Down-Slope Load (lb/ft ²)	19.4

SolarMount Test Loads:

Module Area up to 22.2 sq ft	
Downward Load (lb/ft ²)	170.20
Upward Load (lb/ft ²)	76.07
Down-Slope Load (lb/ft ²)	24.2

Module Area up to 27.12 sq ft	
Downward Design Load (lb/ft ²)	50.85
Upward Design Load (lb/ft ²)	50.85
Down-Slope Load (lb/ft ²)	24.75

Module Area up to 29.49 sq ft	
Downward Design Load (lb/ft ²)	46.77
Upward Design Load (lb/ft ²)	46.77
Down-Slope Load (lb/ft ²)	14.7

Module Area up to 33.43 sq ft	
Downward Design Load (lb/ft ²)	41.69
Upward Design Load (lb/ft ²)	42.08
Down-Slope Load (lb/ft ²)	14.7

Module Area up to 27.73 sq ft note: Modules racking system installed with SM Light Rail (2 nd generation)	
Downward Design Load (lb/ft ²)	56.78
Upward Design Load (lb/ft ²)	56.78
Down-Slope Load (lb/ft ²)	29.1

SolarMount Tilt Legs UL 2703 Mechanical Load ratings:

Module Area up to 21.05 sq ft	
Downward Design Load (lb/ft ²)	50.53
Upward Design Load (lb/ft ²)	44.33
Down-Slope Load (lb/ft ²)	10.93



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SolarMount Tilt Legs Test Loads:

Module Area up to 21.05 sq ft	
Downward Design Load (lb/ft ²)	75.80
Upward Design Load (lb/ft ²)	66.50
Down-Slope Load (lb/ft ²)	16.40

Unirac Large Array

ULA is a ground mount system using the SolarMount (SM) platform for the bonding and grounding of PV modules. ULA aluminum components merge with SM rails and installer-supplied steel pipe. The SM rail system is secured to the horizontal Pipe using the Rail Bracket components. The Rear and Front cap secures the horizontal Pipe to the vertical Pipe. The Front cap is also used to secure the Cross brace. A Slider is attached to the vertical Pipe to secure the Cross brace. The SM rails, caps, slider, rail brackets, and cross braces materials are 6105-T5 aluminum extrusion. Fasteners materials are 304 stainless steel. Horizontal and vertical pipe materials meet the minimum requirements of ASTM A53 for galvanized steel pipe in 2" and 3" diameter.

The mechanical load ratings from the SM test data will be applied to the ULA model.

Fire Testing is not applicable due to being a ground mount system.

The grounding of the system is intended to comply with the latest edition of the National Electrical Code, to include NEC 250 & 690. Local codes compliance is required, in addition to national codes. All grounding/bonding connections are to be torqued in accordance with the Installation Manual and the settings used during the certification testing for the current edition of the project report.

Latest Install Manual revision: PUB2025MAY10

RM DT, East West facing, low slope, ballasted roof mount PV racking system

RM 5 South, South facing, low slope, ballasted roof mount PV racking system

Model(s)
RM 5 South, RM DT

RM 5 South and RM DT

The systems listed are designed to provide bonding/grounding, and mechanical stability for photovoltaic modules. The system employs galvanized steel bays, ballasted with ASTM C1491 concrete blocks. Modules are secured to the racking system with stainless steel end and mid clamps. Where applicable, the system may employ fire skirts and/or wind deflectors made from 18 gauge G180 steel. The modules are bonded to the racking system with anodization-piercing clamps. The system is grounded with 10 AWG copper wire to bonding/grounding lugs.

Fire ratings of Class A with Type 1, 2, 29, or 30 for low slope with fixed interstitial gap per design of racking system. RM5 requires wind deflectors on North edge.

The system may employ bay-mounted or module mounted optimizers/micro-inverters.

Both models are identical in terms of construction material, module clamps, bonding/grounding, and performance rating with the exception of



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the tilt angle and direction of the systems.

Latest RM5 Install Manual revision: PUB2025APR14

Latest RMDT Install Manual revision: PUB2025APR14

Mechanical ratings for both models:

Module Area up to 27.76 sq ft System Configuration without Mid Bays Included	
Downward Design Load (lb/ft²)	36.2
Upward Design Load (lb/ft²)	17.24
Down-Slope Load (lb/ft²)	5

Module Area up to 33.44 sq ft System Configuration with Mid Bays Included	
Downward Design Load (lb/ft²)	33.3
Upward Design Load (lb/ft²)	23.52
Down-Slope Load (lb/ft²)	5.26

Module Area up to 33.44 sq ft System Configuration without Mid Bays Included	
Downward Design Load (lb/ft²)	14.85
Upward Design Load (lb/ft²)	15.66
Down-Slope Load (lb/ft²)	5.13

SM Ascender, one or two row elevated or non elevated roof system is an extruded aluminum rail PV racking system that is installed to the roof in portrait orientation

Model(s)
SM Ascender

SM Ascender

The system listed is designed to provide bonding/grounding, and mechanical stability for photovoltaic modules. The system is secured to the roof with the L-Foot components through the roofing material to building structure. Modules are secured to the racking system with aluminum mid clamps and aluminum end clamps. Fire rating of Class A when installed over non-combustible roofing materials.

The grounding of the system is intended to comply with the latest edition of the National Electrical Code, to include NEC 250 & 690. Local codes compliance is required, in addition to national codes. All grounding/bonding connections are to be torqued in accordance with the Installation Manual and the settings used during the certification testing for the current edition of the project report.

Latest Install Manual revisions (1P Elevated, 1P Non Elevated, 2P Elevated, 2P Non Elevated): PUB2025APR14



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UL 2703 Mechanical Load ratings for tested module area 27.76 sq ft:

Downward Design Load (lb/ft ²)	28.4
Upward Design Load (lb/ft ²)	31.9
Down-Slope Load (lb/ft ²)	5.2

UL 2703 and TIL Mechanical Load ratings tested module area 27.76 sq ft:

Downward Design Load (lb/ft ²)	17.1
Upward Design Load (lb/ft ²)	17.1
Down-Slope Load (lb/ft ²)	5.2

SM Ascender Flush Mount, flush mount roof system is an extruded aluminum rail PV racking system that is installed to the roof in portrait or landscape orientation.

Model(s)
SM Ascender Flush Mount

SM Ascender Flush Mount

The system listed is designed to provide bonding/grounding, and mechanical stability for photovoltaic modules. The system is secured to the roof with the L-Foot components through the roofing material to building structure. Modules are secured to the racking system with aluminum mid clamps and aluminum end clamps. Fire ratings of Class A with Type 1, 2, 3 (with metallic frame), 10(with metallic frame), 19, 22, 25, 29, or 30 for steep slope. Class A with Type 1, 2, 29 or 30 for low slope. Tested at 5” interstitial gap which allows installation at any stand-off height.

The grounding of the system is intended to comply with the latest edition of the National Electrical Code, to include NEC 250 & 690. Local codes compliance is required, in addition to national codes. All grounding/bonding connections are to be torqued in accordance with the Installation Manual and the settings used during the certification testing for the current edition of the project report.

Latest Install Manual revision: PUB2025APR14

UL 2703 Mechanical Load ratings for tested module area 27.76 sq ft:

Downward Design Load (lb/ft ²)	28.4
Upward Design Load (lb/ft ²)	31.9
Down-Slope Load (lb/ft ²)	5.2

UL 2703 and TIL Mechanical Load ratings tested module area 27.76 sq ft:

Downward Design Load (lb/ft ²)	17.1
Upward Design Load (lb/ft ²)	17.1
Down-Slope Load (lb/ft ²)	5.2

Flush to Roof is an extruded aluminum rail PV racking system that is installed parallel to the roof in landscape or portrait



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Model(s)
NXT UMount

NXT UMount

The system listed is designed to provide bonding/grounding, and mechanical stability for photovoltaic modules. The system is secured to the roof with the L-Foot components through the roofing material to building structure. Modules are secured to the racking system with aluminum mid clamps and aluminum end clamps. The modules are bonded to the racking system with bonding mid and end clamps with piercing points. Fire ratings of Class A with Type 1, 2, 3 (with metallic frame), 10(with metallic frame), 19, 22, 25, 29, or 30 for steep and low slope. Tested at 5" interstitial gap which allows installation at any stand-off height.

The grounding of the system is intended to comply with the latest edition of the National Electrical Code, to include NEC 250 & 690. Local codes compliance is required, in addition to national codes. All grounding/bonding connections are to be torqued in accordance with the Installation Manual and the settings used during the certification testing for the current edition of the project report.

NXT Tilt Legs is a flat roof configuration of the NXT UMount system that utilizes an attachment variation that involves structural standoffs to achieve a range of module tilt angles. The NXT Tilt Legs installation instructions are captured in an Installation Addendum that covers both the SolarMount Tilt Legs system and the NXT Tilt Legs system. NXT Tilt Legs has mechanical load ratings independent of the NXT UMount mechanical load ratings.

NXT UMount Ghost Rail is a version of NXT UMount system where the south row is identical to NXT UMount in that there are two rails in that row of modules. On all non-south rows instead of two rails per row of modules there is 1 rail per row of modules and the absent rail is replaced with a coupler component.

Latest SolarMount NXT Tilt Legs Installation Addendum revisions: PUB2025APR25 & PUB2025APR25-Trinity

Latest NXT UMount Install Manual revision: PUB2025MAY01

Latest NXT UMount Ghost Rail Install Manual Revision: PUB2025JUN02

NXT UMount UL 2703 Mechanical Load ratings for tested module area 21.86 sq ft:

NXT Systems without DTD Butyl Attachment P30817211, Rail Splice P30808218, or Rail Clamp P30817214	
Downward Design Load (lb/ft ²)	113.7
Upward Design Load (lb/ft ²)	51.1
Down-Slope Load (lb/ft ²)	16.8

NXT Systems with DTD Butyl Attachment P30817211, Rail Splice P30808218, or Rail Clamp P30817214	
Downward Design Load (lb/ft ²)	51.1
Upward Design Load (lb/ft ²)	51.1
Down-Slope Load (lb/ft ²)	16.8



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NXT UMount UL 2703 and TIL Mechanical Load ratings tested module area 27.76 sq ft:

NXT Systems without DTD Butyl Attachment P30817211, Rail Splice P30808218, or Rail Clamp P30817214	
Downward Design Load (lb/ft²)	50.1
Upward Design Load (lb/ft²)	22.2
Down-Slope Load (lb/ft²)	8.0

UL 2703 and TIL Mechanical Load ratings tested module area 29.49 sq ft:

NXT Systems with all components included in PUB2023NOV10 Install Manual	
Downward Design Load (lb/ft ²)	37.06
Upward Design Load (lb/ft ²)	20.97
Down-Slope Load (lb/ft ²)	7.53

UL 2703 and TIL Mechanical Load ratings tested module area 30.05 sq ft:

NXT Systems with all components included in PUB2023NOV10 Install Manual	
Downward Design Load (lb/ft ²)	36.5
Upward Design Load (lb/ft ²)	20.96
Down-Slope Load (lb/ft ²)	7.6

NXT HD Rail UL 2703 Mechanical Load ratings:

Module Area up to 27.81 sq ft	
Downward Design Load (lb/ft ²)	50.47
Upward Design Load (lb/ft ²)	25.57
Down-Slope Load (lb/ft ²)	8.2

NXT Tilt Legs UL 2703 Mechanical Load ratings:

Module Area up to 21.05 sq ft	
Downward Design Load (lb/ft ²)	51
Upward Design Load (lb/ft ²)	32.23
Down-Slope Load (lb/ft ²)	10.93

Module Area up to 27.81 sq ft	
Downward Design Load (lb/ft ²)	30.35
Upward Design Load (lb/ft ²)	24.1
Down-Slope Load (lb/ft ²)	8.13



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NXT Tilt Legs Test Loads:

Module Area up to 21.05 sq ft	
Downward Design Load (lb/ft ²)	76.5
Upward Design Load (lb/ft ²)	48.35
Down-Slope Load (lb/ft ²)	16.40

Module Area up to 27.81 sq ft	
Downward Design Load (lb/ft ²)	45.53
Upward Design Load (lb/ft ²)	36.15
Down-Slope Load (lb/ft ²)	12.2

NXT UMOUNT Ghost Rail UL 2703 Mechanical Load ratings:

Module Area up to 21.65 sq ft	
Downward Design Load (lb/ft ²)	16.8
Upward Design Load (lb/ft ²)	28.2
Down-Slope Load (lb/ft ²)	9.6

NXT UMOUNT Ghost Rail Test Loads:

Module Area up to 21.65 sq ft	
Downward Design Load (lb/ft ²)	25.2
Upward Design Load (lb/ft ²)	42.3
Down-Slope Load (lb/ft ²)	14.5

GridFlex 10 is a low slope ballasted roof mounted PV racking system

Model(s)
GridFlex 10

GridFlex 10

The system listed is designed to provide bonding/grounding, and mechanical stability for photovoltaic modules. The system is a low slope ballasted system. Modules are secured to the racking system with aluminum clamps. The modules are bonded to the racking system via the clamps' stainless steel bonding pins. Fire ratings of Class A with Type 1, 2, 3 (with metallic frame), 10(with metallic frame), 19, 22, 25, 29, or 30 for low slope applications. Tested at 5" interstitial gap which allows installation at any stand-off height.

The grounding of the system is intended to comply with the latest edition of the National Electrical Code, to include NEC 250 & 690. Local codes compliance is required, in addition to national codes. All grounding/bonding connections are to be torqued in accordance with the Installation Manual and the settings used during the certification testing for the current edition of the project report.

Latest GridFlex 10 Install Manual revision: PUB2025APR14



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GridFlex 10 UL 2703 Mechanical Load ratings for tested module area 22.20 sq ft:

GridFlex 10	
Downward Design Load (lb/ft ²)	60.12
Upward Design Load (lb/ft ²)	38.57 ¹
Down-Slope Load (lb/ft ²)	11.91

GridFlex 10 UL 2703 Mechanical Load ratings for tested module area 27.76 sq ft:

GridFlex 10	
Downward Design Load (lb/ft ²)	50.48
Upward Design Load (lb/ft ²)	31.01 ¹
Down-Slope Load (lb/ft ²)	8.93

GridFlex 10 UL 2703 Mechanical Load ratings for tested module area 33.44 sq ft:

GridFlex 10	
Downward Design Load (lb/ft ²)	17.59
Upward Design Load (lb/ft ²)	18.55 ¹
Upward Design Load (lb/ft ²)	5.38 ²
Down-Slope Load (lb/ft ²)	6.20

¹This is the design load value in uplift for non-south row modules and south row modules with either ballasting or mechanical attachments south of the south row modules

²¹This is the design load value in uplift for south row modules that utilize the south rail stiffener component and do not utilize ballasting or mechanical attachments south of the south row modules

Ground Fixed Tilt is a Roll Formed Steel and extruded aluminum rail PV racking system that is ground mounted in portrait orientation

GFT Flush Mount is a Roll Formed Steel and extruded aluminum rail PV racking system that is roof mounted in portrait orientation

Model(s)
GFT, GFT Flush Mount

Ground Fixed Tilt

The racking system listed is designed to provide bonding/grounding, and mechanical stability for photovoltaic modules. Racking system is secured to the ground with roll-formed steel piles. Modules are secured to the racking system with stainless steel or aluminum mid clamps and Aluminum end clamps. The modules are bonded to the racking system with bonding mid clamps with piercing points. The system is grounded with 10 AWG copper wire to bonding/grounding lugs.

The grounding of the system is intended to comply with the latest edition of the National Electrical Code, to include NEC 250 & 690. Local



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codes compliance is required, in addition to national codes. All grounding/bonding connections are to be torqued in accordance with the Installation Manual and the settings used during the certification testing for the current edition of the project report. The mechanical load ratings from the SM test data will be applied to the GFT model.

Fire Testing is not applicable due to being a ground mount system.

Latest Install Manual revisions:

GFT_Installation Guide_PUB2025MAY10

GFT_HD_RAIL_20240209_PUB2024FEB09

Mechanical ratings:

Module Area up to 22.2 sq ft	
Downward Design Load (lb/ft ²)	113.5
Upward Design Load (lb/ft ²)	50.7
Down-Slope Load (lb/ft ²)	16.13

Module Area up to 27.12 sq ft	
Downward Design Load (lb/ft ²)	33.9
Upward Design Load (lb/ft ²)	33.9
Down-Slope Load (lb/ft ²)	16.5

Module Area up to 29.49 sq ft	
Downward Design Load (lb/ft ²)	31.18
Upward Design Load (lb/ft ²)	31.18
Down-Slope Load (lb/ft ²)	9.8

Module Area up to 33.43 sq ft	
Downward Design Load (lb/ft ²)	27.79
Upward Design Load (lb/ft ²)	28.05
Down-Slope Load (lb/ft ²)	9.8

GFT Flush Mount

The racking system listed is designed to provide bonding/grounding, and mechanical stability for photovoltaic modules. Racking system is secured to the roof with the Flashloc components through the roofing material to building structure. Modules are secured to the racking system with stainless steel or aluminum mid clamps and Aluminum end clamps. The modules are bonded to the racking system with bonding mid clamps with piercing points. The system is grounded with 10 AWG copper wire to bonding/grounding lugs. Fire ratings of Class A with Type 1, 2, 3 (with metallic frame), 4 (with trim), 5 (with trim), 10(with metallic frame), 19, 22, 25, 29, or 30 for steep slope. Class A with Type 1, 2, 29 or 30 for low slope. Tested at 5" interstitial gap which allows installation at any stand-off height.

The grounding of the system is intended to comply with the latest edition of the National Electrical Code, to include NEC 250 & 690. Local codes compliance is required, in addition to national codes. All grounding/bonding connections are to be torqued in accordance with the Installation Manual and the settings used during the certification testing for the current edition of the project report. The mechanical load ratings from the SM test data will be applied to the GFT model.

Latest Install Manual revisions:



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PUB2025JAN01, GFT FLUSH MOUNT_Installation Guide_20250101

Mechanical ratings:

Module Area up to 22.2 sq ft	
Downward Design Load (lb/ft ²)	113.5
Upward Design Load (lb/ft ²)	50.7
Down-Slope Load (lb/ft ²)	16.13

Module Area up to 27.12 sq ft	
Downward Design Load (lb/ft ²)	33.9
Upward Design Load (lb/ft ²)	33.9
Down-Slope Load (lb/ft ²)	16.5

Module Area up to 29.49 sq ft	
Downward Design Load (lb/ft ²)	31.18
Upward Design Load (lb/ft ²)	31.18
Down-Slope Load (lb/ft ²)	9.8

Module Area up to 33.43 sq ft	
Downward Design Load (lb/ft ²)	27.79
Upward Design Load (lb/ft ²)	28.05
Down-Slope Load (lb/ft ²)	9.8

Conditions of Acceptability:

Installation is subject to the acceptance of the local inspection authorities having jurisdiction. The certification of these products relates only to the methods of installation, bonding, and grounding as outlined in the Installation Manual for each product.

APPLICABLE REQUIREMENTS

ANSI/UL 2703: 2015 - First Edition- Including revisions through July 11, 2024 - UL Standard for Safety Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels

CSA TIL NO. A-40 - CSA TIL NO. A-40 - PV Module and Panel Racking Mounting System and Accessories



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Notes:

Products certified under Class(es) C531302, C531382 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca

