2024

# **KB**RACKING

# PRODUCT CATALOG

**Commercial Racking Systems** 

Simple Solutions You Can Count On

Trustworthy Systems for a Dependable and Renewable Future

### **Company Profile**

KB Racking is a Toronto – based manufacturer specializing in solar mounting systems for commercial rooftops across North America. We manufacture ballasted and anchored solar racking systems for flat roof projects, as well as customized solutions for metal roofs. KB Racking has offices in Canada as well as USA which allows us to service all North America.

Our mission is to face the future with positive change. We strive towards creating a 100% renewable energy future, one project at a time. With over 280+ megawatts generated in 50 states and provinces, KB Racking has come to represent quality engineering and on-site expertise that customers can count on. We continue to deliver simplified energy solutions to more people every day. With a combination of passion for innovation and ownership of our work, you will experience service quality that can be ounted on as much as our products.



### **Our Products**

At KB Racking, we offer custom solutions and innovative designs. From flat roof to metal roof racking, we offer a variety of solutions with proven quick installation speeds and lasting results. Our products are tested rigorously to meet all major industry standards. We use high grade aluminum for all of our components. This guarantees high resistance to corrosion, durability and provides customer satisfaction. We take pride in offering a variety of mounting systems, suitable for all clients, with the ability to customize them to meet your rooftop needs.

Our top system features are simple with few components, light-weight, high grade corrosion-free aluminum components and a 25-year warranty. All of our mounting systems are UL Certified. Our goal is to provide simple solutions you can count on.

All systems are certified.







# EKONORACK®2,0

### Flat Roof Mounting System

**EKONORACK** 2.0 is the simplest non-penetrating solar mounting solution for commercial flat rooftops. The system's ETL Certification attests to its high standard of safety and robust design, allowing it to be grounded with only one grounding lug per array.

**EKONORACK** 2.0's innovative design is composed of only one major component, acting as a ballast tray, windshield mount and multiple panel support. The system's pre-attached roof mats save time on installation and provide maximum protection for the roof.



### **Features**

- · ETL Certified to UL standard 2703
- · Single point grounding/bonding per array
- · Customizable row spacing available
- · Windshields include integrated press-fit nuts for a faster installation
- · Integrated rubber roof protection mats for hassle-free installation
- · Wind deflectors optimize performance and lower ballast requirements
- · Fast installation with click-in module clamps: up to 3-4kW/man-hour
- · High-grade, corrosion-free aluminum components
- · 25-year standard product warranty, extended warranty available

### **Technical Specifications**

5°, 7.5°, 10°, 12°, 15°, 20° (Landscape) Inclinations

5° (Portrait)

Distribution Load 3 - 8 lbs/ ft2 **Orientation Panel** Landscape, Portrait Framed PV module

Panel Type

3000 series Aluminum

Row Spacing 49.6 - 68.9"/ 1.260 - 1.750m (Landscape) 84.3 - 96.5"/2.140 - 2.450m (Portrait)

All types of flat roofs Roof Type Roof Pitch Up to 5°

**Grounding Method** 

Grounded once per array -ETL Certified grounding method

**Building Height** Up to 60'/ 18.3m (higher upon request)

Dependent on wind zone and exposure category **Ballast Weight** 

Wind Speed Up to 170 mph (274 km/h)

Complies with ASCE 7-10, NBCC 2005, Wind Tunnel Testing

IBC 2012 & OBC 2012 standards

Certified to ULC/ORD STD C1703

Certification Conforms to UL STD 2703.

US D774,874 S Patent Number



### Flat Roof Racking System

AEROGRID° is our latest flat roof racking system that is designed for the highest load rating in snow load regions across North America. The grid-based design features an integrated rail for windshield and ballast to reduce number of components. Offered in 5- and 10-degree tilt variations, the snap-in components provide an easy tool-less installation.

Aerogrid is a 100% green-zone clamping system that offers more panels per area and less racking per panel, making it one of the most versatile mounting systems in the market.



- · Grid Based system (N/S and E/W rails)
- · Green zone clamping (L/4 Clamping)
- · Customizable row spacing
- PV module variability (1024-1344mm width, 1950-2434mm length)
- · Snap-in components for easy tool-less installation

· Non-penetrating design prevents damage to your roof

· G90 Galvanized Steel components

- · Integrated Press-fit nuts for a faster installation
- · 25-year standard warranty



### **Technical Specifications**

5 & 10 Deg Landscape **Panel Type** Framed PV Module

**Module Dimensions** 1024-1344 mm Width, 1950 - 2434 mm

> Length, 30-50mm Thickness G90 Galvanized Steel

**Row Spacing** 1.260 - 1.925m (49.6" - 75.79") Landscape

**Roof Pitch** 

Material

Grounding Method Grounding once per array - FTI Certified grounding method

**Building Height** Up to 60'/18.3m (higher upon request) Dependent on wind zone and exposure category Ballast Weight

Wind Speed 170 mph (274 km/h) Wind Tunnel Testing

Certification

Patent

**Exposure Categories** 

**Roof Material** Grounding & Bonding Minimum Array Size

Boundary layer wind tunnel tested by RWDI - based on ASCE 7-16/

IBC 2018 standards

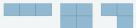
Conforms to UL STD 2703. Certified to ULC/ORD STD C1703

Pending

· ASCE 7-10 - Exposure Category B, C, D

· ASCE 7-16 - Exposure Category B, C, D

Any types of flat roofs Fuse rating up to 30 amps





### Flat Roof Mounting System

**AERORACK** 2.0 is the next generation of rail- based mounting solutions. KB Racki ng has refined its rail based solution to provide customers with the same core elements of integrated wire management and simple installation, at a more economical price.

**AERORACK** 2.0 features the same low ballast requirements and structural integrity as the original AeroRack, with a more aerodynamic design. The system offers customizable solutions with its flexibility in panel orientation, row spacing and tilt angle.



### **Features**

- Rail based design provides stiffness, reducing ballast requirements and roof loads
- · Non-penetrating design prevents damage to your roof
- · Aluminum components ensure long lasting performance
- · Pre-attached rubber mats offer additional protection for the roof
- · 25-year standard product warranty, extended available
- · Windshields include integrated press-fit nuts for a faster installation

### **Technical Specifications**

Inclinations 5°, 10°, 12°, 15°, 20° (Landscape)

3, 5° (Portrait)

Distribution Load 2- 5 lbs/ft²

Orientation Panel Landscape, Portrait

Panel Type Framed PV module

Material 3000 series Aluminum

**Row Spacing** 49.6 - 68.9"/ 1.260 - 1.750m (Landscape)

84.3 - 96.5"/2.140 - 2.450m (Portrait)

Roof Type All types of flat roofs

Roof Pitch Up to

Wind Speed

Grounding Method Grounding once per array - ETL Certified

Building Height Up to 60'/18.3m (higher upon request)

Ballast Weight Dependent on wind zone and exposure category

Up to 170 mph (274km/h)

Wind Tunnel Testing Complies with ASCE 7-10, NBCC 2005, IBC 2012

& OBC 2012 standards

Certification Conforms to UL STD 2703. Certified to ULC/ORD STD C1703



### Flat Roof Mounting System

**AERORACK** is the latest aerodynamic rail-based mounting solution. KB Racking has refined its rail based solution with an east-west orientation, to provide customers with the same core elements of integrated wire management that allows for installers to install more panels, while saving space on the roof.

With an east-west configuation, this system offers best value by reducing costs and installation time.

**AERORACK**' sees features low ballast requirements and structural integrity, while offering customizable solutions with its flexibility in row spacing and tilt angle.



#### **Features**

- Rail based design provides stiffness, reducing ballast requirements and roof loads
- · Non-penetrating design prevents damage to your roof
- · Aluminum components ensure long lasting performance
- · Pre-attached rubber mats offer additional protection for the roof
- · 25-year standard product warranty, extended available
- · Windshields include integrated press-fit nuts for a faster installation

### Technical Specifications

**Inclinations** 5°, 10°, 12°, 15°, 20° (Landscape)

3°, 5° (Portrait)

Distribution Load 2 - 5 lbs/ ft²

Orientation Panel Landscape, Portrait

Panel Type Framed PV module

Material 3000 series Aluminum

**Row Spacing** 0.2 - 15"/ 0 1 0 m (Landscape Portrait)

Roof Type All types of flat roofs

Roof Pitch Up to

Speed

Grounding Method Grounding once per array - ETL Certified

Building Height Up to 60'/18.3m (higher upon request)

Ballast Weight Wind Dependent on wind zone and exposure category

Up to 170 mph (274km/h)

Wind Tunnel Testing Complies with ASCE 7-10, NBCC 2005,

IBC 2012 & OBC 2012 standards

Certification Conforms to UL STD 2703. Certified to ULC/ORD STD C1703

# **ANCHORRACK®**

### Anchored Mounting System

**ANCHORRACK** has been designed to eliminate rooftop ballasting and provide a system both affordable and favorable to weight-challenged roofs. Wood screws penetrate the roof surface to create a secure attachment against high wind loads while high-grade flashing allows for a permanent seal against the elements.

ANCHORRACK' sinstallation is made simple with pre-punched screw holes, click-in module clamps, and lightweight aluminum components. The durable components are built-to-last with flexibility in tilt angle, row spacing and panel orientation, making it the most modular anchored systems on the market.



#### **Features**

- · Conforms to UL standard 2703
- · Fully anchored rooftop mounting solution with zero ballast
- Designed based on SEAOC's wind design guidelines for solar arrays
- · Only 2 main components for rapid installation
- · Durable flashing for a long-lasting, permanent seal
- · 5" roof clearance to allow for rooftop obstacles
- · Easy panel mounting with self-grounding, click-in module clamps
- · 25-year standard product warranty, extended available



### Technical Specifications

Inclinations 5°, 7.5°, 10°, 12°, 15°, 20° (Landscape)

5° (Portrait)

Orientation Panel Landscape, Portrait
Panel Type Framed PV module
Material 3000 series Aluminum

**Row Spacing** 49.6 - 68.9"/ 1.260 - 1.750m (Landscape)

84.3 - 96.5"/2.140 - 2.450m (Portrait)

Roof Type All types of flat roofs

Roof Pitch Up to 4

Wind Speed

**Grounding Method** Grounding once per array - ETL Certified grounding method

Flashing Pre-attached tape and liner with secondary LPS sealant

Building Height Up to 60'/18.3m (higher upon request)

Up to 170 mph (274km/h)

Certification Conforms to UL STD 2703. Certified to ULC/ORD STD C1703

## BARNRACK<sup>®</sup>2.0

### Pitched Roof Mounting System

**BARNRACK** 2.0 is a corrugated-roof mounting solution, adding adaptability and flexibility for both fully-railed and shared-rail solar installations. The lightweight aluminum rails couple with corrugated roof connections providing a rigid solar platform and a design backed with leak-proof attachments.

**BARNRACK** 2.0's adaptable design is complimented by its simple installation and feature-rich mounting rails. The KB10 rails offer integrated wire management, side mounting, and common fasteners for a clean and fast installation.



#### **Features**

- · EPDM gaskets provide a secure, watertight attachment
- · Integrated wire management
- · Configured for fully-railed and shared-rail systems
- · Side-mounted with T-bolts
- · Low overall system weight
- · 25-year standard product warranty, extended available



### **Technical Specifications**

Distribution Load 1.5 - 3 lbs/ft²

Inclinations Flush

Hush

Wind Speed Up Material 60

Up to 190mph

Module Type

6000 series aluminum

Wire Management

All standard size framed PV modules

Orientation

Built into KB10 Rail Landscape and Portrait Rail Length

.

Configurations Shared-Rail, Fully-Railed

Roof Pitch

0° - 45°

10', 20'

Roof Type All corr

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All corrugated metal roofs

Grounding Method

Module Spacing

ETL certified KB Konnect clamps

Roof Clearance

Up to 8" (Bottom of module to roof)

Customizable based on project requirements

Span Lengths

Dependent on project location, 3'- 8'

## SEAMRACK<sup>®</sup>2.0

### Standing Seam Mounting System

**SEAMRACK** 20 is a versatile standing seam solar mounting solution, featuring complete adaptability foboth fully-railed and shared-rail mounting configurations. The system uses non-penetrating seam clamps for mounting directly to standing seams, without jeopardizing the integrity of the roof.

**SEAMRACK** 2.0's adaptable design is compli mented by its simple installation and feature-rich mounting rails. The KB10 rails offer integrated wire management, side mounting, and common fasteners for a clean and fast installation.



### **Features**

- · Integrated wire management
- · Easy installation using only four components
- · Configured for fully-railed and shared-rail systems
- · Side-mounted with T-bolts
- · Low overall system weight
- · 25-year standard product warranty, extended available



### Technical Specifications

Distribution Load 1.5 - 3 lbs/ft²

Inclinations Flush

Wind Speed Up to 190mph

Material 6000 series aluminum

Module Type All standard size framed PV modules

Wire Management Built into KB10 Rail

Orientation Landscape and Portrait

Rail Length 10', 20'

Configurations Shared-Rail, Fully-Railed

Roof Pitch 0° - 4

Roof Type All standing seam metal roofs

**Grounding Method** ETL certified KB Konnect clamps

Module Spacing Customizable based on project requirements

Roof Clearance Up to 8" (Bottom of module to roof)

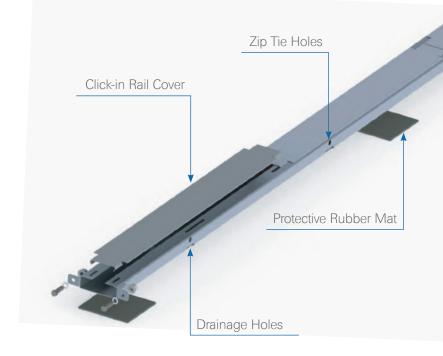
Span Lengths Dependent on project location, 3'- 8'

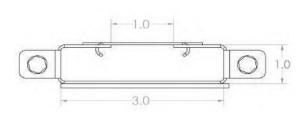
### WIRE MANAGEMENT SOLUTION

### Wire Management Solution

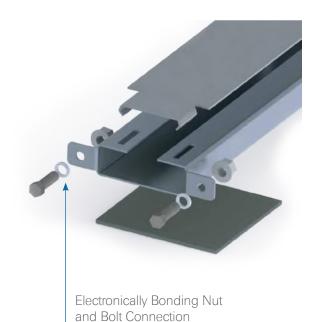
KB Racking's **WIRE MANAGEMENT SOLUTION** allows installers to neatly organize north-south running electrical wires into one, compact channel which is engineered to integrate seamlessly with KB Racking's flat roof mounting systems.

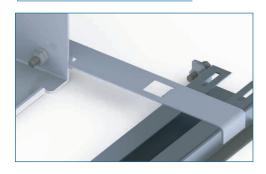
The system features pre-attached roof protection mats and click-in covers for a simple, tool-free installation and maximum protection against the elements. The innovative solution is designed to install 30% faster than standard wire management systems while maintaining the quality KB Racking is known for.





- · ETL Certified to NEMA VE1 and CSA C22.2#126.1
- · Pre-attached roof protection mats
- · Compact design integrates seamlessly with KB Racking's systems
- · Click-in rail covers for a tool-free, rapid installation
- · Simple grounding once per run using nut and bolt fasteners
- · Durable aluminum components for long-lasting performance







Optional Wire Management System Connectors Available

**HIGH-CAPACITY MOUNTS** 

High-Capacity Mounting Solutions

KB Racking's High-capacity mounts (HCM) have been designed to provide additional support for the constantly evolving PV panel. HCMs can be added for additional support with XL PV panels, and also to provide reinforcement for areas with higher-than-average snow loads.

HCMs provide 6-point clamping along the frame of PV panels. They are compatible with standard frame PV panels, and are available with our **EKONORACK** and **AERORACK** solutions.





#### **Features**

- · Non-penetrating installation
- · Single tool installation
- · Integrated rubber roof protection mats for a hassle-free installation

· High-grade, corrosion-free aluminum components



Load Rating (Pa)

### Panel Manufacturer Approvals

Manufacturer	Module Model	Design Push
LONGi Solar	LRA-72HPH-XXXM	2400
Talesun	TP6L72M(H)	3600
Hanwha	QPEAK DUO-G8X	2260
Canadian Solar	CS3W-XXXMS	1600
JA Solar	JAM72D#0	1500
REC	TwinPeak 2S72	4000

### **HIGH-CAPACITY MOUNTS**

### High-Capacity Mounting Solutions

The standard mid-supports are designed to accommodate module widths ranging from 992mm-1048mm.

Custom mid-supports can be designed to accommodate all panel ranges for high snow load region projects.



Portrait High Capacity Mount



### Solutions for each tilt angle



Portrait High Capacity Mount



### **Customer Testimonials**

"I enjoy working with KB Racking. They are very attentive to detail and make sure that they are knowledgeable in both the technical and regulatory aspects of a project. They are our partners throughout the various stages; from the development and sale side until the project is completely installed."

Jacob Sussman, Chief Operating Officer



"KB Racking's Ekonorack 2.0 has sped up our installation times from 10 panels an hour to close to 20 panels an hour. Their sales team is engaged and responsive, and the engineers we work with are accommodating and knowledgeable."

Ethan Goddard, NABCEP-Certified Senior Project Manager Solar Energy Services

"Working with KB Racking was a great experience, they provided on time delivery with expedited delivery times allowing the project to be completed on time. The system was very easy to set up and install, allowing the project to proceed without any delays."

Matthew Bennett, Operations Manager

"We had a project in an area with very high wind loads and were not allowed to install mechanical attachments, since it was a brand new TPO roof. KB racking provided us with the right product and plenty of support to get this project done. They also expedited the shipment of racking to meet our tight deadline, The install of the system went smooth. We are very pleased with the product and the service provided. Thank you!"

Nadine Pirker, Commercial Solar Installation Supervisor

"Together with KB Racking we built one of the largest rooftop solar projects in Baltimore County. The custom row spacing available with the EkonoRack 2.0 allowed us to maximize roof space and reach our target of 1.67MW. The speed of installation was accelerated by the system's simplicity and their attentive project managers. KB Racking has become a trusted partner of RER Energy not only for their products but also their exemplary customer service."

Mike Barnes, Senior Project Manager



### **OVER 280+ MW GENERATED & 900 + PROJECTS INSTALLED**





