D-Dome Railless² System

ASSEMBLY INSTRUCTIONS
Quality tested – several certifications

K2 Systems stands for secure connections, highest quality and precision. Our customers and business partners have known that for a long time. Independent institutes have tested, confirmed and certified our capabilities and components.

Please find our quality and product certificates under:
Engineering strength is at our core

With sophisticated product innovations and a deep customer focus, K2 Systems is the engineering leader for all your mounting system needs. We are a market leader with more than 20 GW installed worldwide.

We offer proven product solutions and innovative designs. Wind tunnel testing along with advanced structural and electrical validation to facilitate permitting, design and installation. Our designs result in cost competitive racking systems with dedicated support that will position you to win more projects.

We partner with our customers and suppliers for the long-term. High quality materials and cutting edge designs provide a durable, yet functional system. Our product line is comprised of a few, coordinated components that lower the cost of materials, and simplify installation, saving you time and money. All backed by German engineering, a long track record of quality and a company that is here to stay.

Thank you for choosing K2 Systems for your Solar PV Project.
General Safety Information

Please note that our general mounting instructions must be followed at all times and can be viewed online at https://k2-systems.com/en-US/downloads/documentation

- The equipment may only be installed and operated by qualified and adequately trained installers.

- Prior to installation, ensure that the product complies with on-site static loading requirements. For roof-mounted systems, the roof load-bearing capacity must always be checked.

- National and local building regulations and environmental requirements must be adhered to.

- Compliance with health and safety regulations, accident prevention guidelines and applicable standards are required:
  - Protective equipment such as safety helmet, boots and gloves must be worn.
  - Roofing works must be in accordance with roofing regulations utilizing fall protection safeguards when eaves height exceeds 3 m.
  - At least two people must be present for the duration of the installation work in order to provide rapid assistance in the event of an emergency.

- K2 mounting systems are continuously developed and improved and the installation process may thereby change at any time. Prior to installation consult our website at: https://k2-systems.com/en-US/downloads/documentation.
  We can send you the latest version on request.

- The assembly instructions of the module manufacturer must be adhered to.

- Equipotential bonding/grounding/earthing between individual parts is to be performed according to country specific standards, as well as national laws and regulations.

- A thermal break is required at no more than 50 feet in both directions, North/South and East/West. A minimum separation of 2.5 inches is required between separate arrays.

- At least one copy of the assembly instructions should be available on site throughout the duration of the installation.

- Failure to adhere to our general safety and assembly instructions and not using all system components, K2 is not liable for any resulting defects or damages. We do not accept liability for any damage resulting in the use of competitor’s parts. Warranty is excluded in such cases.

- If all safety instructions are adhered to and the system is correctly installed, there is a product warranty entitlement of 25 years! We strongly recommend reviewing our terms of guarantee, which can be viewed at https://k2-systems.com/en-US/downloads/documentation.
  We will also send this information on request.

- Dismantling of the system is performed in reverse order to the assembly.

- K2 stainless steel components are available in different corrosion resistance classes. Each structure or component must be carefully checked for possible corrosion exposure.

- The VdS 3145:2011-07 applies to the proper technical maintenance, inspection and any necessary repair. This includes regular visual inspections and visual inspections in case of events. We recommend annual regular inspections including: inspection of all system components for damage by e.g. weather, animals, dirt, debris, build-up, growth, roof penetration, sealing, structural stability and corrosion. In addition, the tight fit of screws must be checked and if necessary, re-tightened in accordance with the torques mentioned in the assembly instructions.
The following guidelines apply

The D-Dome Railless® System can be installed as standard under the following conditions. Even if the system is capable of meeting higher demands through the integration of safety standards, please get in touch with your contact at K2 Systems if the specified values are exceeded.

Roof requirements

- The structural integrity of the roof must be reviewed on site and approved by a licensed structural engineer.
- Maximum roof height: 150 ft
- Roof slope: 0° to 5°, mechanical fastening required from 3° to 5°
- Minimum clearance to roof edge: 19.7"
- Friction coefficient of the roof must be determined on site

Structural requirements

- Wind speed: 90-200 mph
Bondding and Grounding

The D-Dome Railless® System has obtained a UL 2703 system listing from Underwriter’s Laboratories (UL).

A sample bonding path diagram is shown in Figure 1, below. Specific installations may vary based on site conditions and AHJ requirements.

Each electrical connection has been evaluated to a maximum fuse rating of 30A. When installed per these installation instructions, all connections meet the requirements of NEC 690.43.

Installation should be periodically reinspected for loose components or fasteners and any corrosion.

This racking system may be used to ground and/or mount a PV module complying with UL 1703 only when the specific module has been evaluated for grounding and/or mounting in compliance with the included instructions.

Figure 1: Bonding connections shown in red. For certain jurisdictions, bonding and grounding connections are identified at typical locations.
Fire Rating

The D-Dome Railless® System has undergone fire performance testing in accordance with UL 2703, Fire Performance. A System Class A fire rating is achieved when using the D-Dome Railless® System under the following conditions:

- Roof slope of 0° to 5°

- Used in combination with a UL 1703 Listed module with a fire performance rating of Type 1, Type 2, or Type 3. Consult the module manufacturer for specific fire performance rating information.

- CrossRail may be mounted using any stand-off height to maintain the Class A fire rating. Always consult the module manufacturer’s installation instructions to ensure your installation is in compliance with their UL 1703 Listing.

- The results of the racking system do not improve a roof covering Class rating.

All documentation can be found on UL’s Online Database as well as K2 Systems’ website.
Compatible Modules

*Please note that your module must be compatible with corner clamping to install with the D-Dome Railless\(^2\) System. K2’s D-Dome Railless\(^2\) system was tested with the following:

- **UL/NRTL Listed Apisolar Modules:**
  - DNA-120-MF26-XXW
  - DNA-144-MF26-XXW
  - DNA-120-BF23-XXWW
  - DNA-120-MF23-XXWW
  - DNA-144-BF23-XXWW

- **UL/NRTL Listed Axitec Modules:**
  - AC-xxP/156-60S
  - AC-xxxM/156-60S
  - AC-xxxP/60V
  - AC-xxxP/60xV
  - AC-xxxP/60S
  - AC-xxxP/60x
  - AC-xxxM/120S
  - AC-xxxM/60V
  - AC-xxxM/60xV
  - AC-xxxM/120V
  - AC-xxxM/60S
  - AC-xxxM/60x
  - AC-xxxP/156-72S
  - AC-XXXP/72V
  - AC-XXXP/72xV
  - AC-XXXP/72S
  - AC-XXXP/72X
  - AC-XXXM/144S
  - AC-XXXM/72V
  - AC-XXXM/72xV
  - AC-XXXM/144V
  - AC-XXXM/72S
  - AC-XXXM/72X

- **UL/NRTL Listed Canadian Solar Inc. Modules:**
  - CS6U-xxx
  - CS6K-xxx
  - CS6X-xxx
  - CS6P-xxx
  - CS3K-xxxP
  - CS3K-xxxMS
  - CS3U-xxxP
  - CS3U-xxxMS
  - CS3W-xxxP
  - CS3U-xxxPB-AG
  - CS3U-xxxMB-AG
  - CS3W-xxxPB-AG
  - CS1H-xxxMS
  - CSK-xxxM
  - CSK-P-FG DYMND
  - CS1V-xxxMS
  - CS3N-xxxMS
  - CONTINUED
    - CSK-xxxM
    - CSK-P-FG DYMND
    - CS1V-xxxMS
    - CS3N-xxxMS

- **UL/NRTL Listed CertainTeed Modules:**
  - CTXXHC11-04
  - CTXXHC00-04
  - CTxxxHC11-06

- **UL/NRTL Listed ET Solar Modules:**
  - ET-M660xxxBB

- **UL/NRTL Listed Hanwha Q Cells Modules:**
  - Q.PEAK DUO L-G6
  - Q.PEAK DUO L-G6.2
  - Q.PEAK DUO L-G6.3
  - Q.PLUS DUO L-G5
  - Q.PLUS DUO L-G5.2
  - Q.PLUS DUO L-G5.3
  - Q.PEAK DUO L-G5.2
  - Q.PEAK DUO L-G5.3
  - Q.PEAK L-G4.2
  - Q.PEAK L-G4.1
  - Q.PLUS L-G4.2
  - Q.PLUS L-G4.1
  - Q.PLUS L-G4.3
  - CONTINUED
    - Q.PEAK DUO BLK G6+/SC xxx
    - Q.PEAK DUO BLK G5/SC xxx
    - Q.PEAK DUO BLK G5/SC xxx
    - Q.Plus BFR-G4.1xxx
    - Q.Pro BFR-G4.1xxx
    - Q.Plus BFR-G4.1xxx
    - Q.Pro BFR-G4.3xxx
    - Q.PEAK-G4.1xxx
    - Q.PEAK DUO BLK G6+/TS XXX
    - Q.PEAK DUO BLK G6/TS XXX
    - Q.PEAK DUO BLK G6/TS XXX
    - Q.PEAK DUO BLK G6/TS XXX
    - Q.PEAK DUO ML G9 XXX
    - Q.PEAK DUO ML G9.2 XXX
    - Q.PEAK DUO ML G9.2 XXX
    - Q.PEAK DUO XL G9 XXX
    - Q.PEAK DUO XL G9.2 XXX
    - Q.PEAK DUO XL G9.2 XXX
    - Q.PEAK DUO XL G9 XXX
    - Q.PEAK DUO XL G9.3 XXX
    - Q.PEAK DUO ML G9.3 XXX
    - Q.PEAK DUO ML G9.3 XXX
    - Q.PEAK DUO ML G9.3 XXX
    - Q.PEAK DUO ML G9 XXX
    - Q.PEAK DUO ML G9 XXX
    - Q.PEAK DUO BLK G9 XXX
    - Q.PEAK DUO BLK G9.2 XXX
    - Q.PEAK DUO BLK G9.2 XXX
    - Q.PEAK DUO BLK G9 XXX
    - Q.PEAK DUO BLK G9 XXX
    - Q.PEAK DUO BLK G9 XXX
    - Q.PEAK DUO BLK G9 XXX
    - Q.PEAK DUO BLK G9 XXX
    - Q.PEAK DUO BLK G9 XXX
CONTINUED - Hanwha Q Cells Modules:
- Q.PEAK DUO BLK ML-G10
- Q.PEAK DUO BLK ML-G10.a+
- Q.PEAK DUO BLK ML-G10.a+ /TS
- Q.PEAK DUO XL-G10.2
- Q.PEAK DUO XL-G10.3
- Q.PEAK DUO ML-G10
- Q.PEAK DUO ML-G10+

CONTINUED - Hyundai Modules:
- His-MxxxMI
- His-MxxxM

CONTINUED - Hyundai Modules:
- HiS-MxxxM
- HiS-MxxxMI
- His-SxxxRI
- His-MxxxRI
- His-MxxxRG

UL/NRTL Listed Itek Modules:
- IT-xxx-SE
- Hipro TP672M-xxx

UL/NRTL Listed JA Solar Modules:
- JAP6(DG)
- JAM6(K)-60-xxx/4BB

UL/NRTL Listed Jinko Solar Modules:
- JKxxxPP-72-DV
- JKxxxPP-60-DV
- JKxxxM-60HBL
- JKxxxm-72HL-V
- JKMxxxM-72HL-TV
- JKxxx-P-60
- JKxxxm-M-72HL4-TV
- JKxxxM-6RL3-B

UL/NRTL Listed Kyocera Modules:
- KUxxxMCA

UL/NRTL Listed LG Electronics Inc. Modules:
- LGxxxN1C-A6
- LGxxxN1K-A6
- LGxxxS2W4G
- LGxxxN1K-A6
- LGxxxN2W-G4
- LGxxxN1K-A5
- LGxxxQ1C-V5
- LGxxxQ1K-V5
- LGxxxN2W-A5
- LGxxxS2W-A5

UL/NRTL Listed Luxor Solar Modules:
- Lx-xxxP
- Lx-xxxM

UL/NRTL Listed Lumos Modules:
- LSxxx-60M-B/C

UL/NRTL Listed Longi Modules:
- LR6-72-xxxM [xxx=320-350]
- LR6-72H-xxxM [xxx=320-350]
- LR6-72BK-xxxM [xxx=320-350]
- LR6-72PE-xxxM [xxx=340-380]
- LR6-72PH-xxxM [xxx=340-380]
- LR6-72PB-xxxM [xxx=340-380]
- LR6-72HPB-xxxM [xxx=360-385]
- LR6-60-xxxM [xxx=270-300]
- LR6-60H-xxxM [xxx=270-300]
- LR6-60B-xxxM [xxx=270-300]
- LR6-60BP-xxxM
- LR6-72HBD-xxxM
- LR6-60-xxxM
- LR6-60BP-xxxM
- LR6-60PE-xxxM
- LR6-60PB-xxxM
- LR6-60PH-xxxM
- LR6-60HPB/HiB-xxxM
- LR6-60HP/HiH-xxxM
- LR6-72-xxxM
- LR6-72BK-xxxM
- LR6-72HBD-xxxM
- LR6-60BP-xxxM
- LR6-72PB-xxxM
- LR6-72PH-xxxM
- LR6-72HP/HiH-xxxM
- LR6-72BP-xxxM
- LR6-72HBD/HiBD-xxxM
- LR6-60BP-xxxM
- LR6-60HB/HiBBD-xxxM
- LR4-60PH/HiH-xxxM
- LR4-60HP/HiH-xxxM
- LR4-72PH/HiH-xxxM
- LR4-72HBD/HiBBD-xxxM
- LR4-72HBD/HiBD-xxxM

UL/NRTL Listed Luxor Solar Modules:
- Lx-xxxP
- Lx-xxxM

UL/NRTL Listed Luxor Solar Modules:
- Lx-xxxP
- Lx-xxxM
Compatible Modules continued

- **UL/NRTL Listed Mission Solar Modules:**
  - MSExxxSB1J
  - MSExxxSO5T
  - MSExxxSQ4J
  - MSExxxSQ8S
  - MSExxxSO6J
  - MSExxxSQ4S
  - MSExxxSQ5T
  - MSExxxSQ5K
  - MSExxxSQBT
  - MSExxxSQ9K
  - MSExxxSQ9J
  - MSExxxSQ5S
  - MSExxxSR8T
  - MSExxxSR8K
  - MSExxxSR8S
  - MSExxxSB1J
  - MSExxxSX5T
  - MSExxxSX5K
  - MSExxxSX6S
  - MSExxxSX6W
  - MSExxxSX6Z
  - MSExxxSX5R

- **UL/NRTL Listed Panasonic Modules:**
  - VBHxxxxSA16
  - VBHxxxxKA01
  - VBHxxxxKA03
  - VBHxxxxKA04
  - VBHxxxxSA17
  - VBHxxxxSA18
  - VBHxxxxSA17E
  - EVPxxxx
  - EVPVxxxx

- **UL/NRTL Listed Peimar Modules:**
  - SGxxxx-[BF]
  - SGxxxxP
  - SGxxxxM-[BF]
  - SGxxxxM

- **UL/NRTL Listed Phonon Solar Modules:**
  - PSxxxxMG-20/U
  - PSxxxxPG-20/U
  - PSxxxxM-20/U
  - PSxxxxMH-20/U

- **UL/NRTL Listed Prism Solar Modules:**
  - Bi48 xxx Bifacial
  - Bi60 xxx Bifacial

- **UL/NRTL Listed REC Modules:**
  - RECxxxxTP2 BLK2
  - RECxxxxTPS 72
  - RECxxxxTP2S 72 XV
  - RECxxxxTP2SM 72 XV
  - RECxxxxTP2SM 72
  - RECxxxx NP
  - RECxxxx NP Black
  - RECxxxxAA
  - RECxxxxAA Black
  - RECxxxxTP4
  - RECxxxxAAPure
  - RECxxxxTP4Black

- **UL/NRTL Listed Sharp Modules:**
  - NU-Sxxxx
  - NU-SAxxx

- **UL/NRTL Listed Solara Modules:**
  - PowerxT® -xxxR-P0
  - PowerxT® -xxxR-B0
  - PowerxT® XXXR-PM

- **UL/NRTL Listed Solarworld Modules**
  - "Sunmodule":
    - Plus SW XXX Mono
    - Plus SW XXX Poly

- **UL/NRTL Listed Solarworld Modules**
  - FR xxx Wp
  - Power Slate 54 Mono Dark Series
  - Power Slate 54 Mono Series

- **UL/NRTL Listed S-Energy Modules:**
  - SN15-60PAE/PCE-xxxV
  - SN10-60PAE/PBE/PCE-xxxV
  - SN15-60MAE/MCE-xxxV
  - SN10-60MAE/MCE-xxxV
  - SNxxxxM-10T[SN60]
  - SN15-72PAE/PCE-xxxV
  - SN10-72PAE/PBE/PCE-xxxV
  - SN15-72MAE/MCE-xxxV
  - SN10-72MAE/MCE-xxxV
  - SN20-60MAE/MBE/MCE-xxxV
  - SN20-72MAE/MBE/MCE-xxxV
  - SC20-60MAE/MBE/MCE-xxxV
  - SC25-60MAE/MCE-xxxV
  - SD25-60BDE-xxxV
  - SD25-72BDE-xxxV
Compatible Modules continued

- UL/NRTL Listed Talesun Modules
  - Hipro TP660M-xxx
  - Hipro TP672M-xxx

- UL/NRTL Listed Trina Solar Modules:
  - TSM-xxxDE14A
  - TSM-xxxDD05A.08
  - DUOMAX SPECS 1. PEG14
  - DUOMAX SPECS 2. PEG5
  - DUOMAX SPECS 3. PEG5.07
  - DUOMAX SPECS 4. PDG5
  - TSM-DE15H(II)
  - TSM-DE15M(II)
  - TSM-DD6M.05(II)
  - TSM-DD6H.05(II)
  - TSM-DD6M.15(II)
  - TSM-DD6H.15(II)
  - TSM-DD6H.T5(II)
  - TSM-PE15H
  - TSM-DEG15HC.20(II)
  - TSM-DEG15MC.20(II)
  - TSM-DEG6HC.20(II)
  - TSM-DEG6MC.20(II)
  - TSM-xxxDE15V(II)
  - TSM-xxxDE19
  - TSM-xxxDEG15VC.20(II)
  - TSM-xxxDEG19C.20

- UL/NRTL Listed V Energy Modules:
  - Series 200 PV

- UL/NRTL Listed Yingli Solar Modules:
  - YL-xxxP-29b
  - YL-xxx-35b
Tools Overview

- 13mm
- 11mm
- 6mm

Torque Overview

- End Clamps: 10.3 ft-lb
- Bonding Mid Clamp: 12 ft-lb
- Micro-Inverter Set: 10.3 ft-lb
- Dome Corner Strut R²: 12 ft-lb
- ILSCO Lug: 35 in-lb

Tools and materials for the installation of third party items such as roof attachment products, roof covering and sealing products or items used for bonding and grounding are not listed here. Please refer to the instructions of those third party products.
Components

1. Dome Peak R²
   - 4000592

2. Dome Base R²
   - 4000593

3. Roof Protection Mat R²
   - 4000594
   - Material: recycled rubber

4. Dome Mid Clamp
   - Available in sizes 30-50mm
   - 4000603/4000604/4000605/4000606
End Clamps
Available in sizes 30-50mm

Dome Porter R²

Other Components & Accessories

Dome Corner Strut R²
4000637

Roof Spacer Mat R²
4000636

ILSCO Lug
4000960

Dome Microinverter & Optimizer Mounting Kit
4000646

OMG PowerGrip Plus
4000335

Eco Fasten Eco65
4001442

Anchor Bracket for Porter Kit
4000639

Omega Cable Clip
4005394
3

To install Roof Protection Mats R², place Dome Peak R² or Dome Base R² component on top of mat, ensuring that Dome is properly nested within protrusions in the mat.

4

Mark corner of array using chalk line. Snap line along entire North row. Snap another line along entire West column. Place all Dome Peak R², Dome Base R² and Roof Protection Mat R² on the roof per the following scheme: Dome Base R², Dome Corner Strut R² (only when called out on project plan), Dome Peak R². Repeat Dome Base R², Dome Peak R², and always end with Dome Base R². Refer to image. Arrange Domes, Mats, Porters and ballast blocks over rooftop, using job-site jigs on the North row and West column for spacing. We recommend building North row first and then West column, ensuring that you install the ballast and wiring as you go. If called out on the project drawing, install the Dome Corner Strut R², Dome Porters R², ballast blocks, and/or anchors. Refer to steps 5, 6 and 7.
Two jigs will simplify array layout. Jig 1 is used to set East/West distance between module stops on each type of Domes. Jig 1 length = width of module being used on project. Jig 1 will be used to correctly space between Dome Peak and Base. Jig 2 is used to set North/South inside distance between Peaks. Jig 2 length = length of module minus 1 7/8”. Jig 2 will be used to correctly space between D-Dome assemblies of the same type (Base to Base, or Peak to Peak).

Insert appropriate clamps into MK3 channel of both Dome Peak and Dome Base. Bend the installation aid plastic tabs and insert the MK3 silt nut into the channel and turn 90° clockwise to lock into place. Release the installer aids and the clamp will stand on its won.
Position Dome Corner Strut R² on the tabs of Dome Peak R² utilizing the slot in the end of the Corner Strut. Swing the Dome Corner Strut R² over the Dome Base and align the slot in the Corner Strut to the hole in the Dome Base. Slide socket cap screw through slot and hole and attach the nut. Torque to 12 ft-lbs.

Position porters on the tabs of Dome Peak with L facing inward and drop into place. If more than 4 blocks are required, install Corner Struts [refer to step 5] and utilize the tabs on the Corner Strut with L facing inward. Where required, stack Porters on top of each other in a nesting configuration. For corner and North/South edge modules, assemble porters and ballast on the Corner Struts that are located at the uter edge of the array. Standard ballast block dimensions are 4 x 8 x 16” and standard ballast block weight is 32 lbs.
7 Slide the T-Bolt on mounting bracket assembly through T-Bolt channel on the Dome Peak, until the side of bracket is flush with the side of the peak. Slide the slot on flange of micro-inverter or optimizer onto M8 T-Bolt. Torque to 10 - 15 ft-lbs. Repeat steps on opposite side of Dome Peak for additional micro-inverter or optimizers.

8 Optional

Where required to level the array, as many as 4 spacer mats may be stacked underneath a Roof Protection Mat R². The square nubs on the pad fit into square holes on itsmbottom side that aligns with the nubs for stacking. The Roof Spacer Mats can be used anywhere the roof imperfections increase the risk of metal components coming in contact with the roof such as under the Dome Porters as shown.
Important: Verify module manufacturer’s recommended torque specification to ensure clamps are compatible.

BUILD NORTH ROW: Start assembly on West module pair, then move to East. Continue with this pattern until entire row is complete. Insert ballast blocks as required. Secure clamps to module as you go. Torque End Clamps to 10.3 ft-lbs. Torque Bonding Mid Clamps to 12 ft-lbs. Remember: Always bias ballast to outside edges of sub-array.

BUILD WEST COLUMN: Next, install the modules on West column. As before, if called out on project drawing, install porters, ballast blocks and corner struts as you go. Secure clamps to module. Torque to correct specification. We suggest clamping down as you add panels.

Note: For certain jurisdictions, this item is regarded as a single-use item for a UL 2703 Listed System.

Insert Base of clamp into top channel of rail, rotate clamp clockwise sandwhiching top rail between flanges of clamp base. Torque to 12ft-lbs using 13mm socket.
Install one porter as described in step 6 if not already installed. Determine the desired anchor location. It must be located within 12" of the Dome Peak R². Install anchor to roof per manufacturer’s instructions. Slip anchor bracket over Dome Porter R² and bolt the anchor bracket to anchor plate with supplied hardware, and torque to anchor manufacturer’s specification.

Note: K2 Systems’ anchor bracket assembly allows for movement to account for thermal expansion.

Optional

Install one porter as described in step 6 if not already installed. Determine the desired anchor location. It must be located within 12" of the Dome Peak R². Install anchor to roof per manufacturer’s instructions. Slip anchor bracket over Dome Porter R² and bolt the anchor bracket to anchor plate with supplied hardware, and torque to anchor manufacturer’s specification.

Note: K2 Systems’ anchor bracket assembly allows for movement to account for thermal expansion.
Secure the ILSCO SGB-4 ground lug to the horizontal flange or vertical walls of Dome Peak R². Torque to 35 in-lbs as specified by lug manufacturer. For UL 2703 compliance, use 4-14 AWG Solid/Stranded Copper ground wire. Note: For certain jurisdictions, this item is regarded as a single-use item for a UL 2703 Listed System. Warning: Employ best industry practices to ensure that copper does not contact aluminum or galvanized steel. K2 Systems recommends installing two lugs on each sub-array. Do not install more than one lug on a single Peak.
Thank you for choosing a K2 mounting system.

Systems from K2 Systems are quick and easy to install. We hope these instructions have helped. Please contact us with any questions or suggestions for improvement.

Our contact info:

- k2-systems.com/en-US/contact
- Telephone: +1.760.301.5300