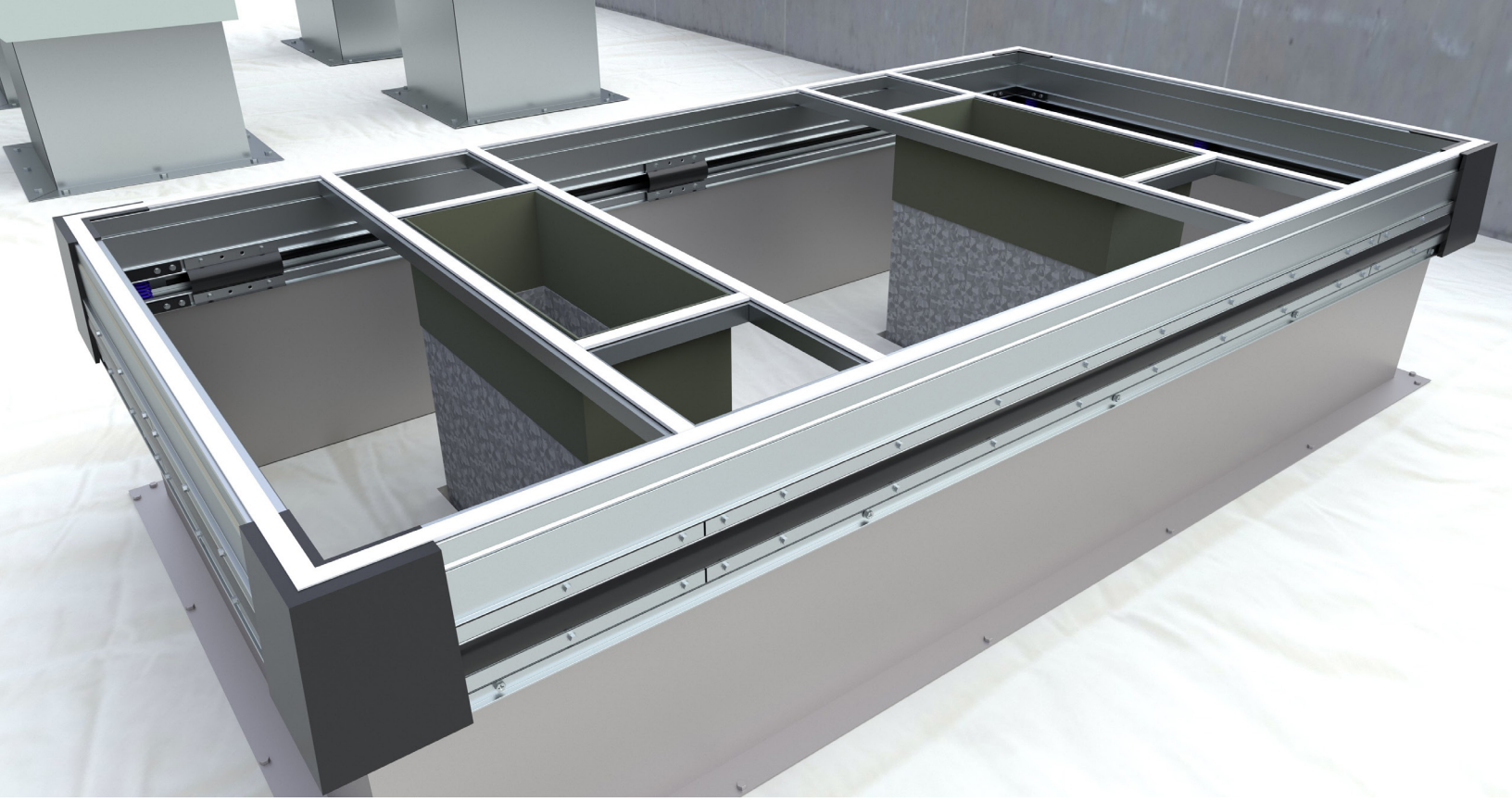


# KINETICS® KSR 2.0: Vibration Isolation Rail

A noise and vibration control system that goes beyond internal isolation

## THE 2.0 ADVANTAGE

- Improved design with fewer components than the previous KSR
- Extremely easy installation with factory assembled parts
- Pre-installed weather strip
- Pre-compressed springs means rail will be installed at the operational height
- Integrated seismic and wind restraints that do not require additional labor to install
- Isolation rail is engineered to meet the latest building code requirements

## STANDARD FEATURES

- Ships partially or fully assembled
- Noise and vibration control
- Horizontal and vertical seismic and wind restraints
- Multiple spring deflection options
- Universal fit, compatible with most curb-mounted equipment
- Continuous air- and water-tight seal strip

## DESCRIPTION

KSR 2.0 equipment isolation rail is engineered to isolate packaged rooftop equipment from the roof structure. KSR 2.0 goes well beyond internal isolation by reducing casing-radiated vibration caused by turbulent air flow as well as compressor and fan vibration.

Kinetics KSR 2.0 mates with the outside of the manufacturer's curb eliminating any internal interference.

## APPLICATION

KSR 2.0 vibration isolation rails are specifically designed and engineered for use as a noise and vibration isolation system for roof curb-mounted mechanical equipment.

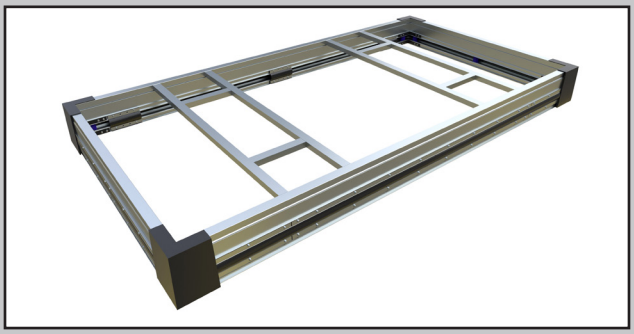
KSR 2.0 equipment isolation rails are compatible with most roof-supported equipment and standard sheet metal roof curbs where the wood nailer is located under the top flange without modification. KSR 2.0 provides support, noise and vibration isolation, and an air and water seal for supported equipment.

Typical applications include support and isolation for unitary-packaged air-handling and refrigeration equipment, and exhaust fans, ordinarily mounted directly on non-isolated roof curb systems.

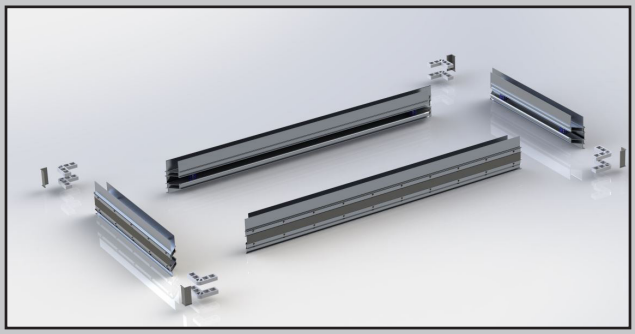
KSR 2.0 isolation rails significantly reduce noise and vibration transmitted from rooftop equipment into roof structures by using equipment weight as an inertia mass to load high-deflection, free-standing, stable springs integrated with the continuous aluminum isolation rail system.

# KSR 2.0 Roof Curb Rail Assembly Options

KSR 2.0 ships partially or fully assembled. Contact Kinetics for complete details on assembly and shipping. For all KSR 2.0 options, some field assembly is required.



**Full assembly** allows for the rail to be taken directly from the delivery truck and placed on to the roof-top curb (by others). Full assembly is available for units where the longest rail is 8-feet or less in length. Additional fees apply for full assembly.



**Partial assembly** of Kinetics KSR 2.0 has the four independent sides of the rail factory assembled, with the corners connected in the field.

## OPTIONS

- KSR 2.1 - 1" deflection and KSR 2.2 – 2" deflection
- Airborne noise control package
- Flexible duct connector supports

## SPECIFICIATIONS

Curb-Mounted Spring Rail: model KSR 2.0 – Full-perimeter rail type isolator, spring components shall be (1"/25 mm), (2"/51 mm) deflection, free-standing, un-housed, laterally stable steel springs. Springs shall have a lateral stiffness greater than 1.0 times the rated vertical stiffness and shall be designed for 50% overload to solid. The spring element shall meet all the specified characteristics described in Kinetics Vibration Isolation Specification, Section 2.01/E.1 paragraph. Springs shall be color coded to indicate load capacity.

Rails shall provide continuous support for the rooftop equipment and shall be designed to provide isolation against casing-radiated vibration in the rooftop equipment housing and structure-borne vibration from rotating and mechanical equipment in the roof-top package. Rail assembly shall consist of extruded aluminum top and bottom members connected by spring isolators and a continuous air- and water-tight seal strip.

The seal strip shall be a fabric reinforced polymeric material retained in both the top and bottom extrusions. The seal strip shall be sealed along the top and bottom with aluminum clamp strips. Corner seals shall be elastomeric material retained to both the top and bottom rails. Rail assemblies shall incorporate means for attachment to the building and the supported equipment and shall incorporate additional stiffening members if necessary to assure stability. The seal strips shall provide wind restraints suitable for prevailing wind conditions that will not impose loads on the curb walls at 90 degrees to their long axis.

Vibration isolators shall be selected by the manufacturer for each specific application to comply with deflection requirements as shown on the Vibration Isolation Schedule or as indicated on the project documents.

Roof Curb Rails shall be model KSR 2.0 as manufactured by Kinetics Noise Control, Inc.

KINETICS Noise Control®

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