



KINETICS® KSCR 2.0

Roof Curb and Vibration Isolation Rail

Affordable, easy-to-install, all-in-one roof curb and vibration isolation rail for under 12,000 lbs packaged rooftop units. Kinetics KSCR 2.0 features the redesigned KSR 2.0 vibration isolation rail.

THE 2.0 ADVANTAGE

- Improved design with fewer components than the previous KSCR
- 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

OPTIONS

- KSCR 2.1 - 1" deflection and KSCR 2.2 - 2" deflection
 - Airborne noise control package
 - Multiple roof pitch interface
- Certification of seismic and wind load engineering

STANDARD FEATURES

- Ships partially or fully assembled
- Vibration Isolation Rail | KSR 2.0
- 14" high, 16 ga. galvanized steel lower support curb
- Horizontal and vertical seismic and wind restraints
- Extruded aluminum top and bottom members
- Universal fit, compatible with most curb-mounted equipment
- Continuous air- and water-tight seal strip
- Elastomeric corner seals
- Flexible duct connector supports

SPECIFICATIONS

Vibration Restrained Curb-mounted Spring Rail: Model KSCR 2.0

All rooftop air-handling units shall be supported by vibration isolation curbs as manufactured by Kinetics Noise Control. The vibration isolation curbs shall be complete assemblies designed to resiliently support the equipment at the specified elevation and shall constitute a fully enclosed air- and weather-tight system.

The isolation curb shall consist of an upper support rail with supply and return flexible connector supports on which the equipment and duct openings rest and a lower support curb which is attached to the roof structure, separated by free-standing, unhooded, laterally stable steel springs and lateral seismic and/or wind load restraints.

The upper support rail shall provide continuous structural 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 rooftop package.

The lower support curb shall be a formed channel fabricated of heavy gauge galvanized steel with a continuous 1-1/2" x 1-1/2" (38 mm x 38 mm) nominal wood nailer. The base plate of the curb shall be 1" (25 mm) wide and shall be welded, bolted or screwed to the building support steel.

The lower support curb shall have a minimum elevation of 14" (356 mm). Spring components shall be 1" (25 mm) 2" (51 mm) deflection, freestanding, unhooded, laterally stable steel springs. Springs shall have a lateral stiffness greater than 1.0 times the rated vertical stiffness and shall be designed for a typical 50% overload to solid. All springs shall have a polyester powder coated finish and be color coded to indicate load capacity.

Upper support rail and lower support curb are connected by spring isolators and a continuous air- and water-tight seal strip. This seal strip shall be a fabric reinforced polymeric material retained in both the upper support rail and lower support curb. 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.

Supply and return flexible connector support hardware shall be supplied for installation by the contractor in the field. The supports will be clearly marked and dimensioned on the submittal and installation drawings. The support hardware shall be cut-to-length, galvanized steel channels supported and connected with stamped and punched galvanized steel duct support hangers.

The support hangers shall allow the duct support elevation to be equal to or lower than the equipment rail elevation. Supply and return air duct shall be flexibly attached by the contractor to prevent transmission of vibration to the building structure.

The isolation curb assemblies shall be shipped to the job site with the upper support rail, lower support curb, springs, and seal strip. The contractor shall assemble the four corners and attach the curb to the roof structure.

The isolation curb assembly shall include a trouble shooting kit to permit the contractor to level or adjust the loading of the isolation system immediately after placement of the rooftop equipment should the actual weight and/or distribution differ from design values.

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 shall be Model KSCR 2.0 as manufactured by Kinetics Noise Control. manufactured by Kinetics Noise Control, Inc.



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