Kinetics ESSR vibration isolated curb system addresses all noise sources associated with packaged rooftop equipment. Here’s how:

Vibration from fans and compressors (source 1) and vibration from casing radiated noise caused by duct turbulence and the airborne noise of the fans and compressors (source 2) are controlled with Kinetics high deflection, laterally stable coil spring isolators and high frequency neoprene noise pads.

Duct-borne noise from the supply and return air fans (source 3) are controlled using an aerodynamic acoustical silencer on the supply fan and an acoustical plenum on the return air side - both with minimal pressure drop.

Breakout noise through the bottom of the rooftop unit (source 4) is controlled by the Noiseblock STL acoustical panel located in the floor of the ESSR.

Isolation rails installed between the rooftop equipment and the roof curb do an excellent job isolating the vibration from the rooftop equipment to the building structure. Isolation rails alone do not address the problems of duct-borne noise or equipment breakout noise into the conditioned space.

Kinetics ESSR is a modular system based on your needs. ESSR incorporates all the features of Kinetics ESR vibration isolation curb plus Kinetics aerodynamic acoustical silencers; return air plenums and NOISELBOCK™ STL panels. This gives you a noise control system that addresses all the noise and vibration concerns of your packaged rooftop equipment: vibration from the rotating equipment and casing radiation, duct-borne noise from supply and return fans, and breakout noise from the fans and compressors into the space below. Kinetics ESSR meets all seismic and wind load code requirements.
Elbow ‘VES’ Silencer

NOISEBLOCK™ Floor

Z-Shaped - (2) ‘VES’ Silencers in Series
Elbow ‘VES’ Silencer and NOISEBLOCK™ Floor

Straight ‘VRS’ Silencer with NOISEBLOCK™ Floor

NOISEBLOCK™ Air Plenum
Z-Shaped - (2) ‘VES’ Silencers in Series and NOISEBLOCK™ Floor