

Landmark Structure Includes Complete Kinetics Isolation System



The Defense Intelligence Agency is the second-largest building under one roof in the U.S. Concrete inertia base frames, like Kinetics Model CIB-L (inset), are just one part of the complete vibration Isolation System, engineered by Kinetics Noise Control, for all mechanical components of the building's HVAC system.

Washington, D.C. is an area which boasts a number of fine architectural landmarks and distinctive structures: The U.S. Defense Intelligence Agency, adds to that number. The project was an 840,000 square foot, multi-use facility which, second only to the Pentagon, is the largest building under one roof in the nation.

The DIA is designed with an extensive heating, ventilation, and air conditioning (HVAC) system which requires equally extensive vibration isolation for its various mechanical components. The task of providing the myriad of vibration isolation products was awarded by the mechanical contractor, Pierce Associates, Inc. of Alexandria, Virginia, to Kinetics Noise Control representative Robert C. Bost Associates, Inc. of Laurel, Maryland, from among a number of competitive bids.

Kinetics design includes separate isolation units for approximately 230 individual pieces of vibrating equipment in the building's HVAC system. The isolation system for each piece of equipment had to be specifically designed to suit its application.

The complete isolation system includes Kinetics Model CIB-L concrete inertia base frames which are installed under all pumps and high-pressure air-handling units. Other air handling units are isolated by means of Model FDS spring vibration isolators, with a Model SRB or SBB structural steel equipment base, which features wide-flange beams and outrigger brackets. Model FLS vibration isolators are used for supporting chillers. Other components include Model SRH hangers, used for all ceiling-suspended fans; Model NP and NG mounting pads to support smaller chiller units; and Model RD molded neoprene mounts for installation under small utility fans.

As suppliers to the extensive DIA project, Kinetics was able to prove its total design capability for virtually any size installation.

"We were awarded the contract on the basis of Kinetics knowledge and engineering experience," notes representative Robert Bost. "Despite its size and special requirements, DIA was one of the best coordinated jobs we've been involved with, thanks to the expertise and support of Kinetics engineers and those at Pierce Associates."