

VIBRATION CONTROL WITH PRECAST CONCRETE STRUCTURES

Precast, prestressed concrete structures, because of their stiffness and massive concrete floors, provide significantly better vibration control and damping characteristics compared to conventional wood or steel construction. Vibrations caused by walking or other activities are seldom a problem in a precast concrete floor system because of the system's inherent mass and stiffness.

Mixed-use structures combining retail, residential, or commercial tenant space combined with parking areas have become a widely accepted use of precast concrete construction. The use of precast concrete in these applications allows for the presence of moving vehicles without disturbing or distracting building occupants.

Mixed-use structures aren't the only buildings to benefit from precast concrete's vibration controlling attributes. Other building types use precast concrete

for mechanical equipment floors, stadium seating risers and warehouse structures taking full advantage of the inherent vibration control attributes of precast concrete.

Additional information on vibration design of precast, prestressed concrete floor systems can be found in Chapter 12 of the "PCI Design Handbook" (MNL-120) available for purchase on the PCI Online Bookstore.



Edison District: Five-Story Mixed-Use Office Building and Parking Garage (Overland Park, KS)

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