## **Vibro-Acoustics**®

## PRODUCT APPLICATION SHEET

PAS-2
Product: Type CIB inertia base
Application: SWSI fan



A Concrete Inertia Base (Vibro-Acoustics model CIB) provides a rigid platform to hold various types of equipment, such as base-mounted pumps, air compressors and fans. By lowering the equipment's center of gravity and reducing the amplitude of vibration, the CIB controls the vibration transmission into the structure.

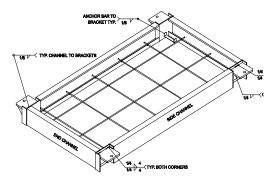
## **Cutting fan vibration**

For this Concrete Inertia Base application, a heavy SWSI fan is mounted on a lightweight mezzanine deck. Four open-spring floor mounts

(Vibro-Acoustics Type FS) support the base – one at each corner. Larger bases may require additional mounts. The FS mount rubber cup bottom reduces the amount of high-frequency vibration transmission into the structure. The spring shown below in a horizontal position is a thrust restraint (Vibro-Acoustics Type THR), which minimizes displacement of the base (and the fan) during fan start-up. It is commonly used with isolated fans that have expected unrestrained motion over 1/4".







## Specifying concrete inertia bases

Selection of a CIB is based on the size and weight of the supported equipment. It should typically:

- weigh as much as the equipment it supports
- be at least 6" thick with reinforcing steel bars between the sides of the frame
- float at least 1" or 2" above the housekeeping pad to minimize potential short circuiting from debris under the base.

Other required information includes: fan and motor weights, belt center dimensions and whether or not seismic restraints are needed. The CIB can be factory- or field-assembled and is shipped to the jobsite without concrete. Motor slide rails are optionally available.

Vibro-Acoustics' application engineers provide specifications, details and instructions for each inertia base model to meet project and code requirements. We are always available to assist you with any noise, vibration, or seismic restraint concerns you may have.