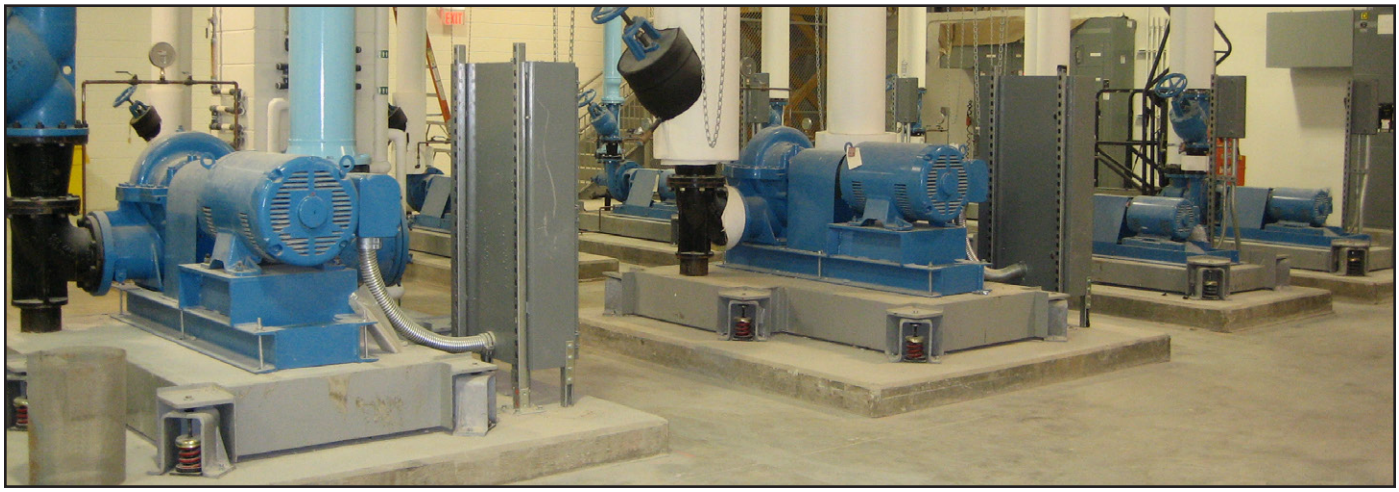
Memtech Acoustics

Inertia Base Frame
Model CIB-L



Description

CIB-L inertia base frames, when filled with concrete, meet all specifications for inertia bases, and when supported by proper vibration isolators, provide the ultimate in equipment isolation, support, anchorage, and vibration amplitude control.

CIB-L inertia base frames incorporate a unique structural design which integrates perimeter channels, isolator support brackets, reinforcing rods, anchor bolts and concrete fill into a controlled load transfer system, utilizing steel in tension and concrete in compression, resulting in high strength and stiffness with minimum steel frame weight. Completed inertia bases using model CIB-L frames are stronger and stiffer than standard inertia base frames using heavier steel members.

Standard CIB-L inertia base frames are available in thicknesses of 6 in (152 mm), 8 in (203 mm), 10 in (254 mm) and 12 in (305 mm), in sizes tabulated, and include integral isolator support brackets, steel channel perimeter pouring frame, 1/2 in (13 mm) diameter reinforcing rods, spaced 356 mm (14”) maximum on centers each way, and steel anchor bolts pre-located and fixed in proper locations. CIB-L inertia base frames are delivered to the job site completely welded and ready to fill with concrete. On-job labor and installation time are minimized, resulting in maximum economy.

Application

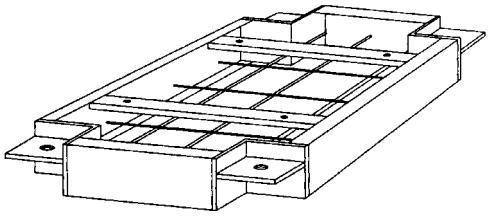
CIB-L inertia base frames are specifically designed and engineered to receive poured concrete, for use in supporting mechanical equipment requiring a reinforced concrete inertia base.

Inertia bases are used to support mechanical equipment, reduce equipment vibration, provide for attachment of vibration isolators, prevent differential movement between driving and driven members, reduce rocking by lowering equipment center of gravity, reduce motion of equipment during start-up and shut-down, act to reduce reaction movement due to operating loads on equipment, and act as a noise barrier.

Typical uses for inertia base frames, with poured concrete and supported by noise and vibration isolators, include use with open-type centrifugal chillers, reciprocating air and refrigeration compressors, chillers, and heat pumps, close-coupled and base-mounted pumps, centrifugal fans, internal combustion engines, and similar types of equipment.

Specifications

Type CIB-L w/ seismic isolators: Isolation bases shall be constructed of concrete cast into fabricated inertia base frames, the steel members of which are designed and supplied by the isolation manufacturer. The concrete shall be poured into a welded steel frame, incorporating pre-located equipment anchor bolts, 1/2-in (13 mm) diameter reinforcing bars spaced 356 mm (14") maximum on centers each way, and recessed isolator mounting brackets to reduce the mounting height of the equipment, and reduce the footprint of the base. The thickness of the base shall be a minimum of 8% of the longest span between (FHS) seismic control restraint spring isolators (detailed in 2.1.A.1 paragraph), at least 6 in (152 mm), or as indicated on the drawings. Where inertia bases are used to mount pumps, the bases shall be sized to support piping elbows. Concrete inertia bases shall be Type CIB-L, as manufactured.



Standard Base Thicknesses

Base Width: in (mm)

Base Length: in (mm)	18 (457)	24 (610)	34 (864)	44 (1118)	54 (1372)	64 (1626)	74 (1880)	84 (2134)
	Base Thickness							
18 (457)	6 (152)							
24 (610)	6 (152)	6 (152)						
34 (864)	6 (152)	6 (152)	6, 8 (152, 203)					
44 (1118)	6 (152)	6 (152)	6, 8 (152, 203)	6, 8, 10, 12 (152, 203, 254, 305)				
54 (1372)	6 (152)	6 (152)	6, 8 (152, 203)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)			
64 (1626)	6 (152)	6, 8 (152, 203)	6, 8 (152, 203)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)			
74 (1880)	6 (152)	6, 8 (152, 203)	6, 8 (152, 203)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	
84 (2134)		6, 8 (152, 203)	6, 8 (152, 203)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)
96 (2438)			6, 8 (152, 203)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)
108 (2743)				6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)
120 (3048)					6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)	6, 8, 10, 12 (152, 203, 254, 305)

The length and width dimensions shown include the actual frame size and may not include the length and width of the bracket.

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