



## Seismic protection of critical equipment is now amazingly simple!

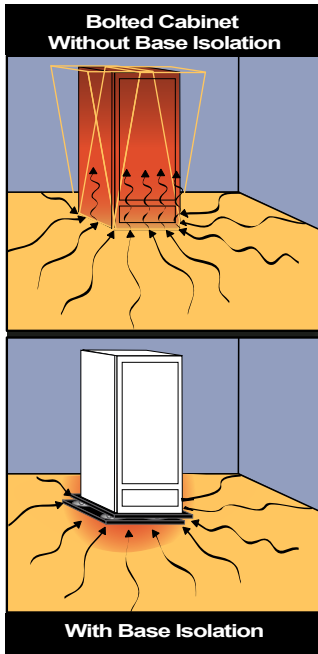


### **ISO-Base™ Seismic Isolation Platform with patented Ball-N-Cone™ Isolators**

- Engineered to protect sensitive electronic components during seismic activity by decoupling away damaging vibrations and shock.
- Exceeds UBC / IBC Seismic Zone 4 code requirements (Bellcore NEBS).
- Ideal for mainframes, server racks, optical storage units, electronics cabinets, lab instruments, or any sensitive or valuable equipment.
- No shutdown required to install! Equipment can be safely lifted and installed onto platforms while live and operational, during normal business hours.
- No dangerous bolting, anchoring, or drilling into units.
- Once installed, equipment can be easily moved and re-installed onto platforms.

A product of WorkSafe Technologies • Valencia, CA 91355 • Tel. 661.257.2527  
U.S. Patent # 5,599,106 with additional U.S. & Foreign Patents Pending and Issued.

[www.worksafetech.com](http://www.worksafetech.com)



## Isolation is the answer!

Base isolation is the cutting edge solution used by architects and engineers worldwide to protect buildings, bridges, and other structures from the damaging effects of earthquakes.

Seismic base isolation works by de-coupling away strong seismic ground motions and vibrations from a structure, thereby eliminating or dramatically reducing the path through which damaging shock waves and vibrations can travel.

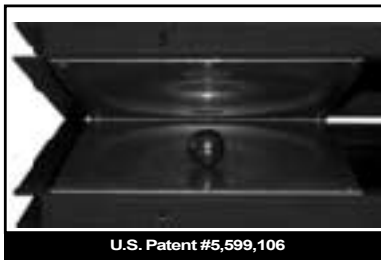
WorkSafe Technologies is the first to apply these proven engineering principles to seismically protect non structural building components and equipment with the introduction of ISO-Base Seismic Isolation Platform Technology.

## How ISO-Base technology works...

At the heart of the system is our patented Ball-N-Cone™ seismic isolation bearing, consisting of two load plates with matching conical recesses sandwiched over a steel ball bearing.

This unique design allows the platform to roll smoothly and evenly while accepting input ground accelerations from any direction.

Using gravity as a restoring force, the bearing re-centers itself as shaking intensity decreases.



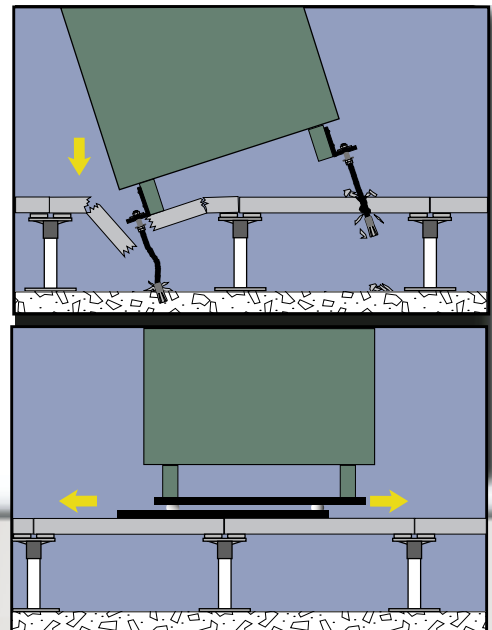
U.S. Patent #5,599,106

## Unique ISO-Base technology lightens the load...

Traditional rigid fastening methods of bolting and anchoring equipment to a raised floor or a concrete subfloor increases the load during seismic activity on the floor anchorage by as much as 2-1/2 times the items weight. Thus a 1,000 pound item could exert up to 2,500 pounds of force on the floor.

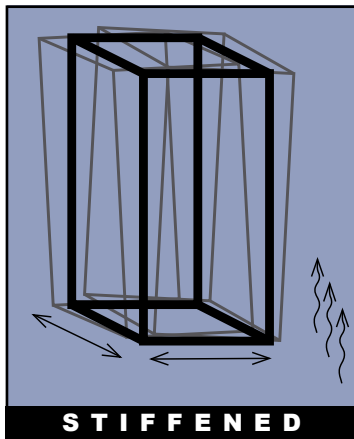
ISO-Base platforms do just the opposite. During seismic activity, items placed on isolation platforms will actually reduce floor loading by 90%. A 1,000 pound item will weigh 100 pounds while in motion.

This could be the critical difference between a successful post earthquake recovery or a major disaster due to a floor collapse.

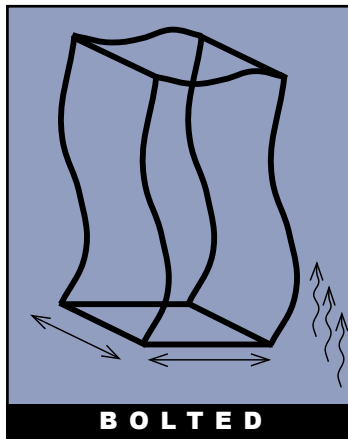


# Traditional Seismic Mitigation Methods

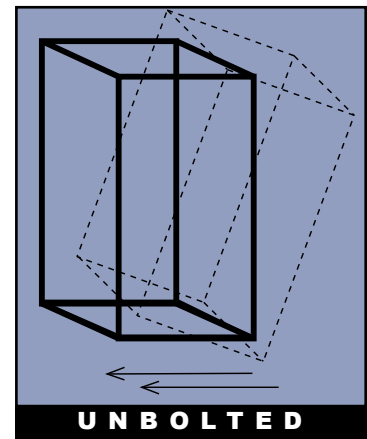
Traditional mitigation strategies for securing electronics cabinets and other equipment have run the gamut from the failed “do-nothing” or just “let-it-roll” philosophy, to bolting, cross-bracing, and structural stiffening of cabinet frames. While these methods may work to keep the equipment or cabinet frame upright, they actually increase the likelihood of system failure as they provide a direct pathway on which damaging shock and vibrations can travel. The more rigid the connection, the more likely there will be damage to drive heads, optical lasers, and other sensitive componentry.



Shock and vibrations sent into and contained within stiffened frame.

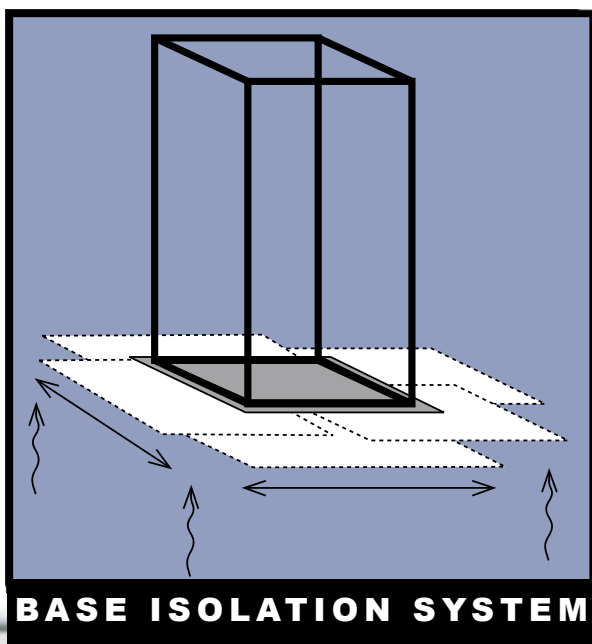


Stresses on cabinet frame and travel of shock and vibrations.



Reaction of a cabinet to seismic ground motion.

# The Innovative Seismic Mitigation Solution



Illustrates the use of a dual-platform base isolation system. The bottom platform moves with ground motion, thereby minimizing the transfer of shock and vibration into the frame. The bearing acts as a “white-noise” filter isolating the top platform from damaging vibrations. This allows equipment to continue to operate right on through seismic activity.

## ISO-Base - Modular Open Frame Design

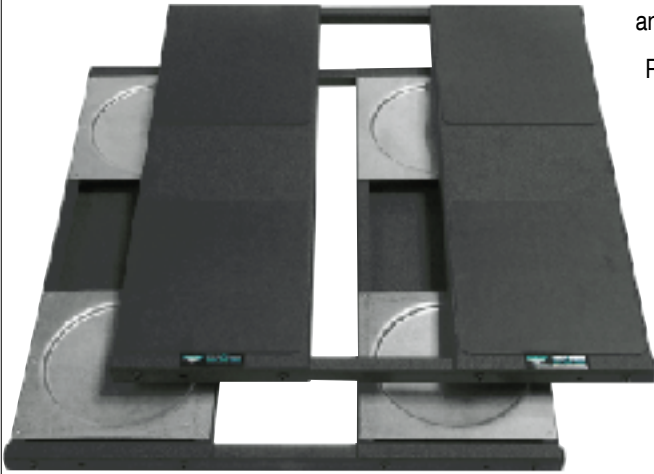
The unique design of ISO-Base Seismic Platforms allows for a multitude of design and layout options. Each plank assembly includes a top and bottom platform with (2) Ball-N-Cone isolators.

Planks are connected with tubing into a front channel.

This front load feature makes assembly easy, and allows additional planks to be added as your needs change. Connector lengths are made to fit the width of the item being protected.

Planks are re-usable and re-configurable, new connector sizes can be easily accommodated.

The open frame design allows proper air circulation and allows a space for cable management through a raised access floor.



## A Standard Installation...



**...with room to grow.**