

# FLOATING FLOORS

Tecoustics has developed a reputation designing, coordinating and installing floating floors systems for our customers. We offer a turnkey solution for your floating floor specification, from supply through to installation. Floating floors are commonly used in mechanical rooms for acoustic control, or in gymnasiums, music studios, weight rooms and helicopter landing pads as a form of impact control.

## Mason Jack-Up Floor Slab System

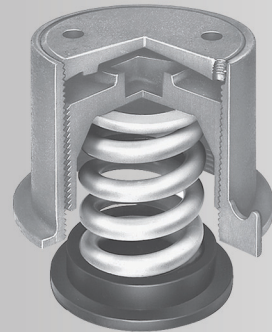
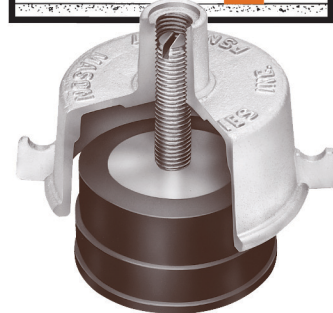
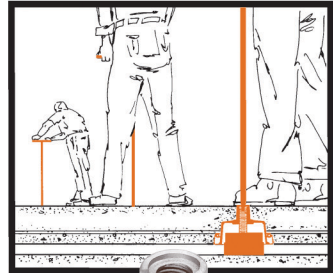
Save costs and increase efficiency and safety with the Mason Jack-Up System. Special mounts are cast into the concrete when the slab is poured, and then lifted via special screws after the slab has cured.

### With Mason Jack-Up Systems, you eliminate:

- Combustible, rot prone plywood forms
- Excess transmission paths through closely spaced or continuous supports
- Moisture retaining fiberglass infill that can plug sub-drains and encourage vermin infestation

### While Gaining:

- An easier, lower frequency isolation system
- A positive air gap
- A floor supported by Mason Low Dynamic Stiffness Rubber, the time tested, low frequency, exposure-proof and truly structural material, at a lower cost



## Mason Spring Jack-Up Floor Slab System

Similar in design and concept to the Mason Jack-Up system, the Spring Jack-Up System utilizes Springs in the cast-in housings instead of Low Dynamic Stiffness Rubber. The benefits of a Spring Floor is lower frequency response through higher deflection as well as superior shock absorption for impact noise. Spring Jack-Up systems are ideal for bowling alleys, gymnasiums, weight rooms, concert halls, music studios and helicopter landing pads.

## Mason Air Bag Floor Slab System

Tecoustics' highest performing floating slab. This system incorporates pneumatically controlled air bags which self level and float the floor slab. This system can be switched on and off (lowered onto supports) for maintenance or equipment servicing. Due to the extremely low frequency response possible with this floating slab system, it is the ideal system for MRI floating slabs, airport baggage scanning slabs, or slab supporting highly sensitive machinery or measuring equipment. As shown on the right -- a Mason 451AS Air Spring System for a 225,000 pound MRI floor slab, complete with vertical and horizontal seismic snubbers.

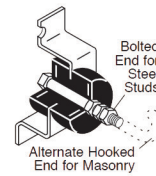


# SPECIALTIES

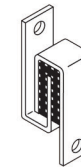
There are many architectural acoustical and vibratory considerations which extend beyond that of a floating floor, and outside a mechanical room. Tecoustics carries a full range of product solutions extending from spring hangers for acoustical ceilings, to building isolation.

## Floating Walls

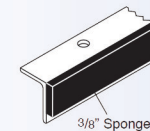
Walls are isolated to prevent flanking around floating floor slabs or to improve the STC between adjacent spaces. The best approach is to rest these walls on the perimeter of the floating floor, so the floor isolation systems serves the walls as well. Sway bracing, floor and ceiling treatments are required to properly isolate the wall system.



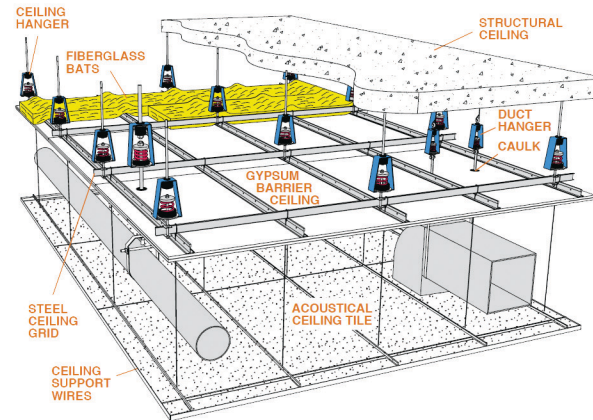
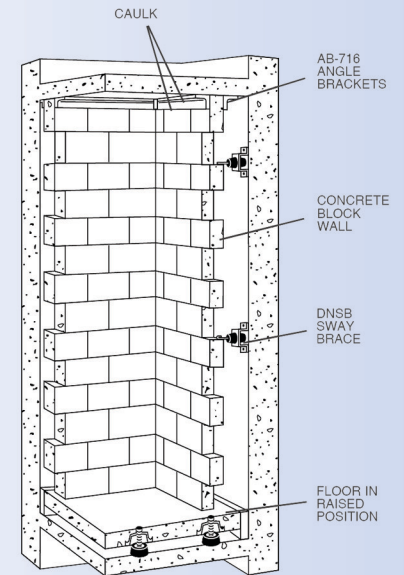
Mason DNSB Sway Brace



Mason WIC Sway Brace



Mason AB-716 Brackets



## Suspended Ceilings

There are two types of resiliently suspended ceilings. Lightweight Mechanical Ceilings, with light fixtures and air conditioning outlets etc and Acoustical Barrier Ceilings, which are used to reduce noise transmission from the floor above. In either case, isolation hangers should be used to suspend the ceilings. The predicted results based on hanger deflections are much more difficult to evaluate compared to spring or rubber equipment mountings that rest on a structural floor. Due to this inconsistency, our recommendations are always to use the best spring products for suspended ceiling applications because the additional cost is low compared to the risk of poor performance. Hanger cost is a small percentage of an acoustical ceiling and it is most important that these sensitive systems are installed with the very best chance of success.

## Building Isolation

Noise and vibration isolators are used to prevent the transmission of vibration from one source to another. Ground vibration may be generated by above ground or underground freight trains or heavy motorized vehicles such as trucks or military equipment. Other noise sources could be industrial hammers, power plants or industrial machines, close enough to an adjacent building to cause a problem. Tecoustics offers custom building isolation solutions from Bridge Bearing Neoprene or Spring supports for the building foundation, to custom rubber or spring mounts for structural isolation applications.

