

Design Features

- Vibration Isolation
- Sound Isolation
- Impact Isolation

Neoprene JACK-UP System

We believe that the most fool-proof and safest way to establish the air gap is the jack-up or lift-slab method. Plastic sheeting is placed on the sub-floor as a breaker layer, isolators are placed on the plastic sheeting, reinforcing steel or mesh rests on the isolator housings, and the concrete floor is poured. After the concrete has cured, the slab is lifted to elevation by turning adjustment screw cavity above each isolator to any specified air gap between 1" and 4".



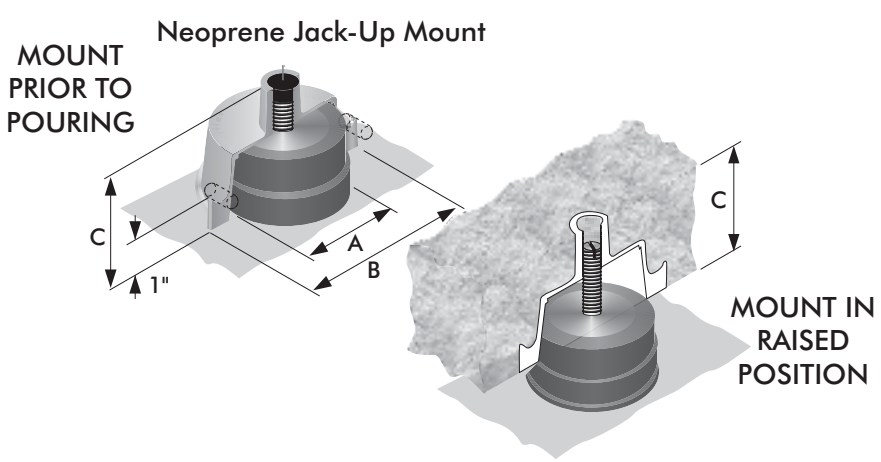
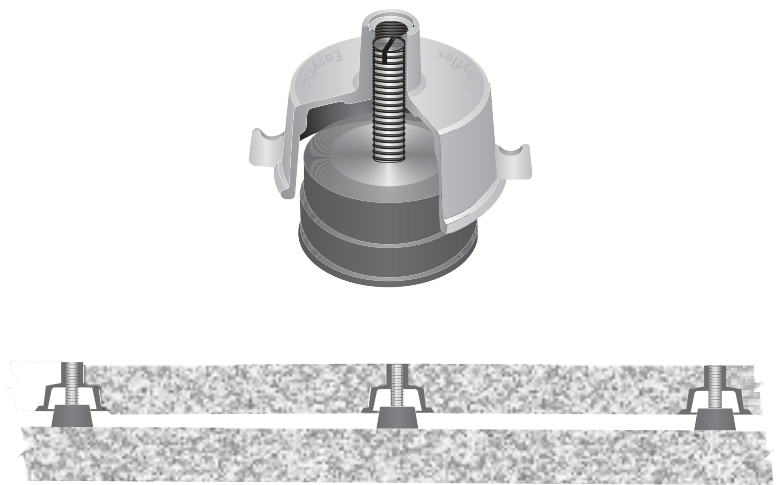
The following table is a general guide to floor thicknesses and air gaps. All specifications may be modified to your requirements.

TYPICAL FLOOR CONFIGURATIONS

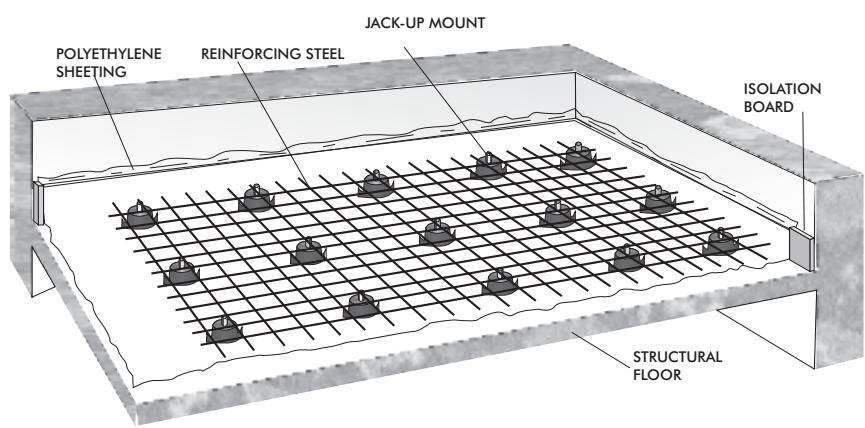
Air Gap	Floor Thickness	Overall Height
Most Common 1" or 2"	3" - Minimum 4" - Most Common 5" - Seldom 6" - Common Thicker Floors or	Air Gap Plus Floor Thickness
Occasionally 3" or 4"	Fractional Dimensions As Required. We have Designed Floating Floors 12" Thick.	

Model	Load Range (lbs)	A (in)	B (in)	Min C (in)	Max C (in)
EFJM A	500 to 1700	4 5/8	5 1/2	3	As Reqd
EFJM B	2800 to 3500	6 3/8	6 1/4	3	As Reqd

Lowest Dynamic Frequency
7.5 Hertz @ 0.3" Deflection. (60 Duro)

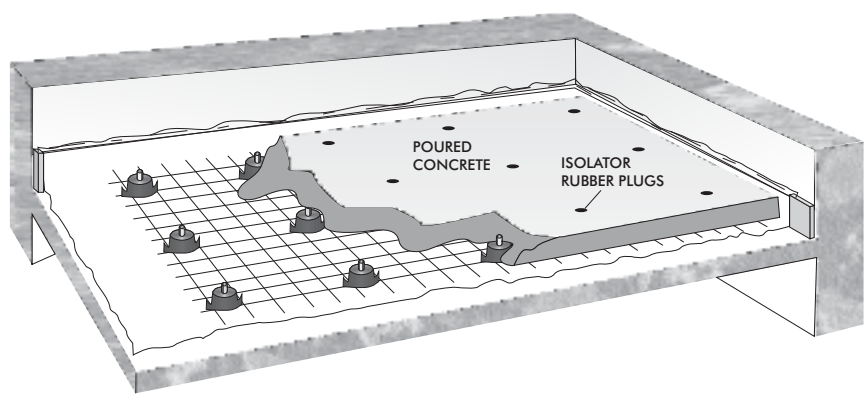


PLACEMENT OF ISOLATION MATERIALS

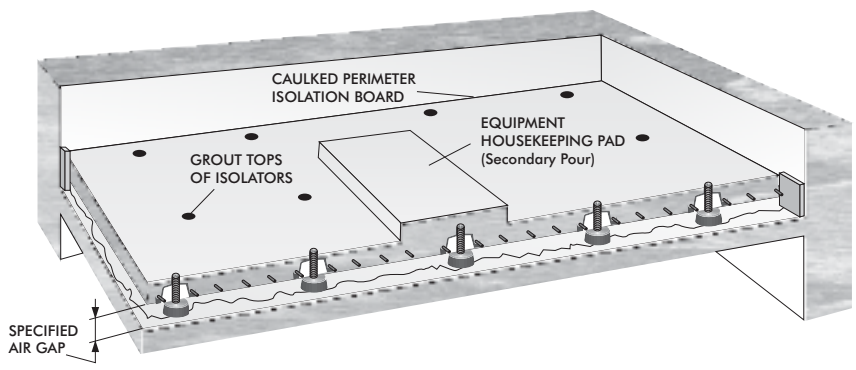


FLOATING FLOOR
 CONSTRUCTION
 SEQUENCE

POURING OF CONCRETE



JACK-UP FLOATING FLOOR



PART 1 GENERAL

1.01 Description

A. Scope of Work

1. Isolate floating floors from building structure by means of jack-up neoprene isolators and perimeter isolation board in each of the mechanical equipment rooms as shown on the drawings.

B. Substitution of Materials

1. Substitute materials shall meet or exceed the "quality" of the products which are listed in these Specifications. Submit samples and test reports by an independent laboratory for consideration on this project.

1.02 Design**A. Intent**

1. The floating floor system shall consist of a 4"(100mm) to 12"(300mm) as the case may be thick concrete slab isolated from and supported 2" (50mm) above the waterproofed structural slab by resilient neoprene isolators within cast iron housing designed to jack up the floor after pouring on the sub-floor.
2. The floating floor slab shall be isolated from adjoining walls, columns and curbs by means of perimeter isolation board.
3. Any floor drains, piping, conduit and duct penetration must not short circuit the isolation system.
4. Any equipment within these rooms shall be mounted on house-keeping pads or directly on the floating floor as drawings.
5. In seismic zones the floating floor shall be restrained horizontally by curbs or walls designed to withstand the horizontal seismic forces. Solid bridge bearing neoprene pads shall be interspersed between perimeter isolation fiberglass to withstand the seismic forces with a maximum deflection of 0.2"(5mm).
6. In seismic zones 2,3 and 4 or equivalent A_v , the floor shall be protected by embedded double acting resilient floor snubbers set in opposition to the overturning moments at the equipment snubbers in all locations where the center of gravity of major equipments is high.

B. Floor System Construction Procedure

1. The setting of all isolation materials and raising of the floor shall be performed by or under the supervision of the isolation manufacturer.
- 2.. Set and waterproof any drains and lower pipe with waterproof specifications.
3. Cement perimeter isolation board around all walls, columns, curbs, etc.
- 3a. In seismic zones intersperse the perimeter isolation board with bridge bearing quality neoprene pads the thickness of the isolation board.
4. Cover entire floor area with 6 mil (0.15mm) plastic sheeting and carry sheeting up perimeter isolation board.
5. Place bell-shaped castings on a maximum of 54"(1370mm), ideally 24"(600mm) centers in the general areas in strict accordance with the approved drawings prepared by the isolation manufacturer. Spacing can be increased to straddle machinery locations. Additional reinforcement must be detailed on isolation manufacturer's drawings when required.

If sound barrier walls are used, add the following:

Perimeter isolators shall be selected to support the wall weight in addition to the perimeter of the floating floor.

- 5a. In seismic zones attach double acting resilient seismic snubbers to the structural slab on either side of high center of gravity equipment not withstand the overturning moment generated by the machinery snubbers and prevent failure of the floating floor.
6. Place reinforcing as shown on the drawing and pour concrete floor monolithically.
7. Raise floor 2"(50mm) by means of the jack-screws. (If construction sequence dictates raising the floor before placing machinery, heavy planking must be used to protect floor while machinery is being rolled into position).
8. Caulk perimeter isolation board in all locations and grout jack-screw holes.

If sound barrier walls are used, add the following:

9. Construct block walls on the floating floor beaing careful that mortar does not drop behind the walls. Place 2"(50mm) fiberglass bats against the structural wall as a precaution. Provide sway braces and isolated angle iron wall braces at the top of the walls Caulk angle iron braces.
10. In seismic zones adjust the double acting snubbers after machinery is in place to provide a maximum up and down clearance of 0,125"(3mm).

1.03 Quality Assurance

- A. Floating floor system components shall be designed and fabricated by a manufacturer with at least five years experience in 20 similar installations.
- B. The floating floor isolation materials shall be installed and the floor raised by or under the supervision of the isolator manufacturer.

1.05 Site Conditions

- A. If site conditions are unsatisfactory or raise questions about the installation of the floating floor, the work will not proceed until the condition has been corrected in a manner acceptable to the isolation manufacturer. The sub-floor must have the same pitch as the top of the floating floor or special provisions made for isolator housings of different height.

1.06 Sequencing and Scheduling

Coordinate work with other trades and coordinate scheduling with the construction supervisor to minimize delays.