

6.5 Furniture, Fixtures, Equipment and Contents

6.5.5 *Miscellaneous Furniture, Fixtures and Equipment*

6.5.5.2 Demountable Partitions

These are freestanding half-height partition walls that are often used to delimit office work spaces. These partitions are typically installed by tenants or occupants and may be readily relocated.

Typical Causes of Damage

- Long runs of unbraced panels are vulnerable to falling over if not specially detailed.
- Partitions that support overloaded shelving units are particularly vulnerable.

DAMAGE EXAMPLES



Figure 6.5.5.2-1 Damage to demountable partitions at the Veterans Administration Medical Center in Sepulveda as a result of the 1994 magnitude-6.7 Northridge Earthquake (Photo courtesy of James O. Malley).



Figure 6.5.5.2-2 Damage to unbraced demountable partition in Silicon Valley office building in the 1989 magnitude-6.9 Loma Prieta Earthquake (Photo courtesy of Maryann Phipps, Estructure).

Seismic Mitigation Considerations

- Check the internet for demountable partitions with seismic rated capacity; some of these have been shake table tested and have improved seismic detailing.
- Panel manufacturers typically have guidelines for acceptable panel configurations for use in earthquake prone areas. Shorter runs of panels with panels at 90 degrees to one another provide favorable conditions for earthquake resistance. Panel anchorage at the base and interconnectivity between panels is also needed for reliable performance. Where panels are not stabilized by return panels, or where panels are tall, bracing at the tops of the panels, up to the structural framing, may be required. Anchorage to the floor slab is another alternative as shown in Figure 6.5.5.2-4.

MITIGATION DETAILS

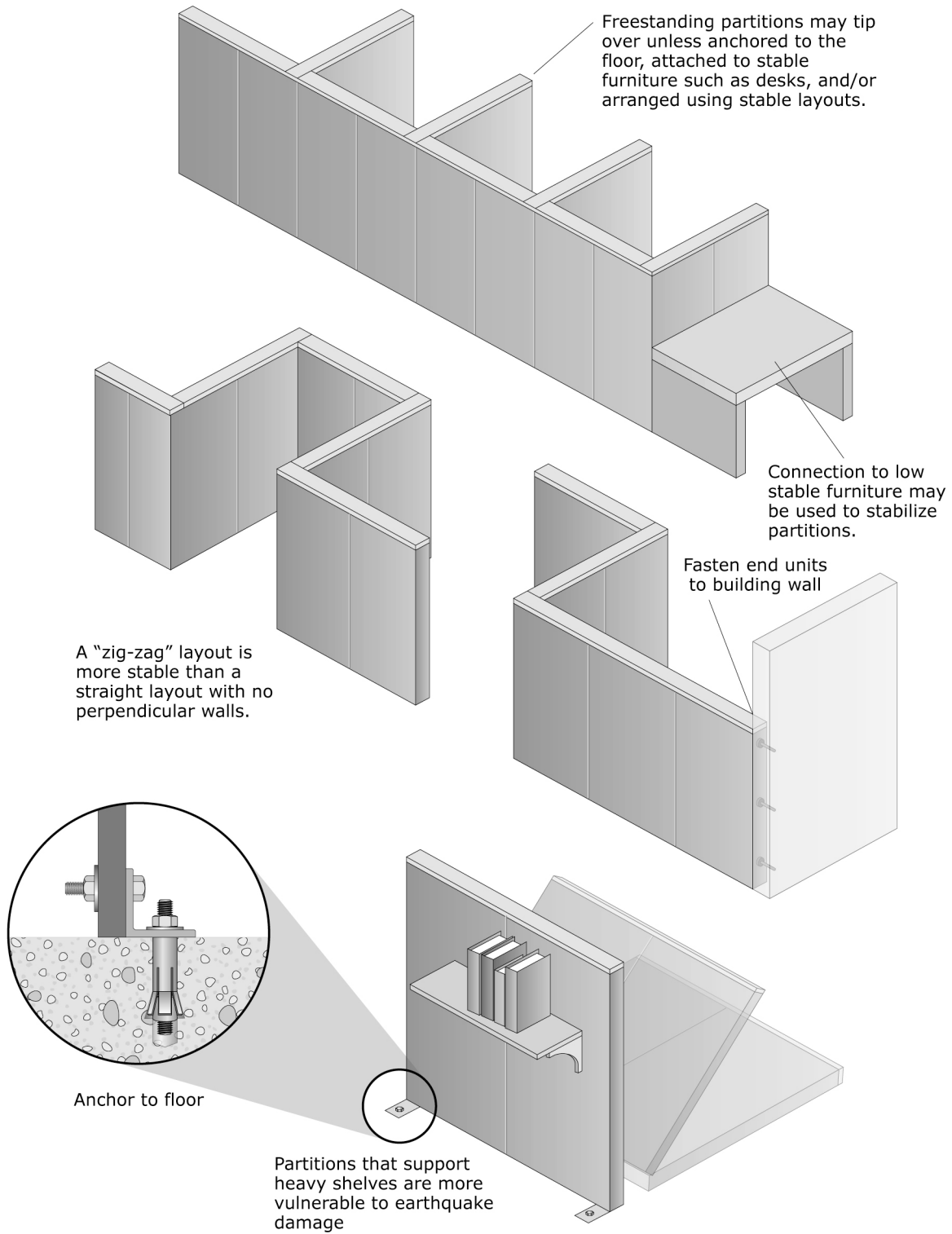


Figure 6.5.5.2-3 Demountable partitions (NE).

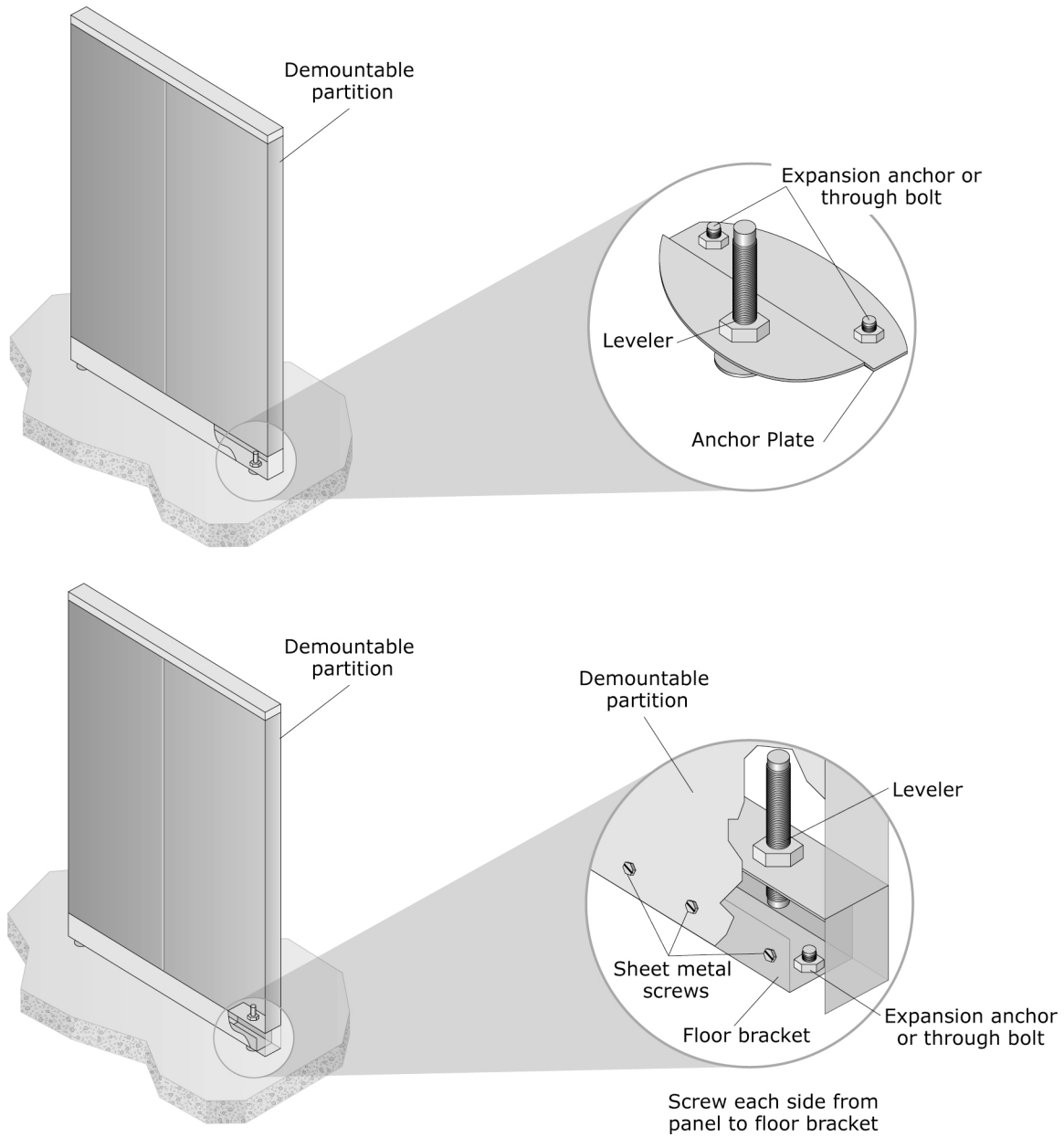


Figure 6.5.5.2-4 Demountable partition details (NE).