

Basic Primer for Suspended Equipment

Failures in piping systems resulting from earthquakes have historically resulted in large quantities of water or other materials being dumped into occupied spaces of the building structure. The resulting dollar damage to the building and its contents is often considerably more than the costs of damage to the building structure itself. In addition, failure of the building's mechanical systems can render the structure unoccupiable until the damage is corrected, and result in major problems for the tenants and/or owners.

Because of the impact that failures of these systems have had in the past, design requirements for piping systems and interfacing equipment have become much more stringent.

Within a building structure, there are multitudes of different kinds of systems, each with its own function and requirements, many of which interface with suspended equipment or are in the immediate proximity of this equipment. Significant effort must be expended to ensure that motion of the equipment induced by an earthquake will not damage surrounding systems or the equipment itself.

This chapter of the manual is a “how to” guide and will deal only with the proper installation and orientation of restraints and not whether or not they are required by code, which can be researched further in Chapter D2, or by specification.

This chapter also does not address the sizing of restraint hardware. Section D10.1 and Chapter D4 include sections on sizing componentry based on the design seismic force and the weight of the system being restrained and should be consulted for this task.

Process equipment is not directly associated with building operating systems and often has its own set of requirements. If there are no applicable special requirements, this equipment should be restrained in a similar fashion to the building mechanical systems.

This manual will not address any special requirements for non-building processes.

BASIC PRIMER FOR SUSPENDED EQUIPMENT

PAGE 1 OF 1

RELEASE DATE: 06/03/04



Toll Free (USA only): 800-959-1229
International: 614-889-0480
Fax: 614-889-0540
World Wide Web: www.kineticsnoise.com
Email: sales@kineticsnoise.com

DOCUMENT:

D10.2

