

WILL CHANGING REGULATIONS CHANGE THE WAY YOU DO BUSINESS?



University at Buffalo The State University of New York

Department of Civil, Structural and Environmental Engineering

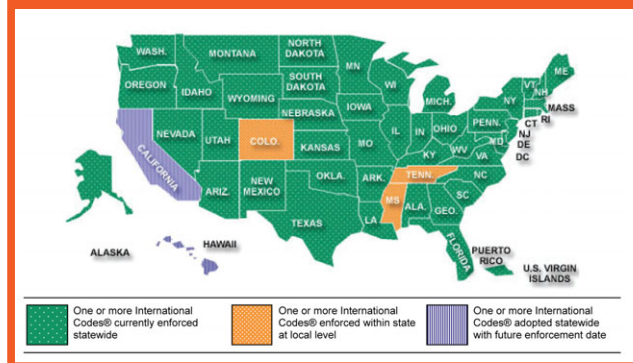
Will Changing Regulations Change the Way You Do Business?

Recent changes in codes and regulations are altering the way that hospitals and commercial facilities are built and equipped.

For the first time, building equipment manufacturers, architects, engineers, and contractors are required to meet stringent and often confusing code requirements for approved installation of building mechanical and electrical equipment, medical equipment, and other building components to ensure occupant safety in an earthquake. In some cases, regulations and building owners are calling for added measures including zero interruptions in equipment performance, and full functionality of facilities following such events.

These changes aren't only happening in California, they're impacting codes and markets across the nation.

Changes in Codes - International Code Adoptions



The International Building Code is used at the state or local level in 47 states plus Washington, D.C. © 2007 International Code Council

How Might These Changes Impact Your Business?

The 2003 and 2006 versions of the International Building Code (IBC) require qualification of mechanical and electrical equipment and equipment mounting systems. California's SB 1953 legislation requires that by the year 2030, acute care hospitals and their equipment be fully functional following an earthquake.

If you sell to or do business in or with healthcare or commercial facilities – or, if you're responsible for hospital safety and operations, you'll want to:

- Gain a better understanding of these changes
- Consider what they mean to your business
- Learn what's being done to better enable you to meet these changing and stringent requirements

2006 International Building Code:

1708.5 Seismic qualification of mechanical and electrical equipment.

The registered design professional in responsible charge shall state the applicable seismic qualification requirements for designated seismic systems on the construction documents. Each manufacturer of designated seismic system components shall test or analyze the component and its mounting system or anchorage and submit a certificate of compliance for review and acceptance by the registered design professional in responsible charge of the design of the designated seismic system and for approval by the building official.

Some of the Equipment and Components Potentially Affected by These Changes:

Mechanical and Electrical Equipment

- Auxiliary Power
- Boilers & Pressure Vessels
- Electrical Distribution & Connections
- Elevator Systems
- Emergency Lighting
- Fire Protection Systems
- HVAC
- Piping & Connections

Medical Equipment

- Biomedical Equipment
- Blood & Other Refrigeration
- Clinical Laboratory Equipment
- Emergency/Trauma Room Equipment
- Medical Imaging Equipment
- Medical Gas Systems
- Plant Maintenance Equipment

Architectural Components

- Ceilings & Lighting Fixtures
- Cladding
- Interior Partition Walls
- Raised Computer Floor Systems
- Windows

Building Contents

- Computer & Data Center Equipment
- Production Equipment & Systems
- Record Storage
- Storage Racks & Shelving
- Supplies/Inventory

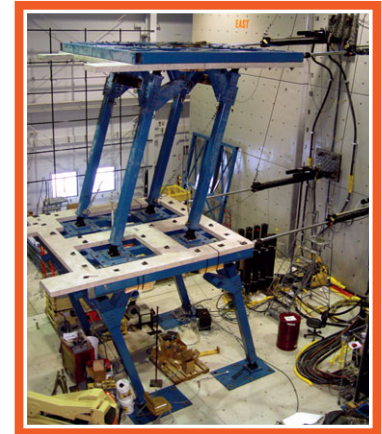
Where Can You Find Seismic Qualification Expertise, Research, and Testing Solutions to Help You Meet These Changing Conditions?

The University at Buffalo (UB), The State University of New York, has the expertise and facilities to help you address equipment research, testing and qualification issues. UB's earthquake engineering researchers have a storied history of producing sound engineering solutions through analytical and experimental studies.

The university is home to this country's first National Center for Earthquake Engineering Research (now known as MCEER) – and a \$21.2 million state-of-the-art Structural Engineering and Earthquake Simulation Laboratory (SEESL).

The 25-thousand-square-foot SEESL, part of the \$81.9 million George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES), houses twin relocatable shake tables, each with a 50-metric-ton payload. SEESL is also home to the world's first and only Nonstructural Components Simulator (UB-NCS). The UB-NCS was developed specifically for performance testing and qualification of architectural components building equipment, systems, anchorages, and contents.

So, if you feel that changing regulations might bring changes to the way you do business, let the the earthquake engineering researchers at the University at Buffalo help you navigate change for the better.



UB's Nonstructural Components Simulator can reproduce full-scale earthquake vibrations on adjacent building floors in real time.

For more information, complete & return the form below or contact:

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I'd like to learn more about seismic testing & qualification capabilities at the University at Buffalo.

Please contact me. Please send more information. Please put me on a mailing list to keep me apprised of developments.

I'm interested in the testing of _____

Name: _____

Title: _____

Company/Organization: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Tel: _____ Fax: _____

Email: _____

Please send the completed form to:

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