

### Historic Hawai'i Foundation Preservation Brief No. 10

## SEISMICALLY RETROFITTING HISTORIC BUILDINGS

Secretary of Interior Standards: Rehabilitation

# Need for Seismic Retrofitting

Living in Hawai'i, the potential for earthquakes does exist, therefore ensuring the earthquake readiness of historic structures is extremely important in order to provide for their continued presence for future generations. The need for seismic retrofitting is both a life-safety issue and compliance issue with federal and state codes. Yet, making a building safer in the event of an earthquake does not have to compromise the historic integrity of the building.

## Retaining Historic Integrity and Ensuring Life-Safety

In keeping with Secretary of Interior Standard for the Treatment of Historic Properties: Rehabilitation and following the guidance found in Preservation Brief No 41 The Seismic Retrofit of Historic Buildings Keeping Preservation in the Forefront, responsible stewards ensure that their historic property does not loose historic integrity during a seismic retrofit. These types of projects can be viewed as an alteration or change and should follow the SOI guidelines. The Preservation Brief No 41, the Park Service applies the SOI principles to the specifics of earthquake readiness.

The Brief notes that there are some important preservation principles to keep in mind:

- Historic materials should be preserved and retained to the greatest extent possible and not replaced wholesale in the process of seismic strengthening;
- New seismic retrofit systems, whether hidden or exposed, should respect the character and integrity of the historic building and be visually compatible with it in design; and,
- Seismic work should be "reversible" to the greatest extent possible to allow removal for future use of improved systems and traditional repair of remaining historic materials.

After identifying the need to retrofit your historic building, a team of professional with expertise in in seismic retrofits and preservation must begin the documentation and planning process. Every successful seismic retrofit starts will a detailed plan including evaluation of historic significance and character defining features, as well current condition and risk hazards. Once this information is gathered by qualified professionals the needs of the building and scope of work can be developed. If you are thinking about seismically retrofitting your historic building Historic Hawai'i Foundation maintains a list of Preservation Professionals and their areas of expertise.

#### Resource and More Information

National Park Service Technical Preservation Brief No. 41

#### Historic Hawai'i Foundation

680 Iwilei Road, Suite 690 • Honolulu, HI 96817 • Tel: 808-523-2900 • FAX: 808-523-0800 • <a href="www.historichawaii.org">www.historichawaii.org</a> Historic Hawai'i Foundation was established in 1974 to encourage the preservation of historic buildings, sites and communities on all the islands of Hawai'i. As the statewide leader for historic preservation, HHF works to preserve Hawai'i's unique architectural and cultural heritage and believes that historic preservation is an important element in the present and future quality of life, environmental sustainability and economic viability of the state.

http://www.nps.gov/tps/how-to-preserve/briefs/41-seismic-retrofit.htm

Federal Seismic Codes http://www.fema.gov/earthquake/building-codes#2

Check out Historic Hawai'i Foundation's Resource Center for more information! http://historichawaii.org/resource-center-2/

#### Historic Hawai'i Foundation