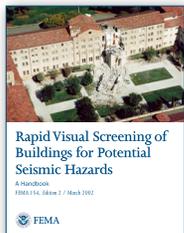


design and construction guidance for one- and two-family light frame residential structures that can be utilized by homebuilders, homeowners, and other non-engineers, and provides supplemental information to the 2003 edition of the *International Residential Code*.

<https://www.fema.gov/library/viewRecord.do?id=2103>



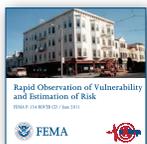
### **Rapid Visual Screening of Buildings for Potential Seismic Hazards: A Handbook (FEMA 154, Second Edition, March 2002)**

E, C, CO,

This handbook presents a method to quickly identify, inventory, and rank buildings posing risk of death, injury, or severe curtailment in use

following an earthquake. The Rapid Visual Screening (RVS) procedure can be used by trained personnel to identify potentially hazardous buildings with a 15- to 30-minute exterior inspection, using a data collection form included in the handbook.

<https://www.fema.gov/library/viewRecord.do?id=3556>



### **Rapid Observation of Vulnerability and Estimation of Risk (FEMA P-154 ROVER CD, June 2011)** E, C, CO,

*Rapid Observation of Vulnerability and Estimation of Risk* (ROVER), is a mobile software for pre- and post-earthquake building safety screening. ROVER's pre-earthquake module is used by field inspectors to quickly compile an electronic inventory of buildings, record important seismic features of a building, and generate an automatic estimate of the need for detailed seismic evaluation.

<https://www.fema.gov/library/viewRecord.do?id=4907>



### **Reducing the Risks of Nonstructural Earthquake Damage: A Practical Guide (FEMA E-74, Fourth Edition, January 2011)** E, C, CO,

This new version of FEMA 74 is designed to be used primarily online (<http://www.fema.gov/plan/prevent/earthquake/fema74/index.shtm>). The new format makes it simple

to browse and to print out the relevant details. The purpose of the document is to explain the sources of nonstructural earthquake damage in simple terms and to provide methods for reducing potential risks.

<https://www.fema.gov/library/viewRecord.do?id=4626>



### **Techniques for the Seismic Rehabilitation of Existing Buildings (FEMA 547, 2006 Edition)**

E, C, CO,

This seismic rehabilitation techniques document is part of the NEHRP family of publications addressing seismic rehabilitation of existing buildings. It describes common seismic rehabilitation techniques used for buildings represented in the set of standard building types in FEMA seismic publications. This document supersedes FEMA 172, NEHRP Handbook of Techniques for the Seismic Rehabilitation of Existing Buildings. <https://www.fema.gov/library/viewRecord.do?id=2393>



### **Earthquake-Resistant Design Concepts: An Introduction to the NEHRP Recommended Seismic Provisions for New Buildings and Other Structures (FEMA P-749, December 2010)** E, C, CO,

This publication is a companion guide to NEHRP's *Recommended Seismic Provisions for New Buildings and Other Structures* (FEMA P-750). This document is intended to provide interested individuals with a readily understandable explanation of the intent and requirements of seismic design in general and the Provision in particular. <https://www.fema.gov/library/viewRecord.do?id=4711>

<https://www.fema.gov/library/viewRecord.do?id=4711>



### **NEHRP Recommended Seismic Provisions for New Buildings and Other Structures (FEMA P-750, 2009 Edition)** E, C, CO,

The 2009 edition is the seventh update of this document and adopts ASCE/SEI 7-05 by reference. It presents criteria for the design and construction of new buildings, additions, and alterations to existing buildings, and of non-building structures to enable them to resist the effects of earthquake ground motions. The document is one of the main resources for the development of national seismic design standards and codes. <https://www.fema.gov/library/viewRecord.do?id=4103>

<https://www.fema.gov/library/viewRecord.do?id=4103>



# Building Science for Disaster-Resistant Communities: Seismic Hazard Publications

FEMA L-783 / November 2011



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To order publications please call 1-800-480-2520 or fax 1-240-699-0525 (Monday – Friday, 8:00 a.m. – 5:00 p.m., EST) or email your request to FEMA-Publications-Warehouse@dhs.gov. Please provide the title, publication number, and quantity, along with your name, address, zipcode, and daytime telephone number.

## Building Science for Disaster-Resistant Communities

# Mitigation Works

### Building Science

The Building Science Branch develops and produces technical guidance and tools focused on fostering a disaster-resistant built environment. Located within the FEMA Federal Insurance and Mitigation Administration's (FIMA) Risk Reduction Division, the Building Science Branch supports FIMA's mission to reduce risk to life and property by providing state-of-the-art technical hazard mitigation solutions for buildings. Mitigation efforts provide value to the American people by creating safer communities and reducing loss of life and property.

Building Science publications provide strategies for all types of hazards, this brochure provides readers with a quick summary of publications that will help them prepare for and mitigate against seismic hazards.

E (Engineers) / C (Contractors) / CO (Community Officials) / H (Homeowners) /  (Available Online)  (Available Print)  (Available CD)

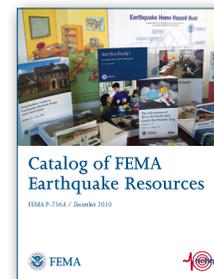
### Seismic Hazard

One of the most frightening and destructive phenomena of nature is a severe earthquake and its terrible aftereffects. Earthquakes strike suddenly, violently, and without warning at any time of the day or night. If an earthquake occurs in a populated area, it may cause many deaths and injuries and extensive property damage. In the United States, major seismic zones can be found in twenty two states.

As a member of the National Earthquake Hazards Reduction Program (NEHRP), FEMA seeks to mitigate earthquake losses in the United States through implementation activities in the fields of earthquake science and engineering.

FEMA's Building Science Branch develops and produces effective practices and policies for earthquake loss-reduction, techniques to reduce the seismic vulnerability of facilities and systems, and works to improve seismic hazards identification and risk-assessment methods and their use.

### Building Science Publications

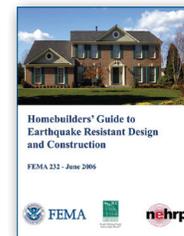


#### ***Catalog of FEMA Earthquake Resources (P-736A, December 2010)*** E, C, CO, H,

This catalog provides an overview of FEMA NEHRP publications and resources available to the public. Each resource is listed with a short description, its cover image when available, and an icon for its availability.

Many of the resources are available online and can be ordered from FEMA Distribution.

<https://www.fema.gov/library/viewRecord.do?id=3538>



#### ***Homebuilders' Guide to Earthquake-Resistant Design and Construction (FEMA 232, June 2006)*** E, C, CO, H,

This guide replaces the Home Builder's Guide to Seismic Resistant Construction and all earlier versions of FEMA 232. It presents seismic