Mission
National Information Centre of Earthquake Engineering (NICEE) was established at IIT Kanpur with the mandate to empower all stakeholders in the building industry in seismic safety towards ensuring an earthquake resistant built environment in our country. NICEE maintains and disseminates information resources on Earthquake Engineering. It undertakes community outreach activities aimed at mitigation of earthquake disasters. NICEE's target audience includes professionals, academics and all others with an interest in and concern for seismic safety.

Seismic Design Decision Making

Facts
India has a very real earthquake problem. Devastating earthquakes have struck India regularly in the past. India’s four seismic zones emphasize that over 60% of land area in India is under moderate to severe earthquake hazard (IS: 1893, 2002).

Unsafe building stock makes the built environment vulnerable and this in turn results in loss of human life and property in the aftermath of earthquakes.

Concerns
The built environment has to be made earthquake resistant so that lives are not lost through the collapse of unsafe buildings. While this requires the active participation of various professionals associated with the construction industry, architects have a very significant role to play.

Needs
As initiators of building projects, architectural decisions with regard to building shape, size and geometry, structural system and construction materials are among the first to be taken and the rest of the building team then works towards finetuning these decisions. It is important therefore that the architectural decision making at the conceptual and detail level is sensitive to seismic considerations.

Starting off right
The noted earthquake engineer, Henry Degenkolb summed up aptly:

If we have a poor configuration to start with, all the engineer can do is to provide a band-aid to improve a basically poor solution as best as he can.

Conversely, if we start-off with a good configuration and reasonable framing system, even a poor engineer can’t harm its ultimate performance too much.

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Each of these publications is targeted at architects—professionals as well as academics. These address the fundamentals of earthquake resistant design at a conceptual, non analytical level and are easy to internalize for application right from the conceptual design stage. The most recent publication on confined masonry construction showcases a time tested technology that is used effectively in several seismic nations.

To receive a free monthly electronic newsletter, please register at www.nicee.org
Guidelines for Conceptual Design and Construction Methodologies

IITK BMTPC Earthquake Tips
Learning Earthquake Design and Construction
Targeted at stakeholders in the building and construction industry, this very popular series introduces the basics of earthquake resistant design concepts in a simple and easy to understand format. **Author:** C.V.R. Murty. 56 pages in colour, Price: Rs. 150/-.

Seismic Conceptual Design of Buildings
This monograph conveys the concept of earthquake resistant design of buildings in a very simple and pictorial style. **Author:** Hugo Bachmann 84 pages in colour. Price: Rs. 200/-

IITK—GSDMA Guidelines on Measures to Mitigate Effects of Terrorist Attacks on Buildings
In recent years, terrorism has become a serious hazard and a proactive preventive approach is necessary to mitigate this hazard. Measures to be considered when designing new buildings are the thrust of this document that brings diverse information on the subject to Indian professionals. **Author:** C V R Murty, 120 pages, Price: Rs. 200/-
AT RISK: The Seismic Performance of Reinforced Concrete Frame Buildings with Masonry Infill Walls

This compilation highlights the vulnerabilities of RC frame buildings that are the preferred typology in our surroundings and suggests ways to reduce the same through informed design decision making. **Author:** C.V.R Murty, et al. 80 pages in colour. Price: Rs. 200/-

New from NICEE

Earthquake Design Concepts

This package (a CD & a 640 printed page volume) contains about 627 power point slides covered in 27 lectures, movie files and explanatory notes for each slide. The set constitutes basic material for both professional architects and academics. It is an excellent resource for preparing lecture presentations on Earthquake Design for undergraduate classrooms and continuing education programmes. **Authors:** C.V.R. Murty, IITK and Prof. Andrew W. Charleson, Victoria University of Wellington, New Zealand, a CD & 640 printed pages. Price: CD Rs. 300/-, Paper Copy: Rs. 500/-

Guidelines for Assessment and Evaluation

IITK—GSDMA Guidelines for Seismic Evaluation and Strengthening of Buildings

An appropriate and adequate level of safety needs to be ensured for the occupants of buildings. These guidelines are intended to provide a systematic procedure for the seismic evaluation which can be applied consistently to a wide range of buildings. Though not applicable to all building types, the document also discusses some cost effective strengthening schemes for existing older buildings identified as seismically deficient during the evaluation process. **Author:** Durgesh C Rai, 125 pages, Price: Rs. 200/-

Guidelines for Retrofit: Audio CD Lectures

Lectures by Dr. Svetlana N Brzev

Seismic Retrofit Techniques for Masonry Buildings:
An Overview

The lecture covers seismic performance of masonry buildings, masonry walls, their behaviour and failure mode and seismic retrofit methods. All the concepts are supported with explanatory sketches and photographs. **Duration:** 62 minutes. Price: Rs. 500/-

Seismic Design & Retrofit Techniques of Non-Structural Building Components

The lecture covers seismic performance and failure modes, performance objectives, design codes and recommendations and seismic retrofit solutions. The main attraction of the lecture is introduction to simple calculations for seismic design of nonstructural building components. **Duration:** 63 minutes. Price: Rs. 500/-

Both CD’s contain the video recording of the lectures clubbed with Power Point Presentation slides, and the RealPlayer® installer. All the slides and recording are supplied in an additional folder for the ease of viewing separately, if required.
Keeping Schools Safe in Earthquakes

This monograph presents a series of papers authored by participants of the Paris 2004 OECD-GHI meeting, encompassing issues pertaining to new buildings, retrofitting of old buildings as well as enforcement and public policy, towards maximizing seismic safety of schools, an issue of critical importance in any community vulnerable to the earthquake hazard.

Authors: Participants of the OECD-GHI Meeting, 242 pages, Price: Rs. 200/-

Earthquake Rebuilding in Gujarat, India

This focuses on field observations of the post-earthquake recovery process after the Bhuj 2001 earthquake. This report is a departure from reconnaissance reports conducted in the immediate aftermath of an earthquake in that it showcases the complex and challenging recovery phase and the strategies employed by communities in disaster mitigation that can serve as useful lessons and guidelines towards long-term earthquake disaster mitigation and preparedness.

Authors: C.V.R. Murty, et al, 120 pages, Price: Rs. 150/-