ABOUT THE BOOK

This book is written for building professionals interested in learning more about confined masonry (CM) construction and for those who would like to promote its application in India. Over the last 100 years, CM construction has emerged as a building technology that offers an alternative to both URM and RC frame construction in countries and regions of extremely high seismic risk. This book is part of an initiative launched in India to promote CM construction based on its proven record of good seismic performance.

This publication was originally authored by Svetlana Brzev as a monograph “Earthquake-Resistant Confined Masonry Construction”, published by NICEE in 2007. More than 3000 copies of the monograph were circulated in English and Hindi over the last 10 years.

CM construction has a great potential for saving lives and property in areas of high seismic risk in India. It is expected that the explanations of key concepts of seismic design and construction of CM buildings found in this book will be useful to building professionals and academics interested in learning more about this construction technology and in engaging in its design and construction.

ABOUT THE AUTHORS

Dr. Svetlana Brzev, P.Eng. has over thirty years of combined academic and consulting experience from Canada, Serbia, and other countries, and has been a Visiting Professor at IIT Gandhinagar, India since 2014. She received Bachelor’s and Master’s degrees in Civil/Structural Engineering from the University of Belgrade, Serbia, and Ph.D. degree in Earthquake Engineering from the University of Roorkee, India. Her interests include seismic design and retrofit of masonry and concrete structures. Dr. Brzev has co-authored a few books and several major publications and papers. She served as a Director and Vice-President of the Earthquake Engineering Research Institute, and was the founding Editor-in-Chief of the World Housing Encyclopedia. She is the Chair of the Confined Masonry Network (www.confinedmasonry.org) and serves on the Board of Directors of the International Association of Earthquake Engineering (IAEE).

Dr. Keya Mitra is Professor in the Department of Architecture, Indian Institute of Engineering Science and Technology, Shibpur in India. She has over twenty five years of combined teaching and research experience. She received her B. Arch degree from the University of Calcutta, M. Arch degree from the University of Wisconsin-Milwaukee, USA and Ph.D. degree in Architecture from the erstwhile Bengal Engineering and Science University, Shibpur in India. She undertook post doctoral research at the Sapienza University in Rome. Her research includes rapid visual assessment of buildings for seismic vulnerability, seismic resistance of vernacular housing typologies in India, and urban earthquake disaster risk mitigation. Prof. Mitra has authored a number of national and international publications. She is presently serving on the National Advisory Committee of NICEE, IIT Kanpur.