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	Titolo	Computer Aided Seismic and Fire Retrofitting Analysis of Existing High Rise Reinforced Concrete Buildings / / by Raja Rizwan Hussain, Muhammad Wasim, Saeed Hasan
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	ISBN	94-017-7297-5
	Edizione	[1st ed. 2016.]
	Descrizione fisica	1 online resource (129 p.)
	Collana	Solid Mechanics and Its Applications, , 0925-0042 ; ; 222
	Disciplina	693.852
	Soggetti	Building materials Natural disasters Quality control Reliability Industrial safety Structural Materials Natural Hazards Quality Control, Reliability, Safety and Risk
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
	Nota di contenuto	1 Introduction -- 2 Related Reviews -- 3 Introduction to Etabs -- 4 Structural Evaluation for Gravity Loads -- 5 Seismic Analysis -- 6 Retrofitting of the Building for Earth Quake -- 7 Retrofitting by use of FRP -- 8 Fire Retrofitting of High Rise Buildings by Manual Approach.
	Sommario/riassunto	This book details the analysis and design of high rise buildings for gravity and seismic analysis. It provides the knowledge structural engineers need to retrofit existing structures in order to meet safety requirements and better prevent potential damage from such disasters as earthquakes and fires. Coverage includes actual case studies of existing buildings, reviews of current knowledge for damages and their mitigation, protective design technologies, and analytical and computational techniques. This monograph also provides an experimental investigation on the properties of fiber reinforced concrete that consists of natural fibres like coconut coir and also steel

fibres that are used for comparison in both Normal Strength Concrete (NSC) and High Strength Concrete (HSC). In addition, the authors examine the use of various repair techniques for damaged high rise buildings. The book will help upcoming structural design engineers learn the computer aided analysis and design of real existing high rise buildings by using ACI code for application of the gravity loads, UBC-97 for seismic analysis, and retrofitting analysis by computer models. It will be of immense use to the student community, academicians, consultants, and practicing professional engineers and scientists involved in the planning, design, execution, inspection, and supervision for the proper retrofitting of buildings.