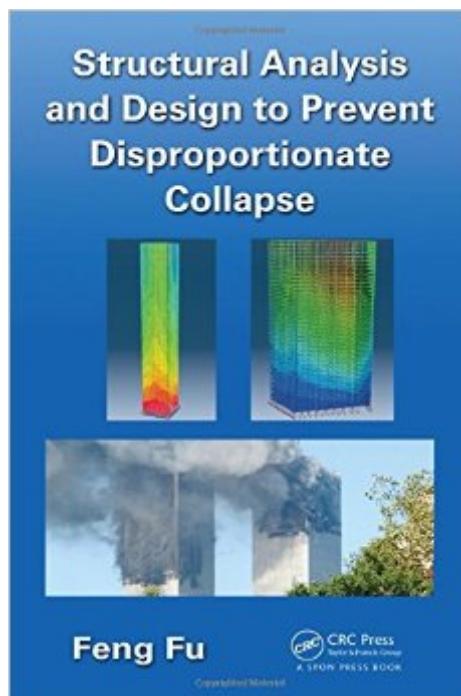


The book was found

Structural Analysis And Design To Prevent Disproportionate Collapse



Synopsis

Hard Guidance on Preventing Disproportionate Collapse Disproportionate collapse is a pressing issue in current design practice. Numerous causes are possible â€“ especially forms of extreme loading, such as blast, fire, earthquake, or vehicle collisions. But it is the mechanism and its prevention which are of especial interest and concern. After the World Trade Center collapse in 2001, interest was sparked, and it is now imperative for a design engineer to have sufficient knowledge on both the analysis and design against disproportionate collapse. Detailed structural design guidance for preventing this has been developed in Europe and the US â€“ such as BS5950 in the UK, and guidance from the Department of Defense and the General Services Administration in the US. However, Structural Analysis and Design to Prevent Disproportionate Collapse is the first systematic text in the market to help design engineers or structural engineering students to properly understand this guidance. Covers the design and analysis of a structure to prevent disproportionate collapse Provides an understanding of disproportionate collapse problems for different structures under different loads Contains detailed knowledge on the design and progressive collapse analysis of complex structures Incorporates ABAQUS®, ETABS, SAP2000, and Highlights 3D Modeling Techniques As progressive collapse analysis is a distinctive and complicated procedure, it normally requires an ability to use a modern commercial finite element package, and Structural Analysis and Design to Prevent Disproportionate Collapse features a detailed introduction to the use of FE programs such as ABAQUS® in progressive collapse analysis. In addition, case studies are performed using 3D FE models based on various types of structures such as multi-storey buildings, long-span space structures, and bridges. These models replicate real collapse incidents and prestigious construction projects, such as progressive collapse analysis of the Twin Towers, structural fire analysis of World Trade Center 7, blast analysis of the Murrah Federal Building and progressive collapse analysis of the Millau Viaduct, which help designers to fully understand the failure mechanisms and effective mitigation methods in practice.

Book Information

Hardcover: 202 pages

Publisher: CRC Press (March 3, 2016)

Language: English

ISBN-10: 1498706797

ISBN-13: 978-1498706797

Product Dimensions: 0.8 x 6.5 x 9.8 inches

Shipping Weight: 1.1 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #3,084,810 in Books (See Top 100 in Books) #119 in Books > Engineering & Transportation > Engineering > Civil & Environmental > Seismic Design #1580 in Books > Engineering & Transportation > Engineering > Civil & Environmental > Structural #6822 in Books > Crafts, Hobbies & Home > Home Improvement & Design > How-to & Home Improvements > Design & Construction

[Download to continue reading...](#)

Structural Analysis and Design to Prevent Disproportionate Collapse No News Is Bad News: Canada's Media Collapse - and What Comes Next Spheres of Intervention: US Foreign Policy and the Collapse of Lebanon, 1967-1976 Dark Age America: Climate Change, Cultural Collapse, and the Hard Future Ahead Survival: The Comprehensive guide to prepare you for a natural disaster, urban collapse, and wilderness survival Prepper Guns: Firearms, Ammo, Tools, and Techniques You Will Need to Survive the Coming Collapse The Healthy Bones Nutrition Plan and Cookbook: How to Prepare and Combine Whole Foods to Prevent and Treat Osteoporosis Naturally Minimalist Muscle Activation: Crush Structural Imbalances, Find Clarity in Your Movement, and Live Pain-Free and Strong Now and in the Future Sleisenger and Fordtran's Gastrointestinal and Liver Disease Review and Assessment (Sleisenger and Fordtrans Gastrointestinal and Liver) The Economic Collapse Chronicles, The Complete Box Set: A Post-Apocalyptic Tale of America's Coming Financial Downfall Homemade Repellents: 31 Organic Repellents and Natural Home Remedies to Get Rid of Bugs, Prevent Bug Bites, and Heal Bee Stings (Homemade Repellents, Natural ... Homesteading, How to Get Rid of Bed Bugs) Eat Fat and Get Thin, Fit, and Healthier Than Ever Before!: Easy Diet and Delicious Cookbook: Recipes for Dramatic and Sustainable Weight Loss (Includes 21 Day Meal Plan) Best Plants for New Mexico Gardens and Landscapes: Keyed to Cities and Regions in New Mexico and Adjacent Areas, Revised and Expanded Edition Amino Acids: The Way to Health and Wellness: Find Health and Healing from Depression, Addictions, Obesity, Anxiety, Sexual Issues, and Fill Nutritional Needs of Vegetarian and Vegan Diets Die-cutting and Tooling: A guide to the manufacture and use of cutting, embossing and foiling dies, anvils and cylinders The Complete Book of Essential Oils and Aromatherapy: Over 800 Natural, Nontoxic, and Fragrant Recipes to Create Health, Beauty, and Safe Home and Work Environments Low-Dimensional and Nanostructured Materials and Devices: Properties, Synthesis, Characterization, Modelling and Applications (NanoScience and Technology) Data Analytics: Practical Data Analysis and Statistical Guide to Transform and Evolve Any Business Leveraging the

Power of Data Analytics, Data Science, ... (Hacking Freedom and Data Driven Book 2) The Insulin Resistance Diet Plan & Cookbook: Lose Weight, Manage PCOS, and Prevent Prediabetes The Low-Carb Diabetes Solution Cookbook: Prevent and Heal Type 2 Diabetes with 200 Ultra Low-Carb Recipes - All Recipes 5 Total Carbs or Fewer!

[Dmca](#)