The book was found

Tall Building Design: Steel, Concrete, And Composite Systems





Synopsis

Addresses the Question Frequently Proposed to the Designer by Architects: "Can We Do This? Offering guidance on how to use code-based procedures while at the same time providing an understanding of why provisions are necessary, Tall Building Design: Steel, Concrete, and Composite Systems methodically explores the structural behavior of steel, concrete, and composite members and systems. This text establishes the notion that design is a creative process, and not just an execution of framing proposals. It cultivates imaginative approaches by presenting examples specifically related to essential building codes and standards. Tying together precision and accuracyâ •it also bridges the gap between two design approachesâ •one based on initiative skill and the other based on computer skill. The book explains loads and load combinations typically used in building design, explores methods for determining design wind loads using the provisions of ASCE 7-10, and examines wind tunnel procedures. It defines conceptual seismic design, as the avoidance or minimization of problems created by the effects of seismic excitation. It introduces the concept of performance-based design (PBD). It also addresses serviceability considerations, prediction of tall building motions, damping devices, seismic isolation, blast-resistant design, and progressive collapse. The final chapters explain gravity and lateral systems for steel, concrete, and composite buildings. The Book Also Considers: Preliminary analysis and design techniques The structural rehabilitation of seismically vulnerable steel and concrete buildings Design differences between code-sponsored approaches The concept of ductility trade-off for strength Tall Building Design: Steel, Concrete, and Composite Systems is a structural design guide and reference for practicing engineers and educators, as well as recent graduates entering the structural engineering profession. This text examines all major concrete, steel, and composite building systems, and uses the most up-to-date building codes.

Book Information

Hardcover: 872 pages Publisher: CRC Press; 1 edition (July 14, 2016) Language: English ISBN-10: 146655620X ISBN-13: 978-1466556201 Product Dimensions: 2.2 x 8 x 11 inches Shipping Weight: 4 pounds (View shipping rates and policies) Average Customer Review: Be the first to review this item Best Sellers Rank: #337,235 in Books (See Top 100 in Books) #11 in Books > Engineering & Transportation > Engineering > Civil & Environmental > Seismic Design #29 in Books > Engineering & Transportation > Engineering > Materials & Material Science > Concrete #84 in Books > Engineering & Transportation > Engineering > Civil & Environmental > Transportation *Download to continue reading...*

Tall Building Design: Steel, Concrete, and Composite Systems Structural Analysis and Design of Tall Buildings: Steel and Composite Construction Design of Steel-Concrete Composite Bridges to Eurocodes The Men of Steel Anthology: The Men of Steel (special edition 2015 includes new release Raising Steel: Momma Joe's story) Techniques of Staircase Construction: Technical and Design Instructions for Stairs Made of Wood, Steel, Concrete, and Natural Stone Seismic Design Aids for Nonlinear Pushover Analysis of Reinforced Concrete and Steel Bridges (Advances in Earthquake Engineering) Principles of Structural Design: Wood, Steel, and Concrete, Second Edition Hardening, Tempering, Annealing and Forging of Steel: A Treatise on the Practical, Treatment and Working of High and Low Grade Steel (Classic Reprint) Boat Building with Steel, Including Boat Building with Aluminium Nonlinear Analysis of Concrete-Filled Steel Tubular Columns Effect of Chloride & Temperature on Rusting of Steel Reinforced Concrete 2nd Ed Black & Decker The Complete Guide to Concrete & Masonry, 4th Edition: Build with Concrete, Brick, Block & Natural Stone (Black & Decker Complete Guide) Corrosive Signs: Essays on Experimental Poetry (Visual, Concrete, Alternative) (Visual, Concrete, Alternative) Applied Wind Engineering for Tall Building Structures Quantum Thermodynamics: Emergence of Thermodynamic Behavior Within Composite Quantum Systems (Lecture Notes in Physics) Design and Analysis of Composite Structures: With Applications to Aerospace Structures Design and Analysis of Composite Structures (AIAA Education) Introduction to Composite Materials Design, Second Edition Concrete Mix Design (Mix Design Methods Book 1) Dreams of Iron and Steel: Seven Wonders of the Modern Age, from the Building of the London Sewers to the Panama Canal

<u>Dmca</u>