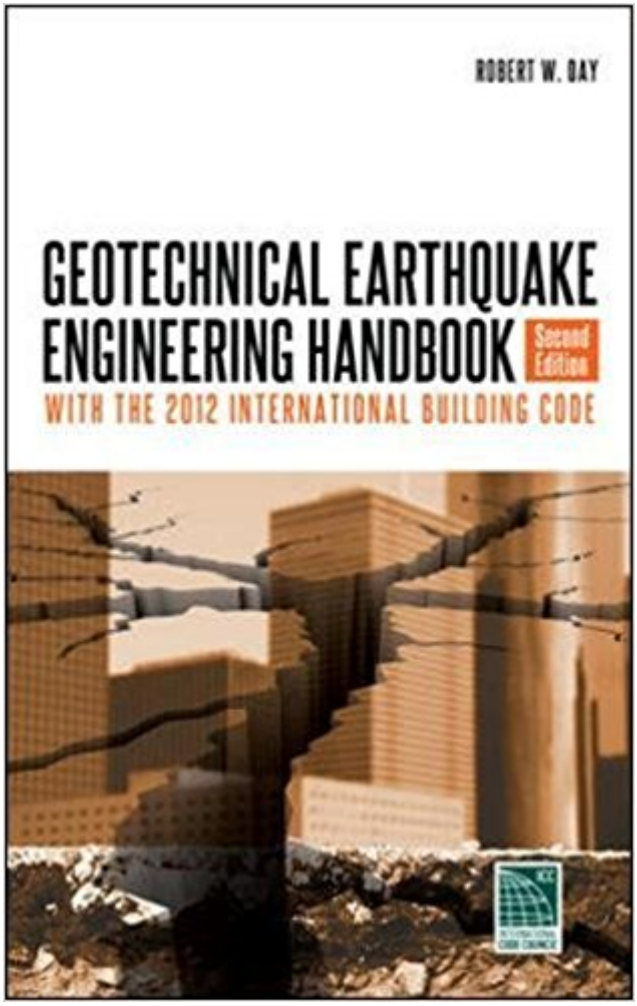
Geotechnical Earthquake Engineering, Second Edition (Mechanical Engineering)



Synopsis

The latest methods for designing seismically sound structures Fully updated for the 2012 International Building Code, Geotechnical Earthquake Engineering Handbook, Second Edition discusses basic earthquake principles, common earthquake effects, and typical structural damage caused by seismic shaking. Earthquake computations for conditions commonly encountered by design engineers, such as liquefaction, settlement, bearing capacity, and slope stability, are included. Site improvement methods that can be used to mitigate the effects of earthquakes on structures are also described in this practical, comprehensive guide. Coverage includes: Basic earthquake principles Common earthquake effects Earthquake structural damage Site investigation for geotechnical earthquake engineering Liquefaction Earthquake-induced settlement Bearing capacity analyses for earthquakes Slope stability analyses for earthquakes Retaining wall analyses for earthquakes Other geotechnical earthquake engineering analyses Grading and other soil improvement methods Foundation alternatives to mitigate earthquake effects Earthquake provisions in building codes

Book Information

Series: Mechanical Engineering
Hardcover: 692 pages
Publisher: McGraw-Hill Education; 2 edition (August 6, 2012)
Language: English
ISBN-10: 0071792384
ISBN-13: 978-0071792387
Product Dimensions: 6.3 x 1.7 x 9.3 inches
Shipping Weight: 2.4 pounds (View shipping rates and policies)
Average Customer Review: Be the first to review this item
Best Sellers Rank: #1,907,862 in Books (See Top 100 in Books) #89 inÂ Books > Engineering & Transportation > Engineering > Civil & Environmental > Seismic Design #150 inÂ Books > Engineering & Transportation > Engineering > Civil & Environmental > Earthwork Design #258 inÂ Books > Crafts, Hobbies & Home > Home Improvement & Design > How-to & Home Improvements > Contracting

Customer Reviews

Robert W. Day is a leading forensic engineer and the chief engineer at American Geotechnical in San Diego, California. The author of more than 200 published technical papers, he serves on

advisory committees for several professional associations, including ASCE, ASTM, and NCEES. Mr. Day holds both bachelor's and master's degrees in structural engineering from Villanova University and a master's degree in civil engineering and a civil engineer degree from the Massachusetts Institute of Technology. He is author of numerous McGraw-Hill books in geotechnical engineering, including Forensic Geotechnical and Foundation Engineering, Second Edition and Geotechnical Engineers Portable Handbook, Second Edition.

Perspectives on Earthquake Geotechnical Engineering: In Honour of Prof. Kenji Ishihara (Geotechnical, Geological and Earthquake Engineering) Geotechnical Earthquake Engineering, Second Edition (Mechanical Engineering) Geotechnical Engineers Portable Handbook, Second Edition (Mechanical Engineering) Seismic Design and Assessment of Bridges: Inelastic Methods of Analysis and Case Studies (Geotechnical, Geological and Earthquake Engineering) Geotechnical Earthquake Engineering Seismic Ground Response Analysis (Geotechnical, Geological and Earthquake Engineering) Coupled Thermo-Hydro-Mechanical Processes of Fractured Media: Mathematical and Experimental Studies (Developments in Geotechnical Engineering) Fire Following Earthquake (American Society of Civil Engineers: Technical Council on Lifeline Earthquake Engineering Monograph, No. 26) Code Check Plumbing & Mechanical 4th Edition: An Illustrated Guide to the Plumbing and Mechanical Codes (Code Check Plumbing & Mechanical: An Illustrated Guide) Shigley's Mechanical Engineering Design (McGraw-Hill Series in Mechanical Engineering) Seismic Risk and Engineering Decisions (Developments in Geotechnical Engineering) Geotechnical Engineering and Earth's Materials and Processes (Engineering in Action) Principles of Geotechnical Engineering (Activate Learning with these NEW titles from Engineering!) Earthquake: Perspectives on Earthquake Disasters (Disaster Dossiers) Earthquake Engineering: From Engineering Seismology to Performance-Based Engineering Practice Problems for the Mechanical Engineering PE Exam, 13th Ed (Comprehensive Practice for the Mechanical Pe Exam) The Mechanical Design Process (Mcgraw-Hill Series in Mechanical Engineering) Geometric Dimensioning and Tolerancing for Mechanical Design 2/E (Mechanical Engineering) The Mechanical Design Process (Mechanical Engineering) Geotechnical Engineering: Principles & Practices (2nd Edition)