Design Of Seismic Isolated Structures: From Theory To Practice
Synopsis
Complete, practical coverage of the evaluation, analysis, and design and code requirements of seismic isolation systems. Based on the concept of reducing seismic demand rather than increasing the earthquake resistance capacity of structures, seismic isolation is a surprisingly simple approach to earthquake protection. However, proper application of this technology within complex seismic design code requirements is both complicated and difficult. Design of Seismic Isolated Structures provides complete, up-to-date coverage of seismic isolation, complete with a systematic development of concepts in theory and practical application supplemented by numerical examples. This book helps design professionals navigate and understand the ideas and procedures involved in the analysis, design, and development of specifications for seismic isolated structures. It also provides a framework for satisfying code requirements while retaining the favorable cost-effective and damage control aspects of this new technology. An indispensable resource for practicing and aspiring engineers and architects, Design of Seismic Isolated Structures includes: * Isolation system components. * Complete coverage of code provisions for seismic isolation. * Mechanical characteristics and modeling of isolators. * Buckling and stability of elastomeric isolators. * Examples of seismic isolation designs. * Specifications for the design, manufacture, and testing of isolation devices.

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Customer Reviews
This book is suitable for students and engineerings. The author brings us through the history of
base isolation. From the simplest rolled rocks is the past to the new technique now. Let us understand the simply theory of base isolation and its application in the world. The code provisions for seismic isolation compares the 3 design codes and its purpose in U.S. The example explains the code inadequate and too complex for practical use. The code now had made it simple! The best part of this book is his design details; Dr. Kelly had isolator design and construction experience for years. He points out many details that a new design may not considered or even noticed. It also offers specifications for isolation manufacturing and testing. With this book in hand, we can know all about base isolation.

Perhaps Dr. Naeim and Dr. Kelly should have called their book "Everything the structural designer always wanted to know about seismic isolation...but was too shy to ask". In my opinion, this is an excellent book that resumes the state-of-the-art of seismic isolation and the design of seismic isolated structures, within the framework of existing codes. It makes available to designers in an abridged and simple way, a lot of information that, while partially available before in trade articles, books, codes and papers, it had never been put together by an expert in a single document. I personally have been related to seismic isolation for the last ten years, and would have benefited a lot should Drs. Naeim and Kelly decided to write their book sooner... or at least, should I have taken notice of it earlier. It certainly would have saved me many, many hours of reading and studying! If you are an structural designer, an architect or a civil engineer and whether in a occasional, frequent or daily basis have to participate in the design, review or construction of seismic isolated structures, you cannot miss this book. Carlos Salinas, C.E. Monterrey, Mexico

recommended for those who want to understand the behavior of insulators in buildings. The focus of the book is not the design

This book is very interesting and usefull

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