DISPLACEMENT-BASED SEISMIC DESIGN OF STRUCTURES

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PREFACE

Performance-based seismic design is a relatively new approach to the design of buildings, with the objective of minimizing the effects of seismic events. In practice, it is based on the use of algorithms that calculate the probability of different levels of damage or collapse, which is often difficult to determine in advance for any given structure, especially for another type of structure.

Current research and practice are focused on the development of more reliable and accurate methods for determining seismic performance, especially for large and complex structures. However, the development of these methods is challenging and takes time, and there is a need for a more reliable and accurate method for determining the seismic performance of structures.

This book presents an overview of the current state of research and practice in performance-based seismic design, with a focus on the use of displacement-based methods. The book is divided into two main parts: the first part provides an introduction to the basic concepts and principles of performance-based seismic design, while the second part presents case studies of the application of these methods in the design of structures.