Book Review

Seismic Design of Buildings to Eurocode 8

Edited by Ahmed Y. Elghazouli

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This book takes the form of nine self-contained academic papers of which only the first seems wholly directed at seismic design to Eurocode 8. The book is edited by Ahmed Elghazouli, who is also a major contributor to two of the included papers, but who strangely did not contribute to the book's introduction piece, or offer an editor's forward to the book. He is, as with the other 13 contributing authors, highly qualified, with wide experience of earthquake engineering. The contributing authors come from a wide variety of structural engineering, geotechnical engineering, earthquake engineering and environmental engineering backgrounds. It is a truly international line-up representing a number of academic and commercial disciplines related to the subject area of designing to withstand earthquake damage.

The reviewer would not recommend this book to the interested amateur, and a working knowledge of structural behaviour of buildings and structures to at least graduate level is essential before tackling any of the papers. Some like the one co-authored by Campbell and Lopez require very specialist structural analysis expertise, however most of the papers clearly explain their principles and should be understandable at levels below engineering doctorate, and by members of associated, but not directly focused, disciplines, such as surveying or construction. An example of a paper that offers good levels of information at all levels is Madabhushi and May. This offers simple explanation of the scientific principles involved supported by illustrated case study analysis. It also then extends into higher degrees of structural calculation. One slight criticism is that, given the small number of photographic illustrations found in this book, that they would be of inestimably greater value if presented in colour. Some of the photographs just do not clearly show the principles they illustrate in a black and white format.

On balance, the reviewer found this to be a very informative, well-written and very well-focused book. The link between most of the papers and the specific terms of Eurocode 8, although often referred to, is not always strongly made, which the reviewer feels makes it more of a general purpose text book for the subject area of seismic design than its title, which suggests a more specific appraisal of a particular code, might suggest. The book combines being a repository for current specialist knowledge with informative interest to the casual but qualified reader, and although not recommended for those with no prior specialisation in engineering and structural analysis, it is however highly recommended for specialist undergraduate students in civil engineering and associated fields, and those engaged beyond under-graduate level in structural and design engineering appraisal in both an academic and commercial capacity.

Currently available at discount from a cover value of £65.00 down to £49.44, the reviewer feels this book really does give exceptional value to its specialist audience. In summary, a good book which the reviewer would recommend, particularly given the strength and diversity of its contributing authors, to members of the stated target audience.

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