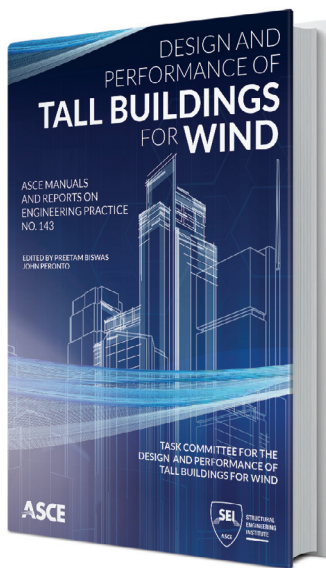


# Review

Structural engineers, architects and building owners will find that reading this important book helps them to raise the right wind-related questions at each stage of a tall building's design, concludes **Gordon Breeze**.

## Design and Performance of Tall Buildings for Wind

**Editors:** Preetam Biswas and John Peronto  
**Publisher:** ASCE  
**Price:** £99.50 (paperback); \$100.00 (ebook)  
**ISBN:** 978-0-784-41565-8



**THIS BOOK IS AIMED** principally at structural engineers; building owners, architects and wind engineering consultants are also identified as significant stakeholders. The book is intended to provide best-practice guidelines and recommendations for the design of tall buildings that are most likely to be susceptible to wind-induced dynamic response.

Within its 101 pages, this book covers the relevant subject matter which relates to wind loading issues and decisions that need to be made at different stages of the design process. It lays out these processes in a commendably logical manner and emphasises that a real-life design process is often not linear.

The book explains that throughout the design process, the design requires engagement, choices and decisions. It is made clear that some performance-related decisions depend upon the intended building usage. The book identifies such choices, and the implications of making them.

From the outset, this book gives confidence that the authors really know and understand the issues. It is not an 'academic' book, nor is it a reference source, and equations are kept to a bare minimum; references are given to places where more detail might be found. The text is clear and easy to read.

The book focuses on giving up-to-date, important and helpful advice and guidance to all those concerned. In the subject matter areas in which I am most familiar, there is (reading between the lines) a wealth of information, hints and pointers that only experts in this field are aware of. In my opinion, the authors have brought this information together in a clear and concise way.

The authors do not shy away from present wind-related controversies. For example, their advice is very clear regarding their favour of wind tunnel testing to determine structural loads, as compared with the use of computational fluid dynamics (CFD)/computational wind engineering (CWE). The authors describe the different wind tunnel test approaches, and what each test provides.

The effects of damping receive a whole chapter, and detailed general advice relating to the modelling

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**THIS BOOK SHINES A SPOTLIGHT UPON THE RIGHT QUESTIONS WHICH NEED TO BE ASKED AT THE RIGHT TIMES**

of structures is given. Specific issues associated with reinforced concrete structures are provided in a separate section.

I believe that this book is important because it shines a spotlight upon the right questions which need to be asked at the right times. If the building owner, structural engineer and architect read this book, and with the wind consultant check off the questions raised at each of the design stages, it will ensure that these right questions are answered. This will inevitably ensure a proper engagement between these parties, enabling the building design to progress towards to the desired outcome.

This book is pitched at the US market (referring throughout to ASCE wind loading codes of practice). Nevertheless, I recommend this book to the UK engineering community. This is because it distils into a relatively short volume an array of expert opinion in a way that is potentially helpful to all the stakeholders associated with, and interested in, the design process of tall buildings.

**Gordon Breeze**  
**BSc(Hons), MSc(Res), CEng, MICE**

Gordon is Head of Wind Engineering at BRE (Building Research Establishment). He is a chartered UK civil engineer and long-standing committee member of the UK Wind Engineering Society, with a wind engineering career spanning over 35 years (wind tunnel testing/analysis, dynamic testing/analysis of buildings/structures).

## The Drawing Board TheStructuralEngineer

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The Drawing Board is *The Structural Engineer's* quarterly sketching competition, judged by Ron Slade F1StructE of WSP.

**Sketches must be:**

- hand drawn (no CAD, except for 'guided free-hand')
- from a real project or assignment
- at a suitable scale for publication (i.e. not too intricate/detailed).

Please also submit a short description (150 words) to put the sketch into context.

To take part, submit your entries to: [tse@istructe.org](mailto:tse@istructe.org)

Each published entry will receive a free single e-book from the Institution's current list of titles.

Background sketch by Kevin Lyons (Lyons O'Neill)