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| Autore | Razdolsky Leo |
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| Descrizione fisica | 1 online resource (xv, 336 pages) : digital, PDF file(s) |
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| Soggetti | Building, Fireproof Fire loads Structural failures - Prevention Structural analysis (Engineering) |
| Lingua di pubblicazione | Inglese |
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| Note generali | Title from publisher's bibliographic system (viewed on 05 Oct 2015). |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Machine generated contents note: 1. Introduction; 2. Introduction to probability theory; 3. Random processes; 4. Very fast fire severity: probabilistic structural fire-resistance design; 5. Fast fire and life-cycle cost analysis; 6. Medium fire severity and thermal-diffusivity analysis; 7. Slow fire severity and structural analysis and design. |
| Sommario/riassunto | In the structural design of airframes and buildings, probability-based procedures are used to mitigate the risk of failure as well as produce cost-effective designs. This book introduces the subject of probabilistic analysis to structural and fire protection engineers and can also be used as a reference to guide those applying this technology. In addition |

to providing an understanding of how fire affects structures and how to optimize the performance of structural framing systems, Probability-Based Structural Fire Load provides guidance for design professionals and is a resource for educators. The goal of this book is to bridge the gap between prescriptive and probability-based performance design methods and to simplify very complex and comprehensive computer analyses to the point that stochastic structural fire loads have a simple, approximate analytical expression that can be used in structural analysis and design on a day-to-day basis. Numerous practical examples are presented in step-by-step computational form.
