

Fire Safety Engineering Design of Structures, Third Edition

By John A. Purkiss, Long-Yuan Li



Fire Safety Engineering Design of Structures, Third Edition By John A. Purkiss, Long-Yuan Li



Designing structures to withstand the effects of fire is challenging, and requires a series of complex design decisions. This third edition of **Fire Safety Engineering Design of Structures** provides practising fire safety engineers with the tools to design structures to withstand fires. This text details standard industry design decisions, and offers expert design advice, with relevant historical data.

It includes extensive data on materials' behaviour and modeling -- concrete, steel, composite steel-concrete, timber, masonry, and aluminium. While weighted to the fire sections of the Eurocodes, this book also includes historical data to allow older structures to be assessed. It extensively covers fire damage investigation, and includes as far back as possible, the background to code methods to enable the engineer to better understand why certain procedures are adopted.

What's new in the Third Edition?

An overview in the first chapter explains the types of design decisions required for optimum fire performance of a structure, and demonstrates the effect of temperature rise on structural performance of structural elements. It extends the sections on less common engineering materials. The section on computer modelling now includes material on coupled heat and mass transfer, enabling a better understanding of the phenomenon of spalling in concrete. It includes a series of worked examples, and provides an extensive reference section.

Readers require a working knowledge of structural mechanics and methods of structural design at ambient conditions, and are helped by some understanding of thermodynamics of heat transfer. This book serves as a resource for engineers working in the field of fire safety, consultants who regularly carry out full fire safety design for structure, and researchers seeking background information.

Dr John Purkiss is a chartered civil and structural engineer/consultant and former lecturer in structural engineering at Aston University, UK.

Dr Long-Yuan Li is Professor of Structural Engineering at Plymouth University, UK, and a Fellow of the Institution of Structural Engineers.



Read Online Fire Safety Engineering Design of Structures, Th ...pdf

Fire Safety Engineering Design of Structures, Third Edition

By John A. Purkiss, Long-Yuan Li

Fire Safety Engineering Design of Structures, Third Edition By John A. Purkiss, Long-Yuan Li

Designing structures to withstand the effects of fire is challenging, and requires a series of complex design decisions. This third edition of **Fire Safety Engineering Design of Structures** provides practising fire safety engineers with the tools to design structures to withstand fires. This text details standard industry design decisions, and offers expert design advice, with relevant historical data.

It includes extensive data on materials' behaviour and modeling -- concrete, steel, composite steel-concrete, timber, masonry, and aluminium. While weighted to the fire sections of the Eurocodes, this book also includes historical data to allow older structures to be assessed. It extensively covers fire damage investigation, and includes as far back as possible, the background to code methods to enable the engineer to better understand why certain procedures are adopted.

What's new in the Third Edition?

An overview in the first chapter explains the types of design decisions required for optimum fire performance of a structure, and demonstrates the effect of temperature rise on structural performance of structural elements. It extends the sections on less common engineering materials. The section on computer modelling now includes material on coupled heat and mass transfer, enabling a better understanding of the phenomenon of spalling in concrete. It includes a series of worked examples, and provides an extensive reference section.

Readers require a working knowledge of structural mechanics and methods of structural design at ambient conditions, and are helped by some understanding of thermodynamics of heat transfer. This book serves as a resource for engineers working in the field of fire safety, consultants who regularly carry out full fire safety design for structure, and researchers seeking background information.

Dr John Purkiss is a chartered civil and structural engineer/consultant and former lecturer in structural engineering at Aston University, UK.

Dr Long-Yuan Li is Professor of Structural Engineering at Plymouth University, UK, and a Fellow of the Institution of Structural Engineers.

Fire Safety Engineering Design of Structures, Third Edition By John A. Purkiss, Long-Yuan Li Bibliography

• Sales Rank: #4145402 in Books

Published on: 2013-12-05Original language: English

• Number of items: 1

• Dimensions: 9.21" h x 1.00" w x 6.14" l, 1.68 pounds

• Binding: Hardcover

• 452 pages

▼ Download Fire Safety Engineering Design of Structures, Thir ...pdf

Read Online Fire Safety Engineering Design of Structures, Th ...pdf

Download and Read Free Online Fire Safety Engineering Design of Structures, Third Edition By John A. Purkiss, Long-Yuan Li

Editorial Review

Review

"Li and Purkiss have produced an extremely well researched, comprehensively referenced and informative book "

?Building Engineer, October 2014

"A standard reference for everyone who is and will be involved in fire safety."

?Ralph Hamerlinck, Bouwen met Staal

Users Review

From reader reviews:

Kevin Primeaux:

As people who live in often the modest era should be revise about what going on or facts even knowledge to make them keep up with the era that is certainly always change and move ahead. Some of you maybe will update themselves by looking at books. It is a good choice in your case but the problems coming to anyone is you don't know what kind you should start with. This Fire Safety Engineering Design of Structures, Third Edition is our recommendation to cause you to keep up with the world. Why, as this book serves what you want and need in this era.

Tom Burkhardt:

A lot of people always spent their particular free time to vacation or perhaps go to the outside with them family or their friend. Were you aware? Many a lot of people spent that they free time just watching TV, or playing video games all day long. In order to try to find a new activity this is look different you can read some sort of book. It is really fun to suit your needs. If you enjoy the book which you read you can spent the entire day to reading a book. The book Fire Safety Engineering Design of Structures, Third Edition it is very good to read. There are a lot of individuals who recommended this book. We were holding enjoying reading this book. Should you did not have enough space bringing this book you can buy often the e-book. You can m0ore effortlessly to read this book through your smart phone. The price is not very costly but this book offers high quality.

Jennifer Bedard:

Playing with family within a park, coming to see the sea world or hanging out with buddies is thing that usually you have done when you have spare time, then why you don't try factor that really opposite from that. A single activity that make you not experience tired but still relaxing, trilling like on roller coaster you already been ride on and with addition associated with. Even you love Fire Safety Engineering Design of Structures, Third Edition, you are able to enjoy both. It is very good combination right, you still need to miss

it? What kind of hang type is it? Oh can occur its mind hangout folks. What? Still don't buy it, oh come on its identified as reading friends.

Dorothy Betancourt:

Do you like reading a publication? Confuse to looking for your selected book? Or your book has been rare? Why so many query for the book? But any people feel that they enjoy intended for reading. Some people likes looking at, not only science book and also novel and Fire Safety Engineering Design of Structures, Third Edition or perhaps others sources were given expertise for you. After you know how the good a book, you feel wish to read more and more. Science guide was created for teacher as well as students especially. Those guides are helping them to increase their knowledge. In other case, beside science e-book, any other book likes Fire Safety Engineering Design of Structures, Third Edition to make your spare time more colorful. Many types of book like this one.

Download and Read Online Fire Safety Engineering Design of Structures, Third Edition By John A. Purkiss, Long-Yuan Li #27DWEFC0QKI

Read Fire Safety Engineering Design of Structures, Third Edition By John A. Purkiss, Long-Yuan Li for online ebook

Fire Safety Engineering Design of Structures, Third Edition By John A. Purkiss, Long-Yuan Li Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Fire Safety Engineering Design of Structures, Third Edition By John A. Purkiss, Long-Yuan Li books to read online.

Online Fire Safety Engineering Design of Structures, Third Edition By John A. Purkiss, Long-Yuan Li ebook PDF download

Fire Safety Engineering Design of Structures, Third Edition By John A. Purkiss, Long-Yuan Li Doc

Fire Safety Engineering Design of Structures, Third Edition By John A. Purkiss, Long-Yuan Li Mobipocket

Fire Safety Engineering Design of Structures, Third Edition By John A. Purkiss, Long-Yuan Li EPub