Post Tensioning Manual 6th Edition

Hands-on structural renovation techniques and best practices—thoroughly revised for the latest building codes This fully updated manual explains how to renovate the structure of any building. Up-to-date, comprehensive, and packed with savvy advice drawn from the author's extensive experience, the book makes it easier for building professionals to plan structural improvements—and to handle unforeseen contingencies that arise during construction. The second edition of Structural Renovation of Buildings: Methods, Details, and Design Examples clearly explains the newest methods and materials used for structural repair, strengthening, and seismic rehabilitation. The case studies illustrate the practical applications of the design methods discussed and the best practices that can be used to mitigate the problems that commonly arise during renovation projects. The book: • Contains practical design methods and problem-solving techniques for structural strengthening and repairs • Explains the structural provisions of the 2018 International Existing Building Code as well as the latest specialized codes pertaining to steel, concrete, wood, and masonry renovations • Is written by a renowned structural engineer and experienced author

Provides all of the anatomy and physiology knowledge a massage therapist needs in a way they can better understand! Applied Anatomy and Physiology for Manual Therapists is a clear, accurate, simple, and comprehensive A&P textbook that focuses on the needs of students in manual therapy education programs. It is a focused text that deliberately emphasizes the information manual therapists need to be familiar with in order to understand the benefits, effects, indications, and contraindications of their specific form of manual therapy. The text includes detailed information not covered in standard A&P texts, adding an entire chapter on neuromuscular and myofascial connections (Chapter 8), and separating the structure and function of the lymphatic system (Chapter 11) from immunity and healing (Chapter 12). This, along with chapter features such as Manual Therapy Applications, Pathology Alerts, and What Do You Think questions, help readers build bridges between the scientific facts and the application of that information to their therapeutic practice.

The Sixth Edition provides easy-to-follow design procedures, newly formatted numerical examples, and both new and updated design aids using ASCE 7-02, ACI 318-02, the third edition of the AISC Steel Manual and IBC 2003. It also includes new and updated information on 15 foot wide double tee load tables, seismic design, torsion and shear design, load and resistance factors, headed stud connection design, and fire resistance.

The CMC Rope Rescue Technician Manual is the standard text for many fire departments, rescue teams and training programs across the country. The sixth edition reflects the latest advances in technology, equipment and procedures available to rescue professionals. Its concise style clearly sequences and describes the elements of rope rescue in a way that is both detailed and easy to understand. Well-drawn diagrams depict each recommended stage of rope rescue operations. The result is a very useful tool for rescue professionals at every skill level. CMC has been an innovator in the emergency services industry for over

40 years. In 1978 Jim Frank endeavored to make rescue safer and more efficient by founding California Mountain Company (later CMC Rescue, now CMC), a company that sourced and supplied specialized life safety equipment to the rescue community. Today, CMC is a globally recognized, employee-owned company that proudly manufactures many products in our ISO-certified Santa Barbara facility, and provides specialized education and training for rescue and rope access professionals. CMC recommends that all rope technicians seek qualified, hands-on instruction from a trusted source. The CMC School provides this type of training with a focus on learning-by-doing. Open enrollment and custom courses are available worldwide. For more information on CMC or the CMC School, visit cmcpro.com.

The Art of Failure

PISOS INDUSTRIALES DE HORMIGÓN

Rope Rescue Technician Manual 6th Edition

Code Requirements for Environmental Engineering Concrete Structures

Structural Engineer's Pocket Book

Precast and Prestressed Concrete

Engineering surveying involves determining the position of natural and man-made features on or beneath the Earth's surface and utilizing these features in the planning, design and construction of works. It is a critical part of any engineering project. Without an accurate understanding of the size, shape and nature of the site the project risks expensive and time-consuming errors or even catastrophic failure. This fully updated sixth edition of Engineering Surveying covers all the basic principles and practice of the fundamentals such as vertical control, distance, angles and position right through to the most modern technologies. It includes: * An introduction to geodesy to facilitate greater understanding of satellite systems * A fully updated chapter on GPS, GLONASS and GALILEO for satellite positioning in surveying * All new chapter on the important subject of rigorous estimation of control coordinates * Detailed material on mass data methods of photogrammetry and laser scanning and the role of inertial technology in them With many worked examples and illustrations of tools and techniques, it suits students and professionals alike involved in surveying, civil, structural and mining engineering, and related areas such as geography and mapping.

Rock Slope Engineering covers the investigation, design, excavation and remediation of man-made rock cuts and natural slopes, primarily for civil engineering applications. It presents design information on structural geology, shear strength of rock and ground water, including weathered rock. Slope design methods are discussed for planar, wedge, circular and toppling failures, including seismic design and

numerical analysis. Information is also provided on blasting, slope stabilization, movement monitoring and civil engineering applications. This fifth edition has been extensively up-dated, with new chapters on weathered rock, including shear strength in relation to weathering grades, and seismic design of rock slopes for pseudo-static stability and Newmark displacement. It now includes the use of remote sensing techniques such as LiDAR to monitor slope movement and collect structural geology data. The chapter on numerical analysis has been revised with emphasis on civil applications. The book is written for practitioners working in the fields of transportation, energy and industrial development, and undergraduate and graduate level courses in geological engineering.

This manual contains updated information on the current practices in the use, design, and construction of post-tensioning. The 6th Edition has been extensively rewritten and expanded from the 5th Edition. The Manual contains 12 new chapters that give design guidance on modern applications of posttensioning. All of the original chapters have been totally revised and modified to reflect the current industry practices. New topics include Seismic Design, Post-Tensioned Concrete Floors, Parking Structures, Slab-on-Ground, Bridges, Stay Cables, Storage Structures, Barrier Cables, Dynamic and Fatigue, Durability, Inspection and Maintenance, and Field and Plant Certification. The Manual provides the industry standard for design and construction of post-tensioned structures. This book is an invaluable resource for practicing engineers, architects, students, educators, contractors, inspectors, and building officials. The 6th Edition of the Post-Tensioning Manual provides basic information and the essential principles of post-tensioning.

For practicing engineers, students, contractors, building officials, plan checkers, and researchers. Drawing upon thirty-two years of world wide experience, topics in post-tensioning are covered in-depth and taken to the point of practical application. ? Covers US and European Codes for Post-Tensioning Design? Unbonded and Bonded (Grouted) Systems? Construction Technology and Design Procedures? Post-Tensioned Floor Design? Step-by-Step calculation? Post-Tensioned Beam Design? Step-by-Step Calculation? Software and Design Tools; Design Flow Charts and Examples? Stress Losses; Deflections; Cracking and Crack Width? Application of Finite Elements to Design? Application of Building Information Modeling (BIM) to Post-Tensioning The book assumes a basic knowledge of conventionally reinforced concrete design. Founded on this knowledge, the material presented covers the full range of post-tensioning principles, including the know-how necessary for expedient and efficient designs. The

focus of the book is on the science of engineering, while covering in detail the ?art? of post-tensioning practice. Emphasis is on the primary objectives of design for ?serviceability? and ?safety,? and how to achieve them, while describing the diversity in local or traditional practice. The material is organized to benefit a wide audience of designers, as well as plan checkers and reviewers, in particular to facilitate the process of project approval. The book comes in two versions: a US Edition, and an International Edition. The US Edition uses the US system of units (lb, in) that is common in US construction, along with the equivalent values in SI units (N, mm). It covers both ACI/IBC and EC2, which in addition to being mandatory in a large number of European countries is being used more and more as a basis for other building codes. The International Edition of the book covers the same topics according to both ACI/IBC and EC2, in the SI (N, mm) system of units. In addition, where applicable, it includes the recommendations of TR43, a publication of the UK Concrete Society that provides recommendations for design and construction of post-tensioned buildings www.PT-Structures.com www.adaptsoft.com Steel Designers' Manual Fifth Edition: The Steel Construction Institute

Structural Fire Engineering

Building Code Requirements for Structural Concrete (ACI 318-08) and Commentary

A Fundamental Approach

Applied Anatomy & Physiology for Manual Therapists

Reinforced Concrete Design of Tall Buildings

Post-tensioning Manual

This classic manual for structural steelwork design was first published in 1956. Since then, it has sold many thousands of copies worldwide. The fifth edition is the first major revision for 20 years and is the first edition to be fully based on limit state design, now used as the primary design method, and on the UK code of practice, BS 5950. It provides, in a single volume, all you need to know about structural steel design.

The quality and testing of materials used in construction are covered by reference to the appropriate ASTM standard specifications. Welding of reinforcement is covered by reference to the appropriate AWS standard. Uses of the Code include adoption by reference in general building codes, and earlier editions have been widely used in this manner. The Code is written in a format that allows such reference without change to its language. Therefore, background details or suggestions for carrying out the requirements or intent of the Code portion cannot be

included. The Commentary is provided for this purpose. Some of the considerations of the committee in developing the Code portion are discussed within the Commentary, with emphasis given to the explanation of new or revised provisions. Much of the research data referenced in preparing the Code is cited for the user desiring to study individual questions in greater detail. Other documents that provide suggestions for carrying out the requirements of the Code are also cited.

Up-To-Date Coverage of Every Aspect of Commercial Aviation Safety Completely revised edition to fully align with current U.S. and international regulations, this hands-on resource clearly explains the principles and practices of commercial aviation safety—from accident investigations to Safety Management Systems. Commercial Aviation Safety, Sixth Edition, delivers authoritative information on today's risk management on the ground and in the air. The book offers the latest procedures, flight technologies, and accident statistics. You will learn about new and evolving challenges, such as lasers, drones (unmanned aerial vehicles), cyberattacks, aircraft icing, and software bugs. Chapter outlines, review questions, and real-world incident examples are featured throughout. Coverage includes: • ICAO, FAA, EPA, TSA, and OSHA regulations • NTSB and ICAO accident investigation processes · Recording and reporting of safety data · U.S. and international aviation accident statistics • Accident causation models • The Human Factors Analysis and Classification System (HFACS) • Crew Resource Management (CRM) and Threat and Error Management (TEM) • Aviation Safety Reporting System (ASRS) and Flight Data Monitoring (FDM) • Aircraft and air traffic control technologies and safety systems • Airport safety, including runway incursions • Aviation security, including the threats of intentional harm and terrorism • International and U.S. Aviation Safety Management Systems

ACI Manual of Concrete Practice

Essentials of Medical Physiology

An Essay on the Pain of Playing Video Games

Specification for Masonry Structures (ACI 530.1-05/ASCE 6-05/TMS 602-05); Commentary on Building Code Requirements for Masonry Structures (ACI 530-05/ASCE 5-05/TMS 402-05); Commentary on Specification for Masonry Structures (ACI 530.1-05/ASCE 6-05/TMS 602-05).

Design and Construction

Until now there has been no comprehensive pocket reference guide for professional and student structural engineers. The

Structural Engineers Pocket Book is a unique compilation of all table, data, facts, formulae and rules of thumb needed for scheme design by structural engineers in the office, in transit or on site. By bringing together data from many sources, this pocket book is a compact source of job-simplifying information at an affordable price. It is a first point of reference as well as saving valuable time spent trying to track down information that is needed on a daily basis. This may be a small book in terms of its physical dimensions, but it contains a wealth of useful engineering knowledge. Concise and precise, the book is split into 13 sections, with quick and clear access to subject areas including: timber, masonry, concrete, aluminium and glass. British Standards are used and referenced throughout. *the only book of its kind for structural engineers. *brings together information from many different sources for the first time. *comprehensive, yet concise and affordable.

Actionable strategies for the design and construction of fire-resistant structures This hands-on guide clearly explains the complex building codes and standards that relate to fire design and presents hands-on techniques engineers can apply to prevent or mitigate the effects of fire in structures. Dedicated chapters discuss specific procedures for steel, concrete, and timber buildings. You will get step-by-step guidance on how to evaluate fire resistance using both testing and calculation methods. Structural Fire Engineering begins with an introduction to the behavioral aspects of fire and explains how structural materials react when exposed to elevated temperatures. From there, the book discusses the fire design aspects of key codes and standards, such as the International Building Code, the International Fire Code, and the NFPA Fire Code. Advanced topics are covered in complete detail, including residual capacity evaluation of fire damaged structures and fire design for bridges and tunnels. Explains the fire design requirements of the IBC, IFC, the NFPA Fire Code, and National Building Code of Canada Presents design strategies for steel, concrete, and timber structures as well as for bridges and tunnels Contains downloadable spreadsheets and problems along with solutions for instructors

The most comprehensive text on reinforced and prestressed concrete for engineering students, fully updated in line with recent amendments.

Over 140 experts, 14 countries, and 89 chapters are represented in the second edition of the Bridge Engineering Handbook. This extensive collection highlights bridge engineering specimens from around the world, contains detailed information on bridge engineering, and thoroughly explains the concepts and practical applications surrounding the subject. Published in five books: Fundamentals, Superstructure Design, Substructure Design, Seismic Design, and Construction and Maintenance, this new edition provides numerous worked-out examples that give readers step-by-step design procedures, includes contributions by leading experts from around the world in their respective areas of bridge engineering, contains 26 completely new chapters, and updates most other chapters. It offers design concepts, specifications, and practice, as well as the various types of bridges. The text includes over 2,500 tables, charts, illustrations, and photos. The book covers new, innovative and traditional methods and practices; explores rehabilitation, retrofit, and maintenance; and examines seismic design and building materials. The second book, Superstructure Design, contains 19 chapters, and covers information on how to design all types of bridges. What's New in

the Second Edition: Includes two new chapters: Extradosed Bridges and Stress Ribbon Pedestrian Bridges Updates the Prestressed Concrete Girder Bridges chapter and rewrites it as two chapters: Precast/Pretensioned Concrete Girder Bridges and Cast-In-Place Post-Tensioned Prestressed Concrete Girder Bridges Expands the chapter on Bridge Decks and Approach Slabs and divides it into two chapters: Concrete Decks and Approach Slabs Rewrites seven chapters: Segmental Concrete Bridges, Composite Steel I-Girder Bridges, Composite Steel Box Girder Bridges, Arch Bridges, Cable-Stayed Bridges, Orthotropic Steel Decks, and Railings This text is an ideal reference for practicing bridge engineers and consultants (design, construction, maintenance), and can also be used as a reference for students in bridge engineering courses.

Theory, Design, and Construction to AASHTO LRFD Specifications

Standards and Guidelines for the Erection of Precast Concrete Products

Concrete Construction Engineering Handbook

PCI Design Handbook

Design of Reinforced Concrete

Superstructure Design

"Highways Subcommittee on Bridges and Structures"--P. iv.

This report from the second Strategic Highway Research Program (SHRP 2), which is administered by the Transportation Research Board of the National Academies, provides guidance on the design, fabrication, construction, and maintenance of precast concrete pavement (PCP) systems. It includes an assessment of the state of the practice for PCP technology as well as guidelines for pavement selection, the decision-making process, and model specifications for PCP systems.

Published in SI units, and re-organized into a Load and Resistance Factor Design (LRED) format, designed to be used with the AASHTO LRED Bridge Design Code.

This is a comprehensive, accessible text that covers the basic principles of Medical Physiology. It is completely up-to-date and includes information on the latest findings in physiology. The text has been beautifully designed and illustrated, and chapters present information in an easy-to-follow and logical style.

Precast Concrete Pavement Technology

Post-tensioning Manual

Post-Tensioned Buildings

Bridge Engineering Handbook, Second Edition

Structural Renovation of Buildings: Methods, Details, and Design Examples, Second Edition

Bridge Engineering Handbook, Five Volume Set

Design of Reinforced Concrete, 10th Edition by Jack McCormac and Russell Brown, introduces the fundamentals of reinforced concrete design in a clear and comprehensive manner and grounded in the

basic principles of mechanics of solids. Students build on their understanding of basic mechanics to learn new concepts such as compressive stress and strain in concrete, while applying current ACI Code. Over 140 experts, 14 countries, and 89 chapters are represented in the second edition of the Bridge Engineering Handbook. This extensive collection provides detailed information on bridge engineering, and thoroughly explains the concepts and practical applications surrounding the subject, and also highlights bridges from around the world. Published

The first edition of this comprehensive work quickly filled the need for an in-depth handbook on concrete construction engineering and technology. Living up to the standard set by its bestselling predecessor, this second edition of the Concrete Construction Engineering Handbook covers the entire range of issues pertaining to the construction

An exploration of why we play video games despite the fact that we are almost certain to feel unhappy when we fail at them. We may think of video games as being "fun," but in The Art of Failure, Jesper Juul claims that this is almost entirely mistaken. When we play video games, our facial expressions are rarely those of happiness or bliss. Instead, we frown, grimace, and shout in frustration as we lose, or die, or fail to advance to the next level. Humans may have a fundamental desire to succeed and feel competent, but game players choose to engage in an activity in which they are nearly certain to fail and feel incompetent. So why do we play video games even though they make us unhappy? Juul examines this paradox. In video games, as in tragic works of art, literature, theater, and cinema, it seems that we want to experience unpleasantness even if we also dislike it. Reader or audience reaction to tragedy is often explained as catharsis, as a purging of negative emotions. But, Juul points out, this doesn't seem to be the case for video game players. Games do not purge us of unpleasant emotions; they produce them in the first place. What, then, does failure in video game playing do? Juul argues that failure in a game is unique in that when you fail in a game, you (not a character) are in some way inadequate. Yet games also motivate us to play more, in order to escape that inadequacy, and the feeling of escaping failure (often by improving skills) is a central enjoyment of games. Games, writes Juul, are the art of failure: the singular art form that sets us up for failure and allows us to experience it and experiment with it. The Art of Failure is essential reading for anyone interested in video games, whether as entertainment, art, or education.

Concrete International

Building, Design, and Construction

Prestressed Concrete

Building Code Requirements for Masonry Structures (ACI 530-05/ASCE 5-05/TMS 402-05)

Commercial Aviation Safety, Sixth Edition

Analysis and Design with Emphasis on Application of AS3600-2009

This textbook imparts a firm understanding of the behavior of prestressed concrete and how it relates to design based on the 2014 ACI Building Code. It presents the fundamental behavior of prestressed concrete and then adapts this to the design of structures. The book focuses on prestressed concrete members including slabs, beams, and axially loaded members and provides computational examples to support current design practice along with practical information related to details and construction with prestressed concrete. It illustrates concepts and calculations with Mathcad and EXCEL worksheets. Written with both lucid instructional presentation as well as comprehensive, rigorous detail, the book is ideal for both students in graduate-level courses as well as practicing engineers. "TRB's second Strategic Highway Research Program (SHRP 2) Report S2-R05-RR-1: Precast Concrete Pavement Technology reviews the available precast concrete pavement (PCP) systems; summarizes PCP applications; and offers suggested guidelines for the design, fabrication, installation, and selection of PCP systems. " -- Publisher's description. Segmental concrete bridges have become one of the main options for major transportation projects world-wide. They offer expedited construction with minimal traffic disruption, lower life cycle costs, appealing aesthetics and adaptability to a curved roadway alignment. The literature is focused on construction, so this fills the need for a designoriented book for less experienced bridge engineers and for senior university students. It presents comprehensive theory, design and key construction methods, with a simple design example based on the AASHTO LRFD Design Specifications for each of the main bridge types. It outlines design techniques and relationships between analytical methods, specifications, theory, design, construction and practice. It combines mathematics and engineering mechanics with the authors' design and teaching experience. A state-of-the-art book written by a national and international expert on concrete

structures and materials, this third edition of Prestressed Concrete reflects the very Page 9/12

latest ACI 318-99 Code and the International Building Code, IBC 2000. It puts at the disposal of the user the authors many years of professional and academic know-how in design, construction, and forensic engineering. This book is different from most because its major topics of material behavior, prestress losses, flexure, shear, torsion, and deflection-camber are sequentially self-contained and can be covered in one semester at the senior and the graduate levels. It uniquely follows procedures given in over 20 flowcharts and 400 illustration that simplify the understanding and application of the subject in design, using both the customary US and the SI units in the examples. Additionally, you will find: *A detailed chapter on the design of statically indeterminate prestressed beams and portal frames. *A revised chapter containing the latest ACI an AASHTO Provisions on the design of post-tensioned beam anchorage end blocks using the strut-and-tie approach. *A revised chapter on slender columns including a simplifie

Civil Applications, Fifth Edition

4th Edition

Reinforced and Prestressed Concrete

Concrete Segmental Bridges

Field Procedures Manual for Unbonded Single Strand Tendons

Building Code Requirements for Structural Concrete (ACI 318-05) and Commentary (ACI 318R-05)

The book combines history with academic notes for use at the university level, presenting design examples from actual jobs with applications and detailing for the practicing engineer. Chapter 1 tells the history of post-tensioned concrete as only Ken Bondy can tell it. Chapters 2-8 are the notes Dirk Bondy uses to teach Design of Prestressed Concrete Structures at UCLA and Cal Poly-San Luis Obispo. Chapters 9-13 are design examples that address many of the decisions faced by practicing engineers on typical projects. Chapters 13-14 cover the art of detailing and observing the construction of post-tensioned concrete. This knowledge was obtained over many years of working on our own projects and listening and learning from the the pioneers of post-tensioned concrete. Chapter 15 covers the slab on grade industry, which represents more sales of post-tensioning tendons than all other post-tensioning applications combined. Chapter 16 discusses the challenging application of post-tensioning-external post-tensioning.

El libro presenta las particularidades de los pisos industriales de hormigón utilizados mayoritariamente en naves de

almacenamiento y procesos industriales pero, además, también la tecnología se puede aplicar a otros usos que, tal vez, pueden ser menos exigentes desde el punto de vista estructural pero presentan otras necesidades que, similarmente, merecen un estudio pormenorizado desde el proyecto para poder ser construidos adecuadamente y lograr el desempeño esperado durante su vida en servicio. Durante el desarrollo de los diferentes capítulos, el lector se introduce en el tema comenzando por aspectos generales y, a medida que se avanza en su lectura, abordan con mayor detalle aspectos relacionados al diseño desde la naturaleza de los materiales, pasando por los tipos de cargas habituales, cálculo de esfuerzos y dimensionado del paquete estructural, estimaciones de contracción y verificación de alabeos para determinar patrones de comportamiento que determinan la ubicación de las juntas. Luego, se desarrollan estrategias para minimizar las juntas o directamente evitarlas mediante técnicas específicas destacándose el uso de hormigón postesado, HRC (hormigón de retracción compensada) y otras técnicas menos habituales. Además, relacionado fundamentalmente a aspectos de diseño, se desarrolla el tema de control de ingreso de humedad a través del piso y su influencia sobre los recubrimientos que tienen su capítulo en particular. Respecto a temas constructivos, además de algunos detalles y recomendaciones que se incluyen a lo largo de la publicación, se desarrollan los capítulos específicos de construcción y control de calidad. En los últimos capítulos, se incluyen conceptualmente algunos modelos de deterioro que, además de explicar el comportamiento de los pisos industriales durante su vida en servicio, pueden ayudar a los comitentes a tomar mejores decisiones de inversión en la medida que el diseñador junto a los responsables de producción y mantenimiento puedan valorar adecuadamente la influencia de las distintas variables ayudándose también en un mejor conocimiento algunas de las patologías más habituales y estrategias de mantenimiento recomendadas para las distintas situaciones de deterioro y, en todo caso, influenciar sobre ellas para optimizar el comportamiento de un piso de hormigón. An exploration of the world of concrete as it applies to the construction of buildings, Reinforced Concrete Design of Tall Buildings provides a practical perspective on all aspects of reinforced concrete used in the design of structures, with particular focus on tall and ultra-tall buildings. Written by Dr. Bungale S. Taranath, this work explains the fundamental principles and state-of-the-art technologies required to build vertical structures as sound as they are eloquent. Dozens of cases studies of tall buildings throughout the world, many designed by Dr. Taranath, provide in-depth insight on why and how specific structural system choices are made. The book bridges the gap between two approaches: one based on intuitive skills and experience and the other based on computer skills and analytical techniques. Examining the results when experiential intuition marries unfathomable precision, this book discusses: The latest building codes, including ASCE/SEI 7-05, IBC-06/09, ACI 318-05/08, and ASCE/SEI 41-06 Recent developments in studies of seismic vulnerability and retrofit design Earthquake hazard mitigation technology, including seismic base isolation, passive energy dissipation, and damping systems Lateral bracing concepts and gravity-resisting systems Performance based design trends Dynamic response spectrum and equivalent lateral load procedures Using realistic examples throughout, Dr. Taranath shows how to create sound, cost-efficient high rise structures. His lucid and thorough explanations provide the tools required to derive systems that gracefully resist the battering forces of nature while addressing the specific needs of building owners, developers, and architects. The book is packed with broad-ranging material from fundamental principles to the state-of-the- $\frac{Page}{Page}$ 11/12

Read Book Post Tensioning Manual 6th Edition

art technologies and includes techniques thoroughly developed to be highly adaptable. Offering complete guidance, instructive examples, and color illustrations, the author develops several approaches for designing tall buildings. He demonstrates the benefits of blending imaginative problem solving and rational analysis for creating better structural systems.

Biosafety in Microbiological and Biomedical Laboratories Beton Prategang Jl. 2 Ed. 3 Erector's Manual Design & Construction Recommendations for Stay Cable Design, Testing and Installation Guide Specifications for Bridges Vulnerable to Coastal Storms