Slabs On Ground Design Spreadsheet

Post-Tensioned Concrete
PRO 15: 5th RILEM Symposium on Fibre-Reinforced Concretes (FRC) - BEFIB' 2000
Concrete Slabs
Concrete Industrial Ground Floors
Concrete Floor Slabs on Grade Subjected to Heavy Loads
Structural Design and Drawing
Example Applications of the NEHRP Guidelines for the Seismic Rehabilitation of Buildings
Design of Slabs on Grade
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Advances in Concrete Slab Technology
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Concrete Floors and Slabs
Proceedings of Italian Concrete Days 2018
Design of Slabs-on-ground
Reinforced Concrete Design Workflow to Eurocode 2
How to Structurally Design a Concrete Slab Culvert? RC Slab Deck Design Using the FORTRAN-95 Program
Basic Concrete Engineering for Builders
Strip Method Design Handbook
Mechanics of Fiber and Textile Reinforced Cement Composites
Soils and Foundations for Architects and Engineers
Minimum Property Standards for One and Two Living Units
Building Services and Energy Efficient Buildings
Design of Post-tensioned Slabs-on-ground
Single Pour Industrial Floor Slabs
Design of Reinforced Concrete Foundations
Mechanical and Electrical Equipment for Buildings
Concrete Industrial Ground Floors
Post-Tensioned Concrete: Principles and Practice, Third Edition
Unsaturated Soils, Two Volume Set
Guide for Concrete Floor and Slab Construction
Plastic and Elastic Design of Slabs and Plates
REINFORCED CONCRETE FLOOR SLABS.
Elevated Slabs

MOHAMMAD AVILA

Post-Tensioned Concrete Thomas Telford
The quality of floor surfaces in industrial and commercial premises can be vitally important to effective business operations. Increasingly rigorous specifications for industrial floors have resulted in considerable changes in the methods used for their construction.
PRO 15: 5th RILEM Symposium on Fibre-Reinforced Concretes (FRC) - BEFIB' 2000 Amer Concrete Inst
This book provides an up-to-date description of the latest procedures for analysis and design of reinforced concrete slabs. It explains the yield line method of analysis and Hillerborg's strip method of design, and discusses the basic North American and British practices.
Concrete Slabs American Concrete Institute
Worldwide growth and application of post-tensioning in recent years is one of the major developments in building construction. The growth is propelled by a burgeoning demand for construction of serviceable and safe buildings. Unlike traditional construction, post-tensioning is based on new design methodology often not covered in traditional engineering courses. With more than 40 years of experience of study, teaching and work on post-tensioning applications around the world, the author has written this book for students as well as practicing engineers, contractors and academics. While the book covers the basics and concepts of post-tensioning in simple and clear language, it also focuses on the application and detailed design through real world examples. Topics of the book include the European and the American building Codes for post-tensioning design. The codes are detailed in the book’s examples such as column-supported floors and beam frames. The book explains and highlights the importance of shortening specific to post-tensioned members and construction detailing for serviceable and safe performance.
Concrete Industrial Ground Floors John Wiley & Sons
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.
Concrete Floor Slabs on Grade Subjected to Heavy Loads Elsevier
Advances in Concrete Slab Technology documents the proceedings of the International Conference on Concrete Slabs held at Dundee University on April 3-6, 1979. This book discusses the influence of steel fiber-reinforcement on the shear strength of slab-column connections; sulfur-treated concrete slabs; yield line analysis of orthotropicaly reinforced exterior panels of flat slab floors; and behavior of flat slab/edge column joints. The design of multiple panel flat slab structures; structural behavior of floor slabs in shear wall buildings; shrinkage and cracking of concrete at early ages; and slab construction for HAB system modules are also elaborated. This text likewise covers the direct finishing of concrete slabs using the early age power grinding technique; application of vacuum dewatering to in-situ slab production; retexturing of concrete slabs; and fatigue resistance of composite precast and in situ concrete floors. This publication is a good reference for students and individuals concerned with the practices and research relating to slab technology.
Structural Design and Drawing John Wiley & Sons
This book allows the construction professional to gain an insight into the fast moving subject of architectural management. Subjects covered include: organization of design and construction; Computing and the architect; quality and value engineering; performance of buildings; the public estate; professional/construction law and education and training.
Example Applications of the NEHRP Guidelines for the Seismic Rehabilitation of Buildings Lulu.com
Master's Thesis from the year 2013 in the subject Engineering - Civil Engineering, grade: Very Good (A), Addis Ababa University (Addis Ababa University Institute of Technology), course: Structural Engineering, language: English, abstract: This thesis focuses on the development of a FORTRAN 95 program for the structural design of the superstructure part of a concrete slab culvert. FORTRAN 95 is a programming language used in the fields of scientific, numerical, and engineering fields. In this thesis, this language has been used to develop the program for the structural design of reinforced concrete slab culvert deck. The input data for at grade and at fill slab culverts are saved on a note pad in the external file folder which constitute the material properties, geometric features and proposed diameter of reinforcement bars of the slab culvert and its deck in the folder which contains FORTRAN 95 program. The output data is written on the note pad in the external folder based on the format assigned for each output in the folder which contains the design results of slab deck thickness and area, spacing and length of main, distribution and temperature reinforcement bars. Besides Edge beam design parallel to the traffic is executed and shown in the output result by the developed program. Concrete slab culvert is an important structure used to convey trucks and pedestrian along a road corridor or in one of a range of other situations. This structure is highly constructed in highway road projects in Ethiopia. In this study, a FORTRAN program is developed for the structural design of reinforced concrete slab culvert deck according to the provisions given in AASHTO LRFD Bridge 2005 Edition.The developed program is expected to assist the structural designers and users to design the superstructure part of a reinforced concrete slab culvert deck efficiently with great accuracy. Both at grade and at fill slab deck thicknesses are computed according to the specification specified in AASHTO LRFD Bridge 2005 Edition. The reinforcement bars are also designed based on the requirements specified in the code. Within the context of this work the program is developed in four steps. The first step is to define and analyze the problem; the second step is to develop an optimal solution and designing the program, the third step is coding the program and the final step is testing and documenting the program.
Design of Slabs on Grade GRIN Verlag
The Strip Method Design Handbook is a thorough guide to the use of the strip method, developed by Arne Hillerborg, for design of reinforced concrete slabs. The strip method of design is relevant to many types of slabs including rectangular slabs with all sides supported and regular flat slabs with cantilevering parts. The author discusses unevenly
Spreadsheets in Structural Design Taylor & Francis
Spreadsheets in Structural Design provides a unique and highly practical explanation of the use of spreadsheets to facilitate the design of structures in a range of key materials, such as concrete, steel and brick. Using spreadsheets in this way has important implications in terms of cost and efficiency, and represents a very useful tool hitherto largely neglected by the design community. Each chapter contains spreadsheet layouts to illustrate the method, drawn from different areas of design and using a range of materials and Codes of Practice. Examples used relate to reinforced concrete, reinforced masonry and steel but the approach is easily extended to other materials and other fields of design. Practising structural engineers, civil engineers and architects will find this book an invaluable guide for the solution of routine design problems. It is also useful reading for advanced undergraduate and postgraduate students of structural design,

civil engineering and architecture.
Criteria for Selection and Design of Residential Slabs-on-ground CRC Press
Textbook and design guide for the structural design of post-tensioned concrete.
Ground Bearing Concrete Slabs Craftsman Book Company
Concrete can be a pretty unforgiving building material. Ask any of the builders who come into your store and they'll usually have a horror story to share about a concrete job gone awry and how much it cost them.Basic Concrete Engineering for Builders may be one of the only books available today that explains how to avoid common concrete problems with foundations, slabs, columns, and more. It gives step-by-step explanations on how to plan, mix, reinforce and pour concrete. It also shows how to design concrete for buildings -- the calculations, the tables, and the rules of thumb, with examples and insight into the working knowledge that every builder needs.Most builders don't end up specifying requirements for structural concrete work. That's the job of an engineer. But most builders working with concrete need a good general understanding of the concepts behind structural concrete engineering. They need to know about: surveying, foundation layout, formwork, form materials, forming problems, aggregates, admixtures, reinforcing, mixing and placing requirements, pumping, creating joints, curing, and testing the concrete's strength. They need to know basic design for walls, columns, slabs, slabs-on-grade, one- and two-way slabs, elevated slabs, equipment pads, pre-cast walls, retaining walls, basement walls, crib walls, reinforcing beams and girders, driveways, sidewalks, curbs, catch basins, manholes and other miscellaneous structures, as well as how to calculate the reinforcement needed for these structural components. You'll find all this information in this book and on the software included in the back.Includes Free Engineering Software: A CD-ROM is included with easy-to-useengineering software for designing simple concrete elements for beams, slabs and columns.
Slabs on Grade Authorsolutions
Concrete is a global material that underwrites commercial wellbeing and social development. There is no substitute that can be used on the same engineering scale and its sustainability, expolitation and further development are imperatives to creating and maintaing a healthy economy and environment worldwide. The pressure for change and improvement of performance is relentless and necessary. Concrete must keep evolving to satisfy the increasing demands of all its users.
Architectural Management Springer Nature
Soils and Foundations for Architects and Engineers, Second Edition is a practical guide to the technology of soil mechanics and foundations, and the application of that technology to the design and construction process. This text provides an up-to-date overview of the classification of soils, the design of foundations, and the behavior of soils under load. Particular emphasis has been given to the subject of piles, piers, and caissons, and to the design and details of construction of basement and retaining walls. New to this edition: Expanded coverage of shear strength of soils, settlement analysis, and expansive soil. Design requirements for prestressed tiebacks, tiedowns, and rock anchors. Expansion of information on pile driving techniques including the use of the Engineering News Formula. A table of British-metric conversions. Many new solved problems and illustrations. In addition to the numerous new improvements, the author also includes: effects of high water tables on architectural and engineering considerations, design of shear keys used in the transfer of lateral earth pressure from a wall to the supporting element, various drainage alternatives to the structural treatment of adjacent footings, and much more. Soils and Foundations for Architects and Engineers, Second Edition can be used in advanced undergraduate and graduate level courses offered in architectural engineering and civil engineering, as well as be used as a reference book by practicing architects, insurance adjusters and attorneys who litigate or adjudicate claims involving soils and foundations.
Designing Floor Slabs on Grade CRC Press
Auf dem neuesten “Stand der Technik” präsentiert sich das Buch noch übersichtlicher mit einer neu gegliederten, äußerst benutzerfreundlichen Darbietung des Stoffes. Das Fachwissen wurde dabei konzentriert und komprimiert auf die für Architekten und Bauingenieure relevanten Sachverhalte und Zusammenhänge. Komplett neu gestaltet wurde der umfangreiche Abbildungsteil mit hochwertigen Zeichnungen zur bildhaften Kommentierung des Textes. Um im Technischen Ausbau mit der technologischen Entwicklung, den steigenden Komfortansprüchen und den Erfordernissen eines wirtschaftlichen und umweltfreundlichen Umgangs mit der Energie Schritt zu halten, ist der “Wellpott/ Bohne” weiterhin ein unverzichtbares Grundlagenbuch.
Post-Tensioning in Building Construction John Wiley & Sons
It explains step-by-step procedure for the design of each type of foundation with the help of a large number of worked-out examples. The book provides an in-depth analysis of topics, such as wall footings, balanced footings, raft foundations, beam and slab rafts, pile caps and pile foundations.
Structural Foundation Designers' Manual CRC Press
Construction Management is a wide ranging discipline, but ultimately it is a demanding, hands-on discipline concerned with the management of people, plant and materials, all mobilised to complete a building project safely, on time, on budget and to the client’s satisfaction. Management of Construction Projects is a highly illustrated series of case studies based on seven live construction management projects, demonstrating the very practical nature of managing projects. The detailed case studies cover a variety of construction projects, varying in value from £1million to £117 million, including a major inner city office block, a portal framed factory unit, a university refurbishment project, a superstore & car park and a new school building. The case studies emphasise detailed on site management procedures and identify a predominantly functional approach to managing projects. A number of related chapters covering practical and theoretical aspects of construction management support and illustrate the individual case studies. With a strong emphasis on the practical nature of the subject, Management of Construction Projects is an ideal introduction to the subject for all students on construction and related degree and diploma programmes. It will be of particular interest to students preparing for the CIOB EPA programme and the new NVQ courses at level 4 and 5 in construction management.
Advances in Concrete Slab Technology Springer Nature
This manual for civil and structural engineers aims to simplify as much as possible a complex subject which is often treated too theoretically, by explaining in a practical way how to provide uncomplicated, buildable and economical foundations. It explains simply, clearly and with numerous worked examples how economic foundation design is achieved. It deals with both straightforward and difficult sites, following the process through site investigation, foundation selection and, finally, design. The book: includes chapters on many aspects of foundation engineering that most other books avoid including filled and contaminated sites mining and other man-made conditions features a step-by-step procedure for the design of lightweight and flexible rafts, to fill the gap in guidance in this much neglected, yet extremely economical foundation solution concentrates on foundations for building structures rather than the larger civil engineering foundations includes many innovative and economic solutions developed and used by the authors’ practice but not often covered in other publications provides an extensive series of appendices as a valuable reference source. For the Second Edition the chapter on contaminated and derelict sites has been updated to take account of the latest guidelines on the subject, including BS 10175. Elsewhere, throughout the book, references have been updated to take account of the latest technical publications and relevant British Standards.
Management of Construction Projects Universities Press
This book provides novel design workflow for reinforced concrete slab, beam and column. These workflows are complimented with detailed explanation and worked examples to enhance the reader's understanding. Derivation of design formulation and key calculation procedures for the determination of design forces developed in structural elements are provided as well.
Concrete Floors and Slabs Springer Science & Business Media
Offering a comprehensive guide for all those involved with industrial floors, this book deals with the design, construction and behaviour of single pour industrial floors, such as those constructed by laser-guided screeding machines.
Proceedings of Italian Concrete Days 2018 Longman Publishing Group
This book gathers the best peer-reviewed papers presented at the Italian Concrete Days national conference, held in Lecco, Italy, on June 14-15, 2018. The conference topics encompass the aspects of design, execution, rehabilitation and control of concrete structures, with particular reference to theory and modeling, applications and realizations, materials and investigations, technology and construction techniques. The contributions amply demonstrate that today’s structural concrete applications concern not only new constructions, but more and more rehabilitation, conservation, strengthening and seismic upgrading of existing premises, and that requirements cover new aspects within the frame of sustainability, including environmental friendliness, durability, adaptability and reuse of works and / or materials. As such the book represents an invaluable, up-to-the-minute tool, providing an essential overview of structural concrete, as well as all new materials with cementitious matrices.