

Basic Estimating For Construction 2nd Edition

Simplify the estimating process with the latest data, materials, and practices Electrical Estimating Methods, Fourth Edition is a comprehensive guide to estimating electrical costs, with data provided by leading construction database RS Means. The book covers the materials and processes encountered by the modern contractor, and provides all the information professionals need to make the most precise estimate. The fourth edition has been updated to reflect the changing materials, techniques, and practices in the field, and provides the most recent Means cost data available. The complexity of electrical systems can make accurate estimation difficult, but this guide contains all the necessary information in one place. An electrical estimate represents the total cost for materials, labor, overhead and profit, but accuracy is virtually impossible without a basic knowledge of the field, and real-world experience in the type of work required. Inaccurate estimates lead to problems with customer satisfaction, which often create payment issues. A thorough, complete, and accurate estimate is in the best interest of all parties involved in the work. Electrical Estimating Methods provides more than just data. Detailed discussions about the work itself help highlight factors that may escape notice, and access to the latest cost data helps tie everything together. Features include: Discussion of current equipment, materials, and processes Means data for both residential and commercial projects Case studies that illustrate best practices Online access to the latest Means data for fast access on the job The book discusses specific situations as well as general practices, and provides comprehensive guidance to the creation of a true, current, estimation of costs. For electrical contractors and estimators, Electrical Estimating Methods contains must-have content that simplifies the estimating process.

Assuming no prior knowledge of blueprint reading and mathematics, this manual guides readers through a material quantity survey, the conversion of the material quantities to a monetary value, and the addition of labor and equipment costs, using actual construction plans as a reference. The volume outlines estimating procedures and mathematics, efficiency and productivity, earthwork, concrete and masonry, structural and miscellaneous steel, wood and plastics, doors and windows, thermal and moisture protection, finishes, mechanical and plumbing, electrical, and the bid package, contract, and follow-up. For estimators and project managers.

A practical, hands-on guide to real-world construction estimating How to Estimate with RSMeans Data is the only instructional book on construction cost estimating that uses the most popular source of construction cost data, RS Means. This updated fifth edition includes new coverage on the role of Building Information Modeling (BIM) in the estimating process, and over 300 sample problems and exercises that show you how to apply cost data to your building project based on the RS Means 2015 Building Construction Cost Data. The companion website provides access to RS Means CostWorks data, allowing you to use real-world numbers in your practice estimates, and the included Instructor's Manual provides step-by-step solutions to problems in the book. Focused on the practical aspects of estimating, this book emphasizes the application of estimating techniques—which are transferable to any estimating software—through problem solving and the ground-up creation of complete construction project estimates. Estimating skills are fundamental to the construction industry, and are applied by all parties at all levels throughout the industry. This book is a hands-on guide to the techniques and tools used to create a thorough estimate, with plenty of opportunities for practice. Apply cost data to all aspects of the building project Practice your skills on over 300 sample problems Construct a complete estimate using RSMeans Besides being an essential construction skill, learning estimating helps you become familiar with reading and understanding construction blueprints and how construction assemblies are built. Mastery of these vital skills is important to your future career, and How to Estimate with RSMeans Data is your ideal guide to a solid foundation.

Companies live or die on the basis of estimating their costs. Preparing estimates and bidding for new jobs is a complex and often costly process. There is no substitute for on the job training -- until now. Drawing on the authors' combined experience of more than 70 years, Estimating Building Costs presents state-of-the-art principles, practices, and techniques for assessing these expenditures that can be applied regardless of changes in the costs of materials, equipment, and labor. The book is an efficient and practical tool for developing contracts or controlling project costs. The authors cover the major components of the direct cost: estimating procedures and cost trends related to materials, construction equipment, and skilled and unskilled labor. They describe various types of building estimates encountered during the lifecycle of a project, as well as the role and accuracy of each. The book provides an overview of the industry, cost indexes in use, approaches to preparing a detailed estimate, and an in-depth description of the organization and function of the estimating group. Including CSI Master Format and UniFormat codes, estimating forms, a list of available estimating software packages, a detailed construction site and investigation report, the book provides a cost estimating methodology that readers can tailor to their own organizational needs.

Estimators need to understand the consequences of entering into a contract, often defined by complex conditions and documents, as well as to appreciate the technical requirements of the project. Estimating and Tendering for Construction Work, 5th edition, explains the job of the estimator through every stage, from early cost studies to the creation of budgets for successful tenders. This new edition reflects recent developments in the field and covers: new tendering and procurement methods the move from basic estimating to cost-planning and the greater emphasis placed on partnering and collaborative working the New Rules of Measurement (NRM1 and 2), and examines ways in which practicing estimators are implementing the guidance emerging technologies such as BIM (Building Information Modelling) and estimating systems which can interact with 3D design models With the majority of projects procured using design-and-build contracts, this edition explains the contractor's role in setting costs, and design statements, to inform and control the development of a project's design. Clearly-written and illustrated with examples, notes and technical documentation, this book is ideal for students on construction-related courses at HNC/HND and Degree levels. It is also an important source for associated professions and estimators at the outset of their careers.

Disk contains: CSUC, CHICO Cost-estimating program, LOAD-AND-HAUL programs for off-highway end-dump trucks and push-loaded scrapers, and an indirect cost computer spreadsheet template.

Part I: Process design -- Introduction to design -- Process flowsheet development -- Utilities and energy efficient design -- Process simulation -- Instrumentation and process control -- Materials of construction -- Capital cost estimating -- Estimating revenues and production costs -- Economic evaluation of projects -- Safety and loss prevention -- General site considerations -- Optimization in design -- Part II: Plant design -- Equipment selection, specification and design -- Design of pressure vessels -- Design of reactors and mixers -- Separation of fluids -- Separation columns (distillation, absorption and extraction) -- Specification and design of solids-handling equipment -- Heat transfer equipment -- Transport and storage of fluids.

Unlike the majority of construction project management textbooks out there, Management of Construction Projects takes a distinctive approach by setting itself in the context of a single and real-world construction project throughout and also by looking at construction project management from the constructor's perspective. This project-based learning approach emphasizes the skills, knowledge, and techniques students require to become successful project managers. This second edition uses a brand new, larger, and more challenging case study to take students through key stages of the process, including: contracts and subcontracting; estimating, scheduling, and planning; supply chain and materials management; cost control, quality, and safety; project leadership and ethics; and claims, disputes, and project close-outs. Also new to this edition is coverage of emergent industry trends such as LEAN, LEED, and BIM. The book contains essential features such as review questions, exercises, and chapter summaries, while example plans, schedules, contracts, and other documents are stored on a companion website. Written in straightforward language from a constructor's perspective, this textbook gives a

realistic overview and review of the roles of project managers and everything they need to know in order to see a successful project through from start to finish.

Estimating is an integral part of the construction process, and may be performed at various stages of a project. Conceptual estimates are general in nature, and require the least amount of data. They are used to determine the feasibility of a project. Design Development estimates require up to 40% of documentation to be complete, and thus provide a partial picture of total project costs. Construction Estimating focuses on Detail Takeoff estimates. Detail Takeoff estimates account for each individual construction component (or takeoff) and are the most accurate type of construction estimate. Construction Estimating provides information about Detail Takeoff estimating techniques, as well as information about construction products, materials, and processes to prepare the estimator to actively participate in the design process. The text includes an appendix with helpful charts, worksheets and metric conversion tables.

An introductory text for tertiary students studying the measurement of building works.

This new edition of Construction Estimating provides a comprehensive introduction to the estimating practices used in the construction industry. The textbook not only covers how to develop estimates, but also provides a guide to information on drawings and in specifications. Building Information Modeling (BIM) has been added throughout. BIM covers geometry, spatial relationships, light analysis, geographic information, and quantities and properties of building components. The content is organized around the CSI MasterFormat® 2011. Construction Estimating provides an excellent resource for commercial contractors, estimators, and those in construction estimating training programs. Opportunities are provided to prepare estimates using ledger sheets, electronic spreadsheets, and a fully functional version of Sage Timberline Estimating software. The Sage software includes sample databases such as General Contractor, Concrete/Masonry, Drywall, HVAC, Electrical, Plumbing, and Industrial databases.

Written for students taking courses in building and surveying, 'Estimating for Builders and Surveyors' describes and explains the method used by the estimator to build up prices or rates for items described in the SMM7 format. Each chapter is a self-contained unit related to a particular element in the building. Worked examples throughout reflect both traditional and up-to-date technology. Written by an author team of academics and professional surveyors, this book continues to be an invaluable introduction to the subject of estimating.

This affordable, real-world guide to success in construction estimating is loaded with tips, checklists, worksheets, data tables, and step-by-step tutorials to help you navigate every step of the estimating process. The text focuses on "how-to" essentials, with on-the-spot answers, visual examples and a strong focus on key factors affecting profit, such as marketing, bid planning, drawing review, scope planning, quantity take-off, pricing, quote evaluation, cost summary, and bid closing for all trades and divisions. Drawing on extensive experience in the industry, the author provides practical solutions for the unprecedented challenges that construction professionals face today, including fierce competition, material price volatility, skilled labor shortages, and strict regulations. He also illuminates the relationship between estimating and project management, with coverage of overhead expenses, value engineering, turnover meeting, and change order pricing.

"Means catalog no. 67343"--P. [4] of cover.

A Complete Resource for Residential and Light Commercial Contractors -- based on the latest construction materials and methods. Learn how to: read and interpret building plans create an accurate takeoff, using a complete set of working drawings. Each chapter covers a major construction division, such as concrete, masonry and carpentry -- and uses plans, details and tables to illustrate plan reading and takeoff procedures. A checklist for each material division helps ensure that nothing is left out of your takeoff. Includes a complete set of residential plans from Home Planners, Inc., the nation's leading provider of home plans. With a detailed material takeoff, from site work to electrical. With over 160 illustrations, including commercial construction details.

The closer you come to completing a job within budget the less likely you are to waste time and money--and that means more profit. Custom builder Jerry Householder can help you improve your estimating abilities and discover better ways to do a quantity takeoff, whether you prefer to use pen and paper or estimating software. He teams up with builder Emile Marchive III to show you types of estimates and when to use them.

Guidelines for estimating the cost of repairing building damage cover estimates for electrical wiring, kitchen cabinets, central air conditioning, and thermal insulation

The Construction Chart Book presents the most complete data available on all facets of the U.S. construction industry: economic, demographic, employment/income, education/training, and safety and health issues. The book presents this information in a series of 50 topics, each with a description of the subject matter and corresponding charts and graphs. The contents of The Construction Chart Book are relevant to owners, contractors, unions, workers, and other organizations affiliated with the construction industry, such as health providers and workers compensation insurance companies, as well as researchers, economists, trainers, safety and health professionals, and industry observers.

Robert Peurifoy was a giant in the field of construction engineering and authored several books during his lifetime. This book last published in 1989 and will capitalize on the well-known name of the author. In this edition, computer calculations of costs and of modeling have been added as well as updated statistics, computer related examples and new problems. Civil, Environmental, and Construction Management Engineering Majors and Professionals will benefit from having this title on their shelf. This edition retains the conceptual strengths of the Peurifoy approach and organization from the previous edition but the new problems and computer-based examples and new up-to-date construction data make it the only choice in academia or industry.

Now users can successfully bid on contracting jobs anywhere! The DEWALT® Electrical Estimating Professional Reference offers complete coverage of the traditional methods of estimating as well as the "hurry up" methods, while explaining how and when to use them. This invaluable tool puts information at your fingertips, from knowing material and labor costs to understanding overhead and profit margins, and is an important guide to the success of any professional electrician's business.

Everything needed for a course in Estimating is provided in this proven text, which combines coverage of principles with step-by-step procedures. Ideal for construction, architecture, and engineering students, it reflects the popular approach of tracing a complete project's progress. The use of computers as a key estimating tool is incorporated throughout.

Construction Cost Estimating equips a new generation of students and early-career professionals with the skills they need to bid successfully on projects. From developing bid strategies to submitting a completed bid, this innovative textbook introduces the fundamentals of construction estimating through a real-life case study that unfolds across its 24

chapters. Exercises at the end of each chapter offer hands-on practice with core concepts such as quantity take-offs, pricing, and estimating for subcontractor work. Online resources provide instant access to examples of authentic construction documents, including complete, detailed direct work estimates, subcontractor work estimates, general conditions estimates, markups, and summary schedules. Through its unique mix of real-world examples and classroom-tested insights, Construction Cost Estimating ensures that readers are familiar with the entire estimating process even before setting foot on the jobsite.

ESTIMATING FOR RESIDENTIAL CONSTRUCTION, 2E provides a very visual, reader-friendly introduction to processes as it details the steps involved in accurately preparing a cost estimate. In his signature clear, straightforward writing style, proven author David Pratt explains how to price excavation and site work, concrete, carpentry, masonry, plumbing, heating, and electrical work, as well as the general expenses and sub-trade work. He also covers the impact of green building practices. The book offers specifics on how to prepare a bill of materials from a takeoff, summarize and prepare a bid for a custom home, assess markup on an estimate, and review a bid before it is submitted to the client. It covers the basic math of residential work early on, devotes an entire chapter to remodeling, and provides tips of the trade from professionals in every chapter. In addition, the Second Edition is linked to a Student Companion Website, where instructors and students can access spreadsheets to assist in estimating tasks and problems. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

This code of practice, long established as a leading publication for the construction industry, provides an authoritative guide to essential principles and good practice in estimating for building work. The seventh edition includes new material on estimating strategy, tendering, procedures and best practice, as well as the build-up of unit rates of cost, overheads and profit, and e-commerce.

For courses in Construction Management/Estimating in departments of Construction Engineering and Construction Technology. This text thoughtfully discusses the overall process of estimating construction costs, with particular emphasis on the preparation of a stipulated sum bid by a general contractor. It covers all the normal bid-preparation activities selection and strategy, drawings and specifications, bid-submission and a review, and recommends and outlines practices and methods to handle these functions. Using North America's most recognized construction cost data from RSMeans, this step-by-step guide develops problem-solving skills through over 300 sample problems and exercises. All of the major construction items, including site work, concrete and masonry, wood and metal framing, doors and windows, and more are covered. Access to a password-protected web site is included, which contains the instruction version of RSMeans Cos/Works, the electronic version of RS Means Building Construction Cost Data, and sample building plans and spreadsheets, enabling you to practice creating a complete construction estimate.

"Completely revised, updated, and reorganized to conform to Masterformat 2010, this new edition provides a step-by-step guide to estimating building costs for contractors. A series of questions at the end of each chapter helps the reader summarize the content. In addition, the chapter on computer estimating has been expanded to cover the new estimating software for performing quantity takeoff by computer, and content covering the procedures for conceptual estimating as well as parametric estimating has been added"--

This book is an introductory text on building measurement and estimating for simple buildings in Hong Kong, based on the Hong Kong Standard Method of Measurement of Building Works 4th Edition Revised 2018 (HKSMM4 Rev 2018). It provides a toolkit for students and surveying technicians who are new to the subject. This second edition updates the contents in line with the HKSMM4 Rev 2018 and incorporates the latest industry developments such as BIM. The main text is divided into five parts following the development of a typical project. Part 1, Building the project team, introduces the team setup for a typical project. Part 2, Deciding the procurement strategy, explains the various procurement decisions to be made by an employer before any cost estimating and measurement work takes place. Part 3, Preparing for tender, covers the tendering methods, tender documentation and approximate estimating techniques used by Quantity Surveyors. Part 4, Measuring quantities, introduces measurement principles and HKSMM4 Rev 2018, followed by a detailed review of the measurement methods for each major trade, with worked examples. Part 5, Estimating unit rates, explores the basic techniques for unit rate preparation. The book contains worked examples from real Hong Kong building projects, self-assessment questions, reminders and points of note. It is essential reading for Hong Kong construction and surveying students, international Quantity Surveyors working in the local area and those wanting international examples of Quantity Surveyors practice.

Have you ever had to provide accurate costs for a new supermarket or a pub "just an idea...a ballpark figure..." ? The earlier a pricing decision has to be made, the more difficult it is to estimate the cost and the more likely the design and the specs are to change. And yet a rough-and-ready estimate is more likely to get set in stone. Spon's First Stage Estimating Handbook is the only comprehensive and reliable source of first stage estimating costs. Covering the whole spectrum of building costs and a wide range of related M&E work and landscaping work, vital cost data is presented as: costs per square metre elemental cost analyses principal rates composite rates. Compact and clear, Spon's First Stage Estimating Handbook is ideal for those key early meetings with clients. And with additional sections on whole life costing and general information, this is an essential reference for all construction professionals and clients making early judgements on the viability of new projects.

An international edition of this product is available for sale overseas and in international markets.

For beginning to intermediate courses in construction estimating in two- and four-year construction management programs. A step-by-step, hands-on introduction to commercial

and residential estimating Construction Estimating with Excel, 3/e, introduces readers to the fundamental principles of estimating using drawing sets, real-world exercises, and examples. The book moves step-by-step through the estimating process, discussing the art of estimating, the quantity takeoff, how to put costs to the estimate, and how to finalize the bid. As students progress through the text they are shown how Microsoft Excel can be used to improve the estimating process. Because it introduces spreadsheets as a way of increasing estimating productivity and accuracy, the book can help both beginning and experienced estimators improve their skills. The Third Edition gives students a broader understanding of construction estimating with a new chapter discussing the role that estimating plays in different project delivery methods and in the design process and how to use data from RSMeans. To bring the book up to date, the material and equipment costs and labor rates have been updated to reflect current costs, and the discussion of Excel (including the figures) is based on Excel 2016. Additionally, content throughout the book has been updated to align to ACCE and ABET student learning outcomes. Student resources are available on the companion website www.pearsonhighered.com/careersresources/.

The most comprehensive book on the market that covers the fundamental cost estimating principles and processes used in commercial construction today. Using a single case study, the book shows readers how to prepare their estimates and to develop the necessary skills needed to be successful in the construction industry. It covers theory, types of estimates, estimating procedures and contractual aspects as well as providing practical tips on how to estimate. Specifically details the process for developing three separate types of estimates: a budget estimate during design development, a guaranteed-maximum-price estimate for a cost-plus contract, and a bid for a lump-sum contract. The book also discusses analysis of subcontractor quotations as well as estimating job site general conditions and company overhead costs; it even includes discussion of negotiated contracts. A comprehensive reference for construction professionals such as cost estimators and project managers.

The Estimator's Pocket Book, Second Edition is a concise and practical reference covering the main pricing approaches, as well as useful information such as how to process sub-contractor quotations, tender settlement and adjudication. It is fully up to date with NRM2 throughout, features a look ahead to NRM3 and describes the implications of BIM for estimators. It includes instructions on how to handle: the NRM order of cost estimate; unit-rate pricing for different trades; pro-rata pricing and dayworks; builders' quantities; approximate quantities. Worked examples show how each of these techniques should be carried out in clear, easy-to-follow steps. This is the indispensable estimating reference for all quantity surveyors, cost managers, project managers and anybody else with estimating responsibilities. Particular attention is given to NRM2, but the overall focus is on the core estimating skills needed in practice. Updates to this edition include a greater reference to BIM, an update on the current state of the construction industry as well as up-to-date wage rates, legislative changes and guidance notes.

ENTIRELY REVISED AND UPDATED! Over 40,000 first edition copies sold. How much does it really cost to renovate your investment property? Learn detailed tips, tricks, and tactics to accurately budget nearly any house flipping project and investment property renovation from expert real estate investor and fix-and-flipper J Scott. Discover the tried-and-tested steps of his professional framework and methodology for precisely evaluating renovation costs in hundreds of his own successful rehab projects. Determine how to accurately estimate all the costs you are likely to face during renovation--and get all of your rehab questions answered in a single place! Whether you are preparing to walk through your very first rehab project or you're an experienced home flipper, this handbook will be your guide to identifying renovation projects, creating a scope of work, and staying on budget to ensure a timely profit! Inside, you will learn how to: -Inspect every aspect of a property to create your renovation scope -Decide which upgrade options provide the biggest bang for your buck -Identify the 150+ most common renovations you'll likely encounter -See big problems (like mold and termites!) and quickly fix them -Assign accurate prices to every rehab task to build a detailed budget -Determine which contractors are best for certain repairs or projects -Break down the top 25 basic components of a renovation -And so much more! You don't need to be a contractor to flip houses, but you do need to know the fundamentals of budgeting and pricing your renovation--including everything from cosmetic renovations to complex installations and upgrades. This book gives you the estimation tools needed to produce the income you desire on your first--or next--investment deal!

Ying-Kit Choi walks engineers through standard practices, basic principles, and design philosophy needed to prepare quality design and construction documents for a successful infrastructure project.

How to succeed in the construction business—step-by-step guidelines for estimating To be competitive, contractors and homebuilders need to know how to generate complete, accurate estimates for labor and material costs. This book guides readers through the entire estimating process, explaining in detail how to put together a reliable estimate that can be used not only for budgeting, but also for developing a schedule, managing a project, dealing with contingencies, and ultimately making a profit. Completely revised and updated to reflect the new CSI MasterFormat 2010™ system, the Second Edition of this practical guide describes estimating techniques for each building system and how to apply them according to the latest industry standards. Cost considerations and quantity takeoff and pricing are included for virtually every type of work found in residential and light commercial projects, from demolition, concrete, and masonry to windows and doors, siding, roofing, mechanical and electrical systems, finish work, and site construction. Complete with many new graphics and references to professional construction cost databases, the new edition provides experienced contractors and novices alike with essential information on: How to correctly interpret plans and specifications, reflecting updates to contract documents since the first edition Computer estimating techniques and new estimating software for performing quantity takeoff The best methods for conceptual estimating as well as the extremely useful topic of parametric estimating How to allocate the right amounts for

profit and contingencies, and other hard-to-find professional guidance How a unit price estimate is built along with labor issues and budgeting for subcontractor work
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