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# Retaining Wall Design Spreadsheet

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Structural Safety and Reliability  
Education and Training in Geo-Engineering Sciences  
Engineering and Design  
Concrete International  
Retaining Walls  
Basics of Retaining Wall Design 11th Edition  
Guide to Rock and Soil Descriptions  
Geotechnical Risk and Safety  
Guide to Retaining Wall Design  
Foundation Engineering Analysis and Design  
Reinforced Concrete Design  
Modular Gravity Retaining Walls  
Design Manual for Segmental Retaining Walls  
Retaining and Flood Walls  
Seismic Analysis and Design of Retaining Walls, Buried Structures, Slopes, and Embankments  
Modern Industrial Training Towards the 21st Century  
Engineering and Design: Retaining Walls  
Design of Deep Braced Excavation and Earth Retaining Systems Under Complex Built Environment  
Cost Optimization of Structures  
Aquananotechnology  
Retaining Wall Design  
Computer Applications in Concrete Technology  
Retaining Walls  
Retaining Walls  
Retaining Wall Design Guide  
Basics of Retaining Wall Design, 9th Edition  
Design Guide for Cantilevered Retaining Walls  
The Design and Construction of a Retaining Wall  
Géotechnique  
The Use of Soil Nails for the Construction and Repair of Retaining Walls  
Embedded Retaining Walls  
Evaluation of the Keysystem I Retaining Wall  
Risk and Variability in Geotechnical Engineering  
Design Manual for Segmental Retaining Walls  
Basics of Retaining Wall Design, 10th Edition  
Drystone Retaining Walls  
Geotechnical Problem Solving  
Design of Reinforced Concrete, 10th Edition  
A Complete Retaining Walls Installation Guide for Allan Block Products  
Retaining Walls in Theory and Practice

*Retaining Wall Design Spreadsheet* Downloaded from [music-school.fbny.org](http://music-school.fbny.org) by guest

## **BLANKENSHIP BOND**

*Structural Safety and Reliability* Thomas Telford  
One of the core roles of a practising geotechnical engineer is to analyse and design foundations. This textbook for advanced undergraduates and graduate students covers the analysis, design and construction of shallow and deep foundations and retaining structures as well as the stability analysis and mitigation of slopes. It progressively introduces critical state soil mechanics and plasticity theories such as plastic limit analysis and cavity expansion theories before leading into the theories of foundation, lateral earth pressure and slope stability analysis. On the engineering side, the book introduces construction and testing methods used in current practice. Throughout it emphasizes the connection between theory and practice. It prepares readers for the more sophisticated non-linear elastic-plastic analysis in foundation engineering which is commonly used in engineering practice, and serves too as a reference

book for practising engineers. A companion website provides a series of Excel spreadsheet programs to cover all examples included in the book, and PowerPoint lecture slides and a solutions manual for lecturers. Using Excel, the relationships between the input parameters and the design and analysis results can be seen. Numerical values of complex equations can be calculated quickly. non-linearity and optimization can be brought in more easily to employ functioned numerical methods. And sophisticated methods can be seen in practice, such as p-y curve for laterally loaded piles and flexible retaining structures, and methods of slices for slope stability analysis.

**Education and Training in Geo-Engineering Sciences** CRC Press  
Design guide for earth retaining structures. Updated and expanded new 10th edition covers nearly every type of earth retaining structure: cantilevered, counterfort, restrained (basement walls), gravity, segmental, sheet pile, soldier pile, and others. Current building code requirements are covered including IBC '12,

MSJC '11, ACI 318-11, ASCE 7-10, CBC '13, and AASHTO. Topics include types of retaining structures, basic soil mechanics, design of concrete and masonry walls, lateral earth pressures, seismic design, surcharges, pile and pier foundations, and swimming pool walls. Fourteen varied design examples. Comprehensive Appendix. Glossary of terminology. 246 pages. 8-1/2x11 paperback.  
Engineering and Design  
John Wiley & Sons  
This book offers detailed retaining wall installation information on how to plan, design and build residential wall up to 6 ft (1.8 m) high using the Allan Block products. Learn about the Allan Block retaining wall collections, to find what will look best for your wall project. You will learn how to build small garden or landscape walls up to larger retaining walls. When installed properly they can support conditions that may exist above or below the wall like slopes, driveways or even other retaining walls. There are many photos and graphics shown to give as much information necessary so a properly built wall can be achieved. Learn about

basic installation, building curves, corners, stairs, reinforcing taller walls and even how to finish the top of the retaining wall for a professional look that will add great curb appeal for years to come. This book is perfect for DIY's or contractors who want to build quality projects.

*Concrete International*

Hba Publications

Incorporated

This book presents cutting edge techniques for characterising, quantifying and modelling geomaterial variability in addition to methods for quantifying the influence of this variability on the performance of geotechnical structures. It includes state-of-the-art refereed journal papers by leading international researchers along with written and informal discussions on a selection of key submissions that were presented at a Symposium at the Institution of Civil Engineers on 9th May 2005.

Retaining Walls CRC Press

The primary objective of Reinforced Concrete Design, 10th Edition, is to provide a basic and thorough understanding of the strength and behavior of reinforced concrete members and structural systems.

Featuring updated compliance with the ACI 318-19 Building Code for Structural Concrete, it covers details of reinforced concrete materials, mechanics of bending, slab systems and an in-depth analysis of continuous one-way and two-way floor systems, shear and torsion, and serviceability. There are also

comprehensive chapters on structural walls, columns, foundations, and prestressed concrete fundamentals. Instructor ancillaries are also available. FEATURES:

Features frequent references to the recent ACI Code updates, making it a vital companion for design and construction Includes practice-based examples and exercises to enhance real-world applications and understanding Illustrates procedures for the design of job-built forms for slabs, beams, and columns Covers basic principles to advanced concepts like the design of deep beams and pile caps, prestressed concrete, and concrete formwork design Adds new material on pole footings and Sonutube foundations, different types of concrete floor systems, and numerous

new photos and drawings  
Basics of Retaining Wall Design 11th Edition John Wiley & Sons

Devised with a focus on problem solving, Geotechnical Problem Solving bridges the gap between geotechnical and soil mechanics material covered in university Civil Engineering courses and the advanced topics required for practicing Civil, Structural and Geotechnical engineers. By giving newly qualified engineers the information needed to apply their extensive theoretical knowledge, and informing more established practitioners of the latest developments, this book enables readers to consider how to confidently approach problems having thought through the various options available. Where various competing solutions are proposed, the author systematically leads through each option, weighing up the benefits and drawbacks of each, to ensure the reader can approach and solve real-world problems in a similar manner The scope of material covered includes a range of geotechnical topics, such as soil classification, soil stresses and strength and soil self-weight

settlement. Shallow and deep foundations are analyzed, including special articles on laterally loaded piles, retaining structures including MSE and Tieback walls, slope and trench stability for natural, cut and fill slopes, geotechnical uncertainty, and geotechnical LRFD (Load and Resistance Factor Design). *Guide to Rock and Soil Descriptions* National Concrete Masonry Assn This manual provides guidance for the safe design and economical construction of retaining and flood walls. This manual is intended primarily for retaining walls which will be subjected to hydraulic loadings such as flowing water, submergence, wave action, and spray, exposure to chemically contaminated atmosphere, and/or severe climatic conditions. For the design of retaining walls which will not be subjected to hydraulic loadings or severe environmental conditions as described above, TM S-818-I may be used for computing the loadings and evaluating the stability of the structure. Geotechnical Risk and Safety CRC Press

Prepared by the Highway Innovative Technology Evaluation Center (HITEC), a CERF Innovation Center. This report describes an evaluation to determine the capabilities and limitations of the KeySystem I Retaining Wall System, a mechanically stabilized earth structure developed, designed, and supplied by Keystone Retaining Wall Systems, Inc. The evaluation was conducted based on design, construction, performance, and quality assurance information outlined in the HITEC Protocol. KeySystem I features modular block facing to which KeyStrips are attached. KeyStrips are structural welded wire, grid-type reinforcement produced from high-strength steel. Guide to Retaining Wall Design CRC Press 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. Foundation Engineering Analysis and Design Thomas Telford The National Concrete Masonry Association presents the essential guide to constructing segmental retaining walls with detailed, easy-to-follow diagrams and charts for do-it-yourself homeowners and landscape contractors alike. From the fundamentals to the latest research and modern techniques in segmental retaining wall construction, this colorful and inspiring gallery of design suggestions accompanies the expertly written step-by-step guide, and offers a plethora of landscaping ideas ilable and will inspire great new designs for all landscape styles. **Reinforced Concrete Design** Allan Block Corporation The world's fresh water supplies are dwindling rapidly—even wastewater is now considered an asset. By 2025, most of the world's population will be facing serious water stresses and shortages. *Aquananotechnology: Global Prospects* breaks new ground with its informative and

innovative introduction of the application of nanotechnology to the remediation of contaminated water for drinking and industrial use. It provides a comprehensive overview, from a global perspective, of the latest research and developments in the use of nanotechnology for water purification and desalination methods. The book also covers approaches to remediation such as high surface area nanoscale media for adsorption of toxic species, UV treatment of pathogens, and regeneration of saturated media with applications in municipal water supplies, produced water from fracking, ballast water, and more. It also discusses membranes, desalination, sensing, engineered polymers, magnetic nanomaterials, electrospun nanofibers, photocatalysis, endocrine disruptors, and Al13 clusters. It explores physics-based phenomena such as subcritical water and cavitation-induced sonoluminescence, and fog harvesting. With contributions from experts in developed and developing countries, including those with

severe contamination, such as China, India, and Pakistan, the book's content spans a wide range of the subject areas that fall under the aquanotechnology banner, either squarely or tangentially. The book strongly emphasizes sorption media, with broad application to a myriad of contaminants—both geogenic and anthropogenic—keeping in mind that it is not enough for water to be potable, it must also be palatable.

*Modular Gravity Retaining Walls* Taylor & Francis US  
 - Executive Summary -  
 Introduction - Soil strengthening techniques  
 - Design considerations -  
 Conclusions -  
 Acknowledgements -  
 References - Appendix A: Design check of a new retaining wall (Scheme A)  
 - Appendix B: Design check of a strengthened retaining wall (Scheme B)  
 - Abstract - Related publications

**Design Manual for Segmental Retaining Walls** CRC Press

Take a Detailed Look at the Practice of Drystone Retaining Wall  
 Construction Drystone retaining walls make very efficient use of local materials, and sit

comfortably in their environment. They make an important contribution to heritage and to the character of the landscape, and are loved by many people who value the skill and ingenuity that has gone [Retaining and Flood Walls](#)  
 Schiffer Books

In recent years the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), the International Association for Engineering Geology and Environment (IAEG), and the International Society for Rock Mechanics (ISRM) have concluded a Cooperation Agreement, leading to the foundation of the Federation of International Geo-engineering  
**Seismic Analysis and Design of Retaining Walls, Buried Structures, Slopes, and Embankments**

Transportation Research Board  
 UPDATED AND EXPANDED NEW 11TH EDITION.  
 Design guide for earth retaining structures covers nearly every type of earth retaining structure: cantilevered, counterfort, restrained (basement walls), gravity, segmental, sheet pile, soldier pile, and others.

Current building code requirements are referenced throughout. Topics include types of retaining structures, basic soil mechanics, design of concrete and masonry walls, lateral earth pressures, seismic design, surcharges, pile and pier foundations, Gabion walls and swimming pool walls. Fourteen varied design examples. Comprehensive Appendix with Glossary of terminology. 257 pages. 8-1/2x11 paperback.

*Modern Industrial Training Towards the 21st Century*  
ASCE Publications

This book presents basic design theories and principles and provides detailed analysis for excavation failure cases based on the author's research experience, aiming to provide a comprehensive picture of the subject matter. It focuses on the basal heave stability analysis, the apparent earth pressure as well as the strut force determination, the retaining wall deflection, the ground settlement, the protection measures such as jet grouting slabs or piles, case reports, back

analysis methodology. From the very basic to the most advanced, it tries to attain theoretical rigorousness and consistency. On the other hand, this book also tries to cope with design practice, implemented by the recent publications from the authors. Students, researchers, and design engineers working in the field of civil engineering could benefit from this book.

**Engineering and Design: Retaining Walls** National Concrete Masonry Association (N C M A)

This publication replaces the CIRIA report from 1984, R104 Design of retaining walls embedded in stiff clays. It provides best practice guidance on the selection and design of vertical embedded retaining walls.

Design of Deep Braced Excavation and Earth Retaining Systems Under Complex Built Environment Springer Nature

This report explores analytical and design methods for the seismic design of retaining walls,

buried structures, slopes, and embankments. The Final Report is organized into two volumes. NCHRP Report 611 is Volume 1 of this study. Volume 2, which is only available online, presents the proposed specifications, commentaries, and example problems for the retaining walls, slopes and embankments, and buried structures.

**Cost Optimization of Structures** Wiley Global Education

"This Geoguide presents a recommended standard of good practice for the description of Hong Kong rocks and soils for engineering purposes"-- Foreword.

Aquananotechnology  
Stylus Publishing, LLC  
Communication of risks within a transparent and accountable framework is essential in view of increasing mobility and the complexity of the modern society and the field of geotechnical engineering does not form an exception. As a result, modern risk assessment and management are required in all aspects of geotechnical issues, such as planning, desi