Architectural Acoustics

Marshall Long
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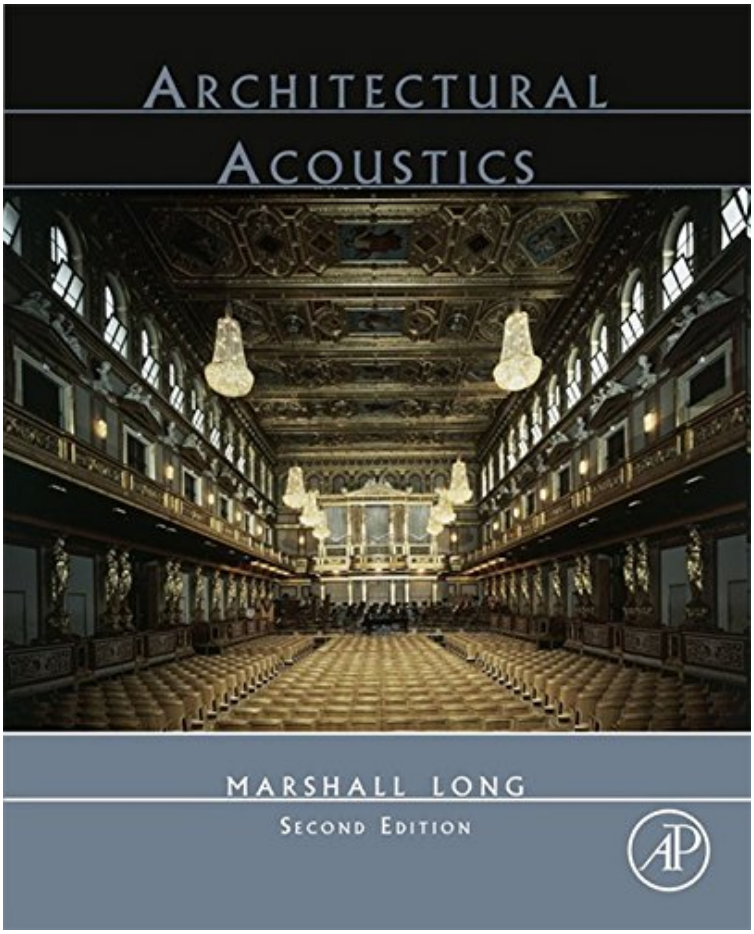

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Marshall Long : Architectural Acoustics before purchasing it in order to gage whether or not it would be worth my time, and all praised Architectural Acoustics:

7 of 7 people found the following review helpful. Theory and practice clearly and comprehensively coveredBy Dr. Howard CastrupThis is an excellent university-level architectural acoustics text, covering an impressive amount of material with skill and clear presentation. The text opens with a history of the subject of acoustics, beginning with the ancient Greeks and Romans and continues on to the present day. This is followed by a comprehensive coverage of the theory and practice of acoustics, including practical guidance for acoustics measurement methods and technology. The material to this point is sufficient to warrant buying the book, but it goes on, applying the methodology to provide a one-stop shopping resource for the study and practice of architectural acoustics, complete with real-world examples and illustrations.All material is treated meticulously by the author with care to making the subject matter understandable and useful. The author's extensive experience in the field is evident throughout the book, and he has clearly spared no effort to pass along his knowledge and experiences to the reader.If you just want to get a feel for the subject, buy this book. If you want to design acoustically optimal structures from home theater rooms to amphitheaters

or cathedrals, buy this book. If you want to teach the subject at the university level, buy this book.4 of 4 people found the following review helpful. My go-to reference for many yearsBy fiatownerThis has long been my go-to reference (it was a required textbook for a graduate-level class at Penn State). The figures are good; the content and issues covered are contemporary; and the exposition is compelling. I liked this text so much I decided to buy an electronic copy (Kindle) since it's searchable.0 of 0 people found the following review helpful. Great reference book.... A true must have for every acoustical professional.By Elzo Forrest GernhartArchitectural Acoustics is an excellent reference book. The author, Marshall Long, presents a complex and difficult subject in a very clear, straightforward, and professional manner. The knowledge presented in the book is a national treasure. Architectural Acoustics should be in every technical library. Thank you Dr. Long for sharing your years of experience.

Architectural Acoustics, Second Edition presents a thorough technical overview of the discipline, from basic concepts to specific design advice. Beginning with a brief history, it reviews the fundamentals of acoustics, human perception and reaction to sound, acoustic noise measurements, noise metrics, and environmental noise characterization. In-depth treatment is given to the theoretical principles and practical applications of wave acoustics, sound transmission, vibration and vibration isolation, and noise transmission in floors and mechanical systems. Chapters on specific design problems demonstrate how to apply the theory, including treatment of multifamily dwellings, office buildings, rooms for speech, rooms for music, multipurpose rooms, auditoriums, sanctuaries, studios, listening rooms, and the design of sound reinforcement systems. Detailed figures illustrate the practical applications of acoustic principles, showing how to implement design ideas in actual structures. This compendium of theoretical and practical design information brings the relevant concepts, equations, techniques, and specific design problems together in one place, including both fundamentals and more advanced material. Practicing engineers will find it an invaluable reference for their daily work, while advanced students will appreciate its rigorous treatment of the basic building blocks of acoustical theory.Considered the most complete resource in the field ndash; includes basic fundamental relations, derived from first principles, and examples needed to solve real engineering problems.Provides a well-organized text for students first approaching the subject as well as a reliable reference for experienced practitioners looking to refresh their technical knowledge base.New content for developing professionals includes case studies and coverage of specific focus areas such as audio visual design, theaters, and concert halls.

"The strength of the book lies in the breadth of material that it covers, and it will work as a starting point for anyone interested in any of the many topics that the author presents."--Journal of the Audio Engineering Society, Architectural Acoustics, 2nd Edition "...provides a comprehensive overview to the many aspects of architectural acoustics, sound isolation, equipment noise control and sound reinforcement systems, balancing both theoretical and practical considerations."--Noice Control Engineering Journal, July-August 2014 "hellip;a first-rate reference for consultants who practice architectural acoustics or for architects and engineers who are looking for a complete compilation on acoustical techniques."--International Journal of Acoustics and Vibration From the Back CoverSolve the wide range of challenges encountered in acoustical design and consulting with this practical single-volume guide Considered the most complete resource in the field ndash; includes basic fundamental relations, derived from first principles, and examples needed to solve real engineering problems. Provides a well-organized text for students first approaching the subject as well as a reliable reference for experienced practitioners looking to refresh their technical knowledge base. New content for developing professionals includes case studies and coverage of specific focus areas such as audio visual design, theaters, and concert halls. Architectural Acoustics, Second Edition presents a thorough technical overview of the discipline, from basic concepts to specific design advice. Beginning with a brief history, it reviews the fundamentals of acoustics, human perception and reaction to sound, acoustic noise measurements, noise metrics, and environmental noise characterization. In-depth treatment is given to the theoretical principles and practical applications of wave acoustics, sound transmission, vibration and vibration isolation, and noise transmission in floors and mechanical systems. Chapters on specific design problems demonstrate how to apply the theory, including treatment of multifamily dwellings, office buildings, rooms for speech, rooms for music, multipurpose rooms, auditoriums, sanctuaries, studios, listening rooms, and the design of sound reinforcement systems. Detailed figures illustrate the practical applications of acoustic principles, showing how to implement design ideas in actual structures. This compendium of theoretical and practical design information brings the relevant concepts, equations, techniques, and specific design problems together in one place, including both fundamentals and more advanced material. Practicing engineers will find it an invaluable reference for their daily work, while advanced students will appreciate its rigorous treatment of the basic building blocks of acoustical theory.About the AuthorSince 1971, Marshall Long has been engaged in acoustical engineering consulting as principal of the firm he founded. Based in California, USA, Marshall Long Acoustics, has established a national and international reputation, completing over 3,000 projects in architectural acoustics, noise and vibration control, environmental impact assessment, and audio visual design. With engineering degrees from Princeton and UCLA, Dr. Long has taught acoustical engineering courses at UCLA and Southern California Institute of Architecture, and has guest lectured at Cal State Long Beach and USC. He has

published numerous papers and articles in the field of acoustics. The author has recently been awarded a US patent on the recording and reproduction of three-dimensional sound. For further information visit the firmrsquo;s website at mlacoustics.com.