DESCRIPTION

The definitive guide to environmental control systems, updated with emerging technology and trends

The Interactive Resource Center is an online learning environment where instructors and students can access the tools they need to make efficient use of their time, while reinforcing and assessing their understanding of key concepts for successful understanding of the course. An access card with redemption code for the online Interactive Resource Center is included with all new, print copies or can be purchased separately. (**If you rent or purchase a used book with an access code, the access code may have been redeemed previously and you may have to purchase a new access code ISBN: 978111899616-4).

The online Interactive Resource Center contains resources tied to the book, such as:

- Interactive Animations
- Interactive Self-tests
- Interactive Flashcards
- Case Studies
- Respondus Testbank (instructors only)
- Instructor’s Manual (over 200 pages) including additional resources (Instructors only)
- Roadmap to the 12th Edition (Instructors only)
Mechanical and Electrical Equipment for Buildings, Twelfth Edition is the industry standard reference that comprehensively covers all aspects of building systems. With over 2,200 drawings and photographs, the book discusses basic theory, preliminary building design guidelines, and detailed design procedure for buildings of all sizes. The updated twelfth edition includes over 300 new illustrations, plus information on the latest design trends, codes, and technologies, while the companion website offers new interactive features including animations, additional case studies, quizzes, and more.

Environmental control systems are the components of a building that keep occupants comfortable and help make the building work. Mechanical and Electrical Equipment for Buildings covers both active controls, like air conditioners and heaters, as well as passive controls like daylighting and natural ventilation. Because these systems comprise the entire energy use and costs of a building's life, the book stresses the importance of sustainability considerations during the design process, by both architects and builders. Authored by two leading green design educators, MEEB provides the most current information on low-energy architecture, including topics like:

- Context, comfort, and environmental resources
- Indoor air quality and thermal control
- Illumination, acoustics, and electricity
- Fire protection, signal systems, and transportation

Occupant comfort and building usability are the most critical factors in the success of a building design, and with environmental concerns mounting, it's becoming more and more important to approach projects from a sustainable perspective from the very beginning. As the definitive guide to environmental control systems for over 75 years, Mechanical and Electrical Equipment for Buildings is a complete resource for students and professionals alike.

ABOUT THE AUTHOR

WALTER T. GRONDZIK, PE, LEED AP BD+C, is an architectural engineer and Professor of Architecture at Ball State University, Muncie, Indiana. Grondzik is a Fellow of ASHRAE, a Fellow of the American Solar Energy Society, and a past president of the Society of Building Science Educators and of the Architectural Research Centers Consortium. His research includes building commissioning, sustainability and high-performance building initiatives, and all areas of environmental control systems and their effects on buildings and occupants.
ALISON G. KWOK, PHD, AIA, LEED AP BD+C, is an architect and Professor of Architecture at the University of Oregon, Eugene, teaching design studios, seminars in building performance, and environmental technology. Kwok is a Fellow of the American Solar Energy Society and a Certified Passive House Consultant. Her research includes identifying adaptive and mitigation strategies for climate change, thermal comfort, and building performance case studies.

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