1. Record Nr. UNISALENTO991001581059707536

Autore	Piano, Renzo
Titolo	Antico è bello : il recupero della città / Renzo Piano, Magda Arduino, Mario Fazio ; fotografie di Gianni Berengo Gardin
Pubbl/distr/stampa	Roma ; Bari : Laterza, 1980
Descrizione fisica	252 p. : ill. ; 25 cm
Altri autori (Persone)	Arduino, Magdaauthor Fazio, Marioauthor Berengo Gardin, Gianni
Disciplina	711
Soggetti	Centri storici - Recupero Città - Risanamento edilizio
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910781657303321

Autore	Al-Shemmeri Tarik
Titolo	Energy audits [[electronic resource]] : a workbook for energy management in buildings / / Tarik Al-Shemmeri
Pubbl/distr/stampa	Chichester, West Sussex, U.K. ; ; Ames, Iowa, : Wiley-Blackwell, 2011
ISBN	1-119-95030-9 1-283-24034-3 9786613240347 1-119-95029-5
Descrizione fisica	1 online resource (321 p.)
Classificazione	TEC009000
Disciplina	658.26
Soggetti	Buildings - Energy conservation Energy auditing Energy conservation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Energy Audits: A Workbook for Energy Management in Buildings; Contents; Preface; Acknowledgements; Dimensions and Units; List of Figures; List of Tables; 1 Energy and the Environment; 1.1 Introduction; 1.2 Forms of energy; 1.2.1 Mechanical energy; 1.2.2 Electrical energy; 1.2.3 Chemical energy; 1.2.4 Nuclear energy; 1.2.5 Thermal energy; 1.3 Energy conversion; 1.4 The burning question; 1.4.1 Combustion of coal; 1.4.2 Combustion of oil; 1.4.3 Combustion of natural gas; 1.5 Environmental impact from fossil fuels; 1.6 Energy worldwide; 1.7 Energy and the future; 1.7.1 The dream scenario 1.7.2 The renewable scenario1.8 Worked examples; 1.9 Tutorial problems; 1.10 Case Study: Future energy for the world; 2 Energy Audits for Buildings; 2.1 The need for an energy audit; 2.2 The energy benchmarking method; 2.2.1 Benchmarking step by step; 2.2.2 How savings can be achieved; 2.3 The degree-days concept; 2.3.1 Regression of degree-day and energy consumption data; 2.4 Energy Performance Certificates; 2.5 Worked examples; 2.6 Tutorial problems; 3 Building Fabric's Heat Loss; 3.1 Modes of heat transfer; 3.2 Fourier's law of thermal conduction; 3.2.1 Conduction through a planar wall

3.2.2 Radial conduction through a pipe wall3.3 Heat transfer by convection; 3.3.1 Convective heat transfer: experimental correlations; 3.3.2 Free convection; 3.3.3 Forced convection; 3.4 Heat transfer through a composite wall separating two fluids; 3.5 Heat exchange through a tube with convection on both sides; 3.6 A composite tube with fluid on the inner and outer surfaces; 3.7 Heat transfer by radiation; 3.8 Building fabric's heat load calculations; 3.9 Energy efficiency and the environment; 3.9.1 Space heating; 3.9.2 Insulation standards; 3.9.3 The economics of heating
3.10 Worked examples3.11 Tutorial problems; 4 Ventilation; 4.1 Aims of ventilation; 4.2 Air quality; 4.2.1 Minimum fresh air requirements; 4.2.2 Composition of respired air; 4.3 Ventilation methods; 4.3.1 Natural ventilation; 4.3.2 Mechanical or forced ventilation; 4.4 Ventilation flow calculations; 4.4.1 Volume flow calculations; 4.4.2 Ventilation heat load calculations; 4.4.3 Ventilation calculations based on CO2 build-up; 4.5 Fans; 4.5.1 Fan laws; 4.5.2 Selection of fans; 4.5.3 Calculation of ventilation fan duty; 4.5.4 Pressure drop calculation
4.5.5 Energy efficiency in ventilation systems4.6 Worked examples; 4.7 Tutorial problems; 4.8 Case Study: The National Trust's ventilation system; 5 Heat Gains in Buildings; 5.1 Introduction; 5.2 Lighting; 5.2.1 Lighting criteria; 5.2.2 Lighting terminology; 5.2.3 Measurement of light intensity; 5.2.4 Types of lamp; 5.3 Energy-saving measures for lighting; 5.4 Casual heat gains from appliances; 5.5 Occupants' heat gains; 5.6 Worked examples; 5.7 Tutorial problems; 5.8 Case Study: Calculation of heating load for a building - options; 6 Thermal Comfort; 6.1 Thermal comfort in human beings
6.2 Energy balance of the human body

Sommario/riassunto

"Energy efficiency is today a crucial topic in the built environment - for both designers and managers of buildings. This increased interest is driven by a combination of new regulations and directives within the EU and worldwide to combat global warming. All buildings now must now acquire and display an EPC (energy performance certificate), a rating similar to the A-G rating given to white goods. But in order to understand how to be more efficient in energy use, you need first to understand the mechanisms of both energy requirements and how energy is used in buildings. Energy Audits: a workbook for energy management in buildings tackles the fundamental principles of thermodynamics through day-to-day engineering concepts and helps students understand why energy losses occur and how they can be reduced. It provides the tools to measure process efficiency and sustainability in power and heating applications, helping engineers to recognize why energy losses occur and how they can be reduced utilizing familiar thermodynamic principles. The author describes the sources of energy available today; explains how energy is used in buildings - and how energy is lost - and how this can be controlled and reduced. Investments in energy efficiency are considered for a number of case studies conducted on real buildings The book explains the theory; illustrates it with case studies and worked examples; and then tests students' understanding with tutorial problems. This is an invaluable resource for students on engineering and building where energy management is now a core topic"--