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Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Advanced Building Construction and Materials 2013; Preface, Committees and Sponsors; Table of Contents; Chapter 1: Degradation of Building Materials; Degradation of PVC-P Membranes in Flat Roof Compositions; Progressive Ways of the Waterproofing of Buildings; Analysis of Effects Influencing Protruding Building Components; Facade Rendering Disorders of Building Envelopes and the Classification the Underlying Factors of Creation Failures; Damage of the Wood by Biological Factors, Fire and Methods of its Protection; Chapter 2: Energy Saving and Ecological Buildings Classification and Basic Economic Quantification of Renewable Energy Sources for the Sustainable Architecture Design Common Characteristics of Zero Energy Buildings in Relation to the Energy Distribution Networks; New Physical-Energy Quantification of Buildings in the Development of the Technology in Architecture for a Sustainable Society; Energy Efficiency of Building Envelopes; Analysis of Energy Balance in Elementary School Building; Development of a Mathematical Model for the Three-Dimensional Accounting of Economic Feasibility of

## Energy-Efficient Buildings

The Impact of the Dynamic Facade Elements on the Energy Balance of the Reference Building in Winter; Influence of Facade Colour on Yearly Energy Need; Aesthetic and Technical Problems of Renovated Residential Buildings Facade - Prevention of Defects; The Results of Experimental Chamber Temperature Measurements for a Light-Weight Wooden Envelope; Renewal of Panel Residential Houses from the Point of View of Energy Criterion; Chapter 3: Thermal Performance of Building Materials and Constructions; Long Time Testing of Temperature Parameters of Wooden Lightweight External Walls; Long Time Testing of Temperature Parameters in Selected Windows; Dynamic Thermal Properties of Uninsulated Rammed Earth Building Envelopes; Renewal of Envelope Constructions of Panel Residential Houses as a Tool for Elimination of Hygienic Problems of Thermal Bridges; Physical Assessment of a Window Using a Computer Simulation; Importance of Envelope Construction Renewal in Panel Apartment Buildings in Terms of Basic Thermal Properties; Program for Quantification Temperature and Aerodynamic Mode of Double-Skin Facade

Influence of Exact Values of Increase of Thermal Transmittance because of Thermal Bridges on Energy Need for Heating of Panel Residential Houses in Original State and after Renewal; Valuable Architectural Refurbishment of Prefabricated Houses as a Part of their Complex Renovation; Material Properties of Windows in the Building Energy Concept; Condensation of Water Vapor in the Functional Gap of Wooden Window; Comparison of Thermal Bridges Calculate Method through Typical Details in Low Energy Designing; Comparison of Thermal Bridges Calculate Method through Window Jamb; Diffuse Characteristics of Window Frame Gasket System

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### Sommario/riassunto

Collection of selected, peer reviewed papers from the 2013 International Conference on Advanced Building Construction and Materials (ABCM 2013), September 26-27, 2013, Kocovce, Slovakia. The 56 papers are grouped as follows: Chapter 1: Degradation of Building Materials; Chapter 2: Energy Saving and Ecological Buildings; Chapter 3: Thermal Performance of Building Materials and Constructions; Chapter 4: Aerodynamic Characteristics of Buildings and Construction; Chapter 5: Indoor Air Quality and Air Exchange; Chapter 6: Fire Safety Materials, Spaces and Construction; Chapter 7: Noise Protection;

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