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| Descrizione fisica      | 1 online resource (246 p.)   |
| Collana                 | Advanced Materials Research, , 1662-8985 ; ; Volume 1057   |
| Disciplina              | 690  |
| Soggetti                | Building<br>Structural design  |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Note generali           | Includes indexes.  |
| Nota di contenuto       | Advanced Building Construction and Materials II; Preface and Editorial Board; Table of Contents; Chapter 1: Energy Saving and Ecological Buildings; Operation Energy Consumption after the Renewal of an Elementary School; Green Building Studio Test Result Comparison with Test from ANSI ASHARE Standard 140-2011; Diagnosis of Elected Industrial Hall Object and Idea for its Reconstruction; Energy Saving Building in Mountain Area; Chapter 2: Thermal Performance of Building Materials and Constructions; Optimization of Design of Pitched Roofs According to Phase Shift of Thermal Oscillation<br>Theoretical and Experimental Research of Glazed Systems in Real Conditions of Outdoor Climate<br>Numerical Analysis of Window Structure<br>Seating Depth Effects on Surface Temperature and Linear Thermal Transmittance; Method for Determination of Time Constants for Annual Balance of Moisture in Building Constructions; Hydrothermal Problems of Wooden Windows; Influence of Thermal Break Element Applied in Balcony Slab on Internal Surface Temperature; Chapter 3: Aerodynamic Characteristics of Buildings and Construction<br>Determination of the Wind Pressure Coefficients on the Model of the Silsoe Cube by the Measurements Made in Wind Tunnels<br>Comparison of Different Wind-Driven Rain Gauges; Interference Effects on High-Rise Buildings - Overview of the Recent Research; New Facade Ventilation Units of under Pressure Controlled Ventilation System; Use of CFD |

Simulation to Measure the Effects of Floor Plan Shape and Building Height on Pedestrian Wind Comfort and Wind Safety; Function of Double-Skin Transparent Facade and its Impact on the Energy Regime of Internal Climate of Adjacent Spaces

Selected Aerodynamic Problems of Double Skin FacadeChapter 4: Fire Safety Materials, Spaces and Construction; Efficiency of Water Curtains; Evaluation of Fire Resistance of Historical Structures; Fire and it is Grown in a Fire Zone; Analysis of Real Fire as a Basis for Future Simulation; Analysis of Fire ETICS in Bratislava in Slovak Republic; Fire Stations Deployment in Slovakia, Czech Republic and Germany; Firefighting Systems and Video Smoke Detection as a Significant Part of Fire Safety in the Building

Problems of Current Classification of Building Materials in the Context of Solution of Structure Fire SafetyChapter 5: Noise Protection and Daylight Conditions; Sound Insulation Determination of Door; Assessment of Internal Residential Environment with Regard to Noise Load in Slovak Republik; The Effect of the Colour Selection for Internal Surfaces on Non-Visual Daylight Human Response; Keywords Index; Authors Index

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### Sommario/riassunto

Collection of selected, peer reviewed papers from the Special topic volume with invited peer reviewed papers only. The 28 papers are grouped as follows: Chapter 1: Energy Saving and Ecological Buildings, Chapter 2: Thermal Performance of Building Materials and Constructions, Chapter 3: Aerodynamic Characteristics of Buildings and Construction, Chapter 4: Fire Safety Materials, Spaces and Construction, Chapter 5: Noise Protection and Daylight Conditions.

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