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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 Theoretical and Experimental Research of Glazed Systems in Real Conditions of Outdoor ClimateNumerical Analysis of Window Structure 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 Determination of the Wind Pressure Coefficients on the Model of the Silsoe Cube by the Measurements Made in Wind TunnelsComparison 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 Republic; 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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