

Table of Contents

Preface

Factors for Eco-Efficiency Improvement of Thermal Insulation Materials

J. Kono, Y. Goto, Y. Ostermeyer, R. Frischknecht and H. Wallbaum 1

Traditional and Innovative Materials for Energy Efficiency in Buildings

A.L. Pisello, V.L. Castaldo, F. Rosso, C. Piselli, M. Ferrero and F. Cotana 14

Energy Efficient Construction Materials

A.R. Gupta and S.K. Deshmukh 35

Straw Based Materials for Building Retrofitting and Energy Efficiency

S. Liuzzi, S. Rigante, F. Ruggiero and P. Stefanizzi 50

Earthen Plasters Based on Illitic Soils from Barrocal Region of Algarve: Contributions for Building Performance and Sustainability

J. Lima, P. Faria and A. Santos Silva 64

Effect of Plasters/Coatings on the Thermo-Physical Behavior of Light Weight Pond Ash Blocks Based on Non Autoclaving Technique

V. Sood, B.M. Suman and A. Kumar 78

Rigid Polyurethane Foam: A Versatile Energy Efficient Material

H. Singh 88

Mechanical Properties and Thermal Resistance of High Volume Fly Ash Concrete for Energy Efficiency in Building Construction

B. Balakrishnan and A.S.M.A. Awal 99

A Study of Natural Pozzolan Mortars Exposed to Sulfate as Energy Efficient Building Material

L. Laoufi, Y. Senhadji and A.S. Benosman 109

Mineral-Based Composite Materials for Energy Efficiency in Buildings

B. Belbachir, A.S. Benosman and H. Taïbi 123

Application of Lean Management Techniques for Achieving Energy Efficiency in Building Construction: Procurement and Handling of Building Materials

M.P. Devaki 135