METADATA

Title: Thermal insulation materials and thermal insulation protection of buildings

Other Titles: -

Language: Greek

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ISBN: 978-618-228-049-2

Subject: NATURAL SCIENCES AND AGRICULTURAL SCIENCES, ENGINEERING AND TECHNOLOGY

Keywords: Thermal insulation / Thermal insulation materials / Thermal bridges / Thermal insulation sufficiency / Thermal conductivity coefficient

Bibliographic Reference: Aravantinos, D. (2024). Thermal insulation materials and thermal insulation protection of buildings [Undergraduate textbook]. Kallipos, Open Academic Editions. http://dx.doi.org/10.57713/kallipos-281

Abstract

The book provides the basic knowledge about thermal insulation materials and the need for thermal insulation shielding of buildings both on a practical level and on a computational level, based on the current Regulation on the Energy Performance of Buildings and in particular on the recently revised second technical directive of the regulation (T.O.T.E.E. 20701–2) of 2022 (which is expected to take effect). In its sections: a) the main axes, on which the thermal insulation protection of building structures is based, are analyzed, b) the most common thermal insulation materials found on the Greek market are presented with a description of their properties, with references to their uses and the selection criteria for each one, c) the methods of thermal insulation protection of individual structural elements are briefly described, whether they relate to new or to existing constructions, d) the regulatory framework and the calculation methodology of the revised technical directive regarding the thermal insulation adequacy of the building envelope are presented and e) examples are given for calculating the required thickness of the thermal insulation layer for the most common structural elements of a building.

The Project is funded by the National Development Programme 2021-2025 of the Ministry of Education and Religious Affairs and implemented by the Special Account for Research Funds of the National Technical University of Athens.