

# HEAT EXCHANGERS FOR PASSIVE HOUSES

**Gabriel Ivan (\*), Nicolae Ivan(\*), Dragos Isvoranu(\*\*), Viorel Badescu (\*\*)**

(\*)Faculty of Building Services, Technical University of Civil Engineering of Bucharest  
122-124 Lacul Tei boulevard , 72302

(\*\*) Faculty of Mechanical Engineering, Polytechnic University of Bucharest, 313 Spl. Independentei, Bucharest  
060042

## ABSTRACT

*This paper analyzes the particularities of some heat exchangers commonly used during passive houses design. The characteristics of the passive houses, which are very low energy consumers, require the usage of specific equipments, with high degree of compactness. Heat exchangers based on phase change materials belong to this category. Renewable energy sources, such as solar energy or the thermal energy accumulated in the soil, are very well suited to be implemented in passive houses. Consequently, exchangers designed to extract heat from the ground are of particular interest in this context. The authors present some details about the operation principles of these equipments as well as the reasons that lead to their implementation in passive houses.*

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