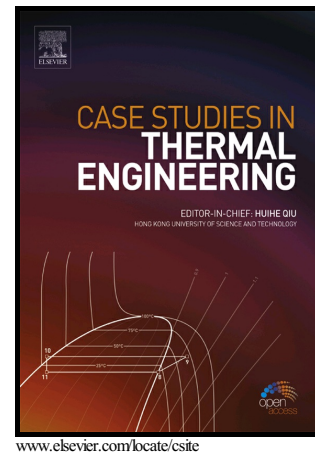


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Comparative study of hygrothermal properties of five thermal insulation materials

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ABSTRACT

The objective of this article is to carry out a comparative study of the main hygrothermal properties of five thermal insulation materials for buildings. These properties are necessary for a correct prediction of heat and moisture transfers through the walls and the selection of the most appropriate materials according to the specific buildings. The studied materials were glass wool, rock wool, expanded polystyrene, wood fiberboard and polyester fiberfill. The article is divided into three parts. The first part presents the phenomena of hygrothermal transfers in walls in order to understand the need for determining specific properties of the

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