

Energy Saving of the Paint with Mineral Insulators: Simulation and Study on Different Climates

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Abstract : By using an adequate thermal barrier coating in buildings the energy saving will be happened. In this study, a range of wall paints with different absorption coefficient in different climates has been investigated. In order to study these effects, heating and cooling loads of a common building with different ordinary paints and paint with mineral coating have been calculated. The effect of building paint in different climatic condition was studied and comparison was done between ordinary paints and paint with mineral insulators in temperate climate to obtain optimized energy consumption. The results have been shown that coatings with inorganic micro particles as insulation reduce the energy consumption of buildings around 14%.

Keywords : climate, energy consumption, inorganic, mineral coating

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