

# Review on Thermal Insulation Performance in Various Type of Concrete

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**Abstract.** Thermal insulation concrete building plays an important role in environment sustainability especially energy saving buildings. Buildings are one of the largest consumers of energy worldwide. Therefore, significant energy saving can be realized by buildings with proper materials, design and operation. Thermal insulation systems are nowadays mostly applied for such building envelopes where the materials of load bearing structure such as concrete do not have a substantial thermal insulation capability. Thermal insulation in concrete are materials or combinations of materials that are used to provide resistance to heat flow, should have low conductivity for building application in order to represence of a temperature gradient, has an important effect on the heat exchange between the building interior and the ambience. The aim of this paper is to review the thermal properties include thermal conductivity and specific heat on various types of concrete.