

Since concrete is one of the most popularly utilized building mixtures in construction, a high demand of natural resources is significantly emerged. Therefore, a skyrocketed attention has been paid to create new opportunities for the use of recycle materials to develop a new construction substance with more satisfactory properties. The use of waste products in concrete is not only economical, but it helps in solid waste management as well. Among various properties of concrete, thermal conductivity is a crucial factor that plays an important role in building insulation by evaluating a material's capacity to transfer heat. This paper aims to review the potential application of waste materials in concrete as additive ingredients and investigate the effect of this waste material on thermal conductivity of concrete. The review of literature revealed that the application of most of the waste materials exhibited an obvious potential as thermal insulator. However, further investigated work is needed to highlight the advantages of utilizing waste materials in concrete containing various type of waste materials