

## Recycled Use of Solid Wastes in Building Material: A Review

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**Abstract :** Large quantities of solid wastes being generated worldwide from sources such as household, domestic, industrial, commercial and construction demolition activities, leads to environmental concerns. Utilization of these wastes in making building construction materials can reduce the magnitude of the associated problems. When these waste products are used in place of other conventional materials, natural resources and energy are preserved and expensive and/or potentially harmful waste disposal is avoided. Recycling which is regarded as the third most preferred waste disposal option, with its numerous environmental benefits, stand as a viable option to offset the environmental impact associated with the construction industry. This paper reviews the results of laboratory tests and important research findings, and the potential of using these wastes in building construction materials with focus on sustainable development. Research gaps, which includes; the need to develop standard mix design for solid waste based building materials; the need to develop energy efficient method of processing solid waste use in concrete; the need to study the actual behavior or performance of such building materials in practical application and the limited real life application of such building materials have also been identified. Therefore a research is being proposed to develop an environmentally friendly, lightweight building block from recycled waste paper, without the use of cement, and with properties suitable for use as walling unit. This proposed research intends to incorporate, laboratory experimentation and modeling to address the identified research gaps.

**Keywords :** recycling, solid wastes, construction, building materials

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