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Incorporation of Waste Materials in the Manufacture of Masonry Bricks: An Update Review

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Abstract

Conventional bricks are made off from clay with high firing temperature or from cement concrete, but these consume and emit high energy and have environment shortcoming like carbon footprint and raw materials depletion. Researchers have utilized various types of waste materials in the production of bricks to protect the environment and contribute towards sustainable development. This study presents the latest research updates on utilizing waste materials in bricks manufacturing. The study categorized into two groups based on manufacturing method: fired and unfired methods. The review of literature exhibited an obvious potential of the waste materials as partial or total replacement of conventional raw materials where the produced bricks fulfilled the standards requirements. Additional research work is required, not just in the properties and economical parts but also on educating and aware the public about the advantages of utilizing waste materials in bricks manufacturing as well as on developing codes of practices and standards.

Keywords:

Waste materials, Burnt Bricks, Unburnt Bricks, Sustainability

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