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Use of Plastic in Paver Blocks by Two Method

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Abstract: *The use of plastic waste in construction materials has gained significant attention due to its potential to reduce environmental pollution and promote sustainable practices. This study explores the incorporation of plastic waste in the production of paver blocks using two distinct methods: (1) as a partial replacement for fine aggregates and (2) as a binding material after melting. In the first method, shredded plastic waste is mixed with conventional materials such as cement, sand, and aggregates to replace a portion of fine aggregates. This approach enhances the material's strength, durability, and resistance to weathering while reducing dependency on natural resources. In the second method, plastic waste is melted and utilized as a binder, eliminating the need for traditional cement binders. This technique not only addresses the issue of plastic waste disposal but also results in a cost-effective and lightweight construction material with satisfactory mechanical properties. The comparative analysis of these methods highlights their advantages and limitations, emphasizing the potential of recycled plastic to enhance the physical and mechanical properties of paver blocks. This study aims to contribute to sustainable construction practices by promoting innovative solutions for plastic waste management...*

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