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Application of Single Use Plastic in Non-Structural Elements of Building

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Abstract: *Plastic waste is a non-Biodegradable waste which cannot decompose and this creates water, land, pollution, and air pollution. Also, while we burn the plastic waste in dumping ground, the percentage of plastic waste is increasing rapidly. it is estimated that the plastic waste will double after a decade as we use hundreds of grades of plastic in our life. We can recycle, reuse the plastic waste. The present investigation at manufacturing floor tiles using waste plastic and comparing results with normal tiles to evaluate different physical and mechanical properties, tests like water absorption test, compression test, flash and fire point test carried out on plastic tile and test results are compared with normal cement tiles like vitrified tile. As per this study it can considered to use plastic waste in manufacturing of floor tiles. The project is helpful in reducing plastic waste in a useful way. In this project we have used LDPE plastic bags only. The proper utilisation of waste plastic are suitable for manufacturing of plastic tile and it will not only bring out singnificant saving on tile material cost but simultaneously shall help in tackling the problem of such waste material. The plastic tiles were prepared and tested and the results were discussed.*

Keywords Single use plastic, Physical Properties, Compressive Strength, floor tiles

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