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Development of Red Mud Paver Blocks Prepared From Nuclear Power Plant

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Abstract : Red mud is a waste material generated by the Bayer Process widely used to produce alumina from bauxite throughout the world. The aim of the project is to say the possibility of replacing the Portland cement by red mud. Because it negatively affects the environment. To solve this problem, Portland cement was replaced up to 20% red mud by weight of cement. And evaluating its compressive strength of red mud paver tiles. This project examines the effects of red mud on the properties of hardened paver tile. The test results show that how its compressive strength becomes equivalent to normal paver tile without red mud content, it is concluded that optimum percentage of the replacement of cement by weight is found to be. By this percentage replacement we can have 15% strength is equal to the strength of normal paver tile.

Key words : Bayer process, Compressive strength, Water absorption, Red mud.

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