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# Effect of Brick Dust on Strength and Workability of Concrete

the aim of this research is to utilize the waste generated in concrete. Brick dust is lavish material which on dumping not only occupy land but also it has environmental problems which is hazardous to livings. This waste is generated in brick kilns, brick masonry construction sites and during transportation. By recycling brick dust the problem could be solved up to some extent. In this research brick dust was used in plain cement concrete to check its fresh and hardened properties. Brick dust was used to check the workability and strength of concrete, using the water cement ratio of 0.55 which was kept constant during research. Three samples were casted for each 3, 7, 14, 28 and 56 days with 0%, 5%, 10% 15% and 20% incorporation of brick dust. The test results reveals that replacing cement with brick dust shows higher workability than control sample for 5%, 10% and 15%, of which 15% was greater of all. However, strength results were quite competitive, replacing cement with 15% brick dust shows higher compressive strength. The split tensile test were also conducted, which shows high tensile strength by replacing cement with 15% brick dust. This research shows that cement can be replaced with brick dust

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