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High Volume Fly Ash Concrete for Paver Blocks

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Abstract : Use of concrete paver blocks is becoming increasingly popular. They are used for paving of approaches, paths and parking areas including their application in pre-engineered buildings. This paper discusses the results of an experimental study conducted on Fly Ash Concrete with the aim to report its suitability for concrete paver blocks. In this study, the effect of varying proportions of fly ash, 20 % to 40 %, on compressive strength and flexural strength of concrete has been evaluated. The mix designs studied are M-30, M-35, M-40 and M-50. It is observed that all the fly ash based mixes are able to achieve the required compressive and flexural strengths. In comparison to control mixes, the compressive and flexural strengths of the fly ash based mixes are found to be slightly less at 7 days and 28 days and a little more at 90 days.

Keywords : fly ash concrete, paver blocks, compressive, flexural strength
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