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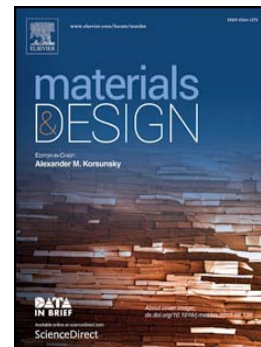
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**Characterization of an environment friendly lightweight concrete containing
ethyl vinyl acetate waste**

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Abstract

In this paper, the environment friendly lightweight concretes (LWCs) produced from ethyl vinyl acetate (EVA) waste was studied. EVA waste from footwear industry was used as a lightweight aggregate in place of normal aggregate at the contents of 3, 5, 7 and 10% by weight of LWC. The water-cement ratio of 0.45 and EVA waste-sand ratio of 0.50 were used for all mixtures. Test results showed that the unit weight of LWCs containing EVA waste reduced with increasing EVA waste content. The thermal conductivity, chemical resistance and water absorption of LWCs substantially improved and were comparable to those of LWCs containing other polymers. Based on the results, the use of EVA waste as a lightweight aggregate showed a good potential for use in LWCs. This is another good

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