

Manufacturing Process of Rubber Cement Composite Paver Block

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Abstract : The objective of this research paper is to study waste tire crumb rubber granules as a partial concrete replacement by the different percentages of facing layer thickness and without facing layer in the production of rubber cement composite paver block. The physical properties of RCCRP compressive strength, flexural strength, abrasion strength density, and water absorption testing by the IS 15658:2006 method. All these physical properties depend upon the ratio of crumb rubber uses. The result showed that the with facing layer at 15 mm, 25 mm, totally rubberized and without facing layer had little effect on compressive strength, flexural strength and abrasion resistance properties. Water absorption is also important for the service life of the product. The crumb rubber paver block also performed quite well in both compressive strength and abrasion resistance. The rubber cement composite rubber paver block is suitable for nonstructural purposes, such as being lightweight and easy installation for the walkway, sidewalks, and playing area applications.

Keywords : rubber cement, crumb rubber, composite, layer

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