

Green curb - an alternative method to produce road curb using old tire

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ABSTRACT:

Green curb was introduced to be an alternative material for a traditional road curb. This green curb is having a different concrete mix but the dimension and other requirement with respect to JKR requirement is still the same. The coarse aggregate was replaced with crumb rubber (CR) that was extracted from vehicle tires after been shredded to the specified size from 15-20 mm as coarse aggregate. Testing such as slump test, compressive strength test and rebound hammer test was conducted to obtain the results. From the results, the slump test shows a high workability and decrease in compressive strength as the percentage of CR increase. The total weight of road curb is reduced by almost 8% compared to the control specimen. This 20% CR mixtures shows good result among other mixtures. The percentage of CR used are 20%, this particular percentage has good workability, satisfy the concrete grade 25 as required by JKR guideline (JKR/SPJ/1988).