

ABSTRAK

Paving block banyak dijadikan aksesoris untuk permukaan jalan, taman dan teras serta tempat yang dapat diaplikasikan untuk pemakaian paving block. Adanya air tergenang permukaan perkerasan menyebabkan kerusakan karena air tersebut akan meresap ke pori-pori perkerasan paving sehingga paving block dapat mengalami retak atau pecah. Pada penelitian menggunakan limbah kertas HVS sebagai campuran adapun variasi campuran adalah 0%, 7,5%, 10% dan 12,5% dan total sampel adalah 36 buah. Tujuan penelitian ini adalah untuk analisis pengaruh bahan tambah kertas terhadap kuat tekan dan penyerapan air. Penelitian ini menggunakan metode eksperimen. Adapun hasilnya yaitu penambahan limbah kertas dapat meningkatkan kuat tekan meskipun pada campuran limbah kertas 10 % dan 12,5% sudah mengalami penurunan kuat tekan namun *paving block* tersebut memiliki mutu diatas *paving block* normal. Penambahan limbah kertas yang memiliki nilai kuat tekan optimum pada campuran kertas hvs sebesar 7,5 % yaitu $160,988 \text{ kg/cm}^2$. Sedangkan daya serap yang paling optimum didapatkan pada campuran limbah kertas 12,5 % yaitu sebesar 3,79 %. Kuat tekan dan daya serap paving block berbanding terbalik semakin tinggi kuat tekan maka semakin rendah daya serap paving block.

Kata Kunci :; Kuat tekan *paving Block*; Daya serap *paving Block*; Persentase campuran limbah kertas HVS.

ABSTRACT

Paving blocks are widely used as accessories for road surfaces, parks and terraces as well as places that can be applied for the use of paving blocks. The presence of stagnant water on the pavement surface causes damage because the water will seep into the pores of the pavement so that the paving block can crack or break. In the study using HVS paper waste as a mixture, the mixture variations were 0%, 7.5%, 10% and 12.5% and the total samples were 36 pieces. The purpose of this study is to analyze the effect of paper additives on compressive strength and water absorption. This research uses an experimental method. The result is that the addition of paper waste can increase compressive strength even though the mixture of 10% and 12.5% paper waste has decreased compressive strength, but the paving block has quality above normal paving blocks. The addition of paper waste that has an optimum compressive strength value in the hvs paper mixture of 7.5%, which is 160.988 kg / cm². While the most optimal absorption is obtained in a mixture of 12.5% paper waste, which is 3.79%. The compressive strength and absorbency of paving blocks are inversely proportional, the higher the compressive strength, the lower the absorbency of paving blocks.

Keywords: Compressive strength of paving Block ; Absorption of paving Block;
Percentage of HVS paper waste mixture