

## ABSTRAK

*Paving block* merupakan salah satu sarana transportasi yang di buat dengan komposisi campuran semen, pasir dan air dengan atau tanpa bahan tambah pembuatan dengan metode mencampur semua bahan kemudian dicetak dalam cetakan *paving block*.

Penelitian ini bertujuan untuk mengetahui nilai kuat tekan dan daya serap air berdasarkan bahan tambah yaitu dengan campuran pecahan keramik yang di serbukkan dan abu daun bambu, pembuatan benda uji menggunakan cetakan berupa balok dengan ukuran 20 cm x 10 cm x 6 cm . Perbandingan 1PC : 5PS, persentase kadar campuran yang digunakan adalah 0%, 5%, 10%, 15% dari berat pasir, waktu pengujian pada saat *paving block* berumur 14 hari dan 28 hari.

Hasil dari pengujian menunjukkan bahwa pembuatan *paving block* menggunakan bahan campuran pecahan keramik mendapatkan hasil kuat tekan tertinggi pada presentase 15% umur 28 hari, sedangkan pada uji serap air nilai tertinggi pada persentase 15%. Artinya campuran pecahan keramik sebagai bahan tambah pembuatan paving block memenuhi syarat SNI 03-0691-1996. Sedangkan campuran abu daun bambu pada uji kuat tekan mengalami penurunan, akan tetapi hasil pada pengujian serap air campuran abu daun bambu mengalami peningkatan paling baik pada persentase 15% umur 14 hari, namun hasil ini belum memenuhi standar SNI *paving block*. Hasil terbaik dari penelitian ini adalah presentase 0% atau tanpa campuran memiliki nilai kuat tekan dan serap air tinggi.

**Kata kunci :** *Paving block, kuat tekan, pecahan keramik porselen, abu daun bambu, daya serap air.*

## ABSTRACT

Paving block is a means of transportation material that is made with a composition of a mixture of cement, sand, and water with or without added ingredients made by mixing all the ingredients then printed in a printed paving block.

This study aims to determine the compressive strength and water absorption based on added ingredients, namely by splitting pieces of ceramic in powder and bamboo leaf ash, making test specimens using blocks in the form of blocks measuring 20 cm x 10 cm x 6 cm. Comparison of 1PC : 5PS, the percentage of mixture content used is 0%, 5%, 10%, 15% of the weight of sand, the time of testing when paving blocks are 14 days and 28 days old.

The results of the test showed that the manufacture of paving blocks using mixture of ceramic fragments obtained the highest compressive strength results at a percentage of 15% at 28 days, while in the water absorption test the highest value was at a percentage of 15%. It means that the mixture of ceramic fragments as added material for making paving blocks meets SNI 03-0691-1996 requirements. While the bamboo leaf ash mixture in the compressive strength the decreased, but the results in the water absorption test of the bamboo leaf ash mixture experienced the best increase in the percentage of 15% at 14 days, but these result did not meet SNI paving block standards. The best results from this study are the percentage of 0% or without a mixture has the highest compressive strength and water absorption values.

**Key words :** Paving block, compressive strength, porcelain ceramic fragments, bamboo leaf ash, water absorption.