

ABSTRAK

Tugas akhir ini berjudul desain paving block plastik yang ramah lingkungan. Penelitian ini dilatar belakangi jumlah sampah plastik yang semakin mengkhawatirkan di Indonesia terkhusus di Kecamatan Cariu. Tujuan penelitian ini untuk mengurangi sampah tutup botol plastik, dengan cara mendaur ulang menjadi produk paving block yang ramah lingkungan dan bernilai ekonomis. Pengujian produk dilakukan menggunakan dua cara yaitu uji serap air dan uji kuat tekan yang dilaksanakan di UPT Laboratorium Bahan Konstruksi Kelas A. Hasil penelitian menunjukkan tidak ada penyerapan air diproduk paving block berbahan dasar tutup botol dan abu sekam padi. Berdasarkan uji kuat tekan menunjukkan produk paving block berbahan dasar 100% tutup botol memiliki kuat tekan 300 kilogram, sedangkan produk paving block yang berbahan dasar 92% tutup botol dan 8% abu sekam padi memiliki kuat tekan 90 kilogram. Kata Kunci : Paving Block, Plastik, Abu Sekam Padi.

ABSTRACT This final project is entitled the design of environmentally friendly plastic paving blocks. This research is motivated by the increasingly worrying amount of plastic waste in Indonesia, especially in Cariu District. The purpose of this research is to reduce plastic bottle cap waste, by recycling it into environmentally friendly and economically valuable paving block products. Product testing was carried out using two methods, namely the water absorption test and the compressive strength test carried out at the UPT Class A Construction Materials Laboratory. The results showed no water absorption in paving block products made from bottle caps and rice husk ash. Based on the compressive strength test, the paving block product made from 100% bottle cap has a compressive strength of 300 kilograms, while the paving block product made from 92% bottle cap and 8% rice husk ash has a compressive strength of 90 kilograms.

Keywords: Paving Block, Plastic, Rice Husk Ash.