ABSTRACT

THE INFLUENCE OF CURRING TIME FOR THE STRENGTH OF PAVING BLOCK AFTER COMBUSTION WITH SOIL AND LIME MATERIALS FOR THE ROAD OF ENVIRONMENT

by

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Infrastructure rapid development sometimes had negative impact, such as the use of impermeable pavement layers which result the infiltration be hampered. By utilizing the paving block, it can resolve of infrastuture development problem. Known, paving block is composition of building materials that made from the mixture of portland cement or hydraulic adhesives, water, and agrregates with or without the other ingridient as defined in SNI 03-0691-19996. To find the other alternatives then will do the assesment with the limestone and soil.

Soil samples were tested from desa Karang Anyar, South Lampung. The composition of mixture was used 6 %, 8 % and 10 %, with curing time during 7,14 and 28 day, and the treatment with or without combustion and then paving block were tested with compressive strength and water absorption.

The research results obtained by the characteristics of the soil is a clay samples. The average value of compressive strength was linearly proportional to the amount of lime composition. The compressive strength during 28 days of curring time andwithout combustion was from32,96kg/cm² to 10,87kg/cm², then the compressive strength with combustion was from16,99kg/cm² to56,91kg/cm². Water absorption test value was inversely proportional to the amount of lime composition. The water absorption was from10,07% to 15,07%. The compressive strength resulting overall still not include the specifications of paving block in SK - SNI 03-1996, also for the compressive strength was 85 kg/cm². The value of water absorption test were not include the specifications of paving block SK SNI - 03 - 0691-1996 which ranges from 3 % - 10 %.

Keywords : Paving blocks, clay, compressive strength, burning soil.