

ABSTRACT

THE EFFECT OF COW DUNG AND RICE HUSK ASH AS MIXTURE MATERIAL TO THE MECHANICAL PROPERTIES OF BRICK

Cow dung if it cannot be processed properly can cause environmental problems. In addition to the unpleasant odor, cow dung can also disturb the balance of ecosystems such as soil and water pollution. Making cow dung as one of the ingredients in making brick wall pairs is thought to be able to reduce the amount of cow dung and as one form of waste treatment. Bricks are relatively inexpensive building materials and are still widely used and can be made traditionally so that they are affordable to the community.

Making bricks follows the traditional way. The research was started by determining the composition of the mixture. This determination produced 3 samples with different compositions. Furthermore, the process of molding, drying, combustion to form bricks without physical defects. The rocks are measured to get the value of apparent density, density, and water absorption. Compressive testing on bricks to determine the value of compressive strength on bricks. The results of measurement and testing data are then analyzed.

From the results of the study found that the cow dung material on bricks affects the mass, water absorption and compressive strength of the bricks. The difference in the percentage of cow dung in the mixture affects the difference in the results of these measurements and tests.

Keywords: Bricks, Cow Dung, Rice Husk Ash, Compressive Strength