

SUMMARY

Hilman Aulia Rahman, Jurusan Teknik Sipil, Fakultas Teknik Universitas Brawijaya, Agustus 2016, *Compressive Strenght Test Of Clay Brick Using Silica Sand Mortar*, Dosen Pembimbing: Wisnumurti and Achfas Zacoeb.

Clay brick building is one element which is widely used in Indonesia, therefore it is important to find out the strength of clay brick. There are many test methods of compressive strength clay bricks that can be used, leading to differences in the results of each test methods.

In this research, the process of testing clay brick of each test method are SNI and ASTM model test piece for SNI total 4 models (Cube, 6 mm SNI, 1 cm SNI, 2 cm SNI), while for the method ASTM models tested only one according to the provisions listed in ASTM C67. For testing process that refers to the SNI surface of the specimen is loaded until it reaches the maximum load with a speed of 2 Kg / cm² / sec. As for the method ASTM test specimen is loaded until it reaches the maximum load with a speed of 907.125 Kg / min. The results of compressive strength SNI and ASTM methods acquiclay from the highest compressive load divided by field loaded. Types of clay bricks that used in this research are produced by Gondanglegi and Turen.

Results of the test showed a significant difference between the model of the test object that refers ASTM and SNI. Average for the test object which refers ASTM model has a compressive strength is 62.002 Kg / cm² for Gondanglegi and 60.596 Kg / cm² for Turen. Meanwhile the highest average which refers SNI has compressive strength refer to a method models of SNI of 2 cm is 21.604 Kg / cm² for Gondanglegi and SNI model of 1 cm is 24.014 Kg / cm² for Turen.

Keywords: clay brick, compressive strength, SNI, ASTM