SUMMARY

PRAMUDIYANTO. A, Department of Civil Engineering, Faculty of Engineering Universitas Brawijaya, September 2017, Cost And Time Optimization In The Implementation Of Red Brick Wall Partner Work With Time Study Method, Supervisor: M. Hamzah Hasyim and Eko Andi Suryo

Activity optimization or productivity improvement is an effort to improve the value of productivity that has been planned, which in this activity required field data. High workforce and work volume will certainly require a high cost so that a good level of productivity will minimize the project cost and optimal work time.

The object of research is 45 type houses with an average brick wall area of 150 m2. This study uses the method of time study by comparing the results of work in general with work that has been adjusted with the influence of relaxation. Stages of observation by way of time study is every work in breakdown, then do the recording time, in this case need to convert labor wage of SNI by in field, then determine rating value, basic time and standard time.

Working groups determined by 4 groups with each combination are group 1 with 1 worker 1 worker, group 2 with 2 workers 1 workers, and group 3 with 2 workers 2 workers and group 4 with 3 workers 2 workers. Observations of the study were conducted with a total of 6 days of observation. The research analysis is conducted to the productivity and efficiency of each working group so that the most optimal working group is obtained.

the most optimal working group in terms of cost, productivity, and efficient is a working group with a combination of 2 builders and 1 worker. This working group has a productivity of 13.8 m2 per day. In terms of cost is also cheaper than the other work groups, for each work 1 m2 red brick couple this group cost Rp. 2.200.000. In addition to working group 2, each worker has a high job opportunity so that can be said to be efficient and not many unemployed.

Keywords: Couple brick, Optimization, productivity, time study