ABSTRACT

***Khairiyah Juita**, Correlation levels of quicksand Against Concrete Compressive Strength. Essay. Jakarta, Pendidikan Teknik Bangunan, Faculty of Engineering, State University of Jakarta, 2016. Supervisor : Dr. Gina Bachtiar, MT. and Dra. Rosmawita Saleh, M.Pd.*

The purpose of this study was to determine the correlation levels quicksand of compressive strength of concrete.

This study adds to the mud content percentage variation that is, 1.4%, 2%, 4.3% and 6.5% whereas levels of 3% as a base mud used in readymix and precast industry. Strong press plan K-300 or 29.42 MPa with FAS plans 0.50 and Slump plans 100 ± 20mm. This study has a sample of 32 specimen (test specimen press = 3 for each individual variation at the age of 7 days, 14 days and 28 days) and use the test specimen cylinder diameter of 15 cm and 30 cm high.

The results showed that the average compressive strength of concrete compressive strength reaching plan of 300 kg / cm² or 29.42 MPa, was at the age of concrete 28 days. At the age of 14 days only concrete with mud content variation of 6.5% which did not reach the compressive strength of the plan. The relationship between the levels of silt and sand of compressive strength of concrete in this study, are at very low levels of correlation for all the concrete that is the age of 7 days, 14 days and 28 days.

***Keywords**: Levels of Quicksand, Concrete, Concrete Compressive Strength*