

# UNIVERSITAS INTERNASIONAL BATAM

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*Undergraduate thesis  
Civil Engineering Undergraduate Program  
2018/2019*

## **ANALYSIS COMPARISON COMPRESSIVE STRENGTH BETWEEN NORMAL CONCRETE WITH FLYASH MIX CONCRETE**

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### **ABSTRACT**

Nowadays development of buildings and infrastructure are gaining rapidly. Plus addition from government development plan has increased much for this few year. Construction is definitely require concrete, so concrete demand increases. As it, surely need concrete innovation. Flyash which is a waste from coal combustion makes can be added as admixture in concrete.

At this chance, author conducted a study combining flyash into concrete grade K-250 with flyash combination percentage by 0% for control, 10%, 15%, 20%, 25% from cement ratio. Beside to know the compression strength of this mix concrete, also can know the optimum ratio for combining flyash into concrete. Compression strength test use 4 samples for each percentage and do the test by 7, 14, 21, and 28 days since concrete cast.

From the study using flyash into concrete with 10%, 15%, 20%, 25% of cement ratio on 28 days, the test give result 211,11 kg/cm<sup>2</sup>, 207,45 kg/cm<sup>2</sup>, 222,15 kg/cm<sup>2</sup>, 266,87 kg/cm<sup>2</sup> with normal concrete control at 195,42 kg/cm<sup>2</sup>.

**Kata kunci** : compressive strength, flyash, concrete