

THE EFFECT OF COARSE AGGREGATE GRADATION ON THE COMPRESSIVE STRENGTH OF NON SANDS CONCRETE

Bayu Arifin Setia Atma Negara¹, H.Asep Kurnia Hidayat², Yusep Ramdhani³

¹²³Civil Engineering, Engineering Faculty, Siliwangi University.

email : Bayualsetia@gmail.com

ABSTRAK

Concrete is a building and construction material whose properties can be determined in advance by careful planning and supervision of the selected material. The ingredients of choice are tough bonds created by chemical reaction between cement and water, and hydrate with coarse and fine aggregates. This study is intended to determine the effect of the percentage use of coarse aggregates gradation on the compressive strength of non-sands concrete, so that maximum compressive strength result are obtained. The result of this study indicate that the smaller the coarse aggregate used, the compressive strength of the concrete will increase. The compressive strength of concrete with 30mm coarse aggregate size 0,92 MPa, a 25mm coarse aggregate size is 2,96 MPa, and a 10mm coarse aggregate size is 3,85 MPa. It can be seen from the result of the research that the compressive strength of linier concrete is smaller if the size is large..