

Strength of Fine Concrete Used in Textile Reinforced Concrete by Changing Water-Binder Ratio

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Abstract : Recently, the abnormal climate phenomenon has enlarged due to the global warming. As a result, temperature variation is increasing and the term is being prolonged, frequency of high and low temperature is increasing by heat wave and severe cold. Especially for reinforced concrete structure, the corrosion of reinforcement has occurred by concrete crack due to temperature change and the durability of the structure that has decreased by concrete crack. Accordingly, the textile reinforced concrete (TRC) which does not corrode due to using textile is getting the interest and the investigation of TRC is proceeding. The study of TRC structure behavior has proceeded, but the characteristic study of the concrete used in TRC is insufficient. Therefore, characteristic of the concrete by changing mixing ratio is studied in this paper. As a result, mixing ratio with different water-binder ratio has influenced to the strength of concrete. Also, as the water-binder ratio has decreased, strength of concrete has increased.

Keywords : concrete, mixing ratio, textile, TRC

Conference Title : ICCESE 2016 : International Conference on Civil, Environmental and Structural Engineering

Conference Location : Berlin, Germany

Conference Dates : May 19-20, 2016