

The Effect of Curing Types on Strength of Self Compacting Concrete

The main purpose of this study is to investigate the effect of using three types of curing (water, painting, and room air) and three different of water and cement on the strength of self-compacting concrete. Nine mixes containing different cement content, water cement ratio, and coarse aggregates (gravel, basalt, and dolomite(limestone)) were designed. The compression, splitting tensile, and flexural strength tests were carried out on hardened self-compacting concretes after 28 days of curing by water, Painting, and room air. In the nine mixes, three cement content (350, 400, and 450 kg/m³), three types of aggregates, and three water cement ratio (0.46, 0.42, and 0.38) were used. Results showed that. Water curing is the best type of curing to use in self-compacting concrete. Painting curing by AntisolE liquid do not have effect on the strength of self-compacting concrete. The difference between Painting curing by Antisol_E liquid and lit concrete on room air without any curing is very small.