

Influence of Increasing Water: Cement Ratio on Concrete Containing Low Content of Polymer

Abdulkader Ismail Al-Hadithi

This research includes the variation effect of (W/C) water: cement ratio on the properties as compressive strength, flexural strength, density and workability of concrete contains low Polymer SBR ratio.

1:2:4 (cement: sand: gravel) by weight mixes were used. The polymer was added as percentages of cement weight and it was 2%. Reference mix was made. Water cement ratio (w/c) were used are 0.2 , 0.3 , 0.4 , 0.5 and 0.6 respectively and 0.35 (w/c) was used for reference mix . The density of concrete varied between 2030 kg/m³ and 2360 kg/m³.