

Investigating The Effects of Utilizing Different Curing Agents on High-Performance Concrete

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Abstract : The Study shed the light on the effects of employing varied curing agents (No.1-No.6): bleeding water, and sprinkling water, aqueous basic silica compound, modified acrylic resin, the emulsion of solid wax and nonionic surfactant, and water-based paraffin wax, on the properties of high-performance concrete (HPC) in comparison with the cured specimens according to the standard curing at $20 \pm 3^{\circ}\text{C}$ (JIS A 0203:2019). The specimens cured in accordance with standard curing exhibit a better compressive strength and higher freeze-thaw resistance compared to most non-standard-cured samples.

Keywords : curing agents, high-performance concrete, compressive strength, cumulative scaling, freeze-thaw resistance

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