

PHYSICAL AND MECHANICAL PROPERTIES OF CONCRETE CURED AT LOW TEMPERATURES

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***Summary:** The paper reports the results of experimental tests of physical and mechanical properties of concrete which hardened in cold weather conditions without curing, without protection against precipitation and also without protection from low temperatures. The samples were exposed to the climatic conditions at the location of Belgrade, from the moment of casting at low temperatures (January), and for the following 90 days. The influence of two chemical admixtures (a superplasticizer, and a setting accelerator) was also investigated in concrete, cured under these conditions. In the presented experimental research, particular attention was paid to the predominant properties of concrete: compressive strength and water permeability.*

***Key words:** concrete, low temperatures, chemical admixtures, compressive strength, water permeability*