

IMPACT OF DIFFERENT THERMAL ACTIVATED CALCINED CLAYS TO CONCRETE PROPERTIES: A REVIEW

Jelena Bijeljić¹, MSc; Nenad Ristić², PhD; Natalija Tošić³, MSc; Milan Protić⁴, MSc

¹Collage of applied technical science, Niš, SERBIA, jelena.bijeljic@vtsnis.edu.rs

²Faculty of civil engineering and arhitecture, Niš, SERBIA, nenad.ristic@gaf.ni.ac.rs

³Collage of applied technical science, Niš, SERBIA, natalija.tosic@vtsnis.edu.rs

⁴Collage of applied technical science, Niš, SERBIA, milan.protic@vtsnis.edu.rs

Abstract: Concrete is one of the most commonly used material in construction industry. It's already clearly that worldwide production of cement impact to environmental pollution and involves the emission of CO₂. Various types of pozzolanic materials are purposed to improve that properties of concrete made of cement supplementary materials can be reached or made even higher. This paper is a review of the researchs of fresh and hardened properties of concrete made of different thermal activated calcined clays in the form of metakaolin (MK). The main goals of researchers are fresh and hardened properties of self-compacted concrete (SCC), consistency, enhanced strengths, deformational and durability properties of concrete.

Keywords: calcined clay 1, metakaolin 2, thermal activation 3, mechanochemical activatvation 4, pozzolanic materials 5