Effect of Freeze-Thaw (F-T) Processes on the Engineering and Textural Properties of Nevşehir Stone (Nevşehir / Turkey)

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Abstract : Natural stones used as building materials are exposed to various direct or indirect atmospheric effects depending on the climatic and seasonal conditions. Stones deteriorate partially or fully as a result of these effects. Freezing and thawing (F-T) process is the most important interaction. Nevşehir is located in the Central Anatolia region in Turkey and it has a typical continental climate with cold, snowy winters and hot, dry summers. Effects of freeze-thaw processes were widely observed on the building stones used in the region. Pyroclastic rocks, which are named as Nevşehir stone in the region, have been used in most of these buildings. The purpose of this study is to investigate the variations in engineering and textural properties of Nevşehir stone during different F-T cycles.

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Keywords : Nevşehir stone, freeze-thaw, engineering properties, textural properties

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