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Assesment of Natural Stones and their Deterioration Types used in Blue Mosque (Istanbul, Turkey)

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Abstract

Known as the Blue Mosque, Sultan Ahmed Mosque is currently one of the most impressive monuments in the world. Different types of natural stones having different lithological characteristics were used in its construction. However, functionalities of these natural stones have been deteriorated over time based on their characteristics such as chemical properties, mineralogic, petrographic and human impacts. The aim of this study is to investigate different natural stones and their deterioration types used in Blue Mosque. According to the results obtained, generally different types of granites, marbles, limestones, pudding stones, porphyry, serpantines were used in Blue Mosque construction. Beside this, detachment, material losses, biological colonization, discoloration and deposits, have been determined as a deterioration types on these stones.

Keywords: Natural Stones, Deterioration, Blue Mosque

