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COMPARATIVE SURFACE DAMAGE DETERMINATION AT A JEWISH GRAVE USING TWO DIFFERENT MOBILE ULTRASONIC VELOCITY DEVICES

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ABSTRACT

The non-destructive methods are necessary in the investigation of the physical and mechanical properties of the materials in monuments. In this framework the ultrasonic velocities were used in situ for the elaboration and evaluation of the weathering on the surfaces of monuments. Additionally, the P-wave velocities were used for the estimation of the depth of weathered zone, as well as the depth of cracks at the surface of the monument. This estimation was performed on a Jewish tomb placed in the AUTH university campus between the building of Law and Economic Sciences and the Administration building, of the Aristotle University of Thessaloniki.

KEYWORDS: Depth of Cracks, Historical Monument, Non-Destructive Methods, Surface Weathering Degree, Ultrasonic Velocities