

Assessment of the physical and mechanical characteristics of masonry - A historic traditional building case study

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Abstract

Historical buildings demand a fully characterization of the materials used for their construction, before any rehabilitation action. The assessment of the mechanical characteristics of the masonry materials is based on visual observation, sampling of the construction materials and laboratory testing of the samples. The work described is concerned with the rehabilitation of a traditional masonry house in Athens which over the years suffered damage due to various causes. The paper describes the early preliminary stages of the rehabilitation work concerned with the description of the structural system, the mapping of damage and the documentation of the materials used.

Keywords:

Building materials; cracking; damage; deterioration phenomena; documentation; structural assessment; structural system; traditional masonry building.

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