

QUALE DURABILITÀ È SENZA FATICA? PROPOSTA DI APPROCCIO INNOVATIVO PER LA RIQUALIFICAZIONE E LA CONSERVAZIONE DELLE PAVIMENTAZIONI URBANE DI PIETRA

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Abstract.

In the context of architectural paving, the UNI 11714-1 standard introduces a technical approach to the choice of the stratigraphic package, according to both the end use and the type of paving to be laid. The final requirements are durability, sustainability, maintainability/cleanability and safety of the work.

Certainly, the first form of saving in terms of sustainability is to ensure a long 'life' for the paving.

The key is therefore durability. This means identifying and taking into account the key aspects (stresses and performance characteristics of the stratigraphic package) at the design stage.

According to current and/or mandatory regulations, the characteristics of each element of the stratigraphic package are determined by means of rupture tests, which investigate the limit state of the individual layer, but unfortunately do not provide any information on fatigue resistance or on the behaviour of the package as a system of interacting layers undergoing continuous stresses during life-service.

In the absence of test methods dedicated to the study of the two aspects of fatigue, the Ciri Edilizia e Costruzioni - Centro Interdipartimentale di Ricerca Industriale dell'Università di Bologna has developed software for carrying out numerical analyses aimed at defining the performance level of different paving packages.

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