

NUOVE FRONTIERE NELL'UTILIZZO DELLE TECNOLOGIE INNOVATIVE PER LA CONSERVAZIONE DEL COSTRUITO STORICO. TEGOLE E COPPI FOTOVOLTAICI

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Abstract

The essay emphasizes the use of photovoltaic tiles, as an innovative technology to support the conservation of historic buildings, to overcome the visual impact represented by photovoltaic panels, identifying those meeting points between protection and enhancement that allow their use. Starting from Cesare Brandi's assumptions on the defense of the historical built heritage, to arrive at the 1972 Restoration Charter, the discussion expands to the evolution of innovative technologies, with particular regard to photovoltaic tiles, a recent example of which was in the restoration of the House of the Vettii in Pompei. In the current socio-economic context, the operational problems regarding the need to equip the extensive Italian building stock with appropriate tools aimed at saving energy and virtuous management of resources, such as photovoltaic panels, take on particular importance. However, these useful devices suffer from integration difficulties in areas subject to landscape, monumental or historical-urban planning constraints. For this reason, research focuses on less aggressive forms of intervention, using photovoltaic tiles. The interventions to be proposed in the presence of the landscape constraint are dealt with in the D.P.R. 13 February 2017, no. 31, which facilitates the installation of these technologies in areas of landscape interest, framing it, through particular conditions, in cases of exclusion from landscape authorization. Currently the cost-benefit ratio allows large-scale investments, while for smaller interventions the expense is still quite significant. This entails the need to implement the field of research, to identify solutions that can involve economies of scale.

Keywords: *Historic centres, Photovoltaic tiles, Landscape protection.*