

## **Superfici ad intonaco idrorepellenti: verifiche, recupero e aggiornamento delle tecniche tradizionali**

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### **Abstract**

In the plasters of the tradition prior to the nineteenth century, especially from the Veneto area, you can recognize forms of surface protection based on the use of lime, in the form of cream or milk, or organic substances, such as oils, soaps and waxes. As can be deduced from the analyzes carried out on samples of historical plasters, and in relation to the information present in the historical literature, it can be said that these protections from external invasion water have always been considered an essential element aimed at guaranteeing a better duration of the entire coating, which is mainly linked to the reduction of surface porosity. The application technique of the protective products, also recognizable by the deterioration phenomena and by the microstratigraphic sections of the samples, was based on the application of the last finishing layer in the fresh state such that to exploit the cohesion with the liquid part of the lime present on the surface when the plaster starts carbonating.

The tests and experiments that are proposed constitute a phase of a research path that wants to highlight the characteristics of traditional organic products, which are compatible with the historical surfaces to which they offer the best long-lasting effects. In fact, compared to traditional lime-based plasters, forms of protection can guarantee long maintenance times programmed with methods that exploit the properties of this binder. The application of protective products must take into account parameters and performance requirements related not only to water repellency, vapor permeability, capillary absorption, penetration but also to possible consolidating effects, color changes and changes in opacity or brilliance of the surface.

**Keywords:** plaster, water repellency, capillary absorption, organic protective products, traditional techniques, soaps