

CUSTOMERS PERCEPTION OF THE CHARACTERISTICS OF MORTARS ON THE MARKET

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Abstract:

Mortars are an essential part of a built structure and play a protective role against buildings degradation, being well homogenized mixtures of binder, water and fine aggregate. Binders are mineral powders with different chemical compositions, which together with water form plastic pastes that harden over time due to physical or chemical processes. Lime is an important component of the mortar used since ancient times, presenting many advantages: very good workability being a natural plasticizer, high water retention capacity, gives the mortar its resistance to stretching and elasticity, ensures the breathing of the walls and is economical. Due to their nature and function, mortars are sacrificial materials with a much shorter service life than the stone elements with which they mixed, and for these reasons, historical mortars degrade and often need to be replaced. Rehabilitation and preservation mortars for old buildings have different characteristics from those developed for contemporary works. The choice of the type of mortar used for historical buildings restoration depends on the historical mortar composition and the factors that led to its degradation. Is considered that a compatible restoration mortar is that type of mortar that acts similarly to old mortars, with different types of action (such as static or hydrothermal) and that does not create or aggravate new types of damage. Knowing the characteristics of historical and contemporary mortars is essential in choosing the type of restoration mortar. This paper is a study on the characteristics and components of contemporary mortars compatible with historical mortars used in the masonry of heritage buildings. In this respect, the characteristics and composition of the mortars existing on the market, as well as the consumer's perception of their properties, were investigate.

Keywords: mortar characteristics, compatible restoration mortar, preservation, masonry

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