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Characterization Of Adobes In The Central Plateau Of Angola

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In Angola, the earth construction constitutes part of the built and cultural heritage. Numerous buildings made of raw earth, built with ancient techniques and methods, are distributed throughout the country. There are a considerable number of structures in wattle and daub, mud and more recently on CEB (Compressed Earth Block). But, adobe constitutes itself as the most widely used technique based on raw earth.

Given the current development of the country, and the possibility of integrating systems and alternative construction materials that respects the environment, adobe construction is one of the most suitable options. Associating the scientific work to the ancestral knowledge, it can be improved and optimized these solutions, responding to the current social, economic and environmental requirements.

This paper presents the results of a survey on the characterization of construction with raw earth in Central Plateau of Angola, involving the identification of collecting sites of the raw material, building methods, and the determination of the properties of representative materials used in the adobe buildings.

The methodology followed in this research was based on the compilation of the information available in the literature, on interviews to the local populations and on laboratory tests to characterize the physical properties (texture, consistency, density, etc.).

The results of the research will identify and characterize the materials and methods used in the constructions with raw earth in Central Plateau of Angola, contributing to the development of knowledge of these sustainable solutions with a strong presence in this region.

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