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Study and Comparison of Solid Bricks Used by Merinids and those For Restoration Within the Chellah Historical Site

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Solid brick is a very old construction material used in the construction of monuments and buildings, the manufacture of solid brick is essentially based on the use of terracotta, this used earth conditions the specific characteristics of the brick and its mechanics behavior and its lifespan in the monument.

In this work and recognizing the importance of characterizing the traditional building materials we plan to study some samples of solid bricks made and used during the Marinid dynasty recovered from the historic site of Chellah which is located in the named city of Rabat as a shared heritage in 2012 and also the solid bricks used in restoration to deduce the similarities and differences.

We will study them under an optical electron microscope and we will expose them to the X-ray diffraction and fluorescence tests, this will allow us to identify the pathologies and degradations of the two types of bricks and the origins of the materials used and their primary compositions.