

Conservation of Earthen Architecture 10. A letter from Mexico. In *Newsletter of the Society of Science for Conservation of Cultural Properties in Hokkaido-Tohoku, Japan* 55 (March 2024)

Abstract:

This article reports on our research on materials used for earthen architecture in three northern Mexican archaeological sites in the Casas Grandes region, which was briefly introduced in Conservation of Earthen Architecture No. 9 in this Newsletter no. 47 (December 2020)

This study compares pre-Columbian earthen construction techniques in three archaeological sites of the Casas Grandes region: Paquimé, Arroyo Seco, and Cueva de la Olla. These sites are found in different geological and geomorphological setting, although they present similar architectural typology. Their construction techniques were examined by archaeometric characterization, such as particle-size analysis, thin-section petrography, X-ray diffraction, and X-ray fluorescence analysis. These analyses were performed on samples from walls of archaeological constructions and samples from local material banks previously identified as potential original material source banks. The results demonstrate some common aspects on construction materials and techniques between these sites, such as use of sandy loam, nonexistence of fiber stabilizer, and hand-built coursed adobe. On the other hand, diversity of each site was also found: utilization of soil naturally mixed with calcium carbonate to construct multistoried earthen architecture of Paquimé.

The details of this report can be found in the paper published on the 12th of this month. The link below will allow you to view and download it without subscription or purchase until May 1<sup>st</sup>.

Link: <https://authors.elsevier.com/a/1ilAa,rVDBjZAM>

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