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# Standardized technology and form but no standardized sizes: Prehispanic adobe brick manufacture in the Zapotitan Valley, Southeastern Mesoamerica

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## Abstract

While Southeastern Mesoamerica has a tradition of earthen construction that dates to Pre-Columbian times, studies on the subject are scarce. This paper analyzes both how adobe bricks were manufactured during the Classic period (600-900 CE) at regional ceremonial center San Andres, in the Zapotitan Valley, El Salvador, and the social implications of their production. Comparing archaeological and experimental adobes, we argue that adobe bricks in San Andres may have been manufactured in wooden molds because they show: 1) square corners, 2) vertical striation on the sides, 3) slightly elevated ridges along the upper part of adobe bricks, 4) clay flow protruding from the lower part of adobe bricks. Additionally, measurement of 61 complete archaeological adobe bricks found at San Andres and other sites in the valley suggest that while manufacture technique and the form of the adobes were standardized, their size was not. The width and length of individual bricks varies considerably, but the height does not. The weight of adobes ranges around 17-45 kg (average 30 kg). This indicates that it would have been difficult to transport such big bricks so it is most likely they were manufactured on site. Given these data, we draw the following inferences for the archaeological case we analyze: 1) technological standardization is not related to adoption of a standardized measurement unit, 2) it is possible to construct massive buildings using adobe bricks of varying sizes; 3) large public buildings at San Andres could be constructed by communal and collective labor organization.

**Keywords:** Adobe bricks, Standardisation, Pre, Columbian period, San Andres, El Salvador, Mesoamerica

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