An earth block with a compressive strength higher than 45 MPa!

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Abstract

This paper presents the results of a compressive strength test carried out on an extruded earth block of dimensions $40.7 \times 13.6 \times 4.8$ (cm$^3$). The failure of the block was not detected by the press used, which reached its highest load (2500 kN). This would correspond to a compressive strength of the block greater than 45 MPa! This value is obviously an aberration and the discussion developed in the paper, based on results from the literature, aims to explain this result and propose solutions for measuring the compressive strength of such products.

Keywords

Adobe; Earth construction; Compressive strength test; Aspect ratio; Earth block

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