



Technological characteristics of compressed earth blocks for its use as a building material

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We present here an innovative building technique, which uses ecological, inexpensive and environmentally friendly materials. These compressed earth blocks seem to be very good for building purposes and that is why we have characterized three types of compressed earth blocks (CEB, named by their color as yellow, grey and red) mineralogically by means of X ray diffraction XRD and scanning electron microscopy SEM (both blocks and raw materials), petrographically by polarizing optical light microscopy POLM, and SEM, and, mainly, petrophysically: their hydric, physical and physico-mechanical properties by means of determining their capillary water absorption, porosity (open or accessible to water, pore size distribution and micro/macroporosity), and densities, color and ultrasound velocity (together with anisotropy).

The particularities of these analyzed materials show that some varieties are more durable than others, and that all of them can be used as building materials with some restrictions related to their appropriate placing in the structures and the exposure to water.

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