



Optimizing engineering aspects of earth constructions. The earth as "common" material.

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Earth is one of the most abundant, most locally available, cheapest and lowest impact materials it's possible to build with. Over 70% of landmass is either pure clay or laterite - clay (with some iron content). Earth is a 100% eco-friendly building material, neither it is manufactured nor transported in construction area.

There are several empirical methods and many laboratory tests to determine the proportion of raw materials that we can use but the aim of this work is to present it as a common resource, free material for construction. In this work we present the appropriate laboratory tests in order to use the earth of an area for construction.

Modern construction thinking and Low-Tech architecture (i.e. low cost construction by non-specialists) have updated techniques so that the earth can become a basic material for the optimization of ecological architecture. This work presents why these techniques is important to be as common heritage accessible by all members of a society especially in crisis periods.