

## New Potentials in Prefabricated Earthen Construction

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- I. The Case for Earthen Building  
Properties of Earth  
The impact of material choice
- II. Difficulties in Implementation  
Labor costs  
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- III. New Potentials  
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- IV. Case Study: the Ricola Herbal Center, Basel Switzerland

### Abstract:

While there is a general consensus about the benefits of earth as a building material (a highly renewable resource which passively regulates thermal comfort) logistical challenges largely prevent these techniques from becoming viable in contemporary construction. This situation is coupled with a mistrust of earthen construction in urban areas, where buildings must be multi-storey in height and the majority of world's population now lives. Central to these problems are issues of labor costs, knowledgeable builders and the image of earth as an inferior material.

Using a contemporary example from Switzerland, (the Ricola Herbal Center in Basel) the presentation will focus on current innovations in Earthen construction, specifically in the field of rammed-earth technique. These considerations (from sourcing, prefabrication and local knowledge transfer) illustrate a holistic approach to "sustainable building"- demonstrating new potentials for this natural material to be re-implemented into our society – for the benefit of all.



Earthen Element Production\_Ricola Herbal Center 2013



Prefabricated Elements, Ricola Herbal Center 2013



Ricola Herbal Center, Laufen Switzerland 2014