

Hammerkop House, Nanyuki. Earth and Lime construction.

A few years ago my wife and I decided to build our own house. Neither of us had any building experience and we set ourselves the challenge of building something as 'green' and sustainable as possible. Our top priority was to avoid cement at all costs, so we decided to build a 'cob' house that also incorporated lime, particularly in the rendering and floors.

Homa Lime played an important part of our house build. Right at the start of our journey we visited the lime factory in Koru, Kisumu District. We wanted to research where materials were produced and to meet the people involved in it. We also wanted to source high quality lime and get it as fresh as possible.

Unexpectedly, we fell in love with the colourful limestones being produced by Homa Lime. For anyone who hasn't seen these, the stone surrounding the lime factory is an incredible mix of red, yellow, green and black limestone. A selection of these ended up forming the stem wall of our home and we used them for the cobble stone floor of our kitchen as well. We actually spent a day at the quarry choosing stones of a particular colour and we found quite a few with fossilised plants in them - a nice touch for the walls!

Our house is predominantly a mud house. The walls are half a meter thick and sculptured by hand. The walls are just mud mixed with wheat straw and some sand. We used lime in perhaps an unusual way. In the right quantities, lime mixes really well with clay. It can help make clay more stable and weather resistant, while it also adds a certain beauty to surfaces. For the internal and external walls of our house we used a combination of lime/clay plasters. In some of the plasters we mixed diatomaceous earth from Nakuru, and marble sand, which gives a real sparkle. For our bathroom we mixed Homa lime, blue pigments and kaolin clay (sourced from the ground near our plot) and then polished it with home made olive oil soap, which reacts with the lime to produce a more water repellent surface. We then polished this with beeswax. We used a similar mix for the floors in our kitchen and bathroom, but added egg whites to the mix, which helps strengthen the lime.

The walls and floors of our house are quite unique in Kenya for using no cement at all; just clay and lime. Beyond substantially reducing our carbon footprint, the result is a surprisingly comfortable house that regulates humidity and stays cool during the day and warm at night. It is really shocking to know how unhealthy 'modern' homes are, not only for the environment but also the people living in them. Cement and modern paints contain an awful amount of VOCs and they are breeding grounds for toxic moulds. It would be fantastic if more people would embrace more natural products such as lime and clay in their homes. Hopefully our experiment will inspire a few more people!

A big thanks to all those at Homa Lime for supporting us on our house build.

And no, termites do not eat cob walls....

Andre & Sophie Standing.

