

EARTHEN ARCHITECTURE IN THE WORLD

CUT EARTH

In areas where the soils was cohesive and contained concretions of carbonates (a natural chemical which give cohesion) the soil was cut in the shape of blocks and used like bricks or stones. Such examples are found typically in tropical areas where lateritic soils give a wonderful building material.

Lateritic soils can be found in two natural states:

- Soft soils, which will harden when exposed to air due to chemical reaction of the soil constituent with the air (carbonation reaction). This natural reaction is called induration. Such soils can be found on the west coast of India, from Kerala to Goa.
- Hard crust which was long ago a soil and has already hardened (indured) through the ages. Burkina Faso in Africa and Orissa in India show wonderful examples of such soils and blocks.

Since a while the name laterite has been replaced by two more specific names: plinthite instead of laterite soft soil and petroplinthite for the hard crust laterite.

In areas where the soil is not cohesive enough, people have used topsoil and grass to create blocks which were stacked fresh upon each other. This method has been used a lot in England, where it has been named sod. In the early days of the United States of America, in South America as well as long ago in Scandinavia, sod blocks cut out of topsoil were extensively used. In Uruguay one can still see quite a few beautiful examples of sod buildings.



Burkina Faso, Quarry of Kari (Photo CRATerre/EAG)



Burkina Faso, Quarry of Kari Kari (Photo CRATerre/EAG)



India, Orissa, Near Narangarh – Petroplinthite cutting



India, Orissa, Near Narangarh – Cutting petroplinthite by hand



India, Orissa, Khurda – Shaping a petroplinthite block



India, Kerala, Near Soranad – Shaping a plinthite block



India, Kerala, Near Soranad – House



India, Orissa, Khurda – Post office



India, Orissa, Near Bhubaneshwar – Lintel ~75 cm span



India, Goa – Basilica Bom Jesus, end 16th century



India, Goa – Basilica Bom Jesus, end 16th century



India, Goa – Basilica Bom Jesus, end 16th century



India, Old Goa – Sé Cathedral, 1562 to ~1619



India, Panaji – Ex Palace, 16th C.



India, Panaji – Ex house, 19th C.



Uruguay, Montevideo – Cutting Sod blocks (Photo H. Guillaud)



Uruguay, Montevideo – Sod house (Photo H. Guillaud)



Uruguay, Montevideo – Sod wall (Photo H. Guillaud)



Uruguay, Montevideo – Sod house (Photo H. Guillaud)



Uruguay, Montevideo – Sod wall (Photo H. Guillaud)



UK - Sod hut (Photo Unknown)