

UN-Habitat Sri Lanka

Sustainable Construction Using Alternative Technologies

Earth Paint



About Earth Paint

- Earth paint is a low cost paint that can be used to paint walls, instead of traditional expensive synthetic paints from the market.
- Earth paint can be used to paint both exterior and interior walls of buildings.
- Suitable for applied on any type of plasters (cement, lime or earth plaster)

Methodology

- First let the excavated clayey earth be sieved by a normal sand sieve (1.18mm) or by using a mosquito net cloth to remove large particles.
- Mix eight parts of sieved clay with one part of cement and then thoroughly mix with water to form a thick slurry.
- Let this slurry pass through a thin clothing material while grinding it using fingers to further break the particles.
- The filtered clay cement mix is then mixed thoroughly with an Epoxy glue (e.g: Chemifix) available in the market. Four liters of the mix should be mixed with 150ml of Epoxy glue.
- Colour pigments can be added to obtain different colours.



Benefits & Limitations

Benefits:

- Earth paint can be produced at the construction site, if suitable soil can be found.
- It enhances the thermal properties of earth plastered walls.
- Earth paint is free from any harmful constituents or emissions.
- Homeowners and their families can produce the earth paint and apply same to the walls.
- Earth paint is lower in cost than traditional paints from the market.

Limitations:

- The colour may change with different soil types.
- Not suitable for completely exposed walls.