

# Dindang Natural Building Educational Center

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**The Dindang Natural Building Center aims to promote the natural and traditional techniques of clay house building in the area of Phato in southern Thailand.**



**The organization was set up in the year 2007 and works with both Thai and international volunteers in order to realize its **current goal**: to set up an educational center where all those interested in natural building techniques can find information and share knowledge.**

- ***Sustainable and environmentally friendly:***

almost all materials, such as clay, sand, grass, water and bamboo can be found in the local area. There is a lower need for prefabricated materials that often have to be transported over long distances. Clay building techniques therefore offer an environmentally conscious alternative to other building methods.

- ***Cheap:*** a large amount of money is not needed to pay for materials or construction workers.
- ***Easy:*** with the right information anyone can build a clay house.
- ***Cool:*** it stays cool inside a clay house even during the hottest hours of the day. The clay walls control the inside temperature and in a similar way make sure that it does not get too cold at night.

## **WHY?**

**Clay building techniques have traditionally been used by many people in rural Thailand. Using clay to build a house or any other building has various advantages. It is...**

- Unfortunately, as modern building methods were introduced in the Phato area, the traditional techniques of clay house building were largely forgotten.
- By setting up a natural building educational center, Dindang hopes to bring this traditional knowledge back to the community.

**Why continued...**



**Dindang works in cooperation with  
Runs N Roses and TCDF(Thai Child  
Development Foundation)  
in Paksong, Thailand**



## CLC Window

There are lots of ways to bring natural light into a building. One way is to use recycled bottles. Just clean them well and place them where you want filtered light. They make great color contrast and add interest to the design.



## Horse Dung

Use horse dung to mix into the second layer of clay. Collect the manure and dry it out in the sun for a day. Then mix it into your bucket with the wet clay mix with water. This layer is strong because it contains lots of fibers from the grass the horses eat. Don't worry, it doesn't smell bad once it is dried out. It's almost like working with dried mud and grass.



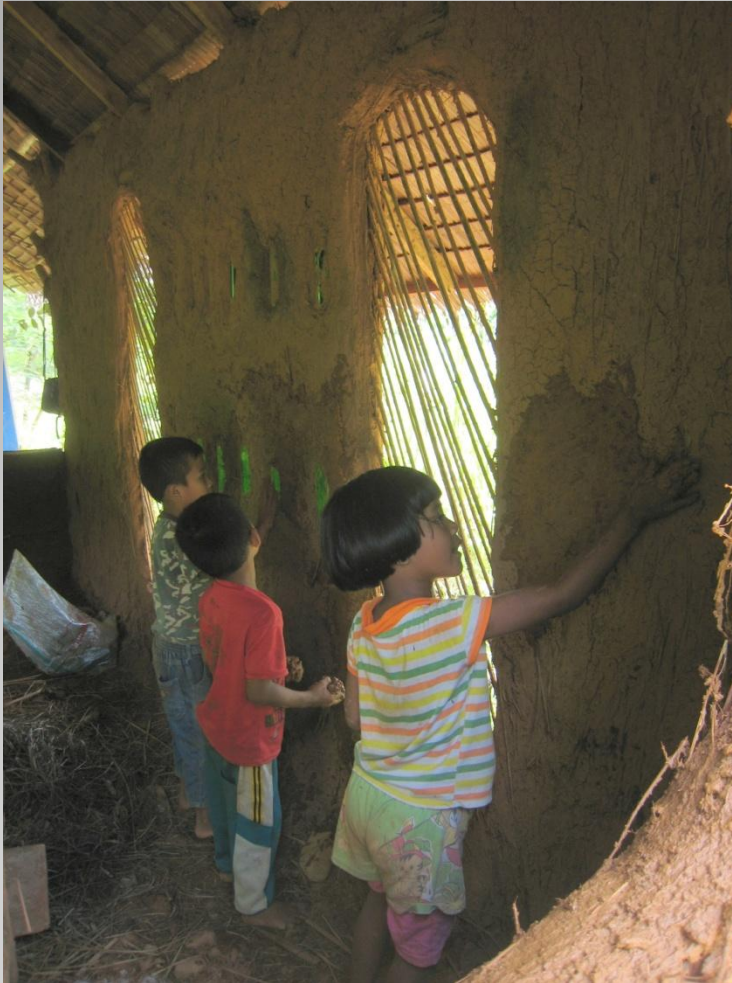
## First Layer



## Second Layer



**Step by step, the job gets done.**



## Second Layer Helpers

People of all ages can help in natural building! Here, the local children help by adding a second layer to the inside of the Creative Learning Center. It's *great fun* for everyone to get their hands dirty and play in the mud!

## Third Layer



The key components in the 3<sup>rd</sup> and final layer of a clay building are sand and potato starch (a natural adhesive). You can use the natural sand only or you can experiment with color by adding clay, food coloring, or anything else in the environment to create color in the mix.



## Bricks

The key components in making clay bricks are clay and coffee shells. Once these are mixed, you can place them into wooden frames to let them take the form. Then, they should be transferred to a place to dry for a month or more. Rotate the bricks every 10 days or so to be sure they are completely dry before you use them.

## Bricks into Benches!



Once you have framed and dried your bricks, you can build structures out of them using wet clay in between as mortar. In the picture, it shows the benches we made while they are in their drying phase. Once they are dry, we will fill them in and add final layers to complete a more finished look and a comfortable place to sit!



**Try different shapes in windows to add interest in design. Use bamboo slats in various ways, too.**



**Volunteers come from all over the world to help build naturally!**



## Off Time

Music is a big part of Thai culture. Here is Bow, the head of Dindang, leading the crowd of international volunteers in a Thai song and dance during a volunteer celebration one evening in the TCDF restaurant.



## Off Time



Volunteers work hard all week and like to spend time relaxing with new friends over the weekend hours off. Here, a group of volunteers eat at a buffet in nearby Ranong, trying all kinds of local Thai food. Yum!



# Volunteer Accommodations

**October 20, 2008**



**October 30, 2008**



**Creative Learning Center- A lot can be done in only 2 weeks!**



# The Creative Learning Center