

# Panyaden School

Chiang Mai, Thailand





## Project data

Architect: 24H-architecture  
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the Netherlands  
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Architect's  
design team: Boris Zeisser msc (Director-Architect)  
Maartje Lammers msc (Director-Architect)  
Olav Bruin msc (Architect)  
Anrew Duff (Intern)

Project name: Panyaden School  
Site address: 218 Moo 2, T.Namprae, A.Hang Dong,  
Chiang Mai, Thailand  
Client: Mrs. Yodphet Sudsawad

Program: Kindergarten and Grade school  
Floor area: 5000 sqm

Design: 2010  
Construction: 2010-2011  
Completion: 2011

Local design team: Chiangmai Life Construction  
Local architect & structural engineer:  
Rajanakarn Design & Construction Co.,Ltd.  
Interior Design: Yodphet Sudsawad & Markus Roselieb  
Sitescaping & Landscaping: Markus Roselieb & Fon  
Playground Design: Ryan Parkes & Markus Roselieb  
Waste Water Consultants: Utility Business Alliances  
Rammed Earth Floor Advisor: Martin Rauch



## 24H-architecture

On 01.01.'01 Boris Zeisser and Maartje Lammers founded 24H-architecture in Rotterdam, the Netherlands.

### Inspired by Nature

Working with ingredients from nature, the theme of *Art d'eco* has been developed as one of the main design philosophies of the office. With this the ambition is to support the environment as well as to create beauty: this makes the art of ecology.

Other themes developed over the years within the office that form a base for inspiration are:

*Evolution*: adaptable structures in time providing multi program use in a single space.

*Natrufied*: Abstract interpretations of nature petrified into building materials.

*Organism*: Growing additions transform existing buildings into new compositions.

*Sensibility*: to arouse the senses, a building should age beautifully by using materials with a natural ability to transform during its lifetime.





## Design

In the lush green surroundings of a former fruit orchard, where Thailand's highest mountains meet the flat rice fields, Panyaden School contracted 24H to design its environmentally friendly school buildings.

Located south of the city of Chiang Mai, this 5,000 m<sup>2</sup> primary school consists of an informal arrangement of pavilions (salas), organized along pathways inspired by the shape of the tropical antler horn fern.

This original design has since evolved organically to its final form which is still in keeping with its original purpose of creating buildings from earth's elements and shapes that are an ode to nature's beauty.

There are two main types of buildings:

- The classroom pavilion type has load-bearing walls from rammed earth, dividing the building into 3 classrooms. The outer walls are made of adobe. Glass windows framed by recycled local hardwood, glass bottles and washing machine windows bring natural light into the classrooms.

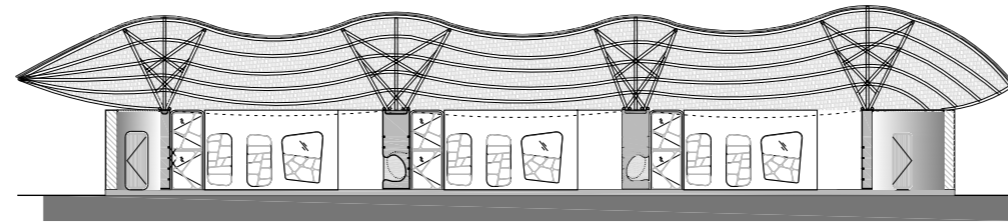
Cupboards and shelves are all integrated in an adobe wall curving around the sanitary block. The curved contours of the bamboo roof structure mirror the mountains at the horizon of the site.

- The sala pavilion type is used for common functions such as the assembly hall and the canteen. Columns consist of bamboo bundles reaching up to the bamboo canopy from their stone foundations, giving a feeling of walking through a majestic bamboo forest.

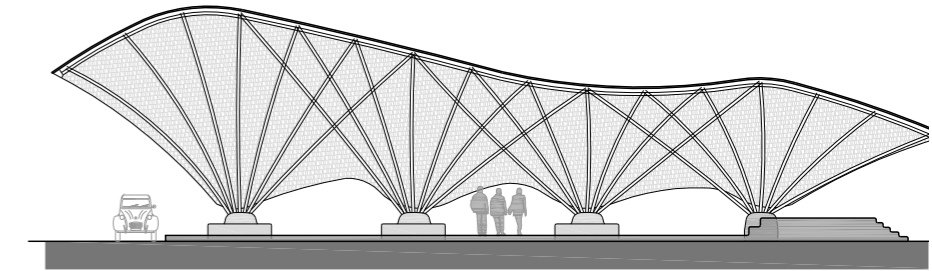
Other salas designed and created by the local team (playground, around the swimming pool, Buddha sala etc) resemble birds or leaves - elements found in nature and in daily Thai life (such as the paper umbrellas made in Chiang Mai).

The entire school has been built from local earth and local bamboo that has been naturally treated to withstand the elements. Organic vegetables and rice will be grown on school property.

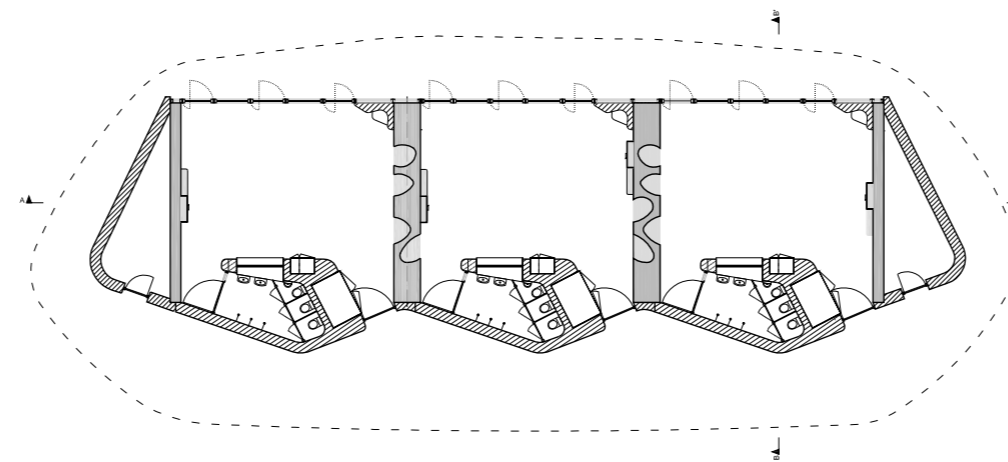
Environmentally friendly waste water treatment and food waste recycling producing organic fertilizers and biogas for cooking, round up the picture of an environmentally friendly school with a negligible carbon footprint.



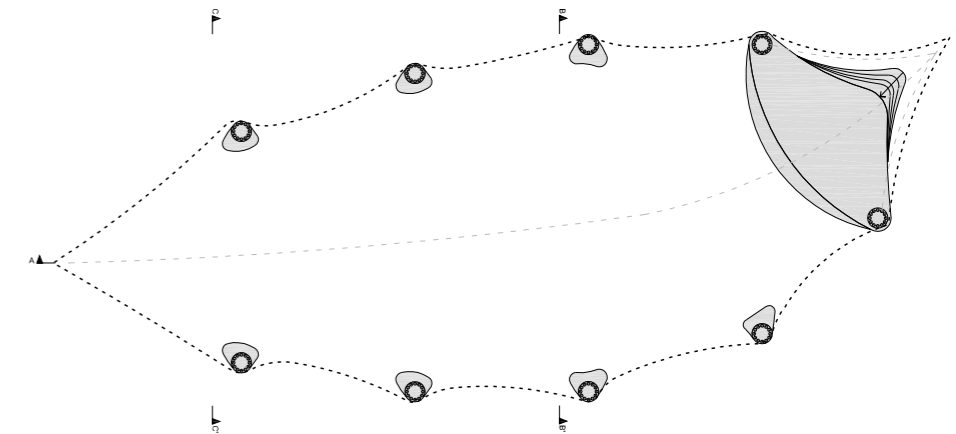
Section  
classroom pavilion



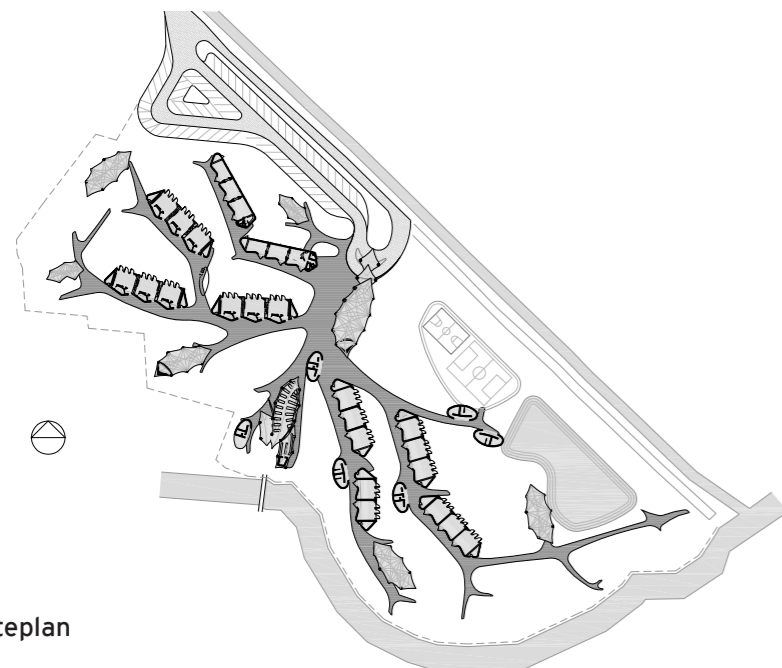
Section  
Assembly hall



Plan  
classroom pavilion



Plan  
Assembly hall



Siteplan



Classroom pavilion



Assembly hall



## Education

Panyaden is a private bilingual school with a Buddhist approach that will accommodate 375 students including 10– 20 percent of local Thai kids funded by scholarships. The students will be the ambassadors to introduce green living into the lives of their communities.

In addition to the Thai and native English speaking teachers, they will be supervised by experts in various arts, creativity as well as traditional wisdom such as local agricultural methods, specialists in tropical forest plants, cloth weaving and northern cuisine etc.

Panyaden School aims to deliver a holistic education that integrates Buddhist principles and green awareness with the highly regarded, International Primary Curriculum.



Assembly hall



Parent's pavilion



Assembly hall



Classroom pavilion





Construction of assembly hall



Construction of classroom pavilions