Temporary Dormitories of Mae Tao Clinic

by Jan Glasmeier / 2015-07-10 10:49:00 / International / 9526 / EN

New Construction

Primary energy need:
10 kWhpe/m².year
(Calculation method: Other)

ENERGY CONSUMPTION

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Construction Year</th>
<th>Delivery year</th>
<th>Address 1 - street</th>
<th>Climate zone</th>
<th>Net Floor Area</th>
<th>Construction/refurbishment cost</th>
<th>Number of Dwelling</th>
<th>Cost/m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student residence</td>
<td>2013</td>
<td>2013</td>
<td>63110 MAE SOT, TAK, THAILAND, Thailand</td>
<td>[Aw] Tropical Wet &amp; Dry with dry winter.</td>
<td>72 m² SHON</td>
<td>1 700 €</td>
<td>5</td>
<td>23.61 €/m²</td>
</tr>
</tbody>
</table>

Proposed by:

The armed conflict that has persisted for decades in the Karen State of Myanmar results in a daily flow of refugees and immigrants to neighboring Thailand. In the Thai town of Mae Sot, a few kilometers from the Burmese border, numerous schools and orphanages offer accommodation and education for the refugees and immigrants. One of these Learning Canters, the CDC School (Children Development Center) under the tutelage of Mae Tao Clinic organization, hosts more than 800 students.

The lack of space, and in many cases, the need for immediate accommodation for new students has forced the School to present a new model of temporary low-cost dormitories that is easy to assemble and can be built by using as many recycled materials as possible.

The Embassy of Luxembourg in Bangkok funded the construction of four dormitories. The first of four dormitories was built in April 2012 within four weeks. With a space capacity of 25 students, the building meets the Modus Vivendi by fitting into the local environment in which it is located. The interior layout ensures an open and airy space that offers semi-privacy and includes storage space for the students. The building materials used are locally available and well known to their users, thus allowing for easy maintenance and resulting in low maintenance costs.
The recycled timber used for the dormitories comes from old buildings in town that are carefully stripped and put aside by the demolition crew. The timber is polished, de-nailed, and saw down to size. Every timber frame is easy to disassemble and assemble again in a new location.

The quality of available timber, mainly teak, at the Thai-Burma border is told to be one of the best in the world. However, the price of the timber has risen by over 300% in the last few years due to the deforestation and the illegal trafficking along the border. Thus recycling timber has become popular among the local people in order to reduce the cost of the new buildings. Using timber as a main building material allows us to help preserve the traditional construction skills of the local people who are already very familiar with this material.

See more details about this project

http://www.archdaily.com/499287/temporary-dormitories-a-gor-a-architects

Stakeholders

Stakeholders

Function : Others
Mae Tao Clinic
http://maetaoclinic.org/

Owner

Function : Designer
a.gor.a architects
jan glasmeier, jan.glasmeier@gmail.com
http://www.agora-architects.com

Contracting method

Other methods

Energy

Energy consumption

Primary energy need : 10,00 kWhpe/m².year
Primary energy need for standard building : 10,00 kWhpe/m².year
Calculation method : Other

Envelope performance

Envelope U-Value : 1.00 W·m⁻²·K⁻¹

Renewables & systems

Systems

Heating system :
- No heating system

Hot water system :
- No domestic hot water system

Cooling system :
- No cooling system

Ventilation system :
- Natural ventilation

Renewable systems :
Environment

Urban environment

The new dormitories are been build on the country side near the new Mae Tao Clinic Campus

Products

Product

Temporary Boarding House

a.gor.a architects

jan.glasmelen@gmail.com

http://www.agora-architects.com/

Product category : Gros œuvre / Charpente, couverture, étanchéité

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Recycled timber as a construction product is important in both raising industry and local community awareness towards deforestation and promoting more environmentally friendly practices.

Costs

Contest

Reasons for participating in the competition(s)

The main cost of the building is the structure made from recycled timber, which represents 70% of the total construction cost of the building, and can be re-sold in the future for 80% of the price. Bamboo and thatch are also used for walls, floors, and roofs. Although these materials are not intended to last over two years without any pre-treatment, they are easily available every season and the cost is affordable and stable for the local community.

Building candidate in the category

![Green Building Solutions Awards 2016 Low Carbon](image)