

2011-2012

A Habitat for Humanity Student Design Competition

THE SUSTAINABLE HOME

Sponsored by: National Endowment for the Art and Vinyl Institute
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WINNER - CENTRAL REGION

Project Title: *the sustainable Home*

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the sustainable Home home > changing > growing > decaying > living

Each breeze on even the smallest part of our life and environment highlights a change that occurs, has occurred or will occur in the future. For us it's natural that every step we take will also change our environment.

For eight years I've watched the changes take place along my route to school and I noticed that everything changed, except existing buildings. The only change that occurs in the field of architecture is the construction of new investments. The buildings look exactly the same. Does this mean that architecture is not susceptible to change and we assume that it is not expected to change either?

It might be interesting to look at a 'life building'. To personally own our own home and treat it as a family member who lives with his family and is able to adjust when the situation requires it to do so. A house that lives with its users, is part of the family. It's also changing with the family.

Reguly - near Warsaw in Poland
small steps to new system of living (changing)

modular
The solution to make such changes happen is to use modular building technology. Dividing the basic functions of certain modules and arranging the spaces that allows for modification. The user can customize the home and modify it depending on their current needs.

life cycle
BIRTH: assembling modules in factory, creating structure of the house.
LIFE: usage (possibility to modify according to current needs).
DEATH: recycling.

opportunities of modular structure
intensity
There are almost no limits in how you can modify the interior to suit the needs of its users. Since you can change the entire panels, it allows you to use multiple material solutions. What the layouts will eventually look like depends entirely on the user's preferences. There are many material solutions, such as: steel, wood, brick or plastic.

exterior
There can also add modules to amplify the use of the house. Terraces, canopies, pergolas, shade and environmental solutions, such as photovoltaic panels allow you to enrich your home program and improve its spatial solutions.

structure
Usage of modules makes it possible to create many different configurations of the same space. It allows users to modify their home according to their needs. The frame frame house construction allows for adjustments to its interior, because of panels. They make it easy to change space according to current needs of the house.

ho me S

ho me XL

home_timeline

Architectural drawings include floor plans (e.g., 'first floor plan', 'second floor plan'), 3D perspective views of the modular units, and a vertical timeline showing the evolution of the design. The drawings are labeled with scales such as 'north facade 1:200' and 'south facade 1:200'.