

Honors theses

Living Container, project for a temporary housing unit

by Maria Giulia Pagliero

Tutor: Matteo Robiglio

Co-tutor: Guido Montanari

The project proposes a living space of 20m², totally obtained from a standard container ISO20' (mm 6050 x 2438 x 2591h) that works as a "structural box" for the living-functions and the services placed inside. The unit can be completely opened to the exterior to make it possible to use of the outside space as an extension of the house, and convert it in a space of possible increase of the living space through self construction. The container responds to a immediate necessity caused by an emergency, but it can also become in a next phase a basic element for the reconstruction of the house. In the design process an important aspect was dedicated to the aspects that refers to the assembling of the module and its collocation, besides the ones regarding the sustainability both environmental and energetic. The unit in fact, aspires to become totally self-sufficient in energy, with zero Co2 emissions, thanks to solar-thermal system, fotovoltaic, wind and biomass systems.



container.abitabile
fase1. schemi di montaggio



Process phases and assembling schemes



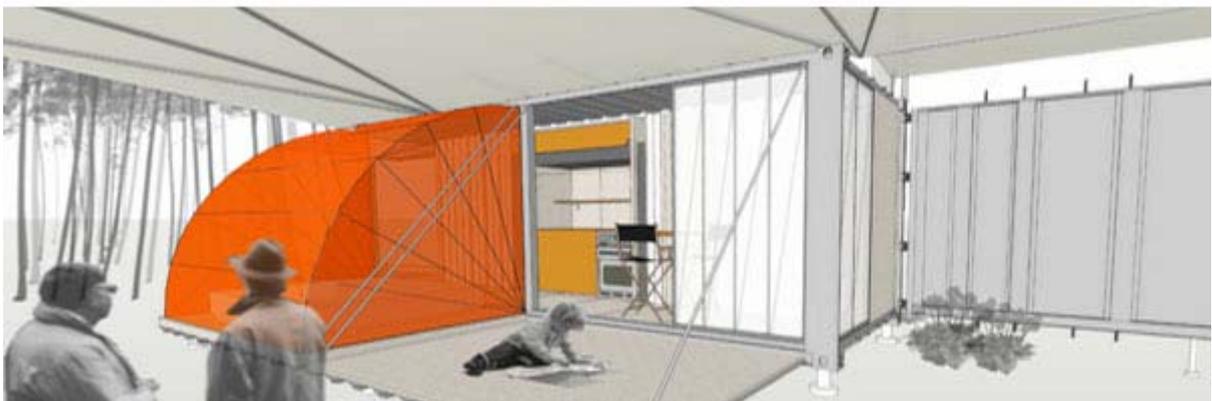
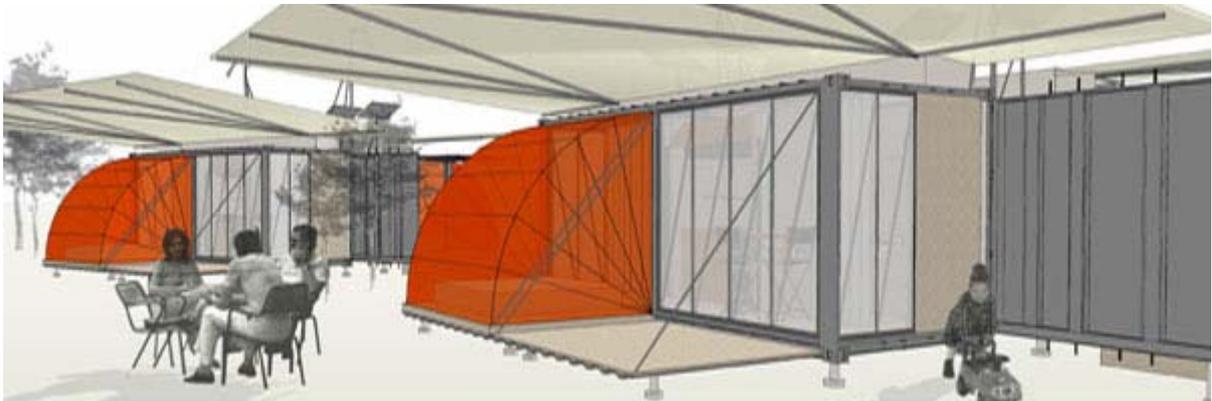
Plants and sections of base-unit

The project is the final result of a process of a study started from history of architecture and landed to the most up-to-date technologies, process which main aim is the production of a “temporary” architectonic object. The challenge of the project was represented by the many bonds and limits that the provisory condition brings, and at the same time by the necessity of providing the same comfort and quality in the temporary unit, as in every other traditional house.

Temporariness was not considered as a negative aspect, a limit, but as a positive aspect, enriching for the project, that becomes a prototype of a new and different housing model, to face emergency conditions. Often, in fact, the solutions nowadays disposable in the field of provisory represent aliening and humiliating models for their inhabitants, that loose the house-dimension inside this new residences. The goal that was tempted to reach was mainly to furnish a “house”, equipped with all the aspects considered fundamentals, a house that in any case still remained a temporary house, characterized by spaces not completely closed and limited by walls, in a traditional point of view. Moreover, there are also aspects connected with sustainability, that makes the unit totally functional and with no impact on environment, opposite to many examples of temporary structures, that often become permanent, and especially do not care at all of their “ecologic-footprint” on environment and territory.

Today, considering also the catastrophic events that struck out Italy, is necessary to face differently the theme of temporary housing, that as it is posed on the ground should be removed without leaving any traces, nor in soil-consumption, nor in Co2 emissions and energy consumption. Is fundamental to adopt a new sustainable approach in building this units, mainly because the situations in which are used are often linked with natural spaces, not yet touched by edification. Finally, the object presented is what was believed to answer in the best way to the requirements that were identified, unifying both architectonic research and functional aspects, being aware that the offer was in any case of a house lacking in many ways, but however adequate to respond to a need of "home".

A very important aspect, in conclusion, was dedicated to the possibilities of the future, imagining, together with the user, developments and changes of the unit, not putting limits to the original concept, to make it more comfortable and functional, to transform the unit into a first step toward a new rebirth.



Renders of the possible units settlements

For further information, e-mail:
Maria Giulia Pagliero: giulia_84@tin.it

Maintained by:
CISDA - HypArc, e-mail: hyparc@polito.it