



Recycled Sheet Metal Box

thinkTREE Architects and partners

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Title: Nemo House

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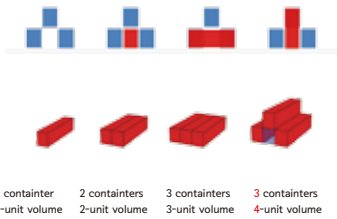
Joohyung Kang, Principal

Taekho Lee

Jinyoung Oh

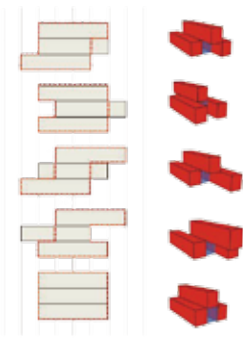
Yeongcheol Choi

Manufacturing : Human Container Inc.



The Nemo house was designed for a family looking for a new home in the Korea's typical rural area surrounded by farmlands and mountains. At the same time it aims to become an alternative solution for the economical houses in Korea where the typical flat living type dominates. Nemo house design combines three shipping containers. The properties of the container allow to be a living shelter with its structural strength and weather-tight envelope.

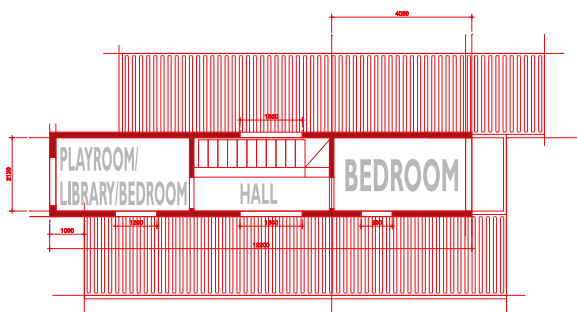
Container house design is a hot topic. Recycling empty containers for houses is one of the ways to create modern and inexpensive homes today worldwide. Still it was challenge to realize as a permanent residential. Although it has some obvious advantages of: strength, durability, availability, and cost, it was unprecedented and negative to people in Korea. Nemo house may be the first achievement for the decent living condition quality with freight containers in Korea. This is why the Nemo house was open and showed to the public at Kyoungyang Housing Fair 2013 before placing at site. it provided good opportunity of a smart choice for people looking for eco-consciousness. It proved the portability and flexibility through the process of assembling, disassembling, and reassembling in a short time of period.



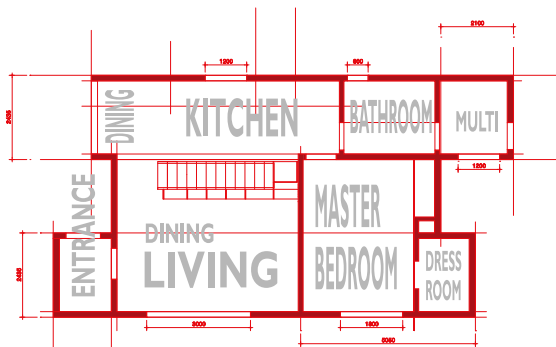
Mass Option Study



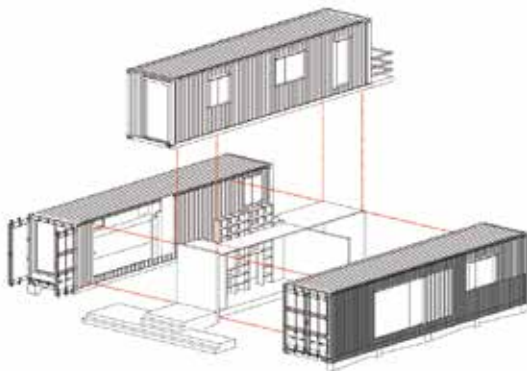
Applicability



2ND FLOOR PLAN



1ST FLOOR PLAN



Axonometric

Shipping container house design is a green way to reuse and recycle empty containers and create comfortable homes in contemporary style. Container house is affordable, sustainable and eco friendly. It also blends recycled materials with creative ideas to reuse and recycle, turning useless or outdated empty containers into house that are efficient, functional and comfortable.

‘Nemo’ means the rectangular geometry in Korean. As the name of the house indicates, it comprises stacking formation of three freight containers that frame 2-storey living space and yards.

The two 40 feet long high-cube containers, 1 foot higher ceiling height than general containers, sit on the foundation base facing each other with an 8’ void gap in between. This formation enables both the living room & kitchen to have larger space of 22’ width and second floor of the third container to cover on the gap.

The steel house is surrounded by green and lush vegetation, creating a pleasant background and peaceful setting for country lifestyle. Basically it was designed to conserve more energy than it consumes by using upcycled shipping containers as a steel structural frame, a sustainable wood cladding façade at south facing, and permeable paving.

The main floor offers living room space that includes the kitchen with a dining area and stairs. Two bottom containers and top containers shifted and created projection for porch and balcony. The principle of simple arrangement with shifting fortifies the engagement with the surrounding natural environment at front door & back door.

The second floor is configured to allow three equal areas of play room for 2kids, a hall with wooden book shelf rising from downstairs, and a bedroom with big windows.



Rendering image



Raw Freight Containers



Rust Proofing



South Elevation



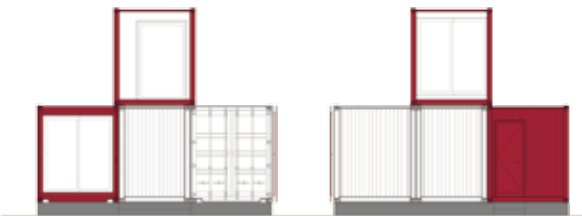
Exterior Coloring



North Elevation



Off-site Manufacturing



West / East Elevation



Delivery



Assembly and Placing





Playroom @ 2nd Floor



Exhibition before Installation on Site



Living room and Kitchen beyond Stairs



Hall @ 2nd Floor with Bookshelf



Down stairs accommodate master bedroom, living room, dining, kitchen, bathroom, and utility room. White decorating and a large see-through book shelf reaching to upstairs unite living room, Dining, and kitchen into one open family space linked to a terrace deck.

South facing long side façade employed large window and wood cladding to hide some scratches of used container corrugated steel surface and to complement metal materiality.

Limited budget made design focus on improving thermal performance and heating system for harsh winter climate.

One of the great features is utilizing the doors of the freight container as a design factor.

When the door at dining area open, interior space can be expanded to patio. While providing a pleasant openness to inside and outside, the doors offer the identity of the container architecture.

Nemo house design is functional eco friendly recycling, inexpensive building and simple installation, requiring minimum effort and time. In addition, we are hoping to grow popularity of small house designs made of empty shipping containers in Korea.



thinkTREE Architects and partners

is a young architectural design firm in Korea. The firm focuses on the primitive architecture issues and sustainability with thoughtful ideas.

thinkTREE Architects currently explores various projects range from urban pavilion & container architecture to cultural spaces.