

Back to the HOUSE of FUTURE

I PRO 301

Project Background

1983 International House of the Future Competition
I PRO 301 Sustainable Village 2005



ISSUE of Housing

SPACE

- density and population increase
- Cultural and Environmental issues
- cultural ramifications
- sustainability
- environmental factors

COST

- construction cost
- labor and material fabrication

OBJECTIVE

Produce a conceptual solution for the development of a "House of the Future" product

CONCEPT Proposal

A modular component housing solution that will address the flexibility and sustainable needs in the future

TEAM members

Instructor : Said Al-Hallaj
Advisors : Joseph Clair, Frank Flury, Charles Owen, Elena Savona

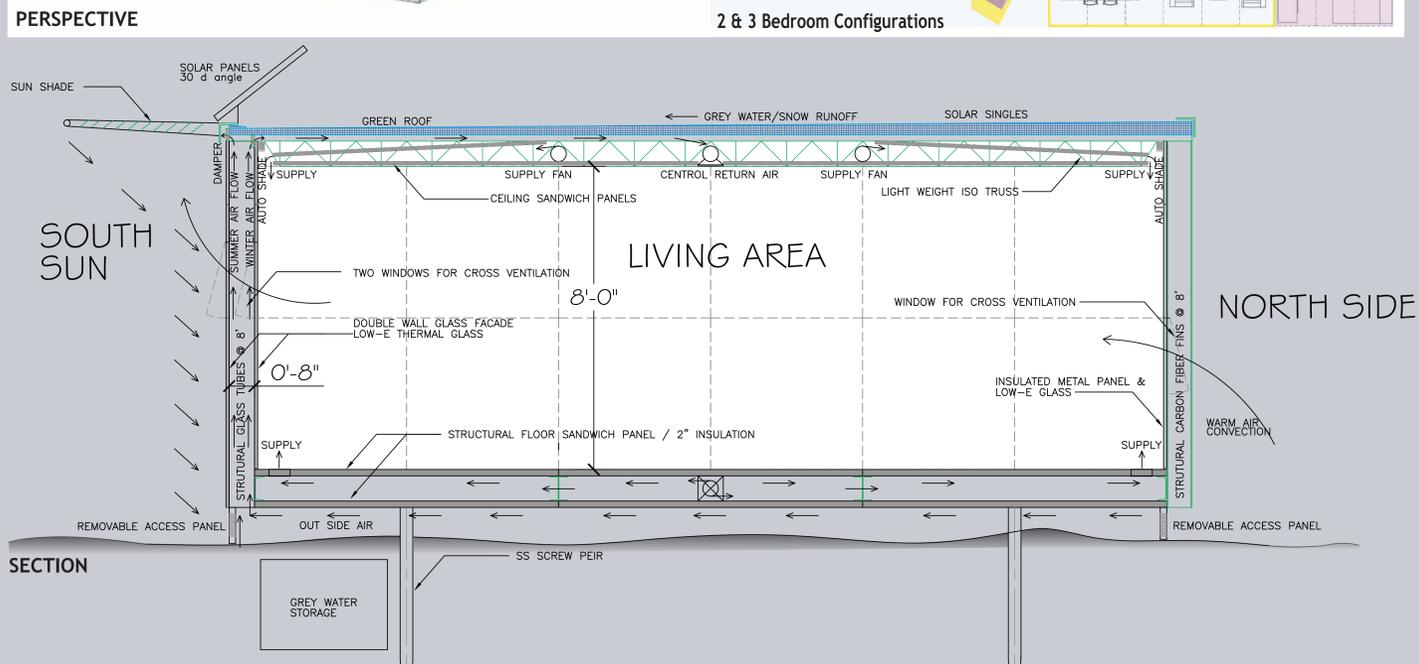
Shirley Cho	Hosung Chun	Susanna Duecker
Erick Fields	Young Jang	Eric Kieft
Shane Ladd	John O'Brien	Chike Obichukwu
Anita Phetkhamphou	Dario Roca	Noi Phonexayphova
Hee Chan Shin	Lilly Simmons	

What is a Module?

Component of a system designed for easy assembly and flexible use

4 X 4 X 4 modular house

PHASE 1
PHASE 2
PHASE 3
PHASE 4
PHASE 5
PHASE 6

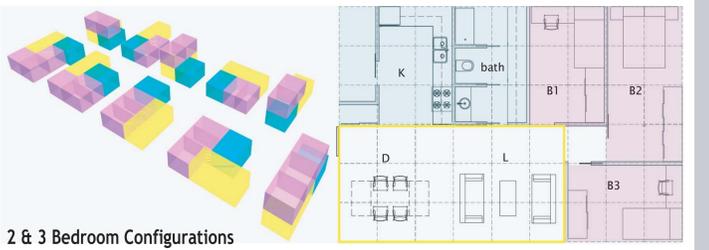


Benefits of Modular Design

Sustainable design | Construction | Transportation | Maintenance | Economical

4' x 4' x 4' Module

- Spatial Dimensions
- Materials prefabrication sizes
- Sustainable Fabrication
- Prefabricated, interchangeable, outsourcing parts for fabrication
- Less waste material
- Economical
- Ease of Transportation
- Ease of Construction
- 2 person maneuverability
- Pieces can be changed over time as needed



Structure

Screw Pile Piers Foundation

Sandwich Panel Floor Deck

Snap-Lock Wall

Flexibility
Removable Connection
Reuse

Plumbing

1. Easy to INSTALL
2. Plug-In and Speedy Delivery of hot and cold water
3. Simplified retrofit of a Gray-water reuse system for future

Mechanical Systems

Decentralized HVAC

Ceiling Concealed Fan Coil

GREEN Energy System

Solar

Geothermal