

ARCHITECTURE FOR HUMANITY: HONOLULU and Re_Think

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What is Architecture
for Humanity?

&

What is Re_Think?

Architecture for Humanity

Architecture for Humanity creates solutions to global humanitarian challenges through the power of design. We provide vulnerable communities with vital, innovative and most of all community-driven architectural, planning and construction services.



**Disaster
Reconstruction**



**Education
Spaces**



**Community
Resilience**



**Active
Spaces**

Re_Think



Design Guidelines for Re_Think:

- 10 x 10 Modular Unit
- Must be Stackable
- Must Create a Sense of Place
- Must be Self sufficient
- Must be made of Locally Available Materials

The Entries

H3 MODULE

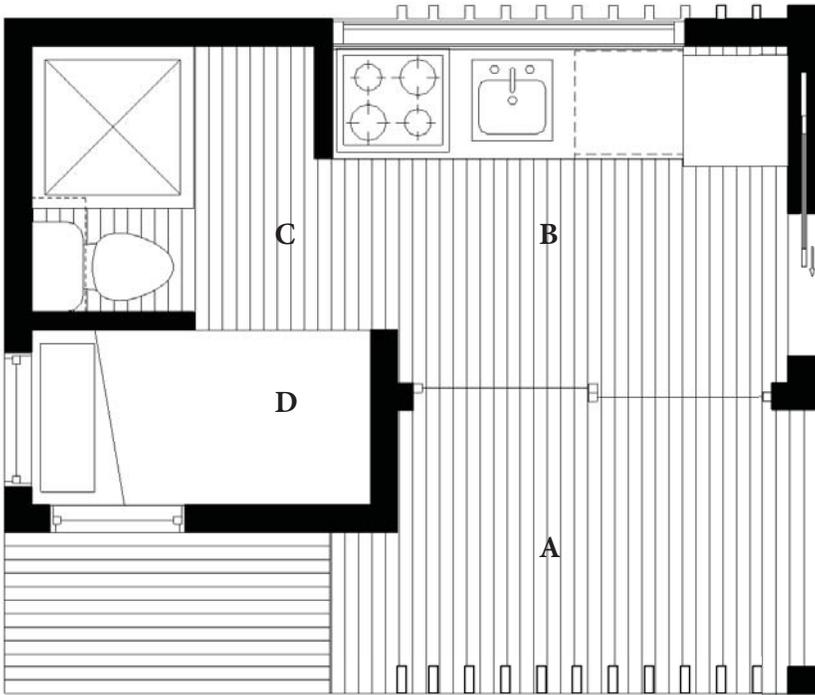
HOPE FOR HAWAII'S HOMELESS

PROJECT DESCRIPTION

Homelessness is a serious issue in the state of Hawaii, it proceeds to get worse as time goes on. The homeless live a nomadic lifestyle wandering from place to place, constantly on the move without any fundamental physiological needs for human survival. Consequently, ruins the well-being of the individual and disrupts the community.

Aiding the homeless can begin with providing single living units that are easy and cheap to construct and by using local recycled materials. An innovated design aimed towards simplicity, practicality, and sustainability is a starting point towards change. The goal is to accommodate the homeless with appealing and comfortable units that are equipped with basic amenities.

These units are versatile and can be set up almost anywhere that has access to water and electricity. The toilet can be connected to a storage tank that can be emptied on a regular basis.



FLOOR PLAN

- A. ENTRY
- B. KITCHENETTE/DINING
- C. BATH
- D. SLEEPING AREA/STORAGE

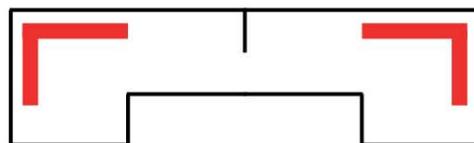
Each unit is designed for one person and consists of 100sf. A single unit can be connected to another unit to make a double unit for a couple.

A double unit can be connected to another double unit to make a single unit of four for a family. The walls are adjustable, allowing for easy connections.

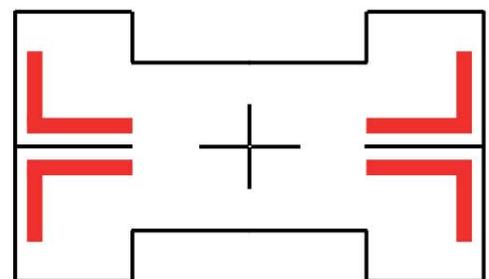
DIAGRAM
SINGLE UNIT TO COMPLEX



TYPE 1



TYPE 2



TYPE 3

LINDY HSIEH & PHAP VU

H3 MODULE

HOPE FOR HAWAII'S HOMELESS



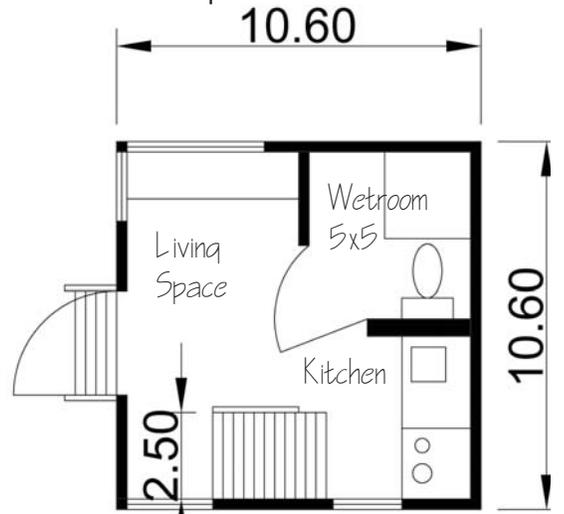
HOME FOR SINGLE



HOME FOR COUPLE



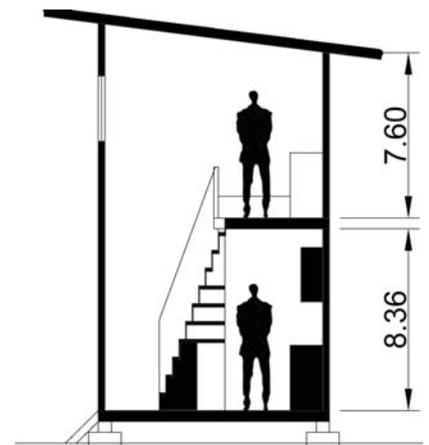
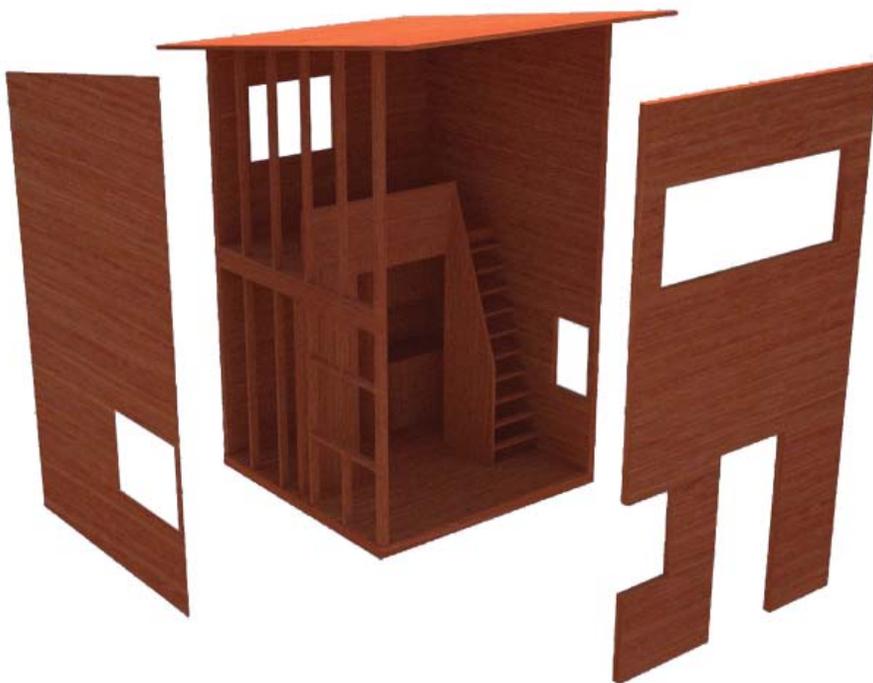
Simple Modular Living



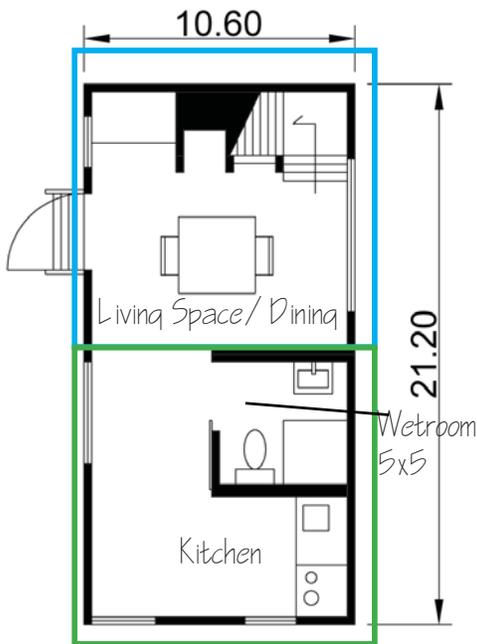
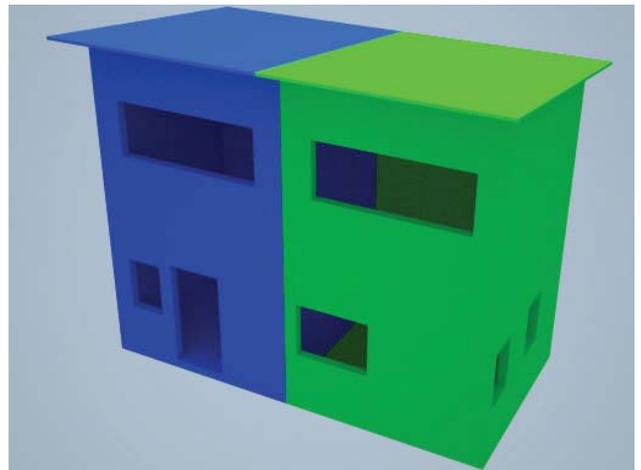
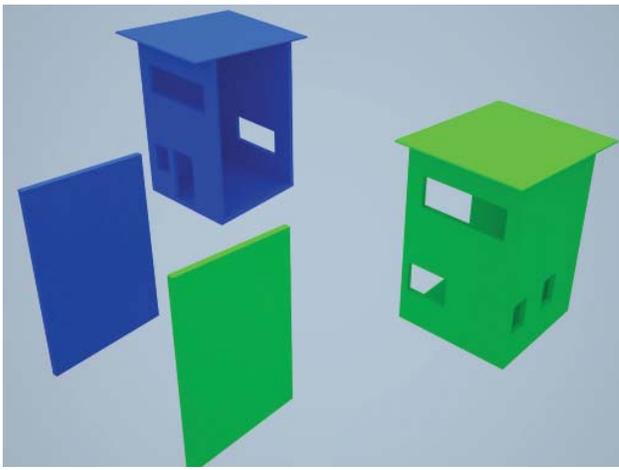
First Floor



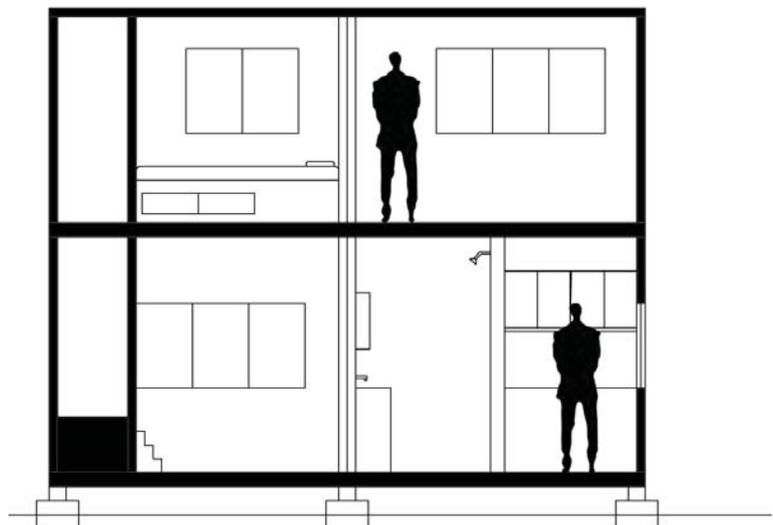
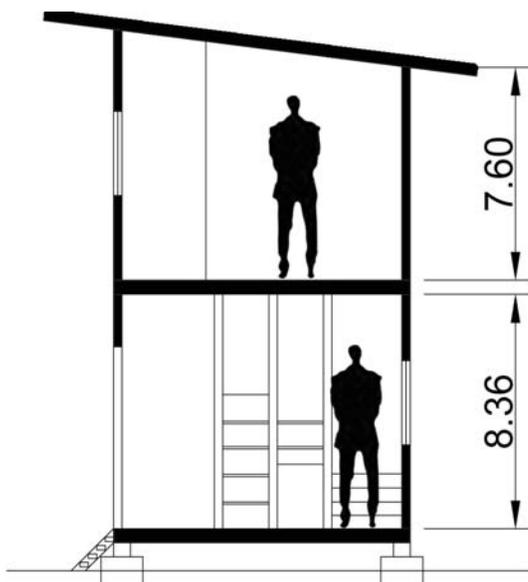
Second Floor



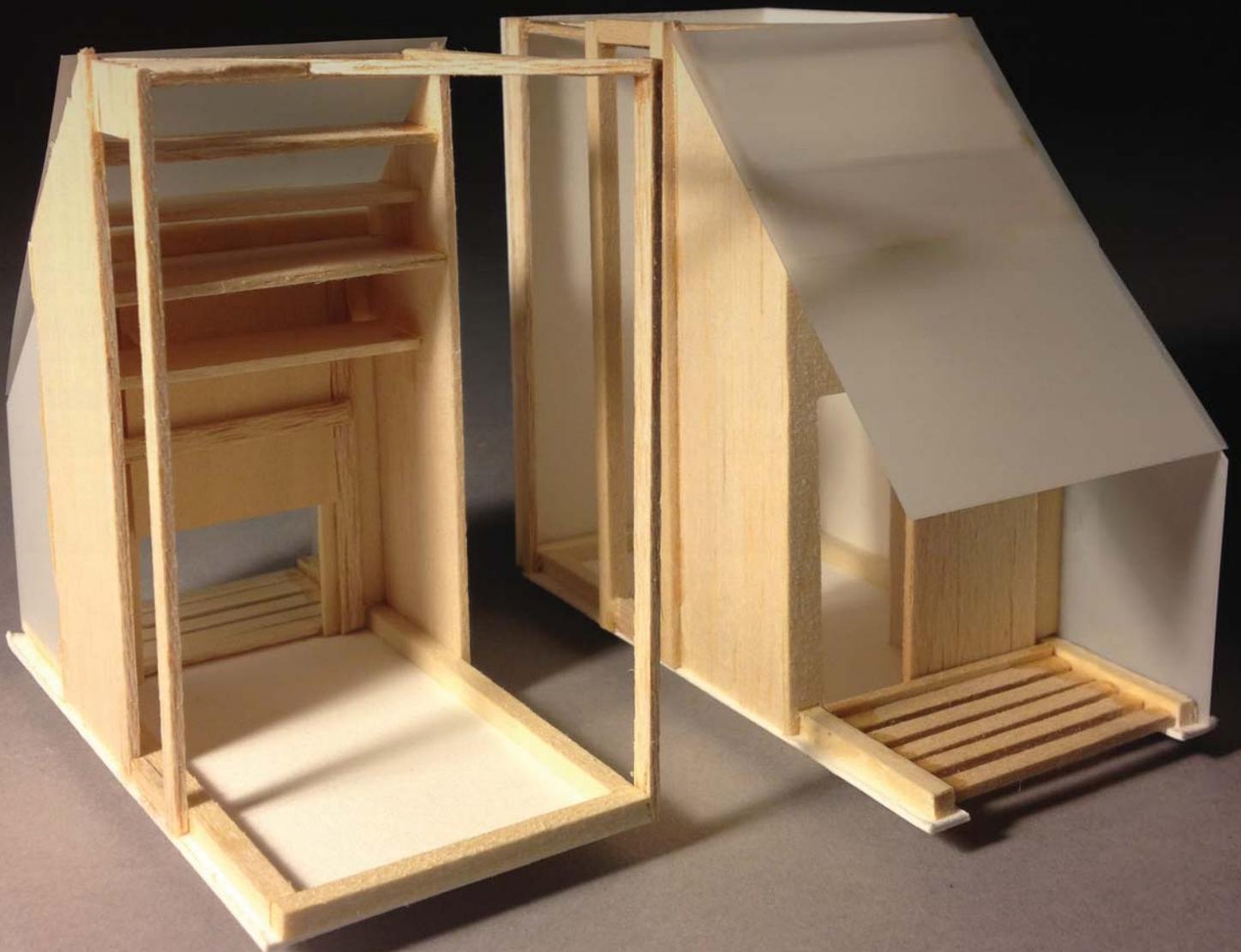
Section



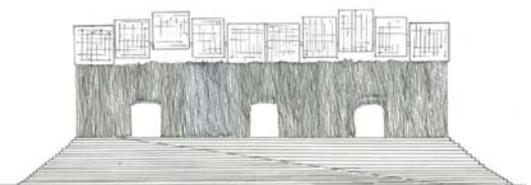
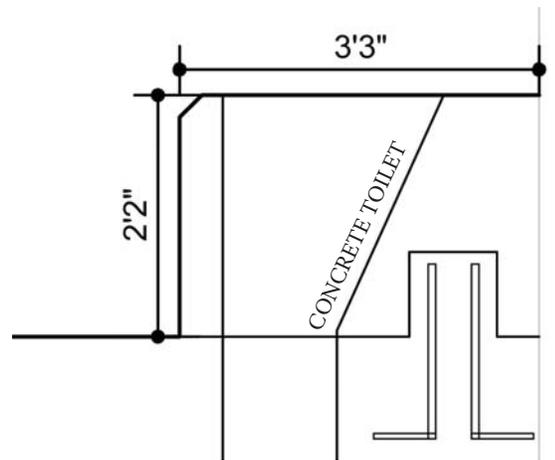
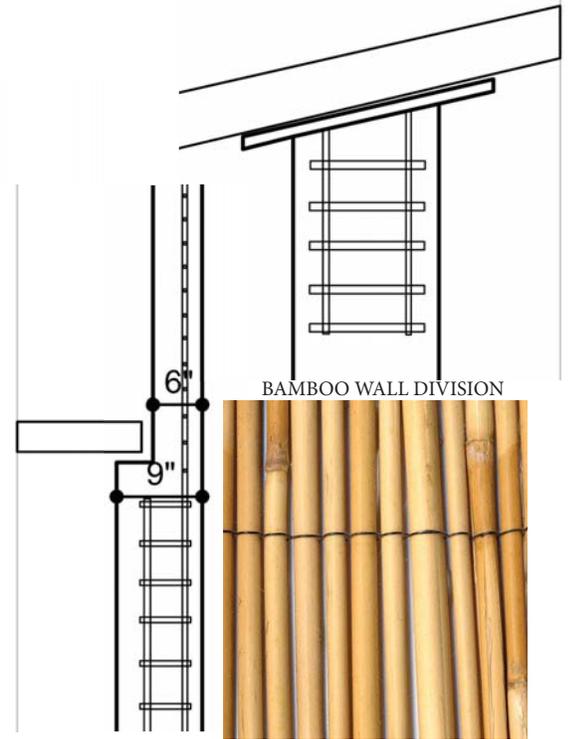
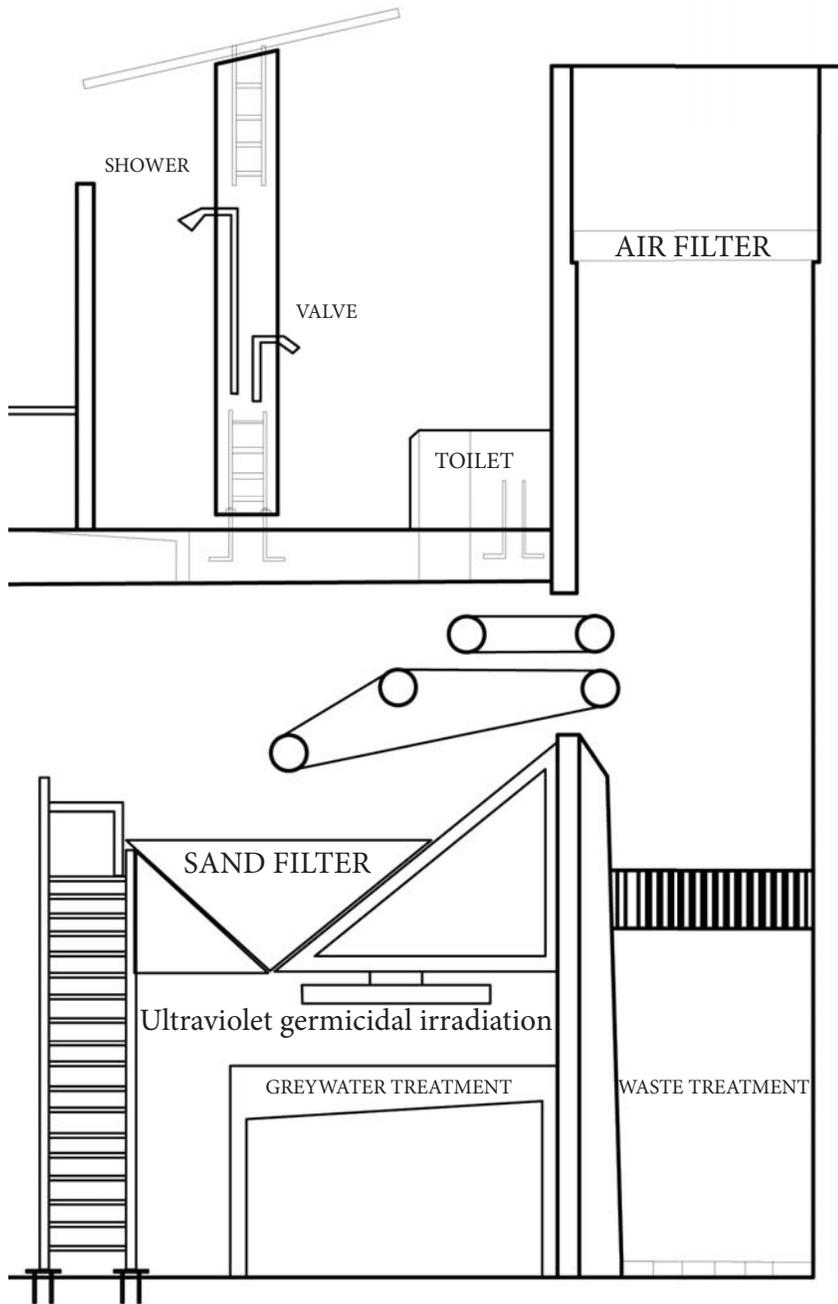
With a constraining square footage maximum utilization of space is key for providing comfort and affordability. Prefabrication techniques allow this humble home to be constructed for one or more occupants. For a single occupant comfort in a small area is maximized by lofting the bed space which allows more space for living in a 100square foot area. With multiple occupants the prefabricated walls could easily be removed and two single units could be combined, thus expanding the space and offering more area for living.



 iHOME



DRY TOILET SYSTEM





reTHINK 4x8

a design proposal for modular low-income housing



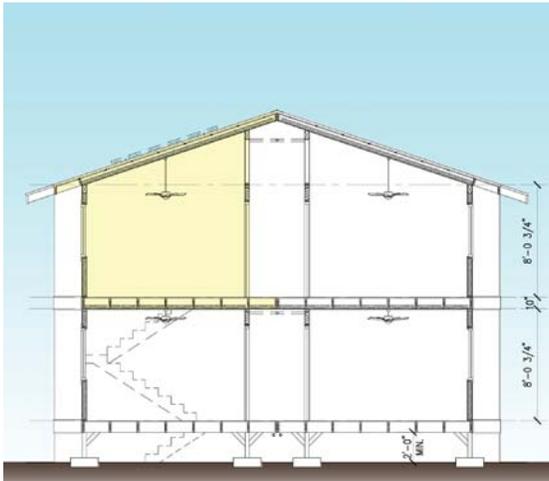
A single module may be used independently or combined as shown below.

THE MODULE DESIGN began with a 4x8 plywood sheet. The ubiquitous and inexpensive building material forms the base of our design figuratively and literally-- three and a half sheets joined side-by-side establish the basic 8x14 modular floor plan. In this same spirit, we designed the walls, ceiling and roof by harnessing off-the-shelf building materials to minimize cuts, waste, manpower and cost. With the module as the basic building block, plus a bit of imagination, a customized community can be easily assembled.

A SINGLE MODULE can be manufactured off-site and used independently or combined with other modules. Modules may be strung together or combined face-to-face to create a double-loaded corridor. Modules may also be stacked up to three stories as allowed by the building code. Module construction, simple and straightforward, can be completed by students, volunteers or prospective residents with a minimum of training. The deceptively simple design of a single module proves flexible, adaptable, expandable and affordable.

MODIFIED MODULES allow for amenities and a variety of functional spaces. The basic module can be reconfigured into kitchens, living rooms and then linked to create larger spaces for community activities or a family. Expanding the modular floor plan to four adjoining 4x8 sheets makes it possible to turn a module into a stairway or a shared bathroom. A mix of basic and modified modules transforms into a simple yet inviting community living environment complete with the comforts and amenities of any home.

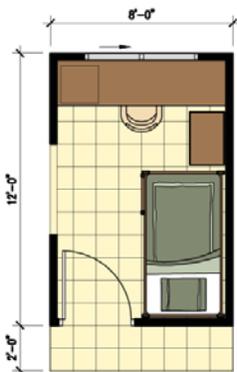
BY RETHINKING the humble 4x8 we created a realistic design approach that tackles the issue of homelessness and also meets local building codes and standards. The module is simple, efficient and functional and can be easily assembled by non-professionals from standard building materials found at any hardware store. And with a potential 110 units/acre density (220 persons/acre using bunk-beds), our concept also intelligently addresses the high cost of land in Hawaii. The module will shelter those less fortunate and also inspire everyone to reTHINK and reapply the most basic notions of how we build and how we live.



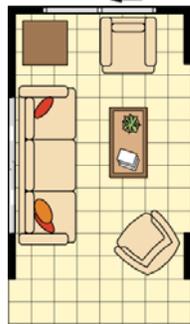
Modules combined and stacked with a base bedroom module highlighted. The Building Code allows for modules to be stacked up to three stories. The stairs from an adjoining unit are dashed in.

ESTIMATED MODULE MATERIAL COST

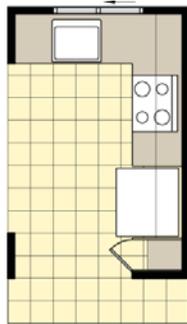
Material	Cost	Material	Cost
Hardie Board w/ Stucco Finish	\$240	Vinyl Window	\$150
Hardboard	\$26	Hollow-core Door w/ Transom Vent	\$110
Gypboard	\$135	Fan/Light & Switch	\$125
-Mud, Tape, Primer & Paint	\$93	Outlet (including Wiring)	\$108
Plywood	\$142	Sprinkler Head & Piping	\$65
Self-Adhesive Vinyl Tile	\$112	Concrete Footing & Anchor	\$88
Vapor Barrier	\$98		\$3,463
Battens & Caulk	\$36	Contingency @ 5%	\$3,636
-Caulk	\$16	Taxes @ 4.5%	\$3,800
Base/Belly Band	\$72		112 sf Module
Standing Seam Metal Roof	\$346		\$33.93 per sf
Batt Insulation	\$390	ESTIMATED MATERIAL COST	\$34.00 per sf
Lumber	\$823		
-Screw, Joist Hanger, Tie-down	\$288		



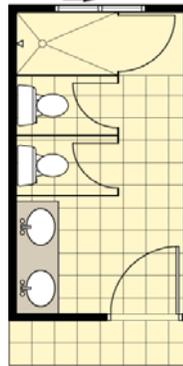
Base bedroom module
Total Gross Area: 112 sf



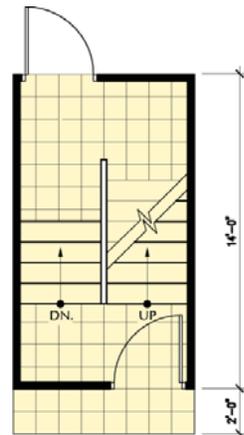
Modified module - Living room



Modified module - Kitchen



Extended module - Bathroom
Total Gross Area: 128 sf



Extended module - Stair





reTHINK 4x8
a design proposal for modular low-income housing



Perspective view of an envisioned module-based, low-income community. Note the variety of building heights and sizes made possible through creative arrangement and simple modification of the base module--the potential is limitless.



Site plan of an envisioned module-based, low-income community. Thoughtful site planning yields areas for parking, gardens, playgrounds and other community spaces.



A proposed floor plan arrangement using the base bedroom (shown in color) and modified modules including stairs, living room, bathroom and deck modules. Countless variations are possible.



Low cost/low income does not need to equal "institutional", and can provide the comforts of any home through careful use of materials, landscaping, site planning and architectural design.



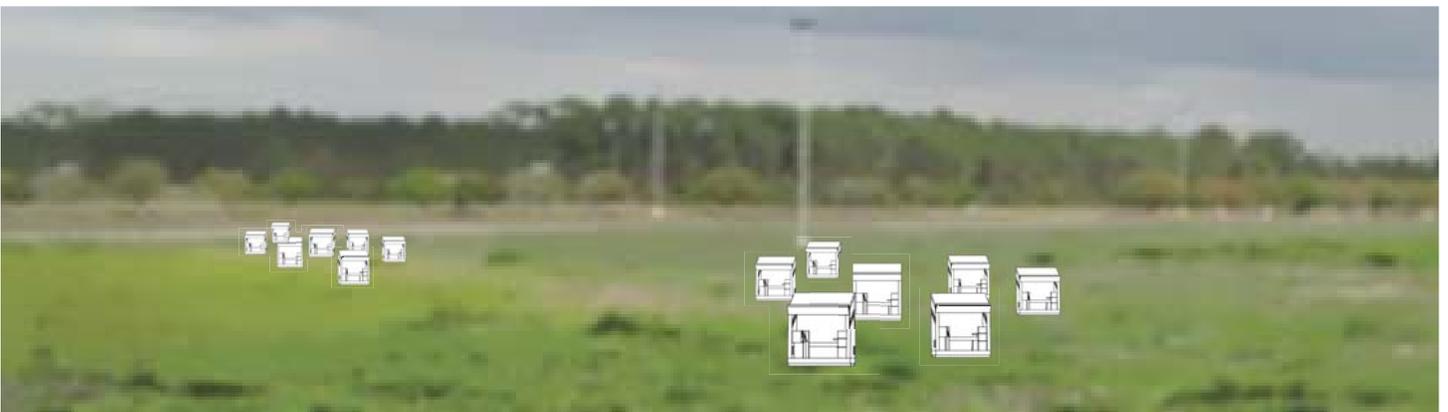
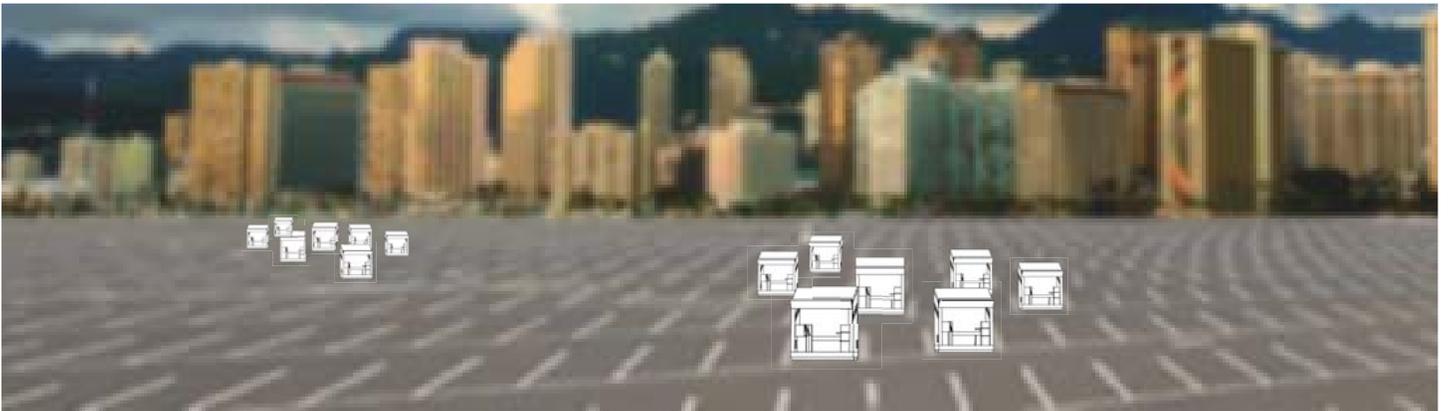


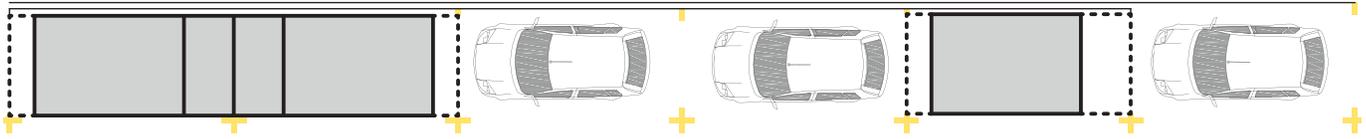
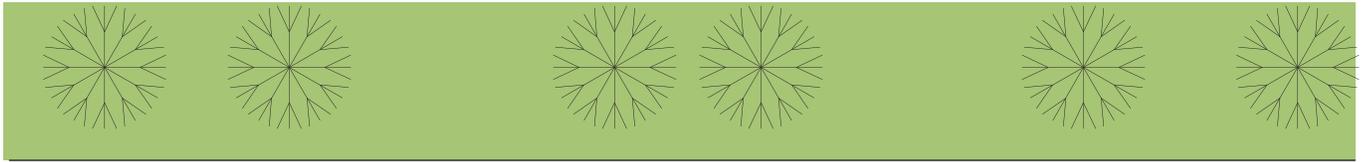
THEIR | OWN | SPACE

In Hawai'i, the high cost of living makes it difficult for many of our people to find an affordable place to live. Without secure shelter, it is difficult to maintain a lifestyle with a steady source of income. This project seeks to provide what Hawai'i's homeless need, their "own" space to live and thrive.

In order to provide maximum flexibility, affordability and utility, the concept is based on the modularity and versatility of a parking stall. Like people, parking stalls can be singular or plural and not to mention... They are everywhere.

A single unit fits neatly inside one standard-size parking stall. A cluster of units in an existing parking lot (or parking structure), allows a community to form in the midst of the cityscape. From dense urban parking lot, to grassy green rural park, the units offer residents a functional and versatile place to live. A community of units would have access to a shared unit, that is especially outfitted with restroom and shower facilities. With each unit, a homeless person is given an intermediate space of their own.

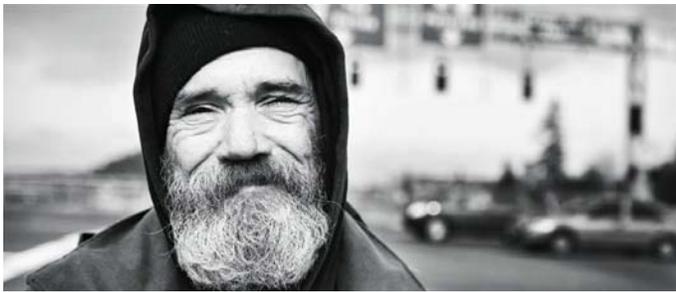




THEIR | INDIVIDUAL | SPACE

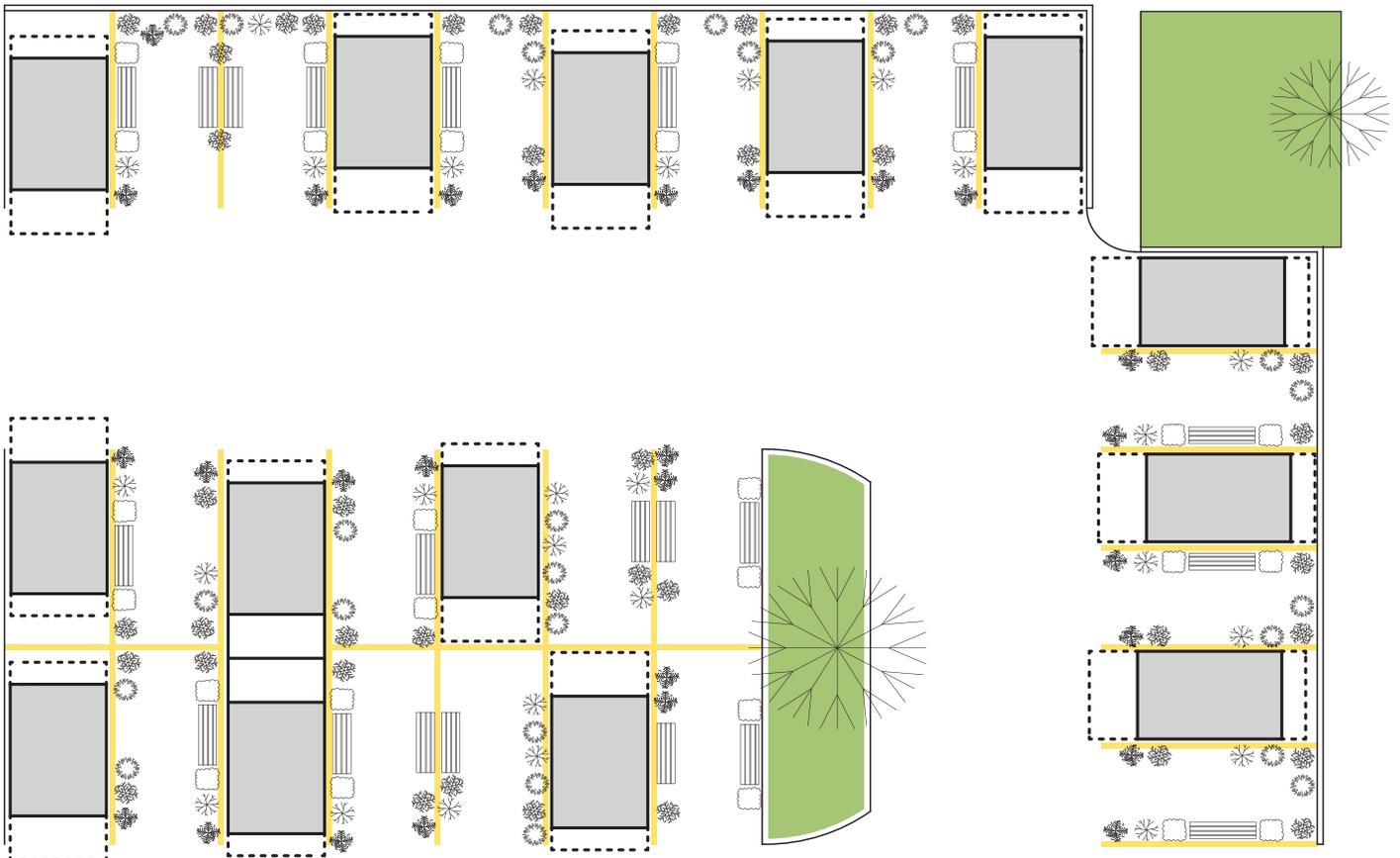
Meet Kane. When he was homeless, he used to live on the streets. But when he was given his “own” space, he went from living on the streets, to living in on-street parking. Once Kane found a community to live in, the mobility of his unit allowed him to transition easily from individual living to community living.

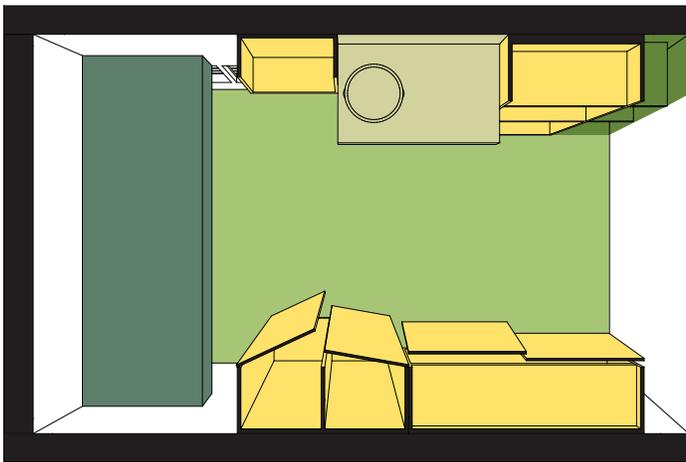
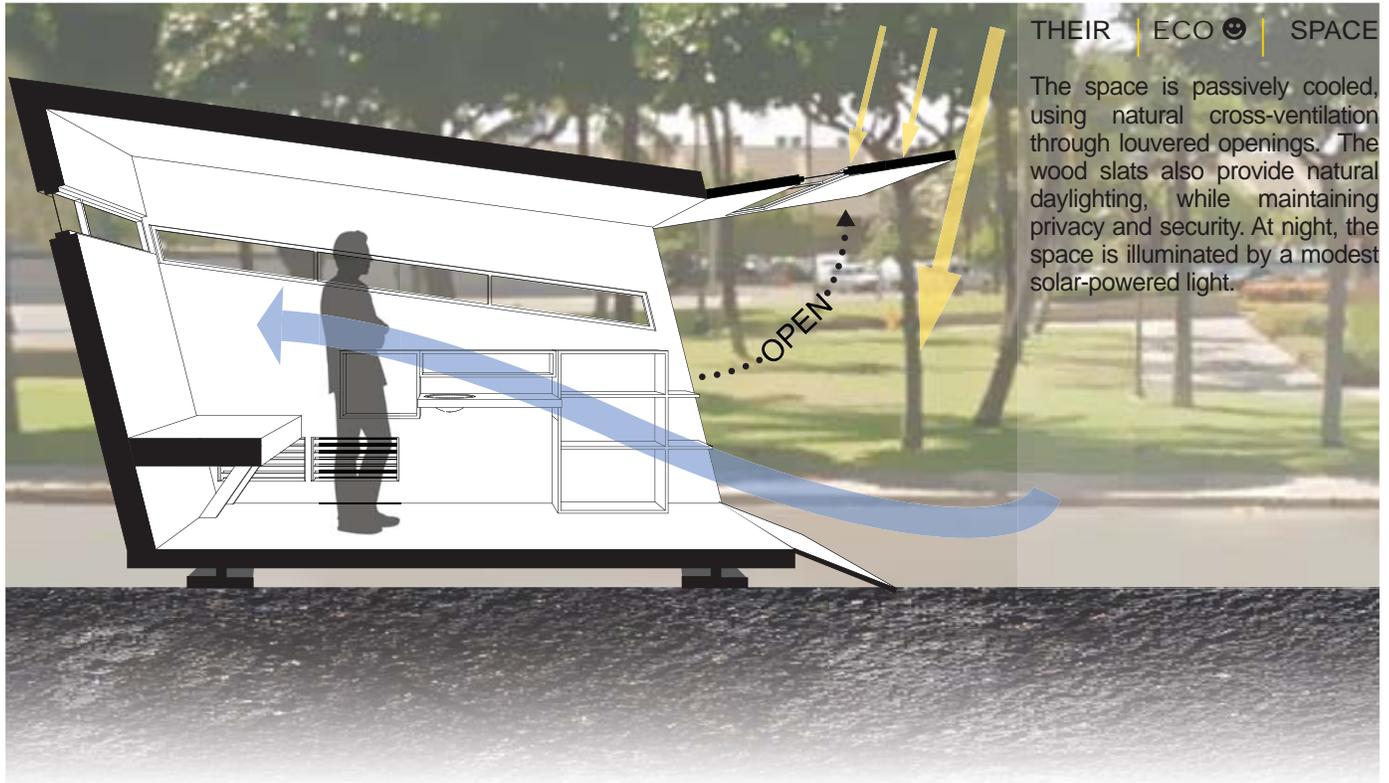
MEET | KANE |



THEIR | COMMUNITY | SPACE

The community at the Kaka’ako Beach Park is close to Kane’s new job. Since living amongst his new community, he now has the support network he needs to get back on his feet.

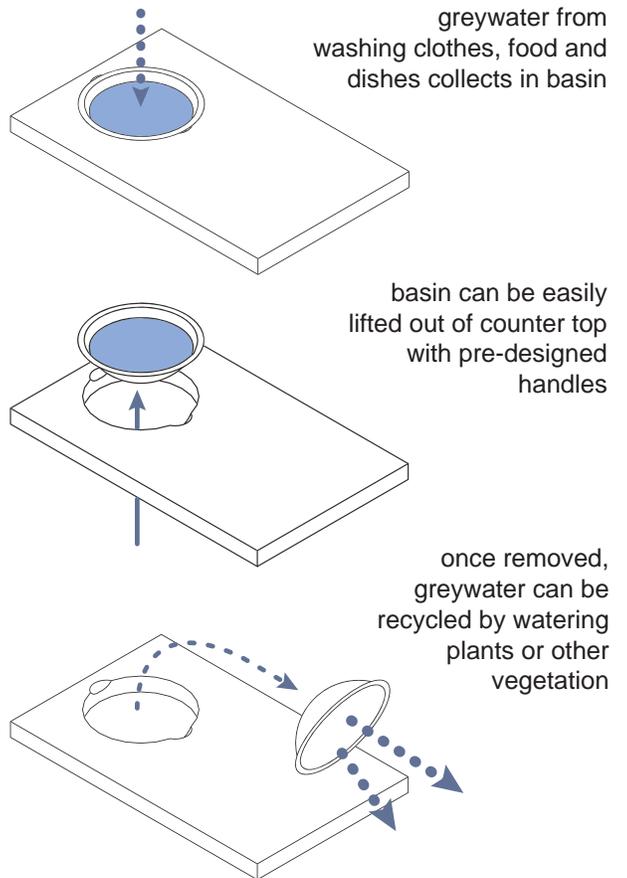




THEIR | LIVING | SPACE

Although compact, each unit is complete with a built-in bed; a counter-top with a basin for gravity-fed water; a collapsible table for eating; and flexible storage space.

- Their |STORAGE| Space
- Their |UTILITY| Space
- Their |ACTIVE| Space
- Their |SLEEP| Space
- Their |GARDEN| Space

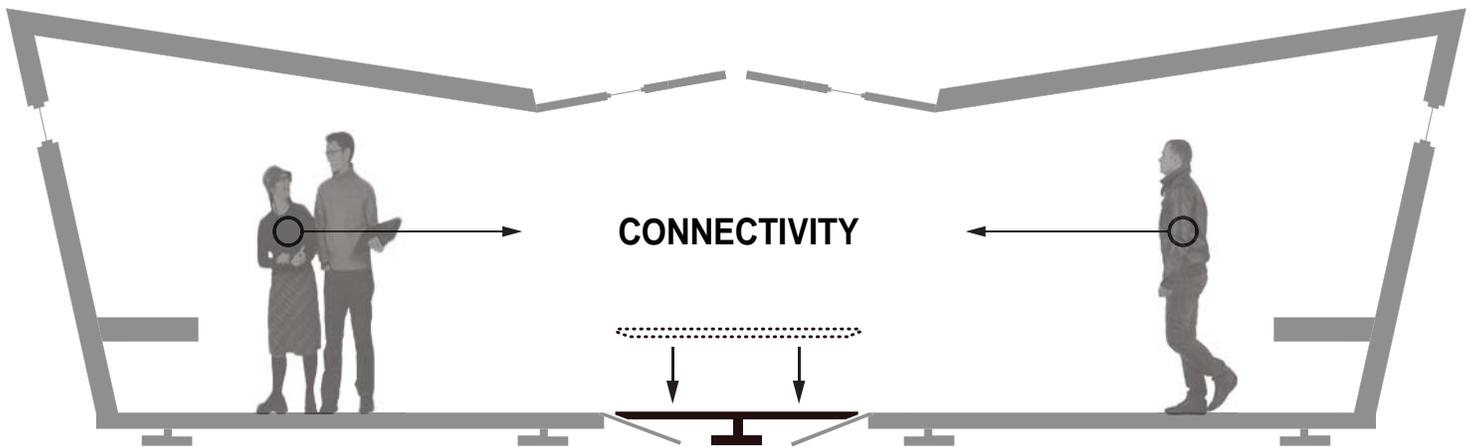




THEIR | GARDEN | SPACE

Vegetables harvested from a small personal garden provide a nutritious supplement to the resident's diet.

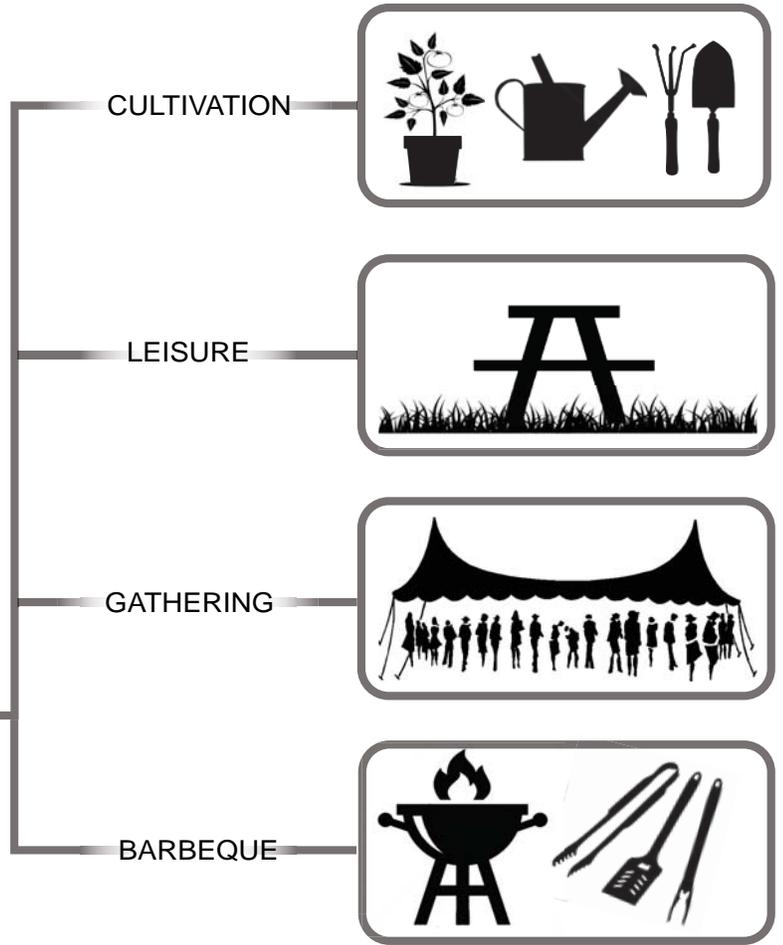
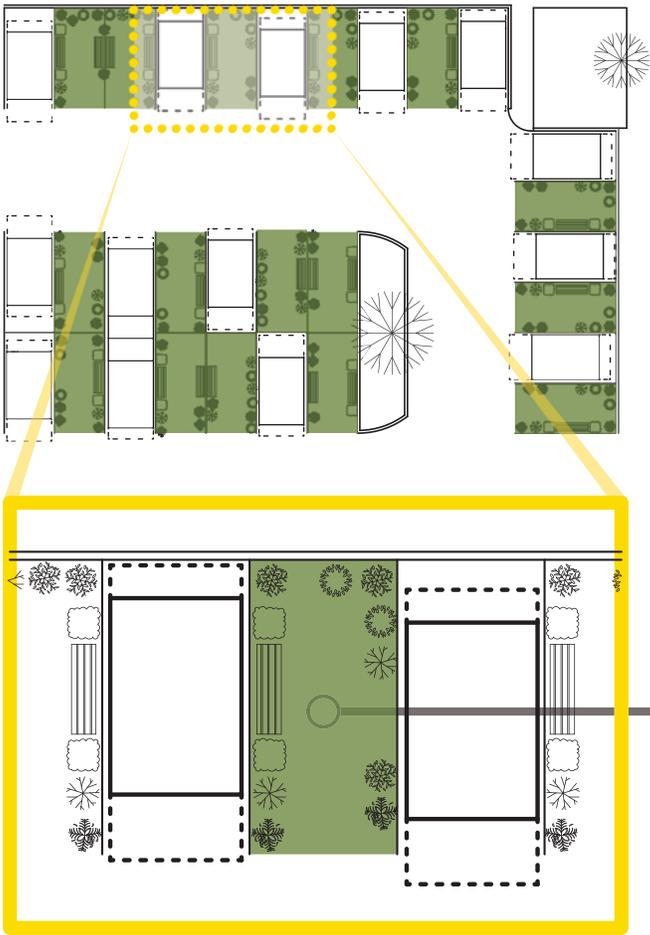
Plants for utility can also be beneficial to residents. In a community environment residents can trade produce and seeds, enhancing their sense of community and strengthening their ties.



THEIR | CONNECTED | SPACE

Two units can be joined together to make a family-style environment. Lifting the back hatches of both units opens each space to one another. Bridging the space with an additional platform makes the transition almost seamless.

The lower portion of the back door (i.e. the tailgate) can be lowered under the platform, or supported by a curb (or concrete block) to form a bridge linking the unit to a sidewalk or another unit.



THEIR | OWN | SPACE

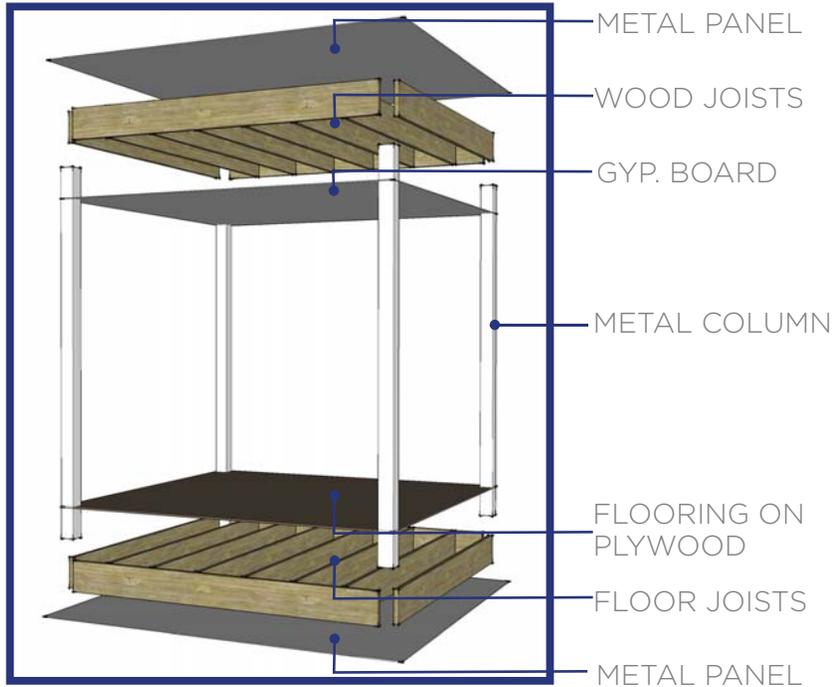
After 2 years living in his own space, Kane was able to save enough money for a deposit on a new apartment with a few of his friends.

His unit was returned to the program for a new resident to inhabit.

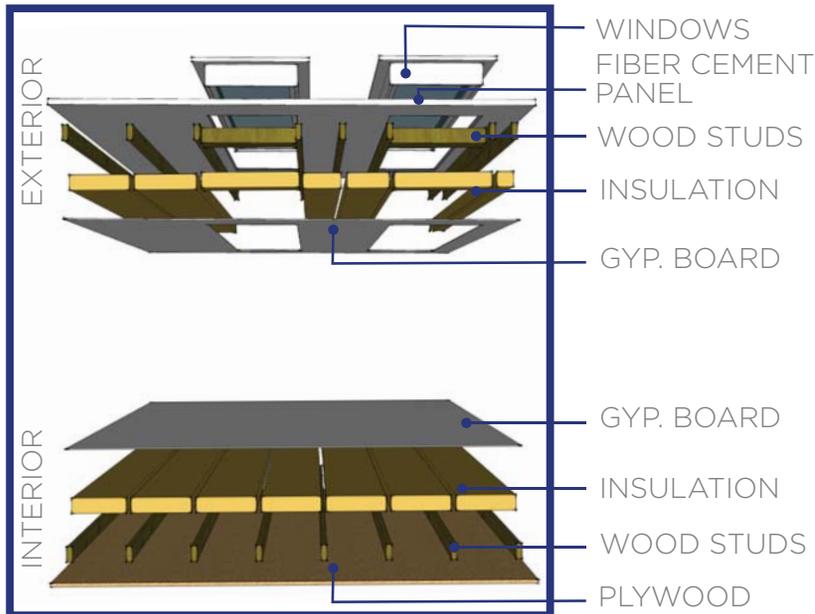
The refurbished unit was reassigned to Lani, from the streets of Chinatown. Her new space will allow seize opportunities in hopes of a better life.



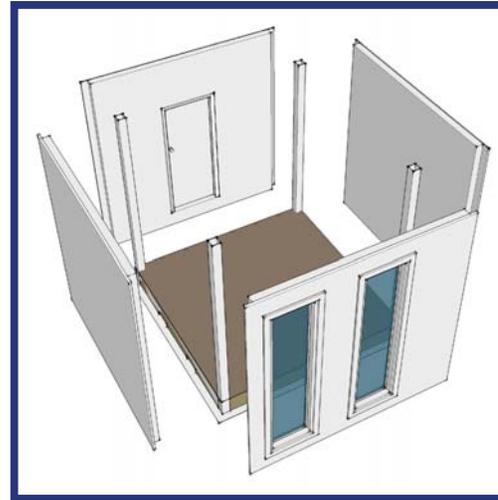
1. CONSTRUCT 10' X 10' X 10' MODULE STRUCTURE OFF SITE



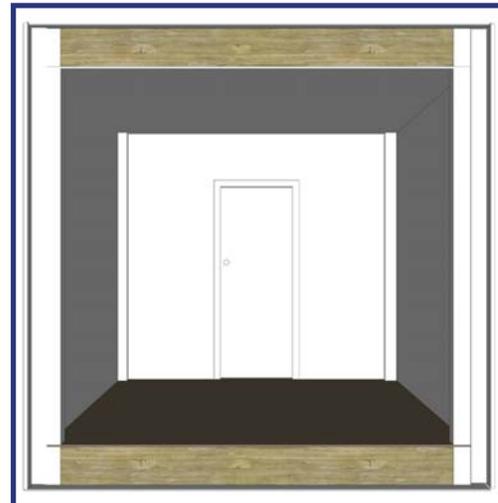
2. CONSTRUCT 10' X 10' WALL PANELS OFF SITE



3. TRANSPORT STRUCTURE AND PANELS TO SITE. ATTACH WALLS TO STRUCTURE.



LIMITING THE NUMBER OF MATERIALS/OPTIONS REDUCES COST AND ONLY REQUIRES A WRENCH ON SITE TO ASSEMBLE AND DISASSEMBLE.



MODULAR FLEXIBILITY ALLOWS FOR SINGLE UNITS OR MULTIPLE UNITS FOR MORE PEOPLE.

4. INSTALL INTERIOR ELEMENTS



FOLDING SHOWER



FOLDING BED/DESK OPTIONS w/ STORAGE



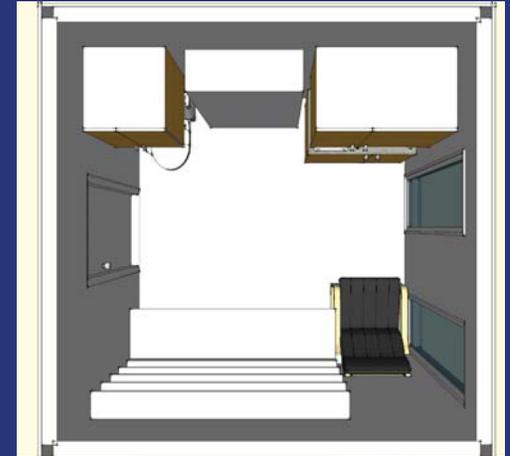
KITCHEN - SINK, COOK TOP, FRIDGE



INTERIOR LAYOUT WITH DESK



ELEVATION



INTERIOR PLAN VIEW



the 100_{sf} home

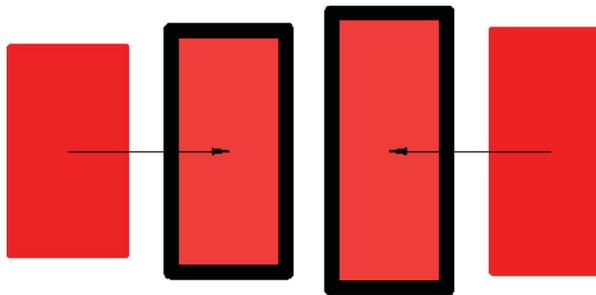
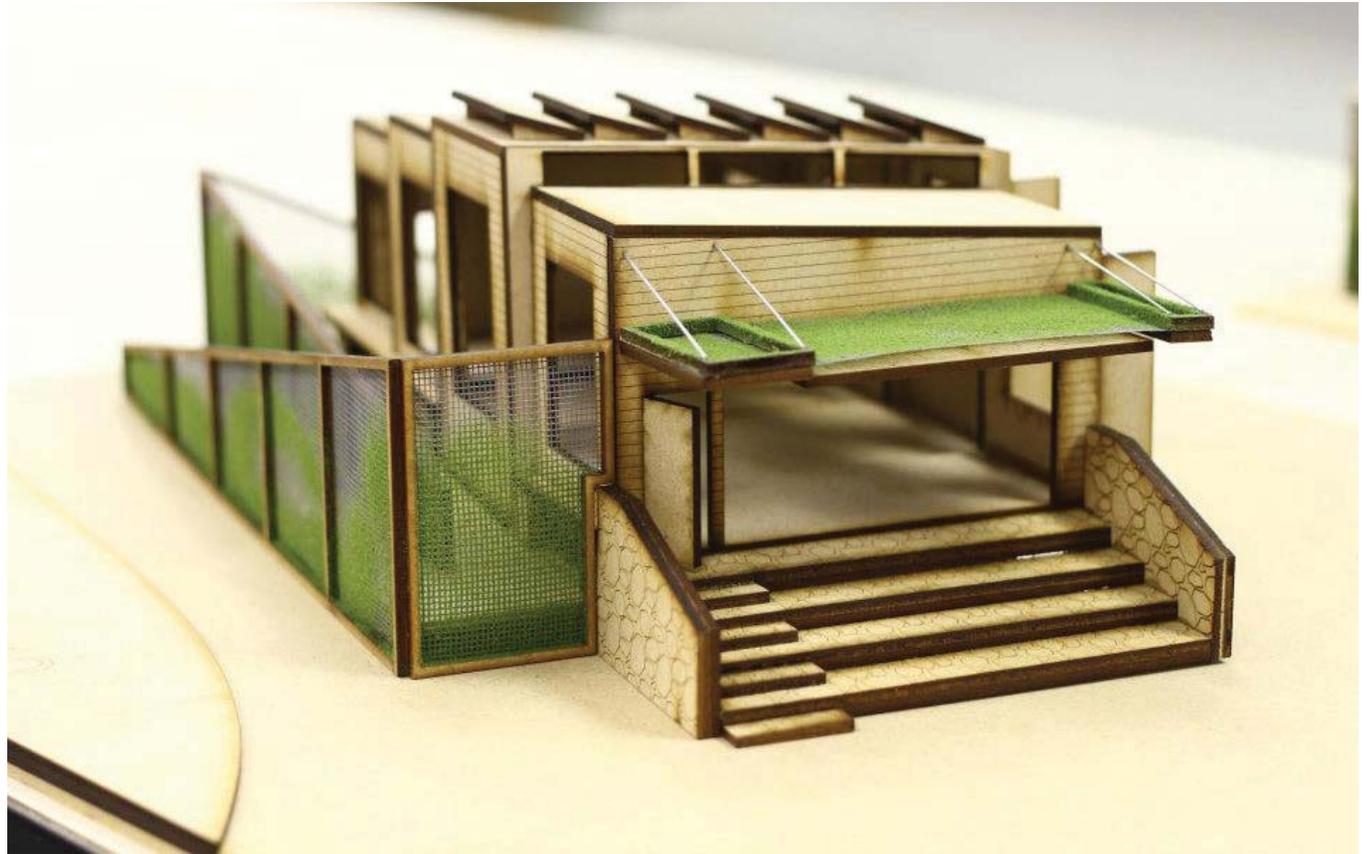
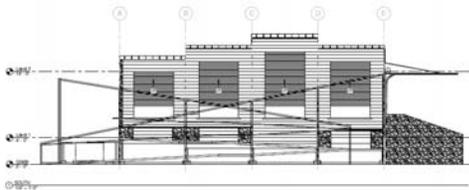
re_THINK DESIGN COMPETITION

DESIGN TEAM:

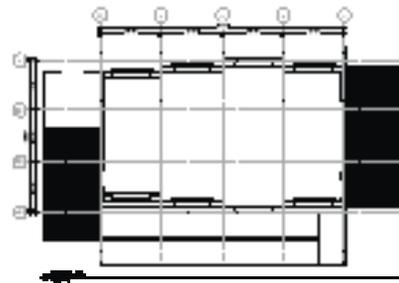
ANDREAS GAETA

MO TUIKOLONGAHAU

Designed to be prefabricated and modular, the structure can be placed on site with 360-degree adaptability, utilizing passive cooling, natural lighting, and rainwater catchment. The modularity of the structure allows its components to be packed within each module, then loaded on a single trailer for easy maneuverability, assembly and disassembly.



Concept diagram of retraction. Multiple units can be attached to each other, creating a larger family prototype.



Generalized Floorplan derived from Retraction Concept.

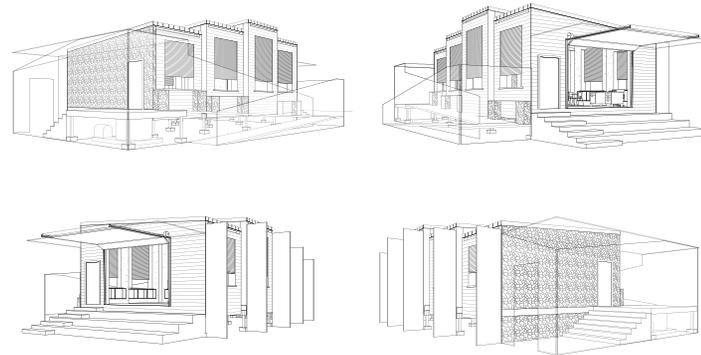


Conceptual Rendering

re_THINK DESIGN COMPETITION

DESIGN TEAM:
ANDREAS GAETA
MO TUIKOLONGAHAU

PERSPECTIVES



GABION WALL SYSTEM



GABION STEPS/BENCH SYSTEM

Inspiration Photos



GABION BENCH W/ WOOD SEATING



INDIRECT LIGHTING



GREEN SCREENS



STANDING SEAM



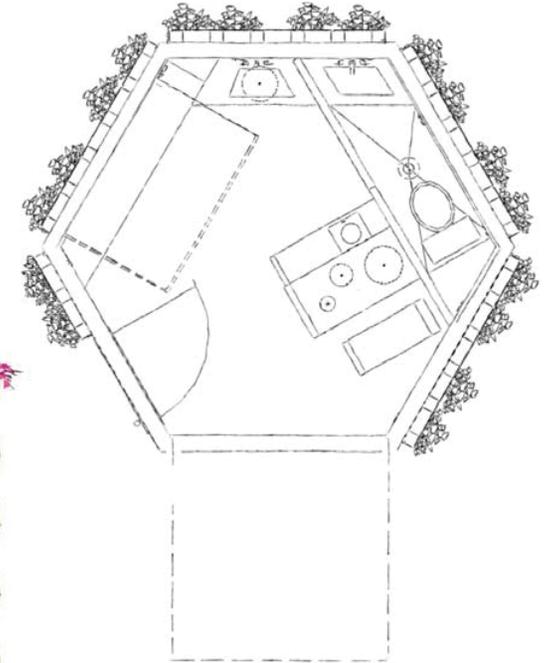
Gabion components allow for easy, non-permanent assembly. Once formed and welded, the Gabion baskets simply need to be filled. This can be done by anyone, including participants in the program. The baskets can be filled with a variety of materials including wood, stone, reclaimed materials, broken asphalt/concrete, etc. Green screens can function for shade, heat mitigation and aesthetics, and can even be planted with subsistence food.

A 2006 STUDY CONDUCTED BY THE STATE OF HAWAII ESTIMATES ALMOST 97,000 PEOPLE IN THE CATEGORY OF "HIDDEN HOMELESS" AND 262,000 PEOPLE IN THE CATEGORY OF "AT-RISK".

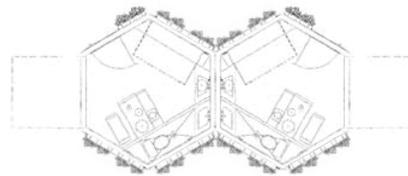
HOUSING AFFORDABILITY IS A MAJOR CAUSE OF THE RISE IN HOMELESS POPULATION. MANY OF THE PEOPLE AFFECTED ARE ACTIVE MEMBERS OF THE COMMUNITY WITH FULL TIME JOBS. MY DESIGN PROVIDES AN AFFORDABLE, DURABLE, HIGHLY FUNCTIONAL SPACE FOR INDIVIDUALS TO LIVE WELL IN.

WHILE THE FOOTPRINT IS ONLY ~100 SF, THE HIGH CEILINGS, GLOSSY WHITE CABINET FINISH & DARK FLOORING GIVE THE SPACE A MUCH LARGER FEEL.

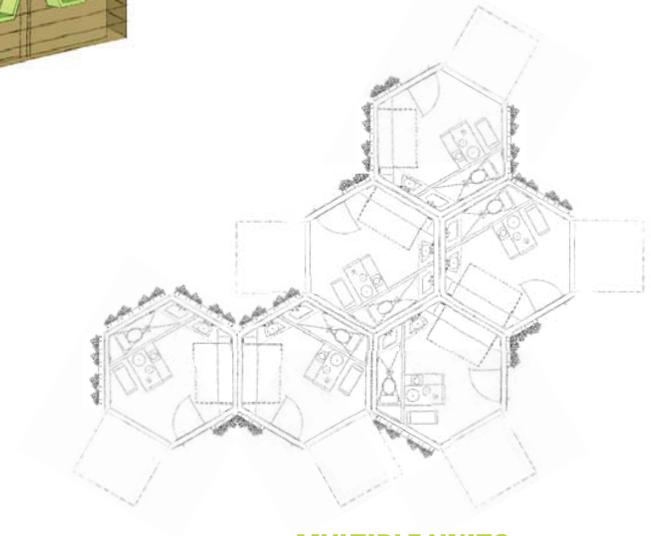
EACH UNIT CAN STAND ALONE OR IT CAN CONNECT ON UP TO 3 SIDES.



**SINGLE UNIT
FLOOR PLAN - NTS**

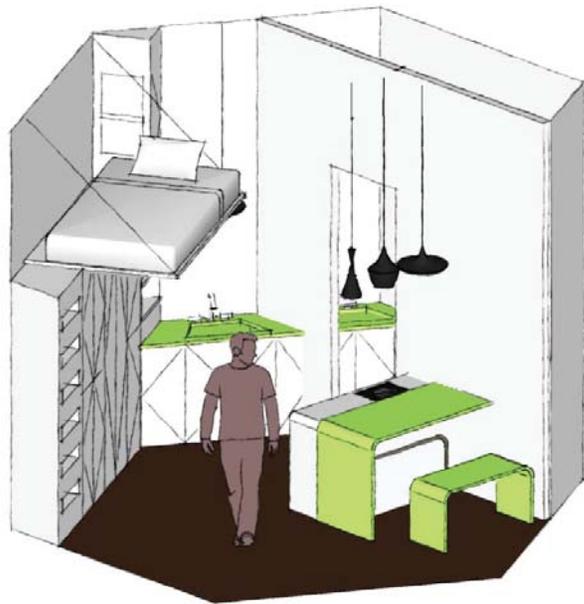


2 UNITS



MULTIPLE UNITS

THE HIVE



INTERIOR COMPONENTS

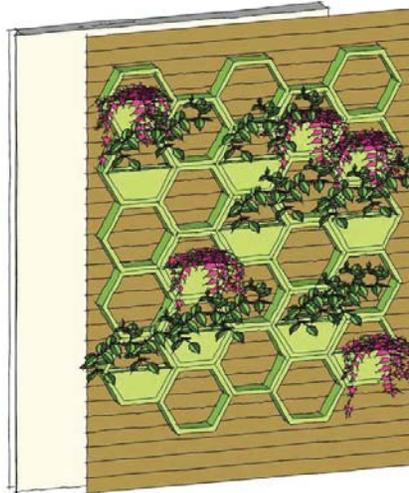
THE INTERIOR SPACE IS KEPT OPEN TO ALLOW FREEDOM OF MOVEMENT.

FINISHES ARE MINIMAL USING STAINED AND SEALED OSB ON THE FLOOR, GLOSSY WHITE LAMINATE FOR ALL CASEWORK & CORIAN COUNTER TOPS.

KITCHEN FEATURES SINK, UNDER-COUNTER FRIDGE/FREEZER, CONVECTION OVEN & SINGLE BURNER COOK TOP. COUNTER SLIDES TO PROVIDE EATING/WORK SURFACE TO REVEAL COOK-TOP BELOW. BENCH SLIDES OUT TO PROVIDE SEATING.

COMPACT BATHROOM FEATURES A RAIN SHOWER.

MURPHY BED ABOVE CABINETS FOLDS UP TO CREATE SEAMLESS APPEARANCE OF CABINETRY WHEN NOT IN USE. BED IS ACCESSIBLE BY A BUILT IN LADDER AND IS PARTIALLY SUPPORTED BY CABLES.



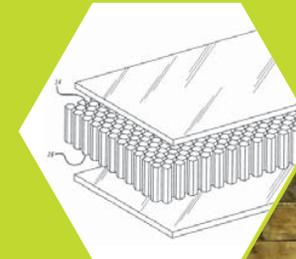
PREFAB COMPOSITE PANELS

THE EXTERIOR WALLS ARE CREATED USING PREFABRICATED LIGHTWEIGHT COMPOSITE PANELS THAT CAN BE QUICKLY ERECTED BY TWO PEOPLE.

PREFAB SIDING

PREFABRICATED SIDING MADE OF RECLAIMED PALLET WOOD/ REUSED WOOD CLAD THE EXTERIOR WITH BRIGHTLY COLORED PLANTERS TO GROW HERBS AND SMALL VEGETABLES.

PRIMARY BUILDING MATERIALS



GORILLA HONEYCOMB COMPOSITE PANELS - \$12 PER SF BUILT

REUSED LUMBER - FREE - \$.50 LF

LAMINATE CABINETRY - \$150 LF

STAINED OSB - \$2 SF

CORIAN - \$40 SF



GLASS DOOR- \$80 SF



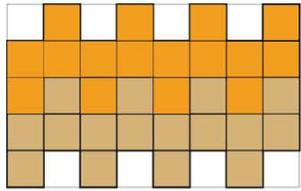
APPLIANCES - \$2500



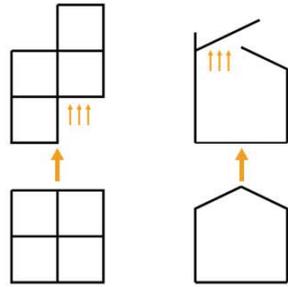
PLUMBING FIXTURES - \$500

* THESE PRICES ARE ROUGH ESTIMATES. THIS DESIGN WONT MEET THE \$80 SF REQUIREMENT AS A SINGLE UNIT. BUT DEPENDING ON THE QUANTITY OF UNITS THE PRICE WOULD BE AFFORDABLE.

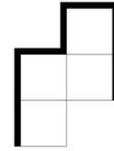
DIAGRAMS



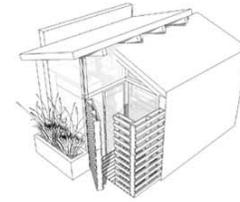
site plan layout



parti diagram



solid/transparent



single unit

AFFORDABLE HOUSING

MODULAR COTTAGE



MAIN CONCEPTS

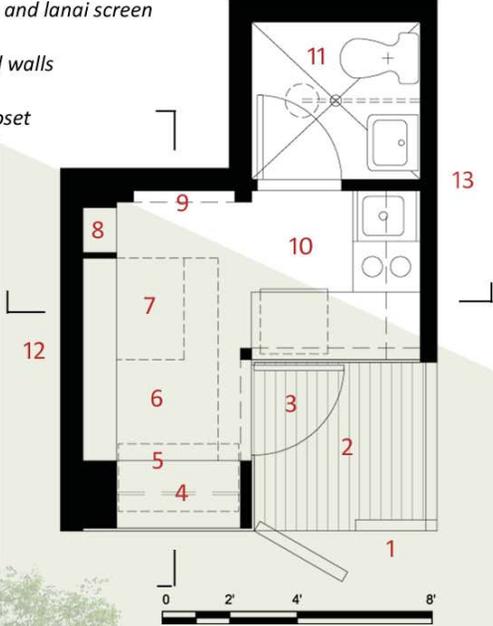
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FLOOR PLAN
sq ft: 126 SF gross
96 SF net



INTERIOR VIEW



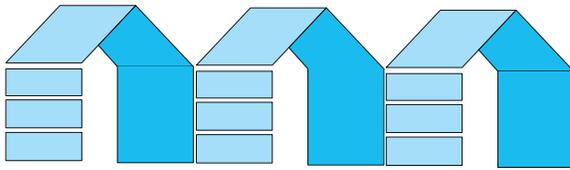
fire resistive wall

natural ventilation

metal roofing

metal siding

SECTIONS



Hanging Hale

Andrea Kelly

The Problem: Homelessness



In the parks

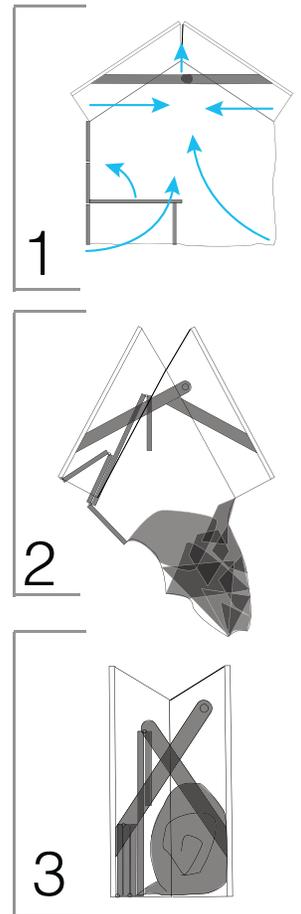
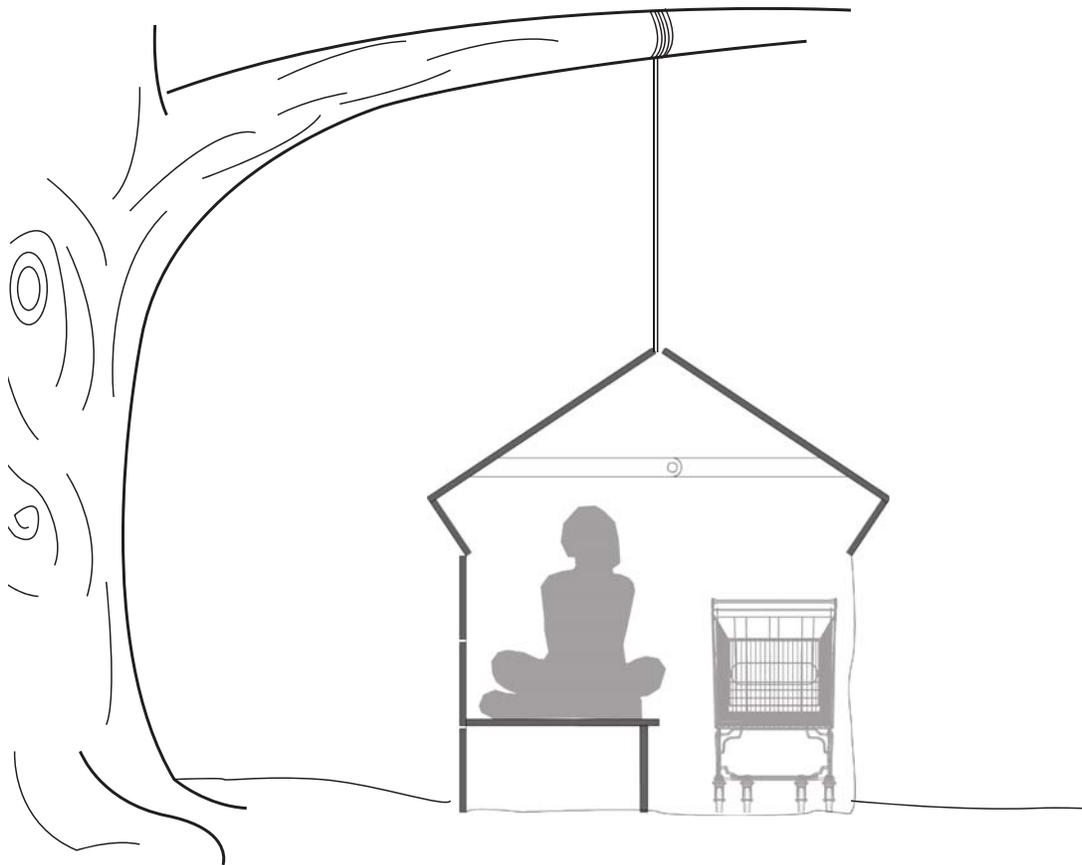


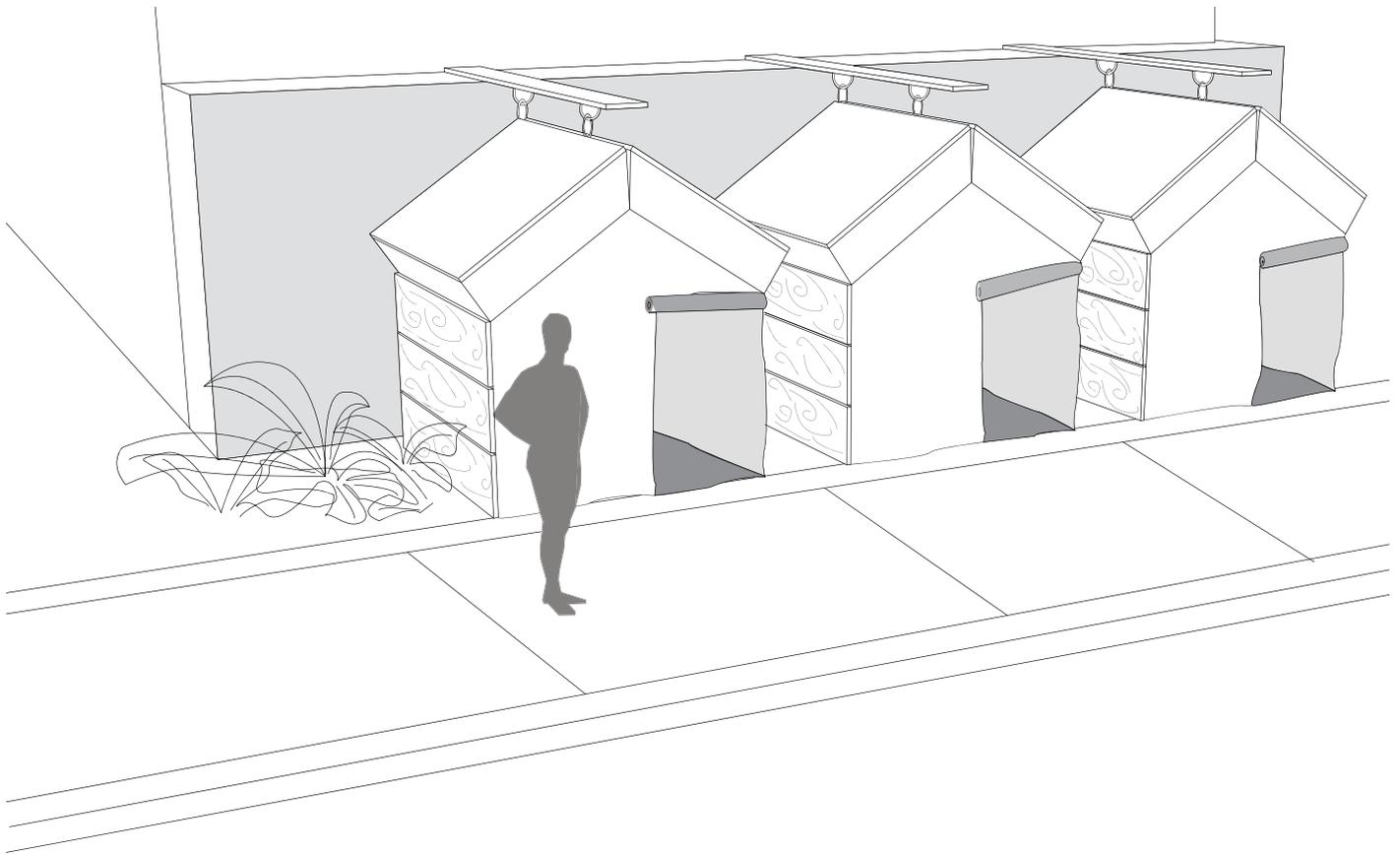
On the sidewalk



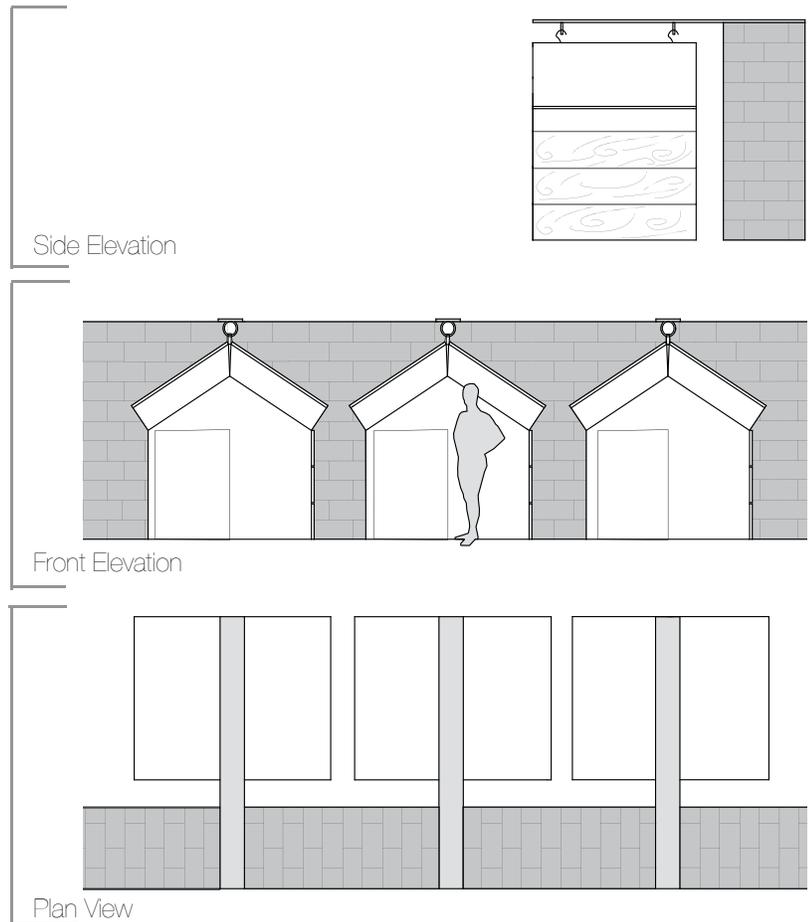
In the street

The Solution: Individual pods that act as hanging tents. They can only be set up in designated areas with hangers or hung from a tree in a park or rural area. They fold up into themselves and fit in a shopping cart to cater to the transient lifestyle of a homeless person. When opened they can fit a shopping cart and a person inside. They are more attractive than personal tents and prevent people from setting up their homes in unwanted places. They help to provide a safe, attractive home for homeless people where they can't be kicked out by police. At the same time they are helping to alleviate the discomfort of the public and beautify the city of Honolulu.





When fully opened the pods measure 6' x 6'; big enough for a shopping cart or bicycle and one occupant. The roof panels can be made out of wood and the sides made out of tent fabric. They could be distributed to homeless people so they can have their own hale to take care of and carry with them. When they find a wall with hangers, or a low enough tree in a park, they can hang up their tent for the night and have a safe place to keep their belongings, stay dry from the rain, and have some privacy. By limiting the number of hangers in a certain area it can control the amount of homeless people and prevent a large population build up in that area. The hanging areas don't need to be monitored by anyone, and require very little supervision. The pods don't require much maintenance and are easily taken care of by the occupant. These hanging homes cater to the current lifestyle of homeless people, but make their presence safer, more regulated, and more attractive.



of storage and what it does for our lives.

S³



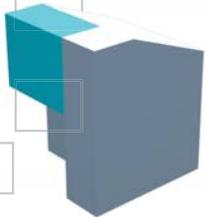
Soaring cost of living in Hawai'i has made it difficult to adapt. The rent of Hawaii homes is 50% greater than the national median and 75% of households living in poverty spend more than half of their income on rent.



STOORAGE *\'st\u0254r-ij* a place or a space for storing. Storage is essential to a home. It is the place that we keep valuables and stock our essentials. It helps to organize our lives and helps us to free our minds from the clutter of physical things. Many people take storage for granted, but we must understand the importance



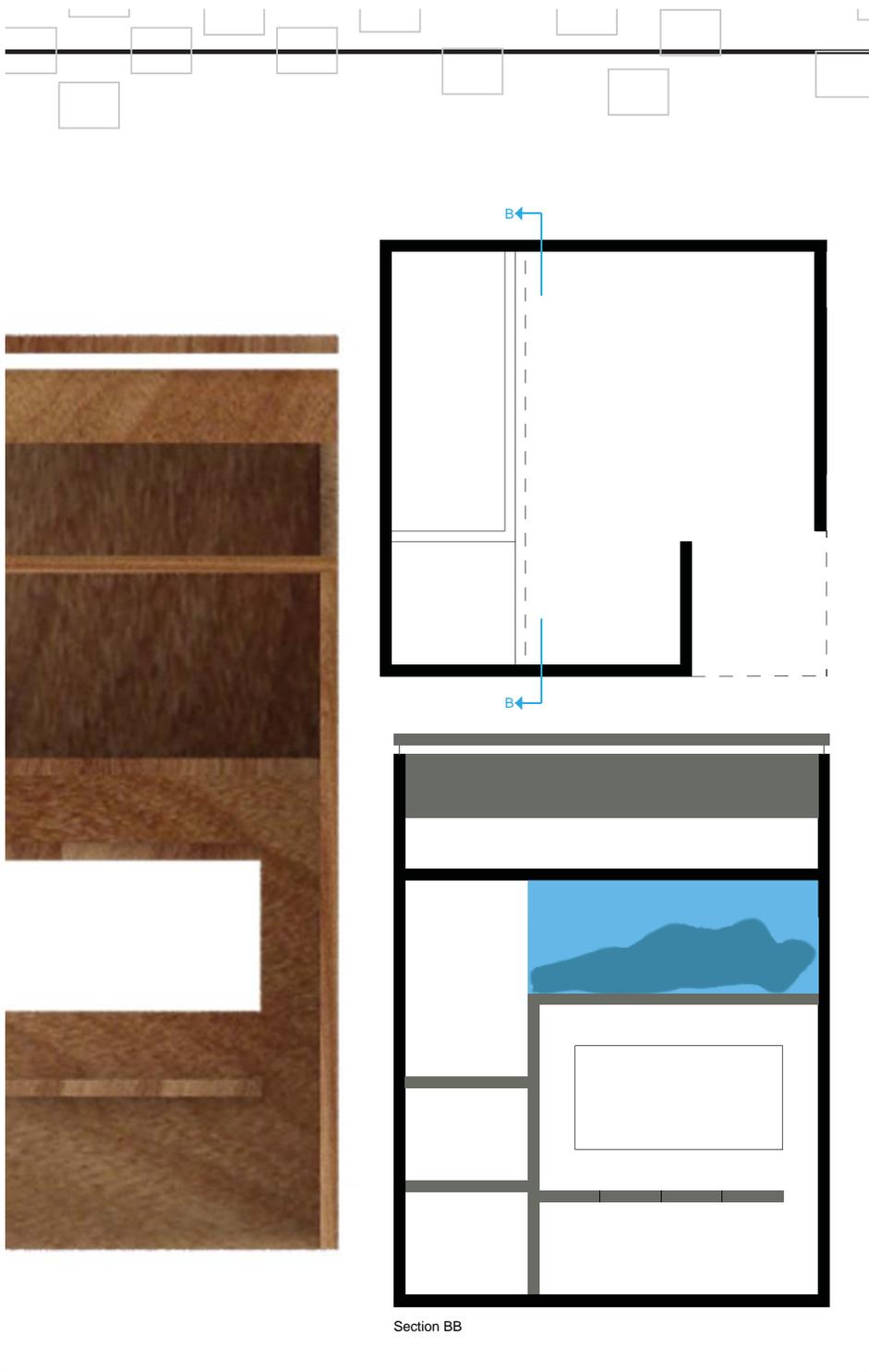
SHELTER *\'shel-t\u0251r* something that covers or affords protection. The best shelter is light-weight and protects from the elements of sun, wind, rain, etc. It should help to create safe havens, both interior and exterior spaces. Shelter is not thought about at all, but we must understand how essential it is to a home, and to our life.



SLEEP *\'sl\u025b\u026a\u028cp* the natural periodic suspension of consciousness during which the powers of the body are restored. Sleep is a habitual act that we do unconsciously. It regenerates our energy, body, and mind. Some of us take sleep for granted, but we must stress its significance in our daily lives.

SHELTER
STORE SLEEP GREEN
INTRO STORE CONNECT EXIT





S **TABILITY**-All of the walls become load-bearing walls. The structure is mainly comprised of four walls making a box with the windows and furniture features being punched out of these walls. The material of the structure is plyboo, a plywood made of bamboo strands. Like many structures, there will need to be a concrete foundation.



Plyboo neopolitan, pre-finished "3/8"

This particular plyboo is made of havana and sahara strands of bamboo which are steam compressed to make this hard material.

COST- \$2.58-\$6.00



Coconut palm plywood

Another option, probably more feasibly in this tropical climate where resources of this material might be more abundant.

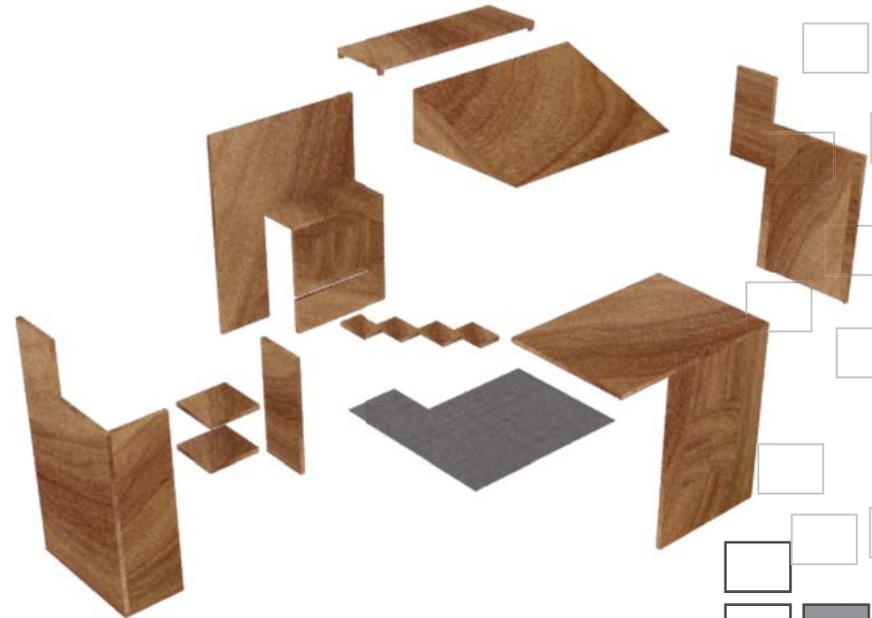
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Concrete

Used for the foundation

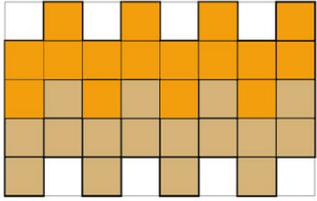
COST- \$6.00-\$8.00



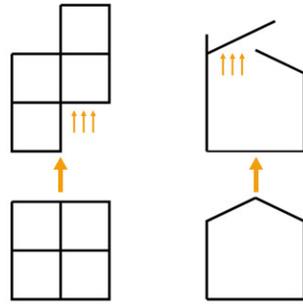
Section BB

Award Winners

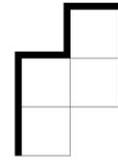
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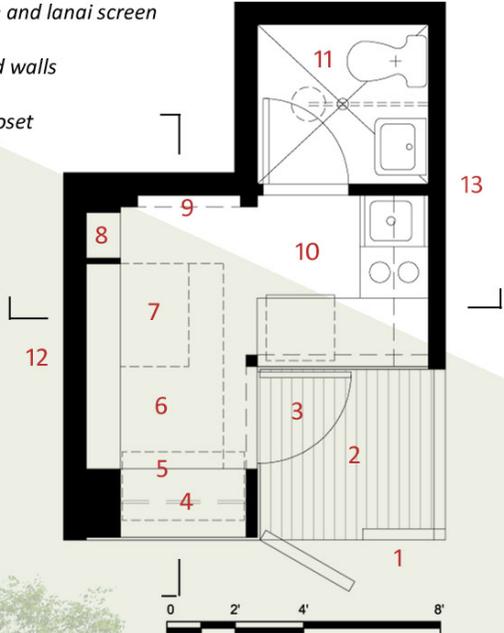
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SECTIONS

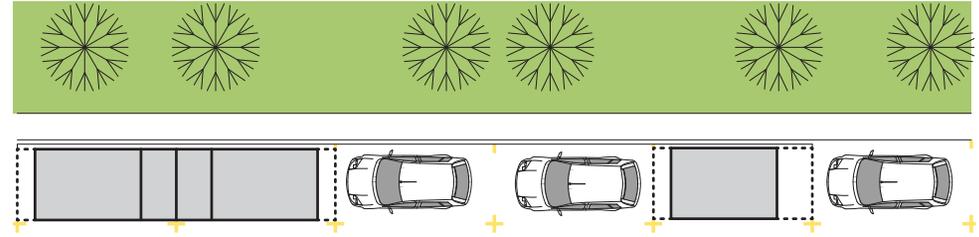
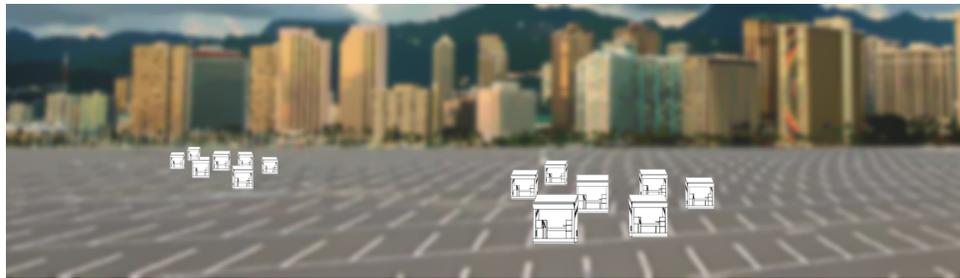


THEIR | **OWN** | SPACE

In Hawai'i, the high cost of living makes it difficult for many of our people to find an affordable place to live. Without secure shelter, it is difficult to maintain a lifestyle with a steady source of income. This project seeks to provide what Hawai'i's homeless need, their "own" space to live and thrive.

In order to provide maximum flexibility, affordability and utility, the concept is based on the modularity and versatility of a parking stall. Like people, parking stalls can be singular or plural and not to mention... They are everywhere.

A single unit fits neatly inside one standard-size parking stall. A cluster of units in an existing parking lot (or parking structure), allows a community to form in the midst of the cityscape. From dense urban parking lot, to grassy green rural park, the units offer residents a functional and versatile place to live. A community of units would have access to a shared unit, that is especially outfitted with restroom and shower facilities. With each unit, a homeless person is given an intermediate space of their own.



THEIR | **INDIVIDUAL** | SPACE

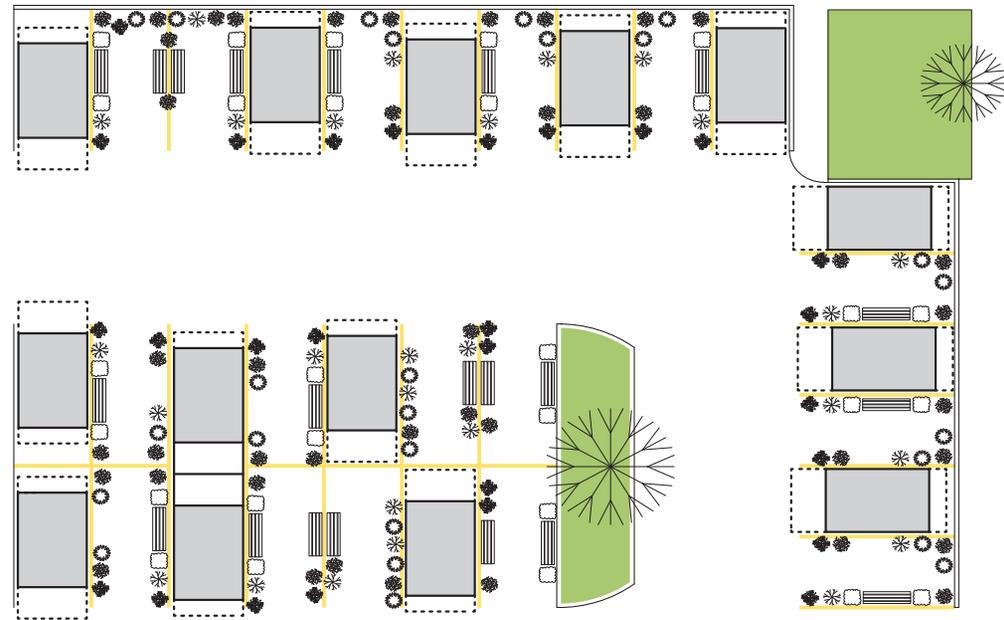
MEET | **KANE** |

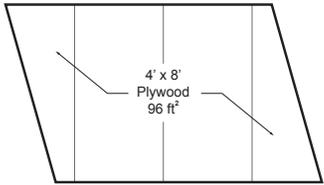
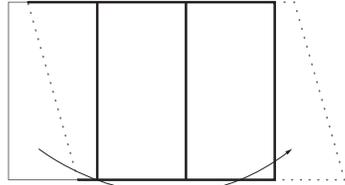
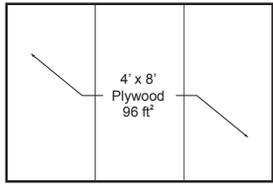


Meet Kane. When he was homeless, he used to live on the streets. But when he was given his "own" space, he went from living on the streets, to living in on-street parking. Once Kane found a community to live in, the mobility of his unit allowed him to transition easily from individual living to community living.

THEIR | **COMMUNITY** | SPACE

The community at the Kaka'ako Beach Park is close to Kane's new job. Since living amongst his new community, he now has the support network he needs to get back on his feet.





THEIR | **MODULAR** | SPACE

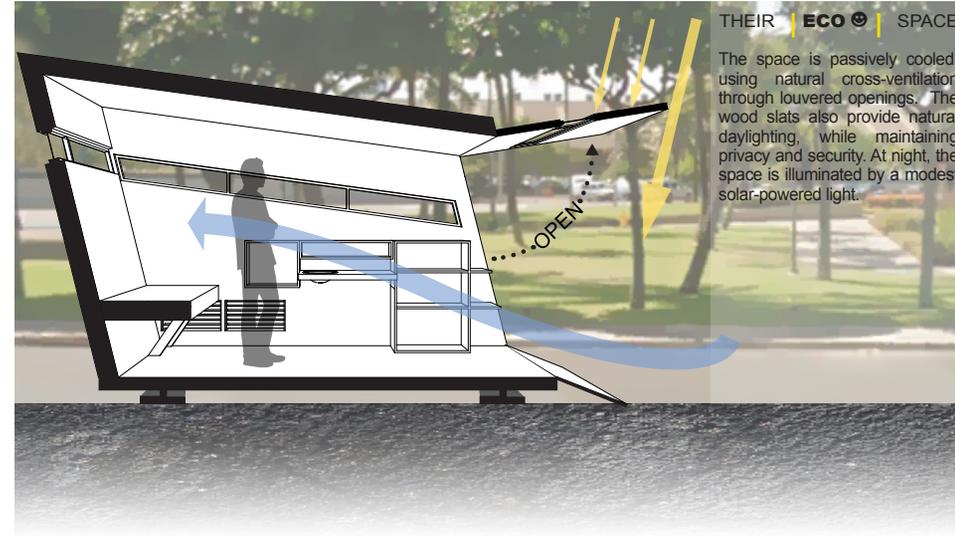
The proportion and size of the unit is based on a module of 3 sheets of plywood (standard 4' x 8'), providing 96 square feet.

The long walls can be similarly constructed from 3 sheets of plywood and can be prefabricated for easy assembly reducing the cost of labor.

The exterior surface of the plywood walls are protected by a corrugated polycarbonate sheathing. The translucent plastic reveals the wood exterior, which displays the honest construction method.

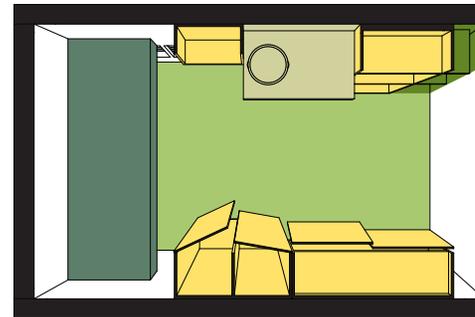
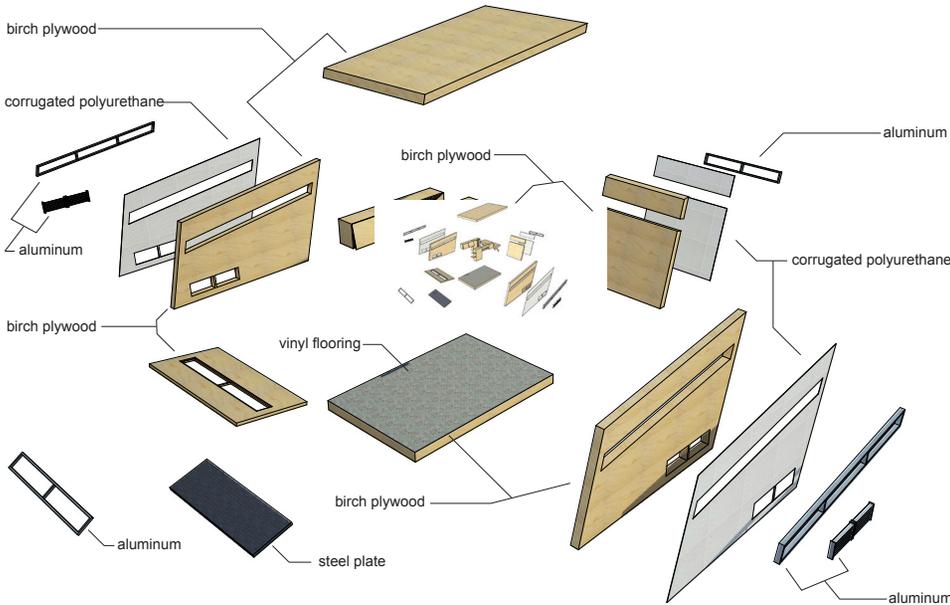
The units are elevated in order to reduce the footprint in contact with the ground plane and to allow passive ventilation under the unit.

The unit is accessible from a single fold-up (garage style) door that when open provides shade and air flow.



THEIR | **ECO** | SPACE

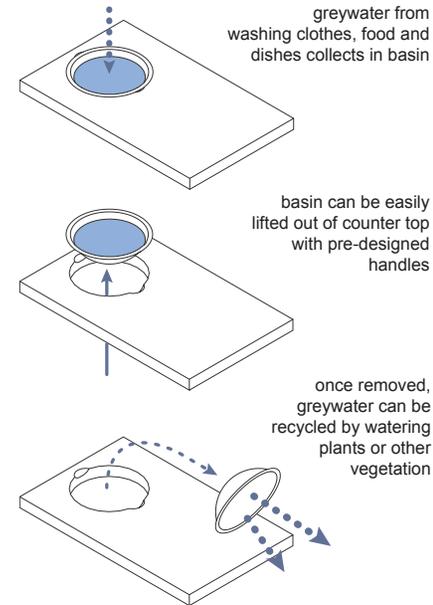
The space is passively cooled, using natural cross-ventilation through louvered openings. The wood slats also provide natural daylighting, while maintaining privacy and security. At night, the space is illuminated by a modest solar-powered light.



THEIR | **LIVING** | SPACE

Although compact, each unit is complete with a built-in bed; a counter-top with a basin for gravity-fed water; a collapsible table for eating; and flexible storage space.

- Their |STORAGE| Space
- Their |UTILITY| Space
- Their |ACTIVE| Space
- Their |SLEEP| Space
- Their |GARDEN| Space



greywater from washing clothes, food and dishes collects in basin

basin can be easily lifted out of counter top with pre-designed handles

once removed, greywater can be recycled by watering plants or other vegetation

THEIR **GARDEN** SPACE

Vegetables harvested from a small personal garden provide a nutritious supplement to the resident's diet.

Plants for utility can also be beneficial to residents. In a community environment residents can trade produce and seeds, enhancing their sense of community and strengthening their ties.

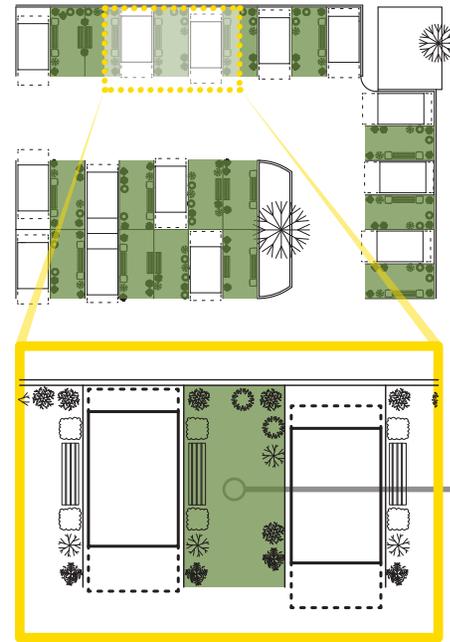
Tomato

Basil

Aloe

Snow peas

Scallion



CULTIVATION



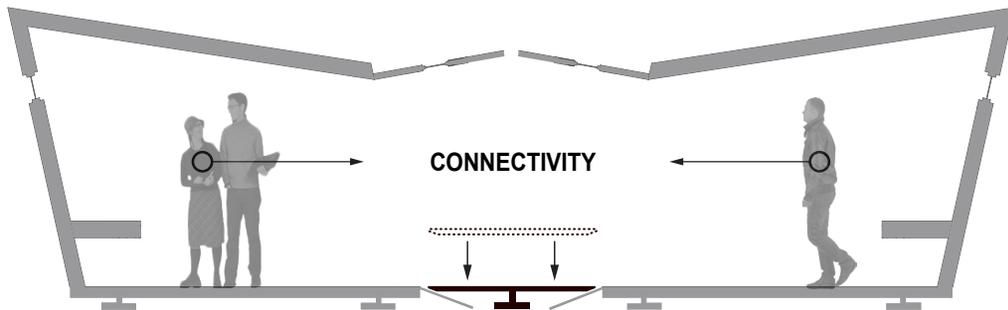
LEISURE



GATHERING



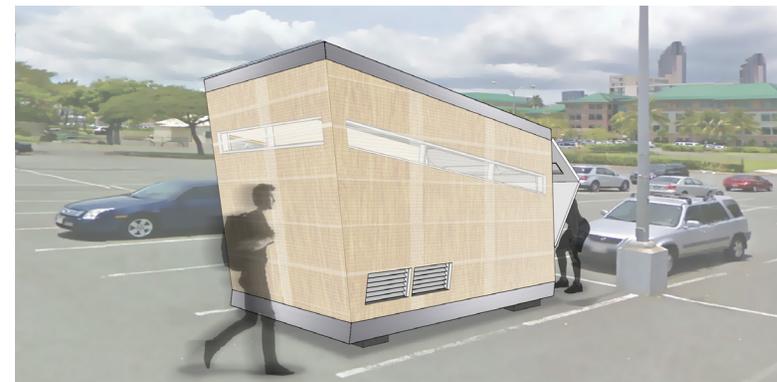
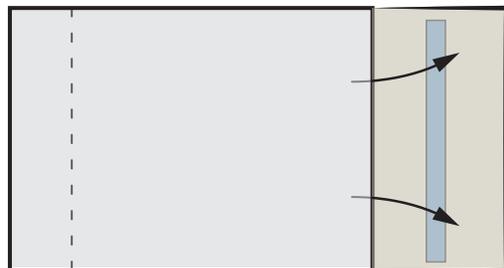
BARBEQUE



THEIR **CONNECTED** SPACE

Two units can be joined together to make a family-style environment. Lifting the back hatches of both units opens each space to one another. Bridging the space with an additional platform makes the transition almost seamless.

The lower portion of the back door (i.e. the tailgate) can be lowered under the platform, or supported by a curb (or concrete block) to form a bridge linking the unit to a sidewalk or another unit.



THEIR **OWN** SPACE

After 2 years living in his own space, Kane was able to save enough money for a deposit on a new apartment with a few of his friends.

His unit was returned to the program for a new resident to inhabit.

The refurbished unit was reassigned to Lani, from the streets of Chinatown. Her new space will allow seize opportunities in hopes of a better life.



What's Happened Since?

Meeting with County and State Leaders



Senate Committee on Homelessness appropriated funds to begin construction on three prototype units.

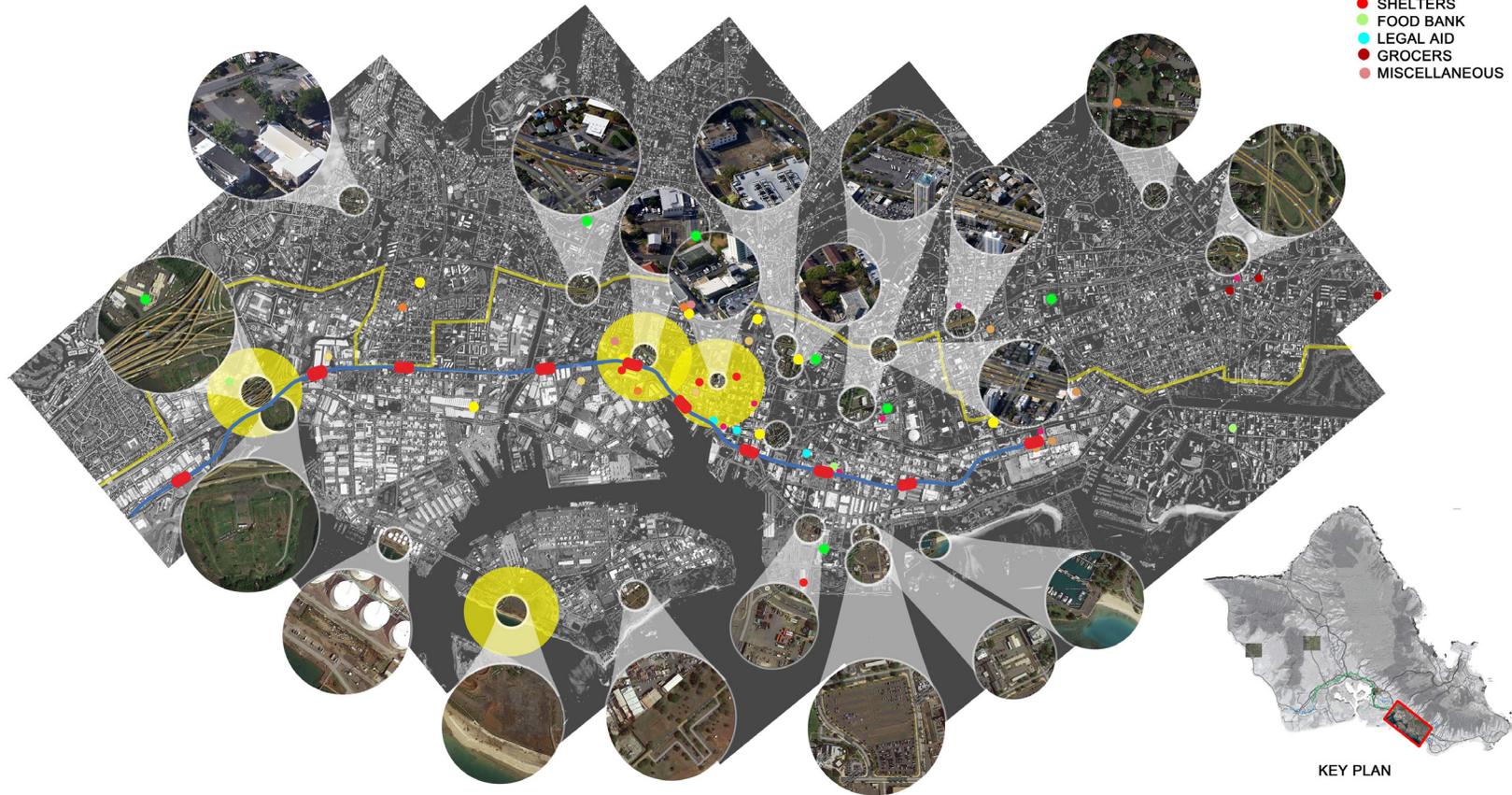


City and County of Honolulu on board to find locations for prototypes

1. INFRASTRUCTURE
2. COASTAL INDUSTRIAL
3. URBAN INFILL
4. MISCELLANEOUS

EXISTING SERVICES

- HUMAN SERVICES
- MEDICAL
- MENTAL HEALTH
- SALVATION ARMY
- SHELTERS
- FOOD BANK
- LEGAL AID
- GROCERS
- MISCELLANEOUS



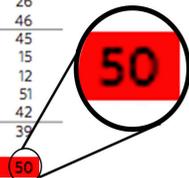
D.I.G.

2013 Annual Average Cost of Living								
State	Rank	Index	Grocery	Housing	Utilities	Transportation	Health	Misc
Mississippi	1	89.1	87.8	76.3	93.2	96.6	91.6	95.2
Nebraska	2	89.5	87.1	80.9	94.9	95.1	93.6	92.9
Idaho	3	89.8	83.2	78.0	93.8	101.3	99.3	94.7
Kentucky	4	90.1	85.8	78.8	98.5	97.1	94.1	94.8
Tennessee	5	90.2	88.2	80.2	89.4	93.4	89.7	97.8
Oklahoma	6	90.4	88.5	81.7	91.6	95.2	96.0	94.9
Indiana	7	90.6	86.4	81.3	91.1	99.0	97.3	95.1
Utah	8	91.1	89.5	83.2	84.2	97.2	92.5	97.5
Arkansas	9	91.6	89.7	83.1	95.7	92.5	87.2	98.1
Texas	10	91.8	87.4	84.3	93.7	96.4	95.4	96.8
Kansas	11	92.0	87.3	84.7	94.7	94.0	94.3	97.7
Iowa	12	92.1	87.2	88.2	91.6	97.8	95.4	94.6
New Mexico	13	92.3	89.3	87.5	88.5	100.2	97.5	94.8
Alabama	14	92.4	93.8	78.5	103.8	94.0	86.7	99.7
Ohio	15	92.5	91.6	82.8	96.8	100.0	94.1	96.0
Missouri	16	92.8	92.4	80.2	105.4	95.9	97.1	97.4
Georgia	17	92.9	91.7	81.9	100.3	97.4	98.0	97.3
Michigan	18	94.8	84.8	89.2	102.8	103.5	96.7	97.3
Louisiana	19	95.0	94.1	92.4	92.7	97.1	96.3	97.1
Nevada	20	95.5	93.6	94.6	79.2	102.2	98.6	98.8
South Carolina	21	95.6	100.1	82.6	105.8	95.0	98.9	100.7
Illinois	22	95.6	89.4	91.0	97.6	104.6	99.5	97.3
North Carolina	23	95.9	101.5	86.2	99.2	96.5	105.7	98.6
Virginia	24	96.2	92.5	93.4	101.8	92.9	98.3	99.2
Wisconsin	25	96.5	91.3	89.4	102.2	100.4	111.0	98.9
Wyoming	26	96.7	99.4	97.1	100.0	91.2	104.0	95.3
West Virginia	27	97.2	91.9	95.4	97.9	104.6	97.7	97.5
Florida	28	98.2	96.6	95.1	97.1	103.2	99.0	99.4
Montana	29	98.4	96.7	99.6	92.1	93.8	106.9	100.6
Colorado	30	99.5	93.5	105.8	94.5	98.9	101.9	98.4
South Dakota	31	99.6	91.4	106.8	98.2	93.7	96.8	100.3
North Dakota	32	99.9	96.0	102.3	83.5	101.2	111.1	102.5
Pennsylvania	33	100.7	99.1	96.6	111.0	102.2	95.9	101.6
Arizona	34	101.9	96.8	108.6	95.3	99.8	100.6	101.5
Minnesota	35	101.9	107.2	97.2	95.8	101.4	104.1	105.2
Washington	36	102.6	95.4	105.9	89.2	107.2	116.0	103.2
Oregon	37	106.8	96.8	116.4	96.7	114.9	113.4	102.2
Delaware	38	107.2	111.6	99.8	116.2	105.0	101.5	110.1
Maine	39	110.6	103.3	120.4	85.4	110.0	122.1	111.8
Maryland	40	119.9	106.2	176.8	109.2	100.6	96.0	94.7
Vermont	41	120.5	111.2	145.1	128.5	110.1	107.7	108.4
New Hampshire	42	120.7	98.8	138.9	122.7	101.5	117.9	122.4
Massachusetts	43	122.1	110.2	137.4	131.0	104.2	125.0	118.6
Rhode Island	44	125.7	107.2	139.8	133.1	104.5	118.5	129.0
California	45	128.1	106.0	187.0	108.3	113.1	109.7	104.9
New Jersey	46	130.0	114.0	170.1	129.6	109.9	105.7	116.1
Alaska	47	131.4	120.5	144.9	162.5	116.3	146.1	119.3
Connecticut	48	132.6	115.2	166.2	120.7	119.3	118.8	123.8
New York	49	136.4	108.7	204.3	113.2	111.7	104.1	115.3
District of Columbia	50	140.1	108.2	249.3	104.1	105.8	98.8	96.9
Hawaii	51	156.9	157.6	209.7	192.8	128.6	113.8	121.1
Grand Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: MERIC Missouri Economic Research and Information Center.
Missouri Department of Economic Development

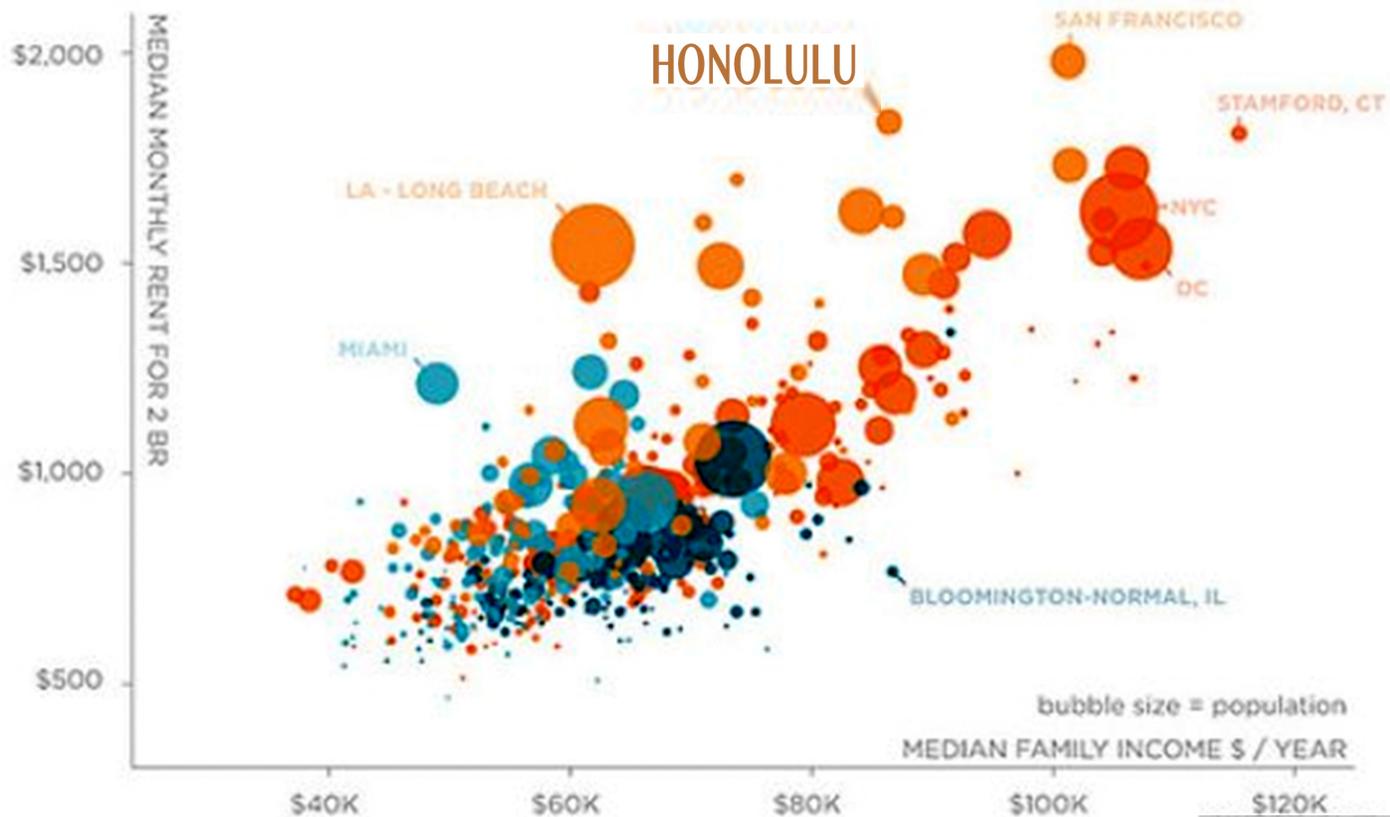
OVERALL HOMELESSNESS BY STATE

State	Homeless Population, 2011	Homeless Population, 2012	Change in Homeless Population, 2011-2012	Rate of Homelessness, 2012 (per 10,000 in general population)	Rank
Alabama	5,558	5,209	-6.3%	10.8	10
Alaska	2,128	1,913	-10.1%	26.5	40
Arizona	10,504	11,302	7.6%	17.4	34
Arkansas	3,424	4,214	23.1%	14.3	26
California	135,928	130,898	-3.7%	34.7	46
Colorado	15,116	16,768	10.9%	32.8	45
Connecticut	4,456	4,209	-5.5%	11.8	15
Delaware	1,035	1,008	-2.6%	11.1	12
District of Columbia	6,546	6,954	6.2%	112.5	51
Florida	56,687	55,170	-2.7%	28.9	42
Georgia	20,975	20,516	-2.2%	20.9	39
Guam	1,745	1,301	-25.4%		
Hawaii	6,188	6,246	0.9%	45.4	50
Idaho	2,199	1,968	-10.5%	12.4	19
Illinois	14,009	14,144	1.0%	11.0	11
Indiana	6,196	6,259	1.0%	9.6	3
Iowa	3,134	2,928	-6.6%	9.6	3
Kansas	2,511	2,684	6.9%	9.3	2
Kentucky	6,034	5,230	-13.3%	12.0	16
Louisiana	9,291	7,772	-16.3%	17.0	32
Maine	2,447	2,393	-2.2%	18.0	35
Maryland	10,208	9,454	-7.4%	16.2	31
Massachusetts	16,664	17,501	5.0%	26.6	41
Michigan	13,185	12,592	-4.5%	12.7	21
Minnesota	7,495	7,744	3.3%	14.5	27
Mississippi	2,306	2,413	4.6%	8.1	1
Missouri	8,989	10,237	13.9%	17.0	32
Montana	1,768	1,833	3.7%	18.4	36
Nebraska	3,548	3,789	6.8%	20.6	38
Nevada	10,579	9,926	-6.2%	36.4	48
New Hampshire	1,469	1,496	1.8%	11.3	13
New Jersey	14,137	13,025	-7.9%	14.8	29
New Mexico	3,601	3,245	-9.9%	15.6	30
New York	63,445	69,566	9.6%	35.7	47
North Carolina	12,896	13,524	4.9%	14.0	25
North Dakota	603	688	14.1%	10.1	5
Ohio	13,030	13,977	7.3%	12.1	17
Oklahoma	4,625	5,032	8.8%	13.3	23
Oregon	17,254	15,828	-8.3%	40.9	49
Pennsylvania	15,096	14,736	-2.4%	11.6	14
Puerto Rico	2,900	3,212	10.8%		
Rhode Island	1,070	1,277	19.3%	12.1	17
South Carolina	5,093	4,915	-3.5%	10.5	8
South Dakota	826	859	4.0%	10.4	6
Tennessee	9,113	9,426	3.4%	14.7	28
Texas	36,911	34,052	-7.7%	13.3	23
U.S. Virgin Islands	532	484	-9.0%		
Utah	3,130	3,527	12.7%	12.5	20
Vermont	1,144	1,160	1.4%	18.5	37
Virginia	8,816	8,424	-4.4%	10.4	6
Washington	20,439	20,504	0.3%	30.0	43
West Virginia	2,211	2,410	9.0%	13.0	22
Wisconsin	5,785	6,027	4.2%	10.6	9
Wyoming	1,038	1,813	74.7%	31.9	44
United States	636,017	633,782	-0.4%	20.3	



Source: Research Report on Homelessness, April 2013
State of Homelessness in America

MEDIAN RENT VS MEDIAN INCOME (2013)



Median Rent vs. Median Income, 2013

Reference: UHero

Median Income vs. Single-Family Homes for Metropolitan Areas

Metropolitan Area	Median Income	Median House Price	House Price/Income	Affordability Index
Honolulu, HI	\$66,639.0	\$628,000.0	9.5	67.6
Anaheim-Santa Ana-Irvine, CA	\$71,957.0	\$539,100.0	7.5	67.8
San Jose-Sunnyvale-Santa Clara, CA	\$85,927.0	\$636,800.0	7.4	70.1
San Francisco-Oakland-Fremont, CA	\$77,693.0	\$742,500.0	9.5	72.6
Seattle-Tacoma-Bellevue, WA	\$67,900.0	\$324,400.0	4.8	130.2
Phoenix-Mesa-Scottsdale, AZ	\$52,589.0	\$147,800.0	2.8	179.5
Atlanta-Sandy Springs-Marietta, GA	\$56,024.0	\$101,300.0	1.8	251.8
Toledo, OH	\$43,457.0	\$80,300.0	1.8	395.4

*All areas are metropolitan statistical areas (MSA) as defined by the US Office of Management and Budget though in some areas an exact match is not possible from the available data. MSAs include the named central city and surrounding areas and may not match local reporting due to differences in specification.

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HOUSING

2011 – 2016 = 50,000 New Units

(2011 Hawaii Housing Planning Study prepared for HHFDC)

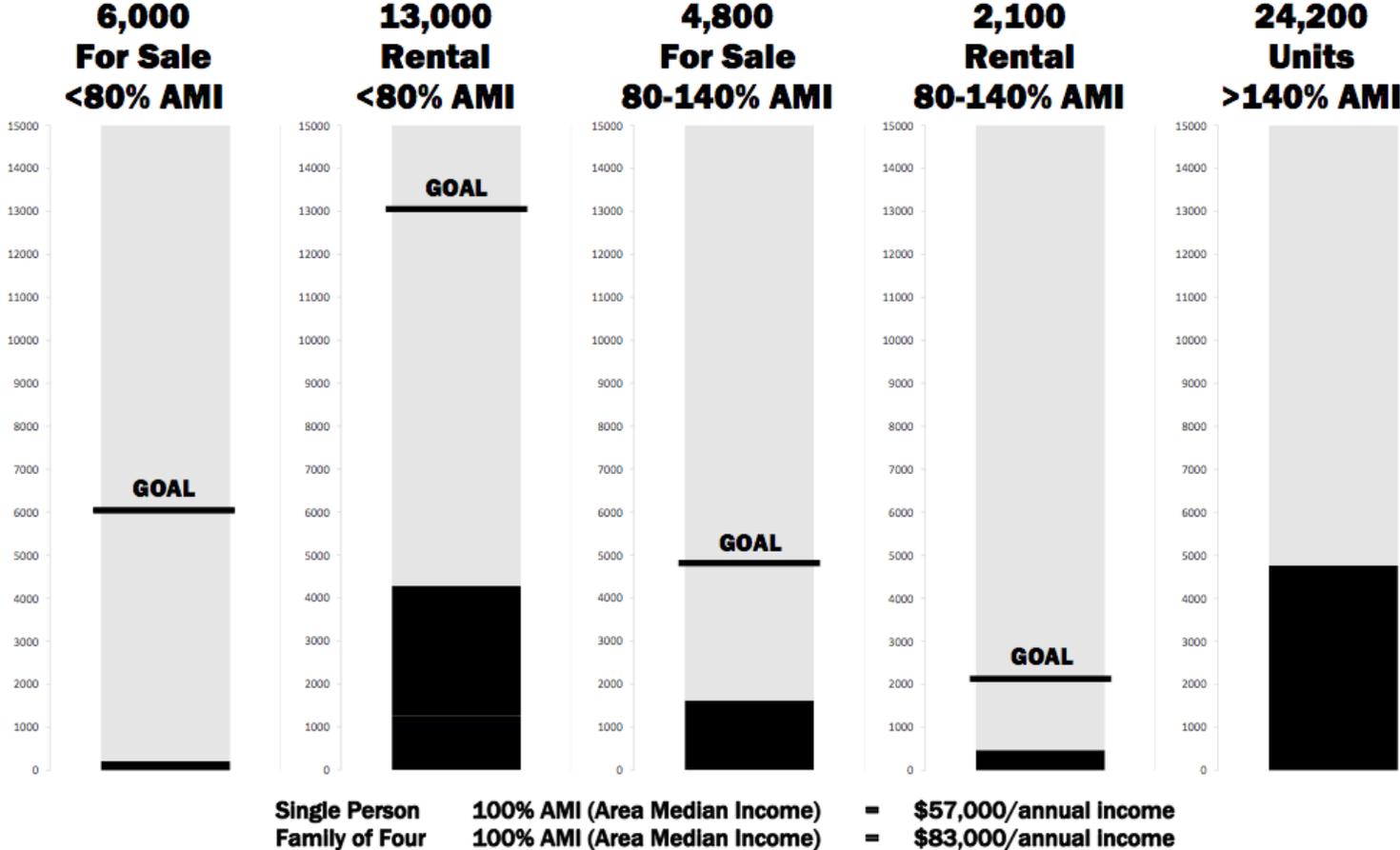


Figure 1: 2011-2016 Housing Goals

Reference: Provided by the Office of Senator Suzanne Chun Oakland

Non-Traditional Housing Models

Micro-Apartment Complex



Figure 2

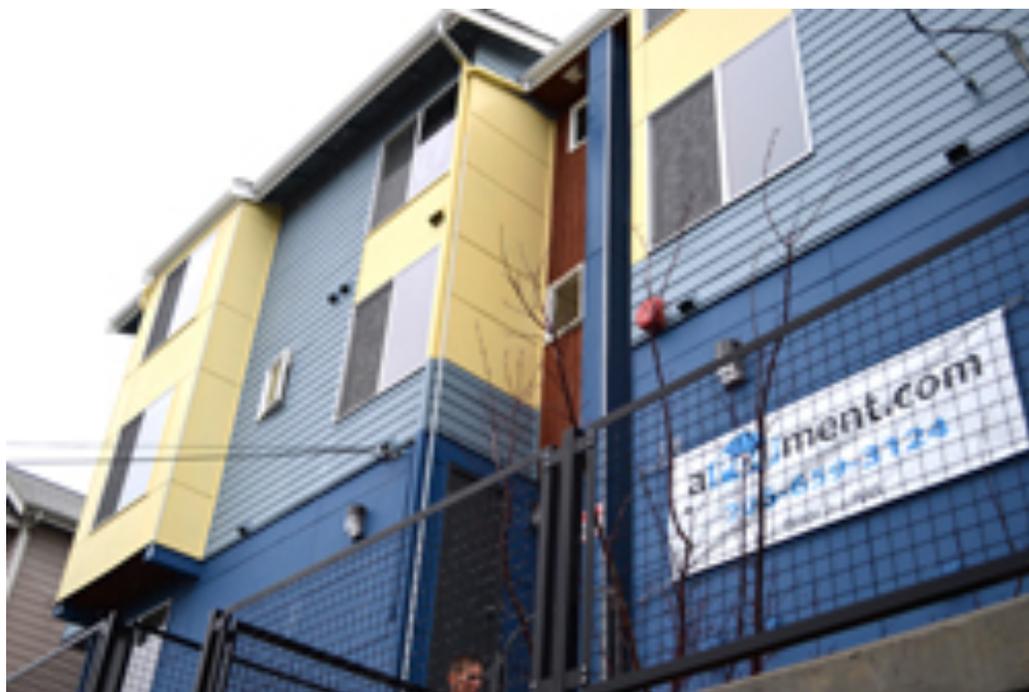
Reference: Canada Mortgage and Housing Corporation

Mike Gidora Place – Victoria

The Target Group: Student/Workforce

Size per Unit: 250sqft

Rent: \$325 and up



Apodments - Seattle

The Target Group: Student to Workforce housing.

Size per Unit: 90-170sqft

Reference: Mayor Mike McGinn's Blog



Figure 3

Reference: Westport Construction

The Star Apartments - Los Angeles



Figure 4

Reference: OneBuild

The Widget Concept - Seattle



Figure 8
Reference: Tempohousing

Keetwonen – Amsterdam

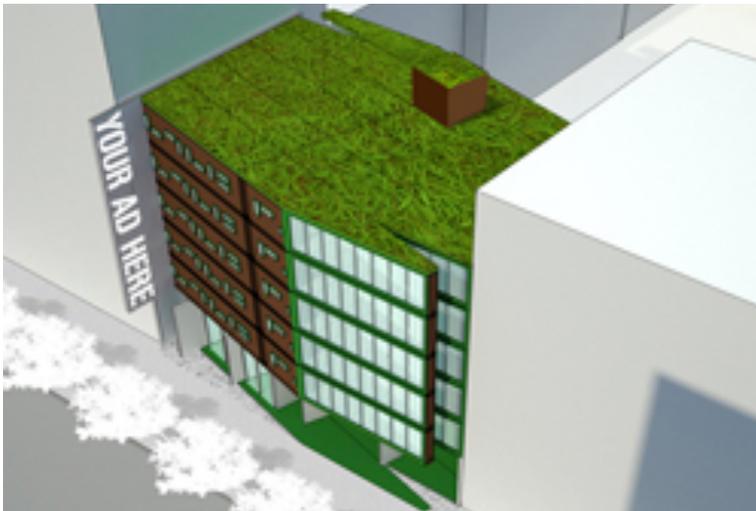


Figure 9
Reference: Olympia Kwartier

Olympia Kwartier – Almere

TrailerWrap – Boulder

Before



After



Figure 7
Reference: TrailerWrap Project



Figure 10

Reference: PremierSIPs

Laurus Wing – Canberra



Figure 11

Reference: Mazine.ws

Por Fin, Nuestra Casa – Tijuana



**The Convertible House –
Vancouver**

Figure 14
Reference: Canada Mortgage and Housing Corporation

Warehouse-Based Shelters



Waianae Civic Center – Honolulu

Figure 15
Reference: Maile's Blog

Flexible Housing

The Grow Home – Montreal



Figure 13

Reference: Avi Friedman

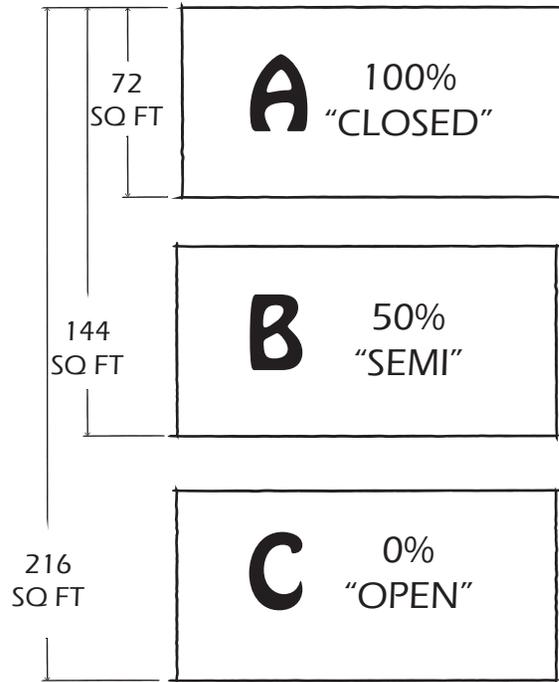
DEMOGRAPHIC SHIFT

- 75-85% of new households through 2025 will not have children in them
- 77% of gen Y say they want to live in an urban core.
- 75% of retiring boomers say they want mixed age and mixed use communities

LIFESTYLE SHIFT







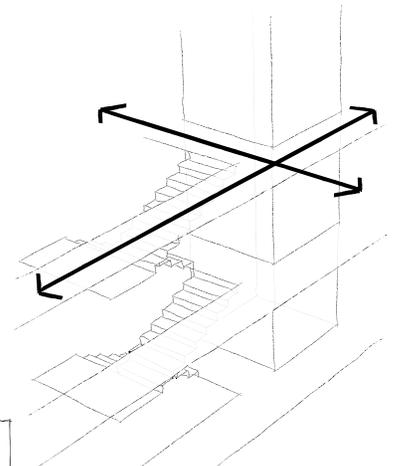
- BASIC UNIT
- CONTAINS ALL MAJOR FUNCTIONS:
FIXTURES FOR KITCHEN, BATH AND SHOWER
- POTENTIAL SLEEP SPACE

- ADDITIONAL UNIT
- MAXIMUM FLEXIBILITY PROVIDES EXTRA:
SLEEP SPACE, STORAGE SPACE AND LIVING SPACE
- INDOOR/OUTDOOR FEEL

- LANAI
- PERFECT FOR HAWAII:
TO GARDEN, SOCIALIZE AND REST
- OUTDOOR LIVING

THE SHELL

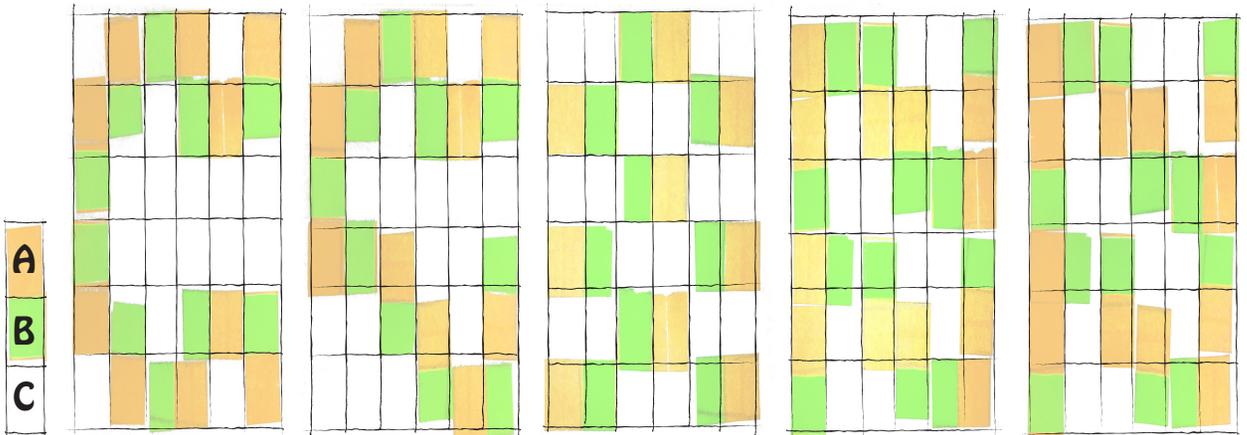
CLUSTER | CONFIGURATION | FUNCTION



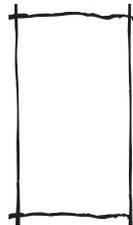
RECONFIGURABLE FOR CLIMATE AND SITE MAXIMIZATION

FOUR UNIT MODULE

CIRCULATION TOWER

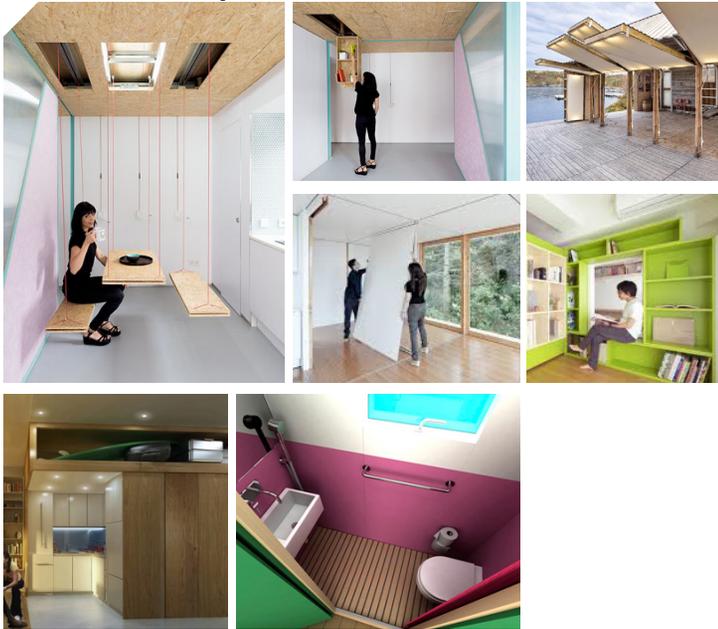


NOTES:



EACH 6FT X 12FT UNIT IS CONSTRUCTED FROM THE INSIDE OUT TO ELIMINATE THE DISRUPTIONS OF ONGOING CONSTRUCTION

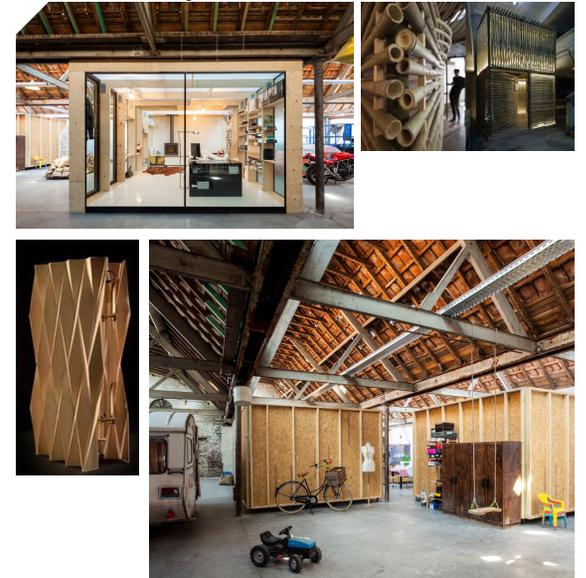
INTERACTIVE | SPACE SAVING



GARDEN



MATERIAL | DESIGN



LIFESTYLE

COMMUNITY | ENVIRONMENT | ATMOSPHERE

The 100 Thing Challenge

- It's not about "counting your stuff."
- It's also about being conscious about what you own.
- It's about having only things you frequently use.
- It's about appreciating what you have because you have less stuff.

Life Tools & Accessories

33 items, including my car, guitar, books,, etc.

Consumables

5 groups of items, including food, cleaning supplies, hygiene supplies, office supplies

Kitchen Items

19 items, including pots, pans, utensils, coffeemaker, toaster, oven mitt, etc.

Bathroom Items

6 items, including my bathroom scale, rugs, trash can, toothbrush etc.

Electronics

20 items, including my phone, computers, Printer,, etc.

Furniture

5 items, including my bed, couch, coffee table, desk, chairs, etc.

Decorations

8 items, including decorative plants, artwork, digital picture frames, wall clock, etc.

Clothes (Miscellaneous)

58 items, including shoes, socks, underwear, belts, gym shorts, coats, etc.

Casual Clothes

55 items, including jeans, hoodies, T-shirts, button-down shirts, etc.

Dress Clothes

22 items, including suits, ties, dress shirts, etc.

Sports Equipment

15 Gym Clothes, surfboards, ocean gear, etc

Total 247

mnmlist : 50 things

mnmlist : 50 things

thx