



MASERU, LESOTHO

By 2050, Africa's urban population will outweigh it's rural population for the first time in history. Many people making this migration are seized by the glitz & glam of urban living apparently holds.

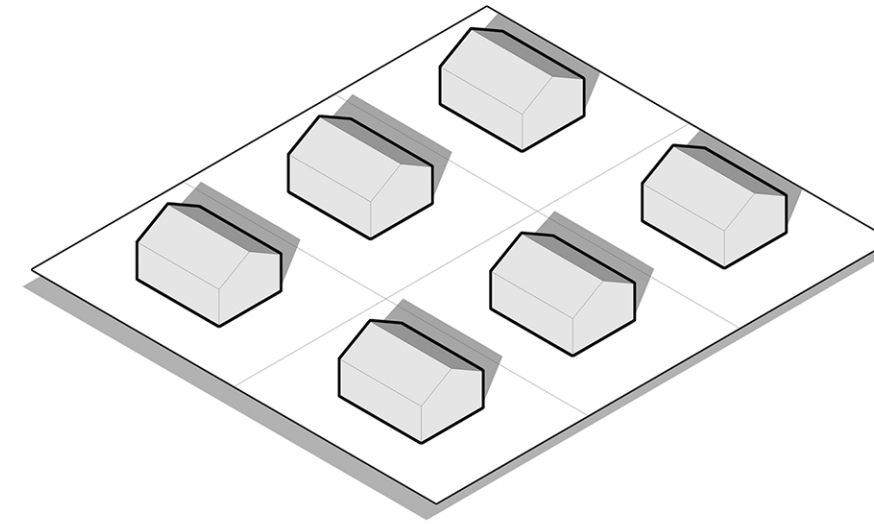
OUTER MASERU, LESOTHO

Current Maseru is the likely outcome of the urban explosion in the near future. Part of the role governments & their citizens will have in going forward is to developing ways of living that negates urban sprawl.



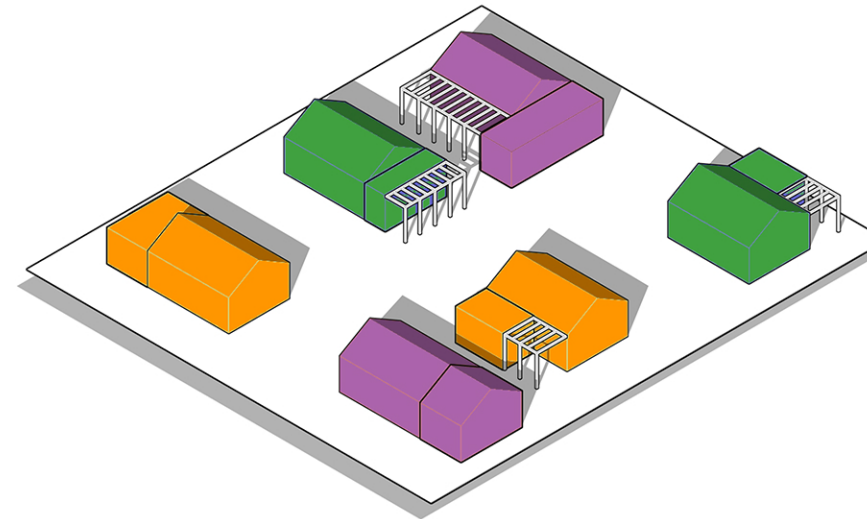
CONTEXT:

KEYWORDS: UNDERSTANDING, DENSITY, TYPOGRAPHY, SPRAWL, SCALE, CULTURAL SPACE MAKING



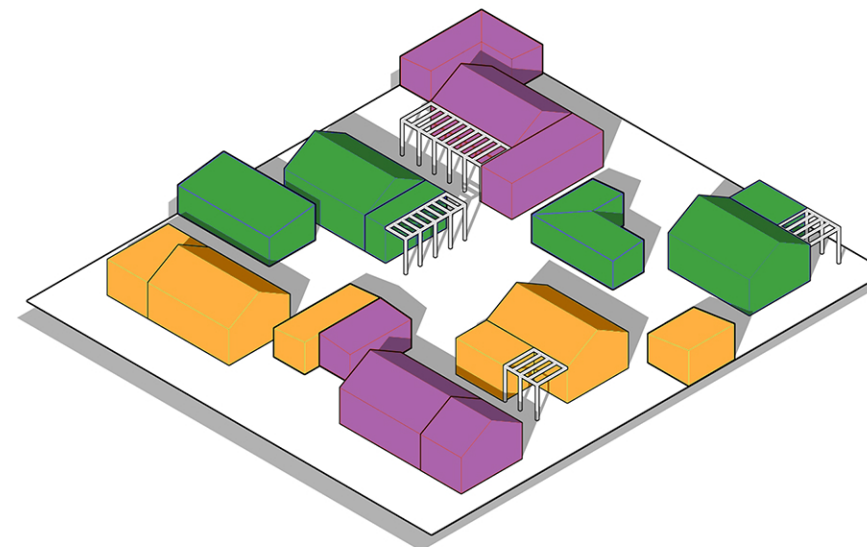
STEP 01:

Social Housing in Southern Africa is defined by '01 Plot, 01 House', of equal dimesions. This is done to maximise build effieency, not life quality.



STEP 02:

Over time, the receipients of these houses add on to them within their own means, to their own requirements.



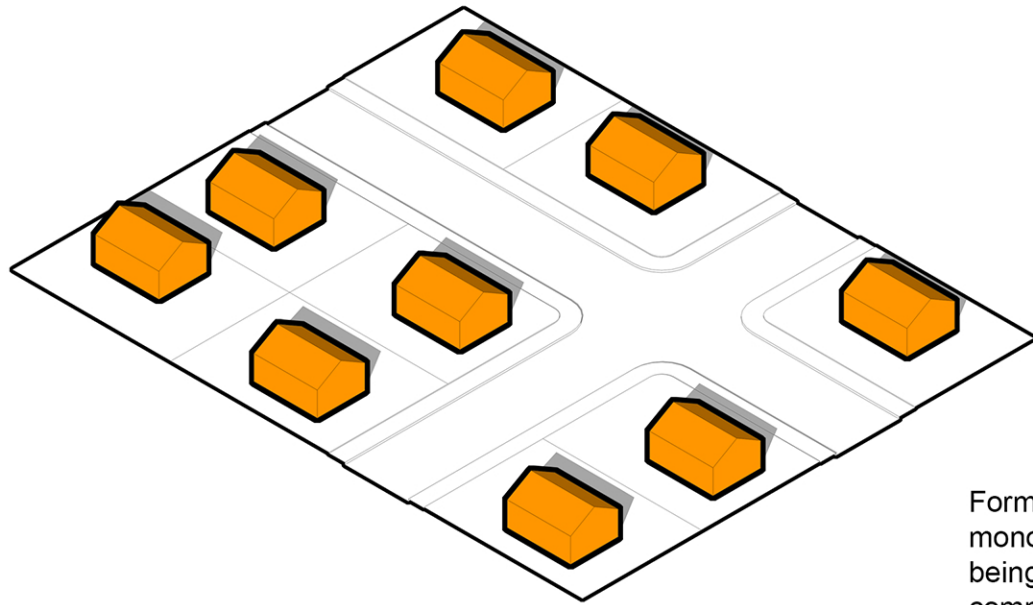
STEP 03:

Eventually, retail &/or rental components are added as means of passive income. This is a given in any Social Housing Context, & yet, it is never planned for.



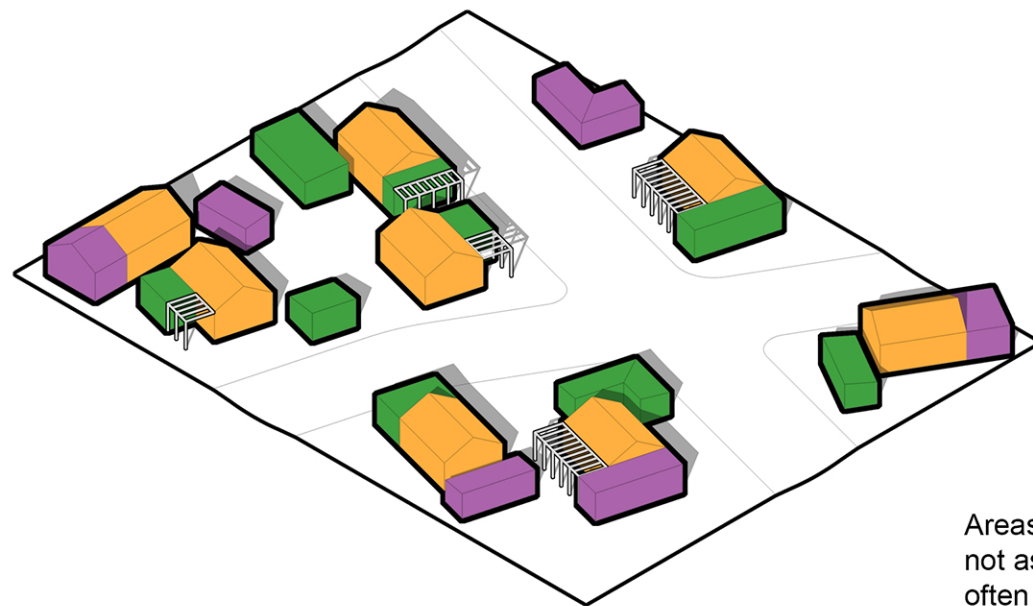
PROBLEM IDENTIFICATION:

KEYWORDS: TRADITIONAL, ONE HOUSE, ONE PLOT, GROWTH



FORMAL:

Formalised suburbs often suffer from a monoculture of programme, often only being residential, industrial, or commercial.



INFORMAL:

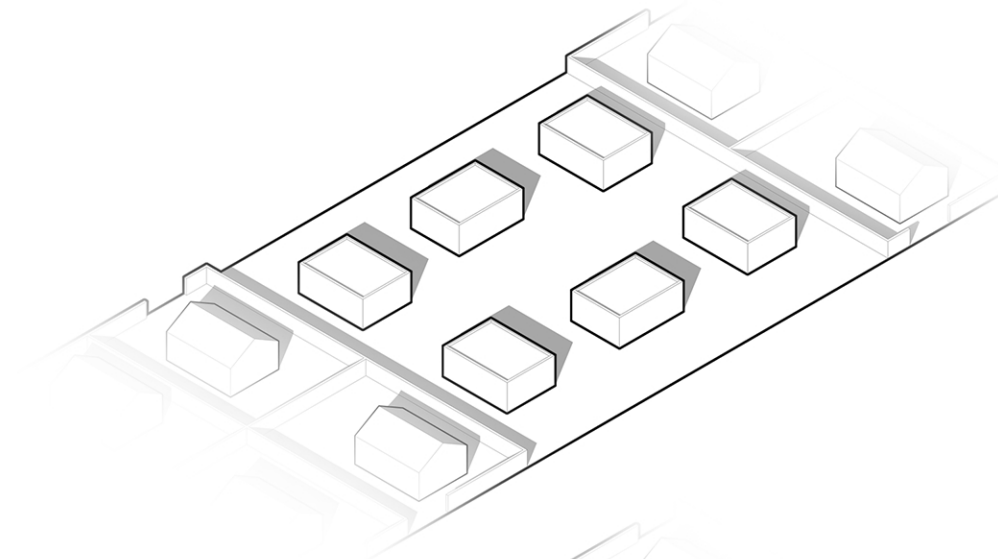
Areas that develop more organically are not as beset by such rules & regulations, often dotted with passive incomes, street shops & the like.

These passive incomes are integral to creating equality, which should also be integral to the design of social housing.



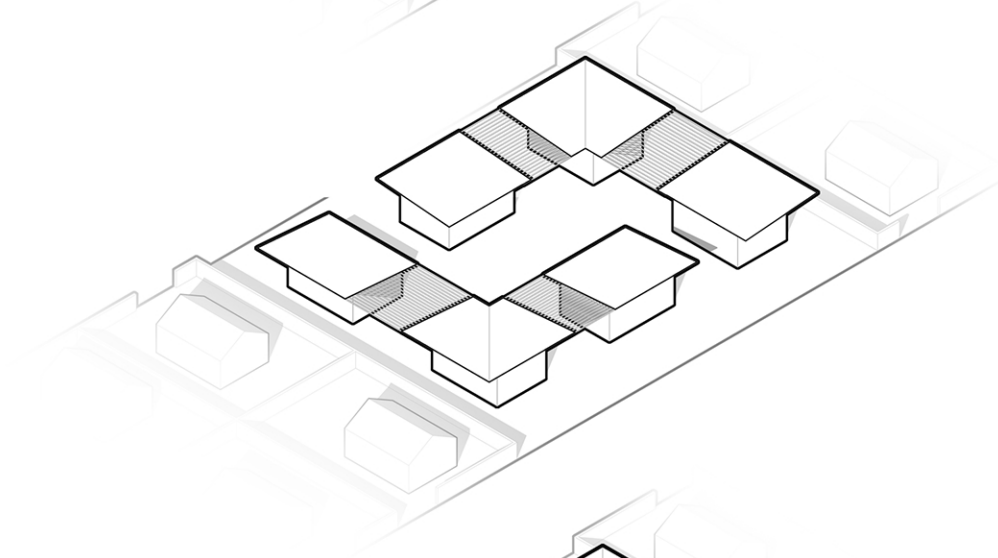
FOR(IN)MAL ECONOMY:

KEYWORDS: BUILDING PASSIVE
POSSIBILITIES INTO SOCIAL ARCHITECTURE



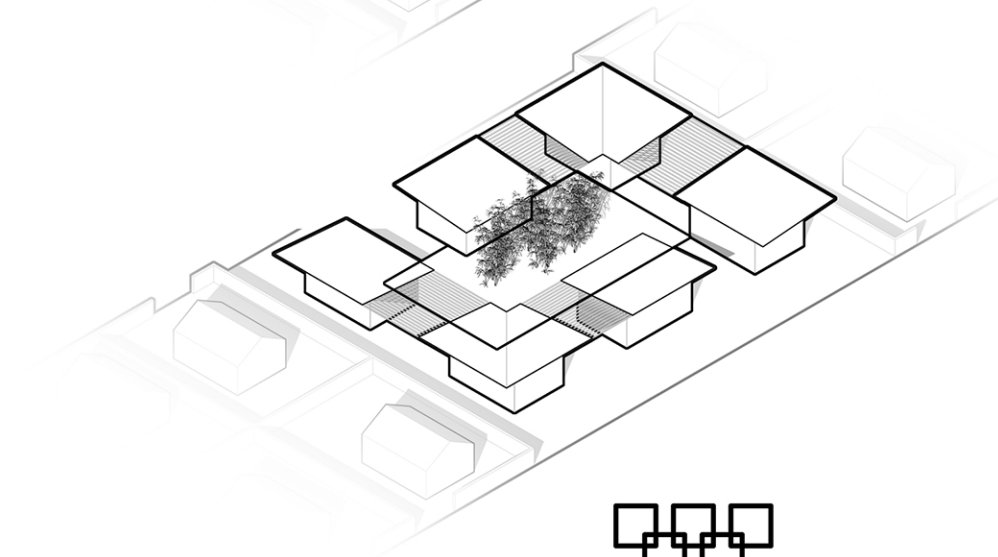
1.

Through grouping the units in courtyards of 6, spatial separation characterised by high, individualising walls is negated, this also serves to create better passive security, rather than physical barriers.



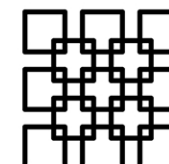
2.

Creating a shared roof structure serves to better define a courtyard space. Between each unit, a pergola is created by the purlins allowed for, this serves both as a functional, as well as spatial element.



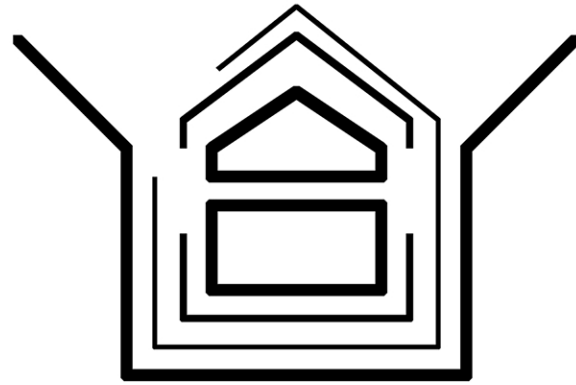
3.

The courtyard then becomes a shared functional space, with a range of opportunities possible, such as a small bamboo plantation to continue developing each unit as required.



URBAN RESPONSE:

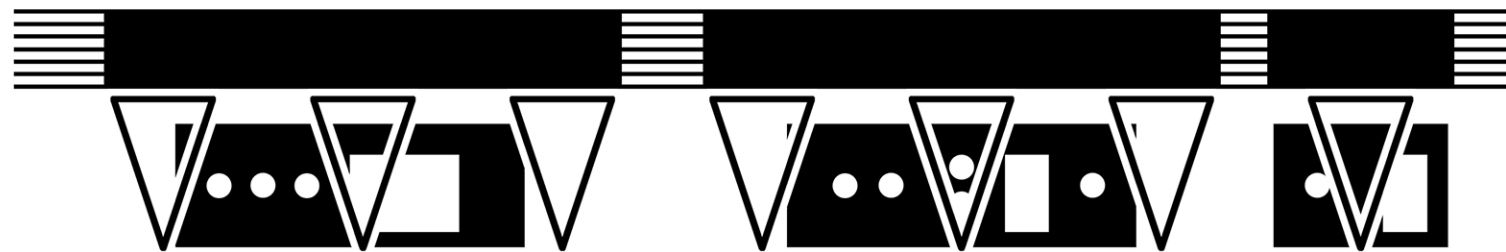
KEYWORDS: COURTYARD, URBAN DESIGN, PAS-
SIVE INCOME, SYSTEMS THINKING, BAMBOO



ELEMENTAL ADAPTION:

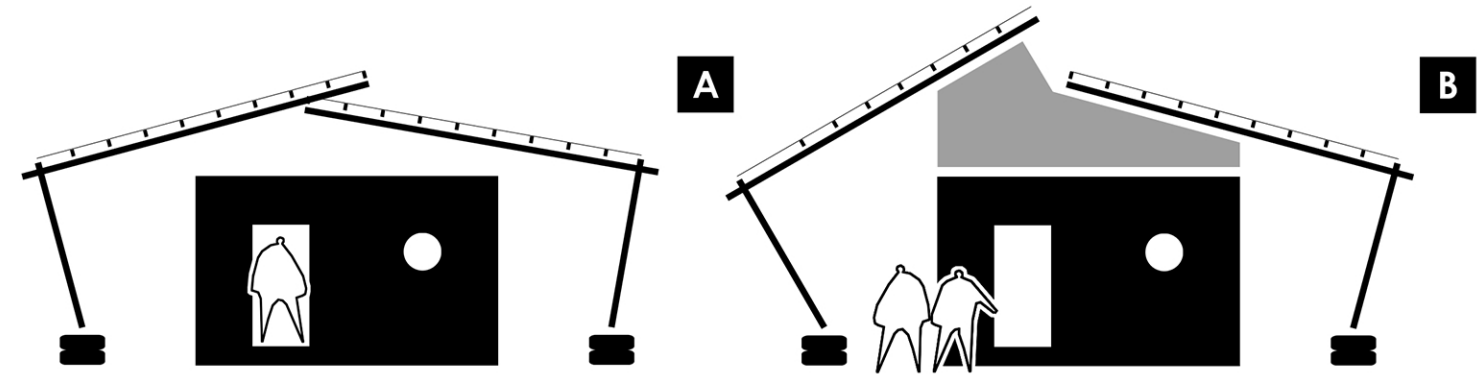
The idea of separating Architectural Elements into their component parts is one that has been espoused extensively.

An added benefit to this approach is that each component is only regulated by its own rules & not necessarily its interaction with other built elements.



CONCEPT APPROACH:

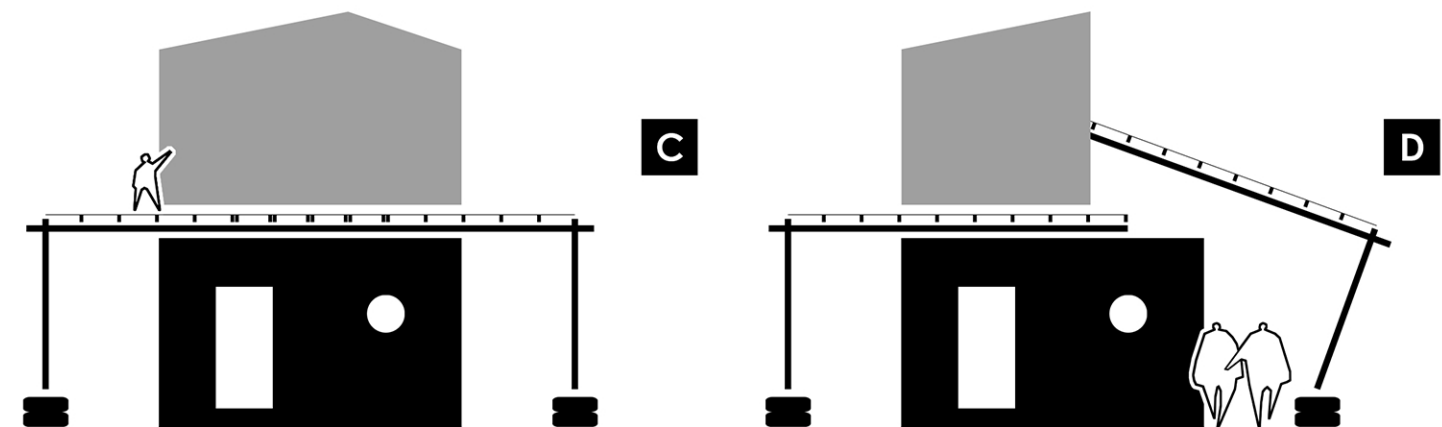
KEYWORDS: ELEMENTAL, SYSTEM DESIGN, BAMBOO, GROWTH



Always keep moving, always.

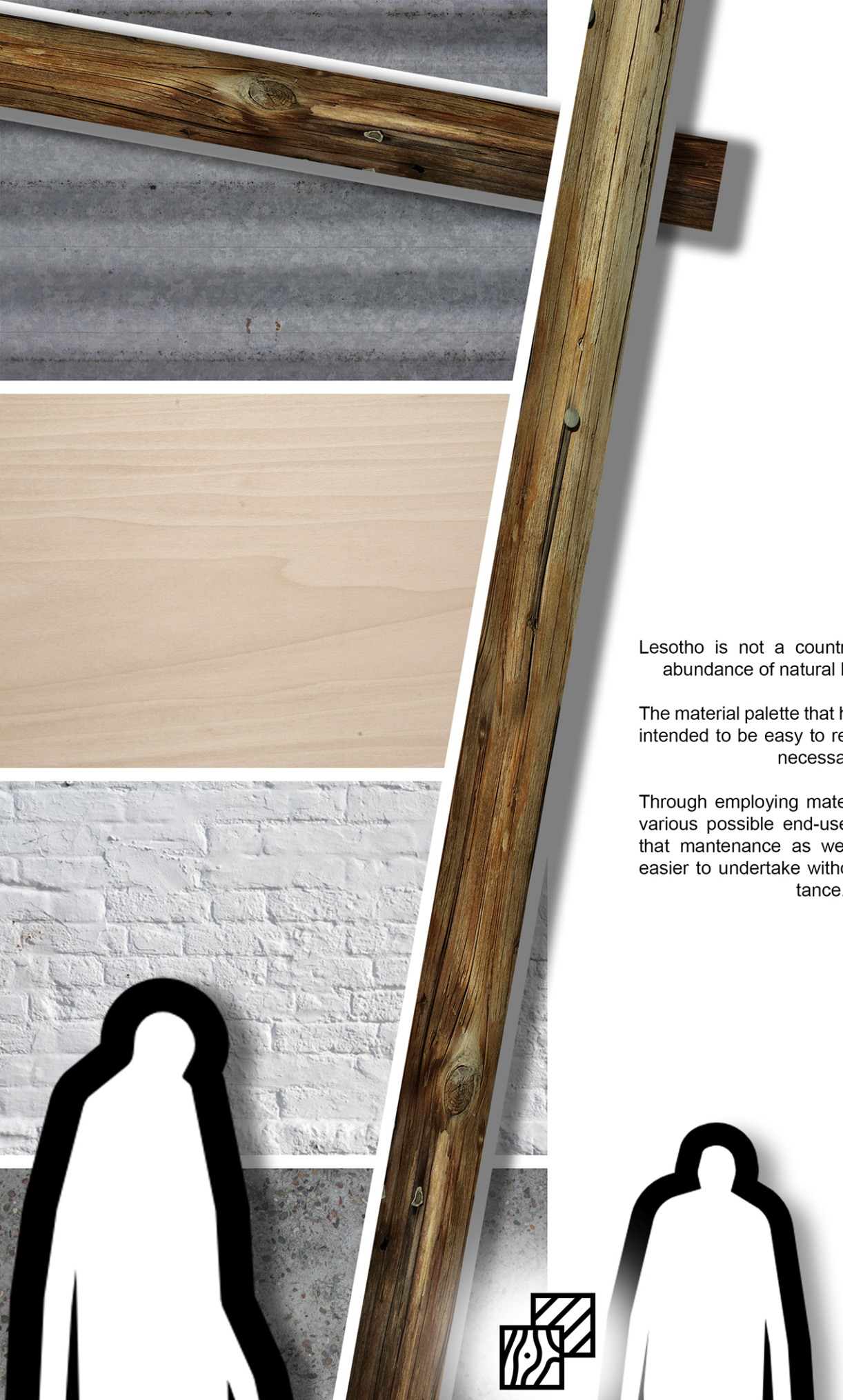
The intention is not to give an end-user an end-result, but rather to hand over a system of growth that is easy to implement.

Through separating the roof structure from the unit, growth can be undertaken by the resident as they see fit.



DESIGN DEVELOPMENT:

KEYWORDS: ADAPT, USER-DRIVEN, OPEN-ENDED



MATERIAL PALETTE:

KEYWORDS: LOCAL, EASILY AVAILABLE,
REINTERPORATE, WIDELY UNDERSTOOD

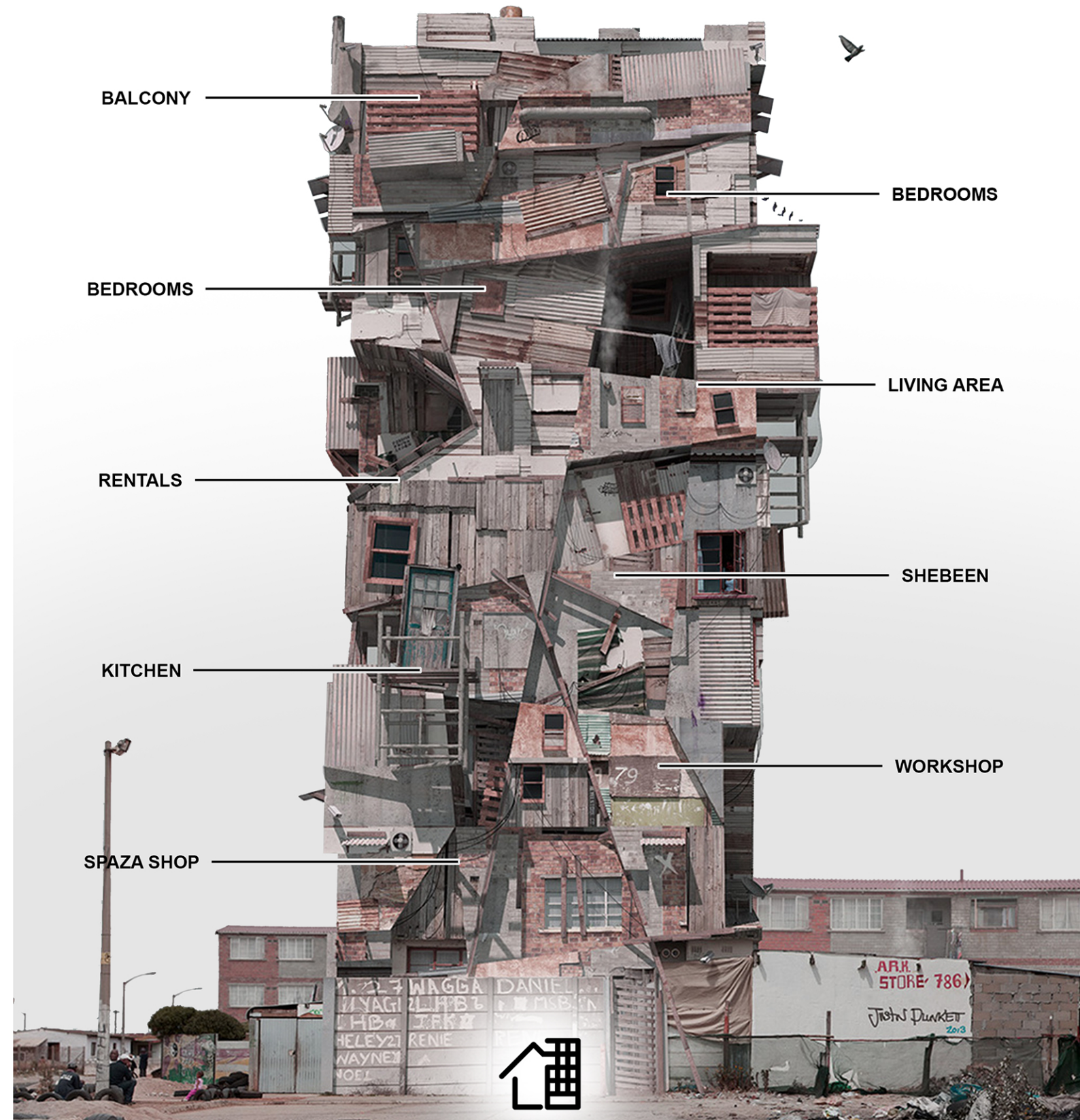
Lesotho is not a country blessed with an abundance of natural building material.

The material palette that has been selected is intended to be easy to replace &/or grow as necessary.

Through employing materials familiar to the various possible end-users, the intention is that maintenance as well as additions are easier to undertake without top-down assistance.

Shopfront rentals are not a luxury not everyone can afford. In developing economies, houses, shops, businesses, & services are often one & the same spatially.

The intention of this proposal is to make allowances for all of these possibilities, with out creating ambiguous spaces.



BALCONY

BEDROOMS

BEDROOMS

LIVING AREA

RENTALS

SHEBEEN

KITCHEN

WORKSHOP

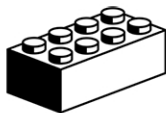
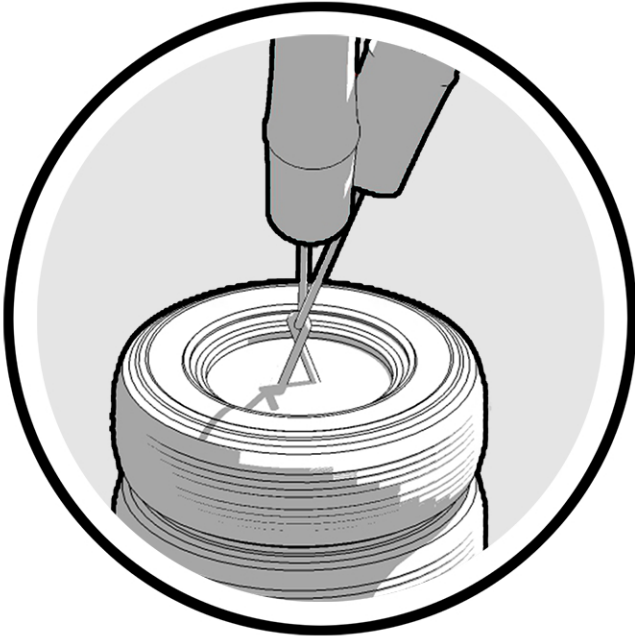
SPAZA SHOP

PROGRAMME:

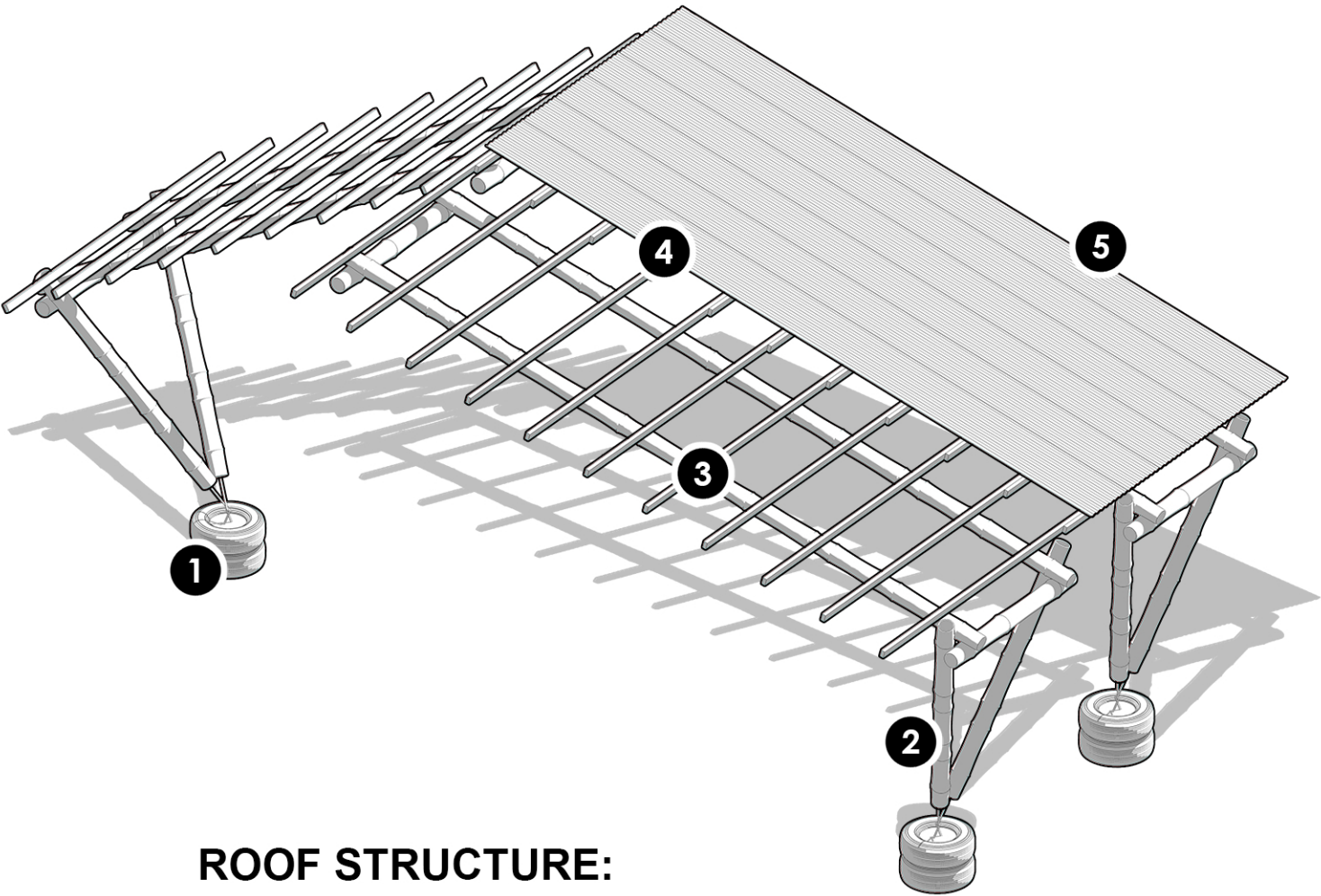
KEYWORDS: DIVERSE, ALL-IN-ONE, MULTIFUNCTIONAL,
NON-UBIQUITOUS

ITEM:	QUANTITY:	UNIT PRICE:	ITEM PRICE:
CLAY MASONRY BRICK	18 000 UNITS	R1-50 / UNIT	R27 000-00
WINTEC 600Ø CONCRETE WINDOW FRAME	8 UNITS	R750-00 / UNIT	R6 000-00
PRECAST CONCRETE LINTEL	8M	R51-00 / M	R408-00
CONCRETE	3.8M³	R40-00 / M³	R160-00
100-125mmØ GUMPOLE	120M	R42-00 / M	R5 040-00
600MM WIDE IBR ROOF SHEETING	280M	R15-00 / M	R4 200-00
PLASTER	1.6M³	R90-00 / M³	R144-00
2440X1220x12MM SA PINE PLYWOOD BOARD	14 UNITS	R330-00 / UNIT	R4 620-00
100MM ISOTHERM INSULATION	48M²	R32-50 / M²	R1 560-00

TOTAL UNIT PRICE:
R49 132-00



BILL OF QUANTITIES:
KEYWORDS: BULK, LOCALLY-SOURCED,
EASILY ACCESSIBLE



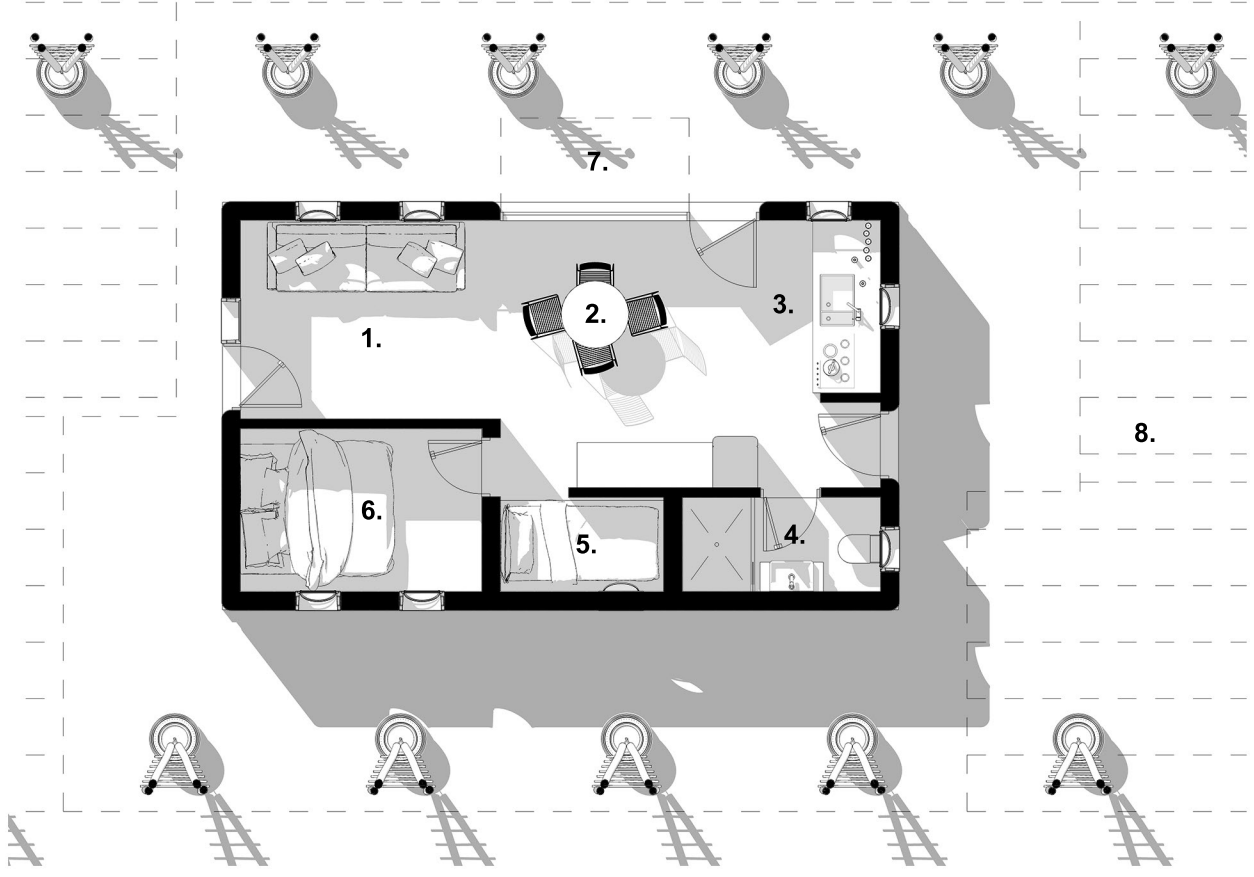
ROOF STRUCTURE:

1. Foundation Pads are cast into worn-out tires, this system makes in easier to move & adapt the roofing structure as neccessary. The pivot points for each roof portal are twisted & cast into place.
2. Each bamboo portal is formed into a 'V', as to reduce the amount of foundation points. It also creates a larger portal structure making adaption of roof segments easier for owners & tenants to handle themselves.
3. Roof Purlins are placed at the maximum distance for profiled steel roof sheeting, while also providing lateral strength to each portal. Each set of purlins has a 600mm free-floating overlap between each portal.
4. Waterproofing membranes are treated with a similar approach as the purlins, with loose overlaps between each portal.
5. Once Again, The roof finish is also separated per portal. Across the long axis of each roof, each portal is stepped by one grid line, connecting it to two portals opposite. Repeating this creates a cohesive roof structure that is still adaptable.



TECHNIFICATION:
KEYWORDS: BAMBOO, PORTAL FRAMES,
GROW, BUILD, PIVOT, EVOLVE

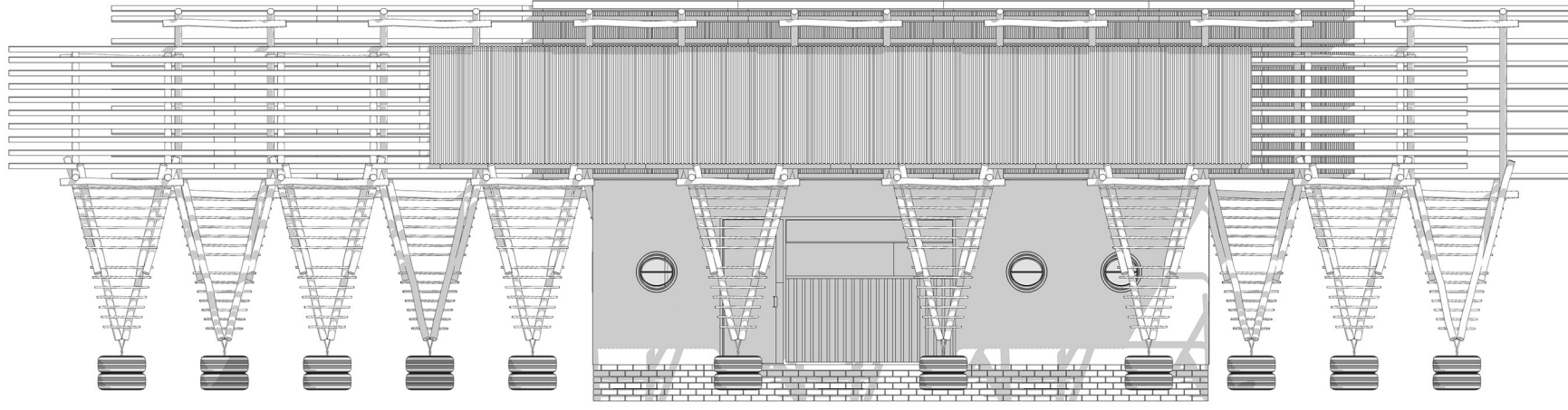




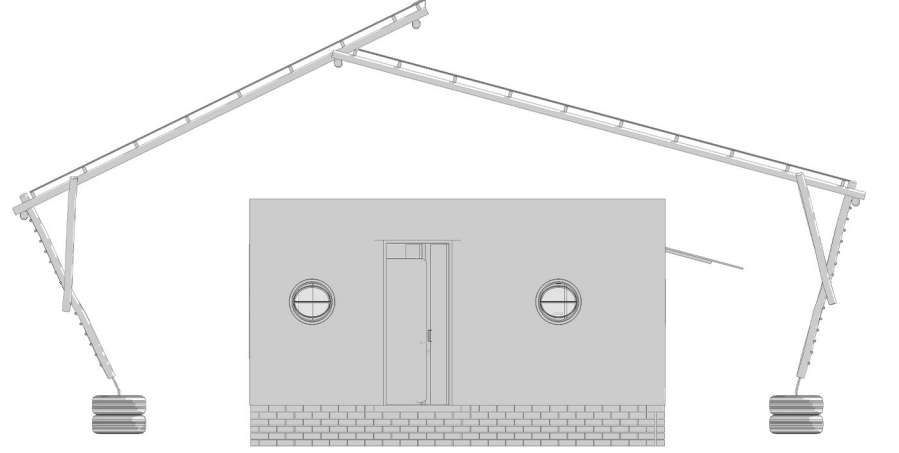
TYPICAL UNIT A FLOOR PLAN
1:100

UNIT TYPE A:

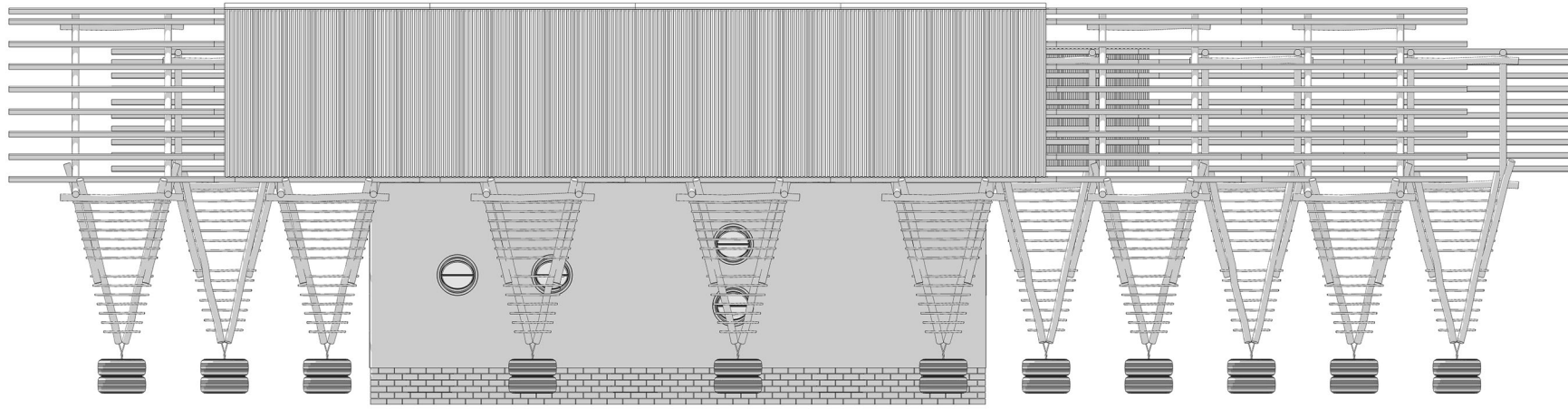
- LEGEND:**
1. LIVING AREA
2. SPAZA / DINING AREA
3. KITCHEN
4. BATHROOM
5. BUILT-IN BUNK BEDS
6. MAIN BEDROOM
7. SPAZA INTERFACE
8. WORKSHOP / KRAAL / etc.



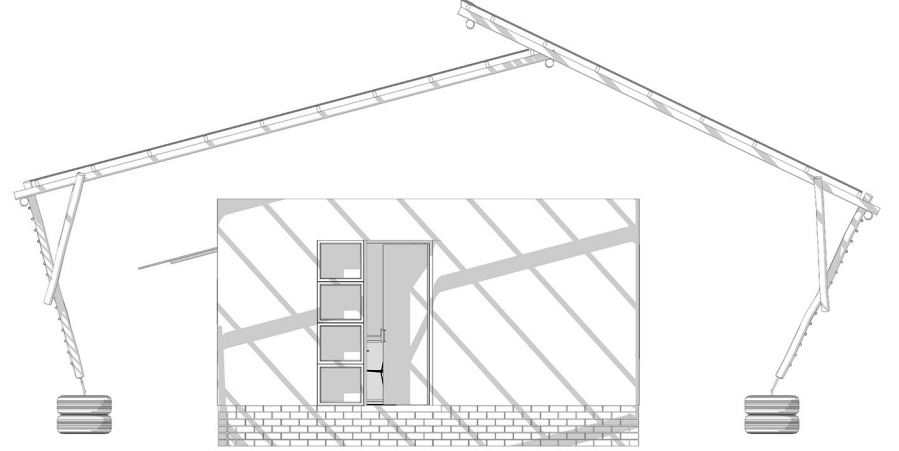
TYPICAL UNIT A 01 ELEVATION
1:100



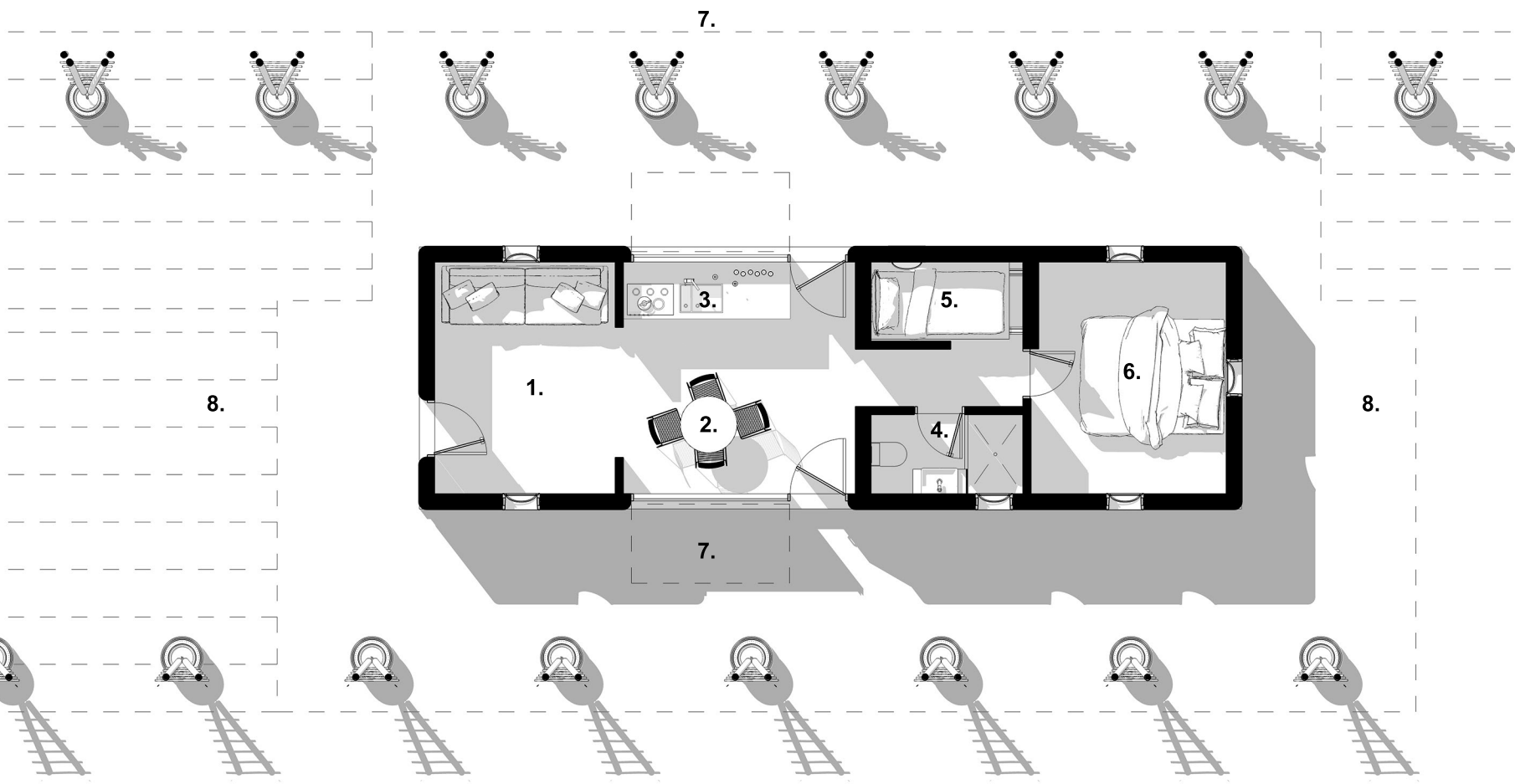
TYPICAL UNIT A 02 ELEVATION
1:100



TYPICAL UNIT A 03 ELEVATION
1:100



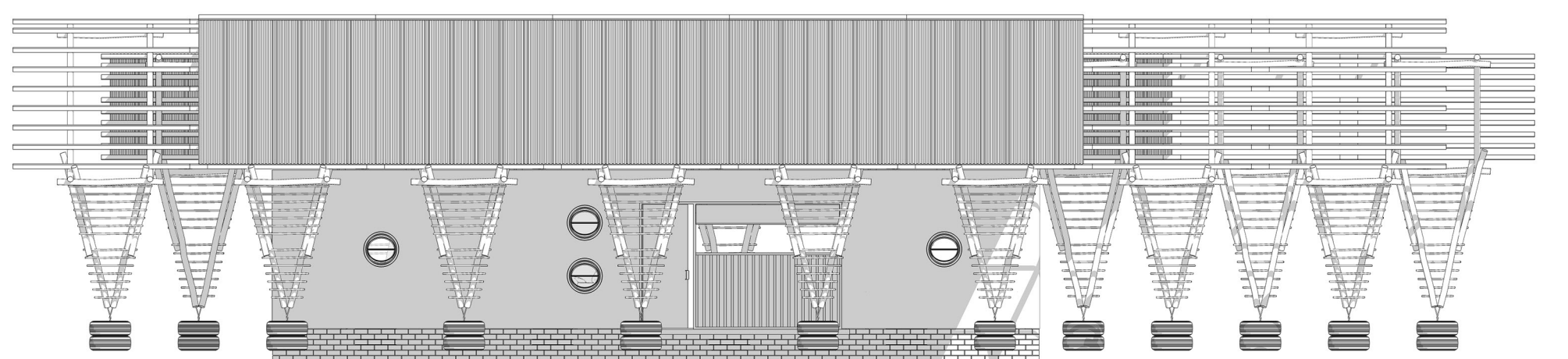
TYPICAL UNIT A 04 ELEVATION
1:100



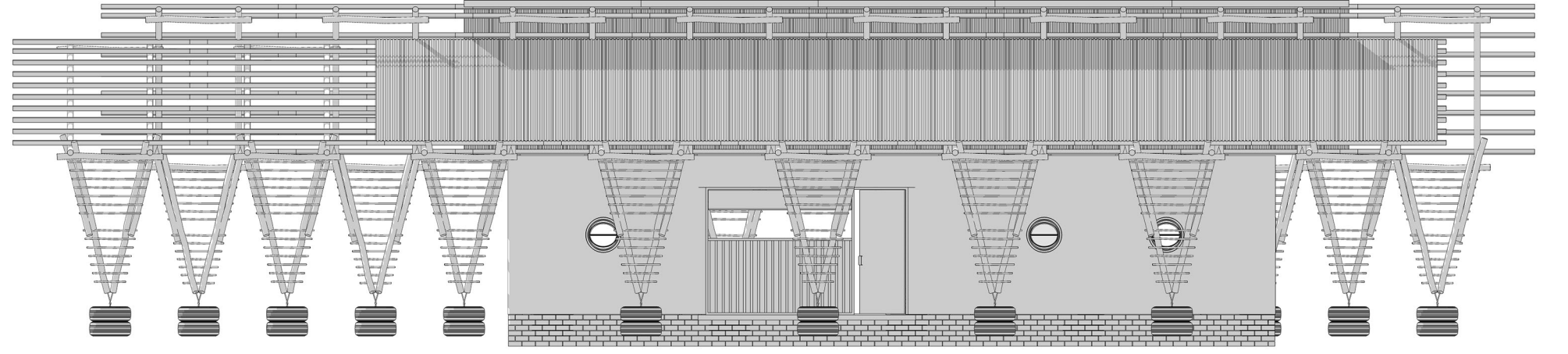
TYPICAL UNIT B FLOOR PLAN
1:100

UNIT TYPE B:

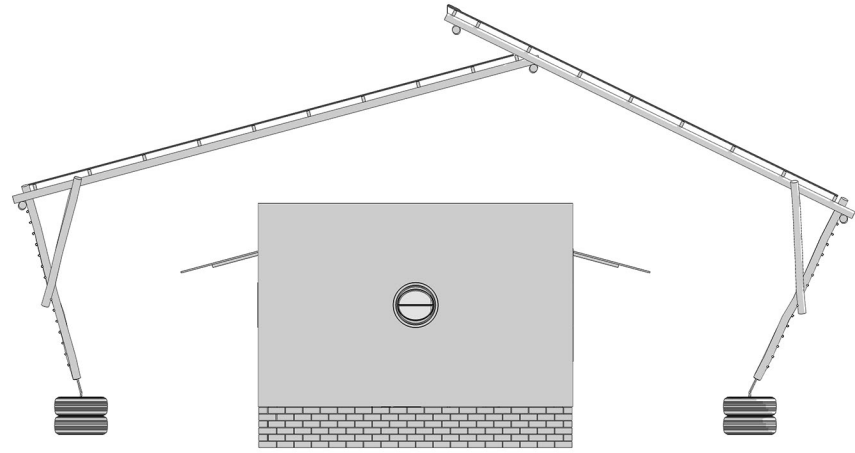
- LEGEND:**
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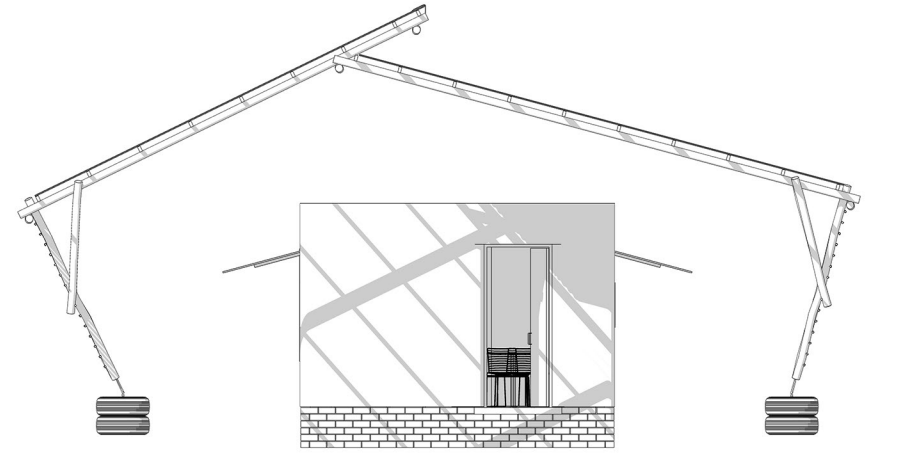
TYPICAL UNIT A 01 ELEVATION
1:100



TYPICAL UNIT A 03 ELEVATION
1:100



TYPICAL UNIT A 02 ELEVATION
1:100



TYPICAL UNIT A 04 ELEVATION
1:100

IT TAKES A COMMUNITY:

The project intention is community-centric, from concept to completion, the aim is to share both costs & benefits, socially, economically, & spatially.

Through providing a system for growth & adaption rather than an end product, it is hopeful that better use can be made of each unit as both an individual as well as part of the whole. Maseru will undoubtedly grow, & the designs that are implemented now need to provide for this.

In 20 years, the project should look nothing like it does today. Project completion is only then reached.

