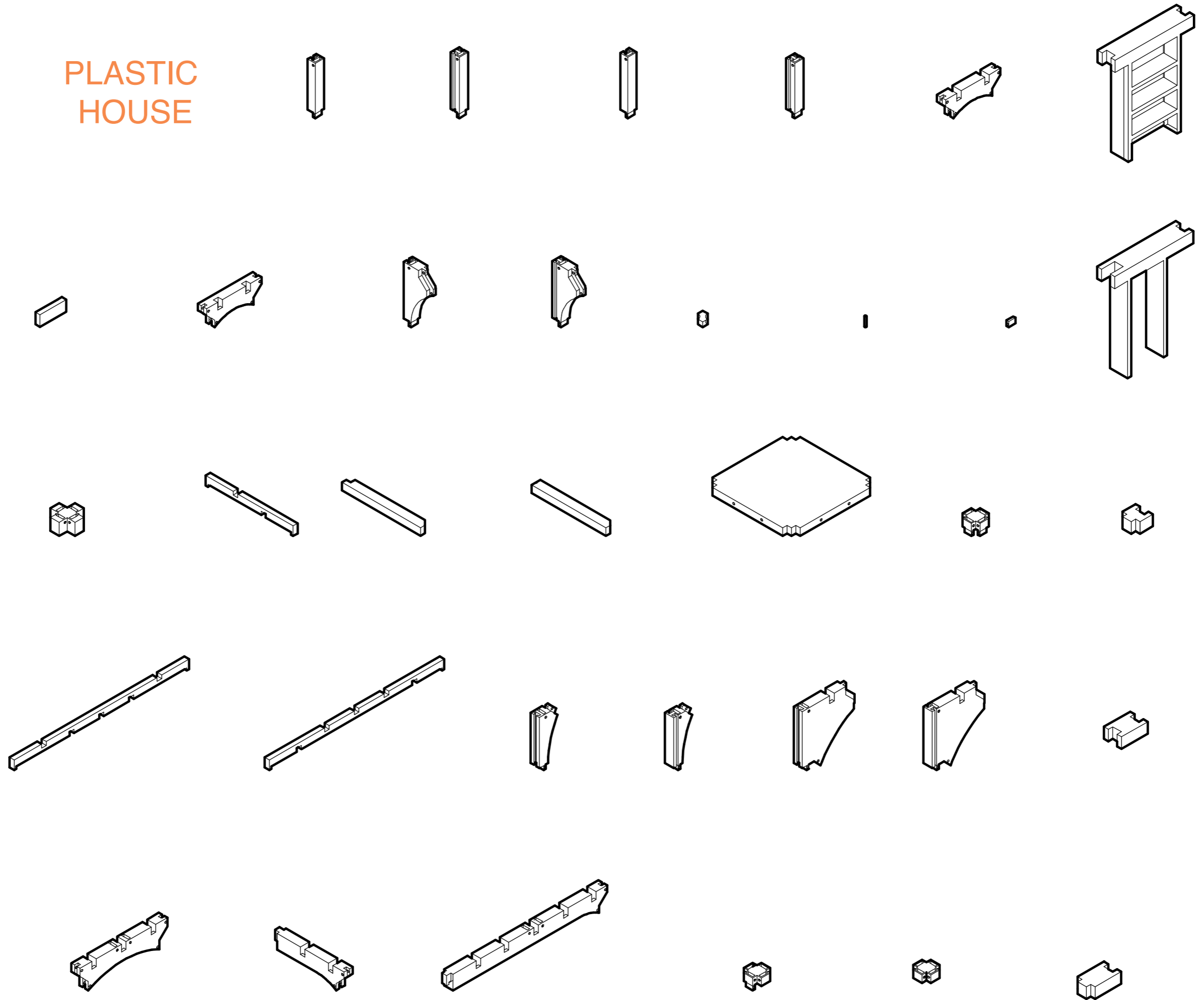


PLASTIC  
HOUSE



## Finding

What are materials available on Lesotho?

Objective: produce to create some employment and limit the import.

Traditionally the houses of Lesotho were in earth and stone.

Today what our earth?

The import of element construction generic as the breezeblock puts

The question of the identity.

Waste bound to the construction and the consumption causes problem.

New stratum of the ground.

Today earth means coat waste blow up.

Through this example extrême and more and more frequent we realize the luck of

Lesotho not to be for this level there.

It is never necessary left it be made.

New stratum of the ground.

Today earth means coat waste blow up.


Through this example extrême and more and more frequent we realize the luck of


Lesotho not to be for this level there.


It is never necessary left it be made.

## PRINCIPLE OF MODULARITY

### JOINTS

-  BENEFITS :
  - + Hollow element which can contain some insulating material
  - + Hollow element which can contain girdles (water, air, electricity)
  - + Possibility of adding, of changing, of removing every element
  - + Possibility of enlarging the house in the infinity
  - + Possibility of defusing completely the house and of going back up it on another site without creation of waste
  - + Low imprint on the environment with recycled foundations
  - + Require only a mallet for the assembly
  - + Assemblies borrowed from the implementation of skeleton wood: without glue, screw and iron framework
  - + Less than 50 different elements to build the house

-  PLASTICS USED FOR THE FILLING OF THE HOLLOW ELEMENTS:
  - + THE POLYSTYRENE (PS) (insulating)
  - + THE LOW DENSITY POLYETHYLENE (PEBD - LDPE)
  - + ANY OTHER WASTE WHICH CAN NOT SERVE IN THE ROTOMOULDING

-  PROCESS :
  - + Assembly of the prefabricated elements

The plastic as the material !

goals :

Recycling (Recycled, recyclable)

Interpretation of the brick, Economic, history identity




brick

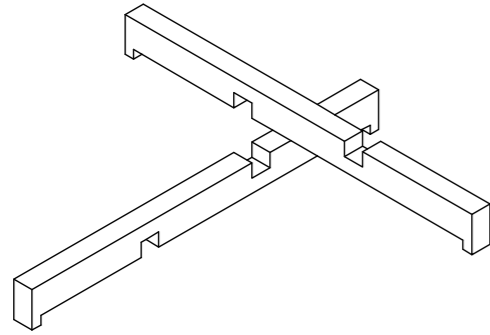
Flexible, reuse rather than throw

Economic, produce quickly and for all

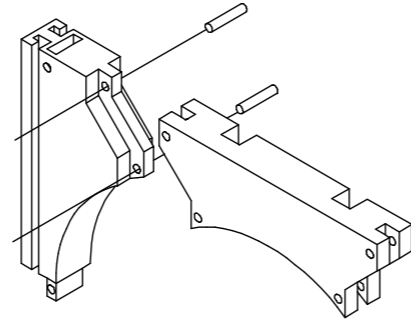
## PRINCIPLE OF PREFABRICATION

### LE ROTOMOLDING

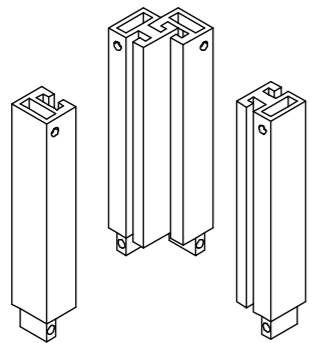
-  BENEFITS :
  - + Possibility of realizing complex and large-sized elements
  - + Resist the extreme temperatures
  - + Resist the shocks and the distortion
  - + Resist to oxidation
  - + Low cost equipment
  - + Low cost raw material
  - + No loss of material, recyclable 100%
  - + Fast manufacturing
  - + Tinged in the mass, no filler or the paint to be planned
  - + Hollow element which can be easily installed
  - + Hollow element which can contain some insulating material
  - + Hollow element which can contain girdles (water, air, electricity)
-  PLASTICS USED FOR THE ROTOMOLDING :
  - + THE POLYETHYLENE TEREPHTALATE (PET - PETE)
  - + THE HIGH DENSITY POLYETHYLENE (PEHD - HDPE)
  - + THE VINYL POLYCHLORURE (PVC - V)
  - + THE POLYPROPYLENE (PP)
  - + THE POLYAMIDE (PA)
-  PROCESS :
  - + Sorting of plastics
  - + Cleaning
  - + Crushing
  - + Coloring addition
  - + Heating in the mold
  - + Cooling
  - + Demolding



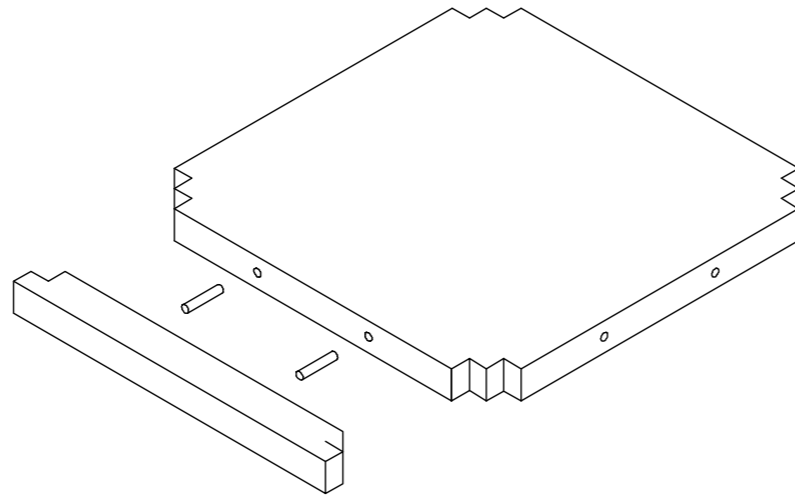
JOINING WITH MIDDLE-WOOD



JOINING BY MORTISE AND TENON JOINT



JOINING LIKE THE MIDDLE-WOOD WITH DOVETAIL



JOINING BY PIN

JOINT TECHNOLOGY

STRUCTURE



GIRDLES (WATER, AIR, ELECTRICITY)

ISULATION



DECOMPOSITION OF A MODULE

PET - PETE  
water bottle



PP  
pot yogurt



PEHD - HDPE  
domestic bottle



PS  
punnet, tumbler



PVC - V  
packaging

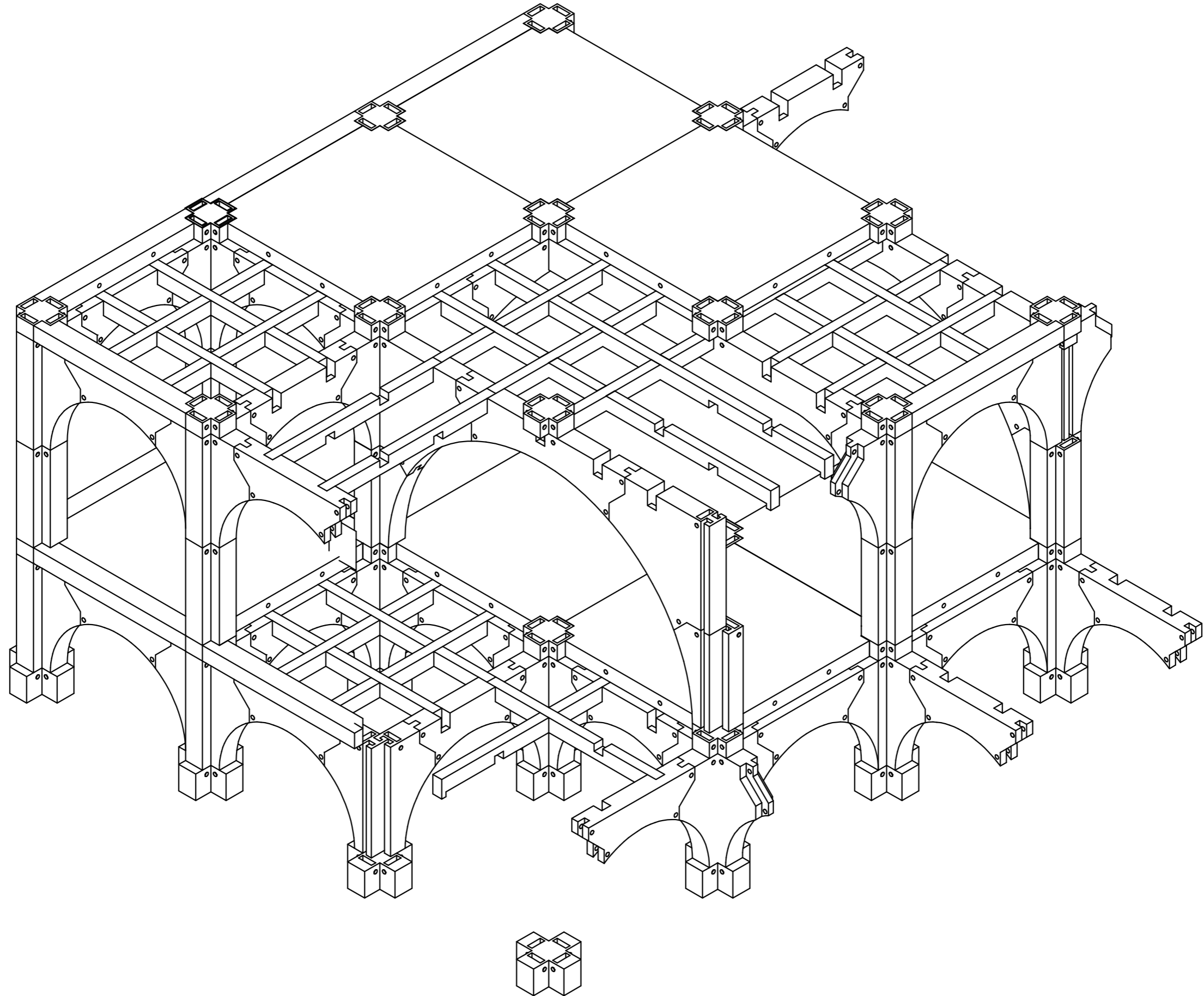


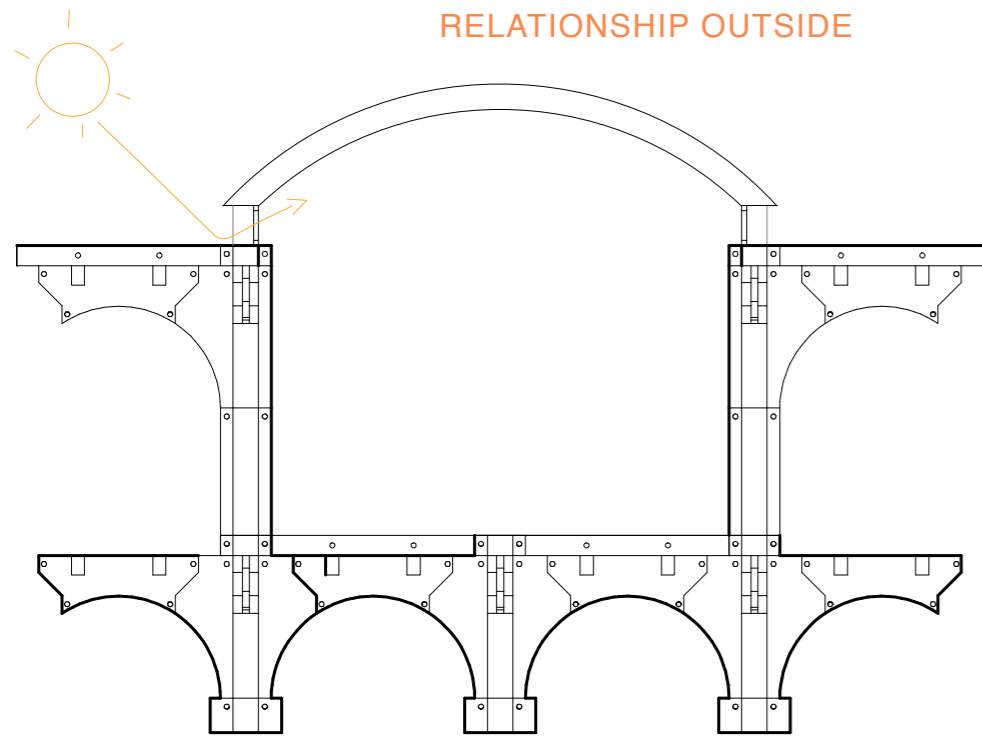
PEBD - LDPE  
plastic bag



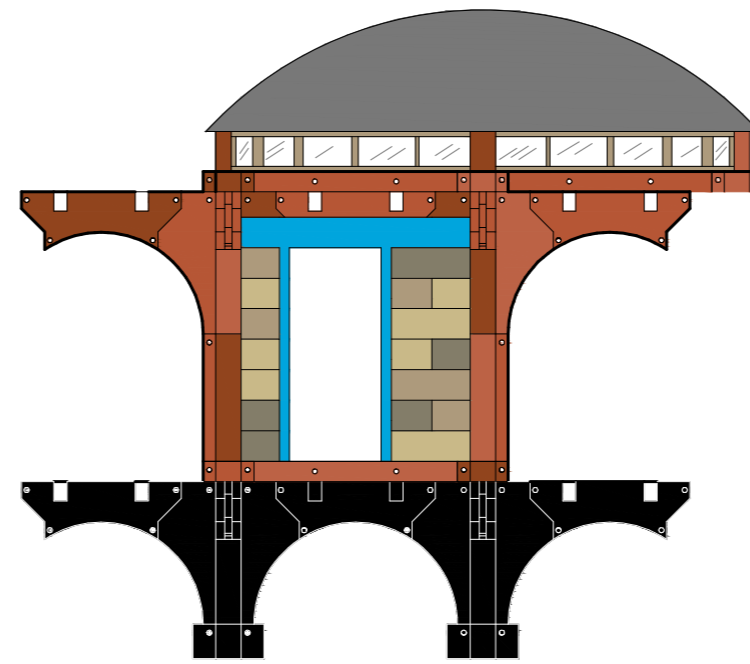
RECYCLABLE PLASTICS

# JOINING

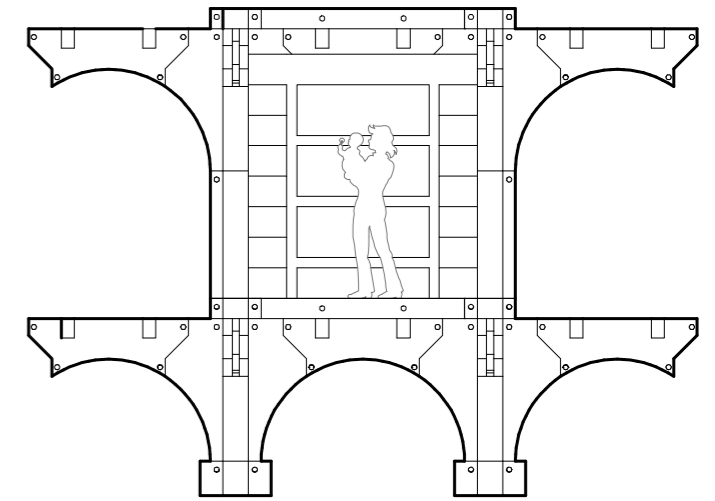




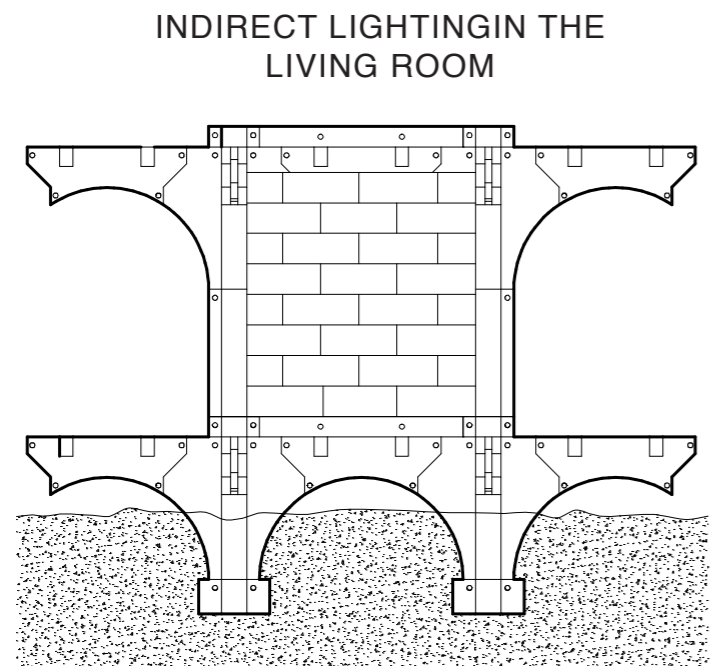
RELATIONSHIP OUTSIDE



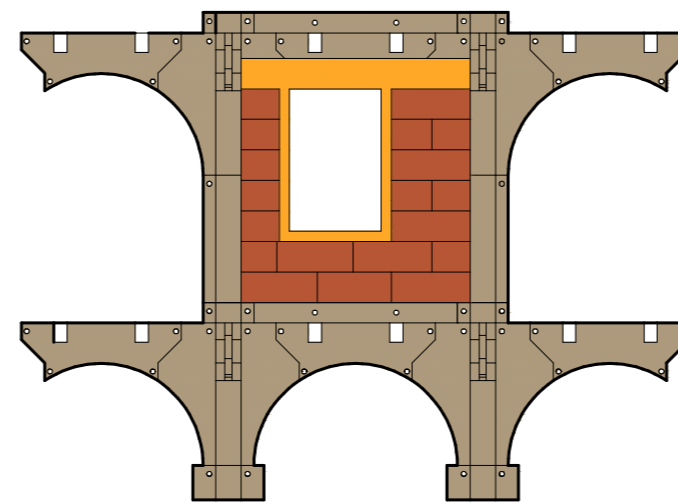
SHADES



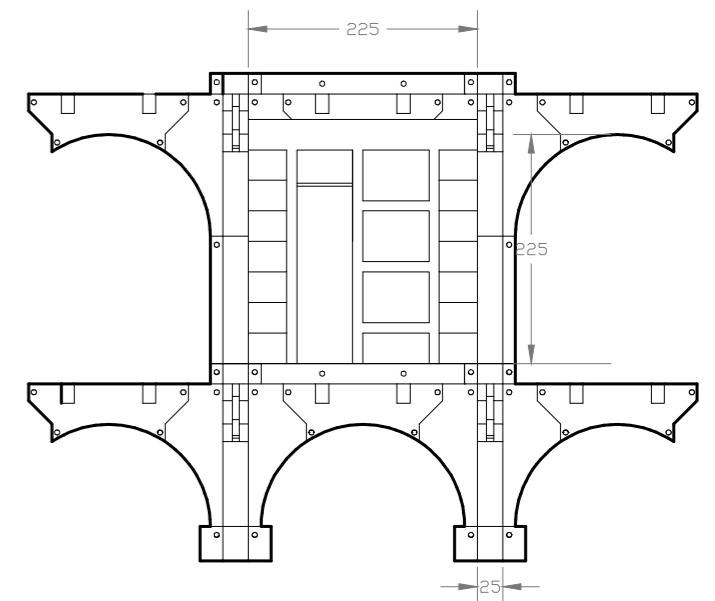
MEASURES



INDIRECT LIGHTING IN THE LIVING ROOM



MULTICOLOR



SCALE

FOUNDATIONS

MONOCHROME

DIMENSIONS (cm)

Bring a light source in the stay and keeping the intimacy of the home

living room under the dome of the roof

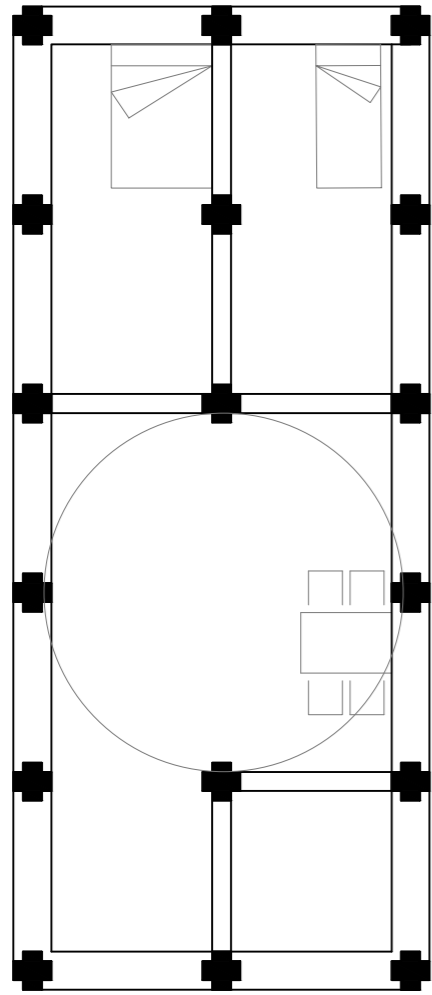
Frames of joinery in the lively colors

Constructive game and color between structure and facing

Limit the impact of a construction with paving stone concrete on the environment

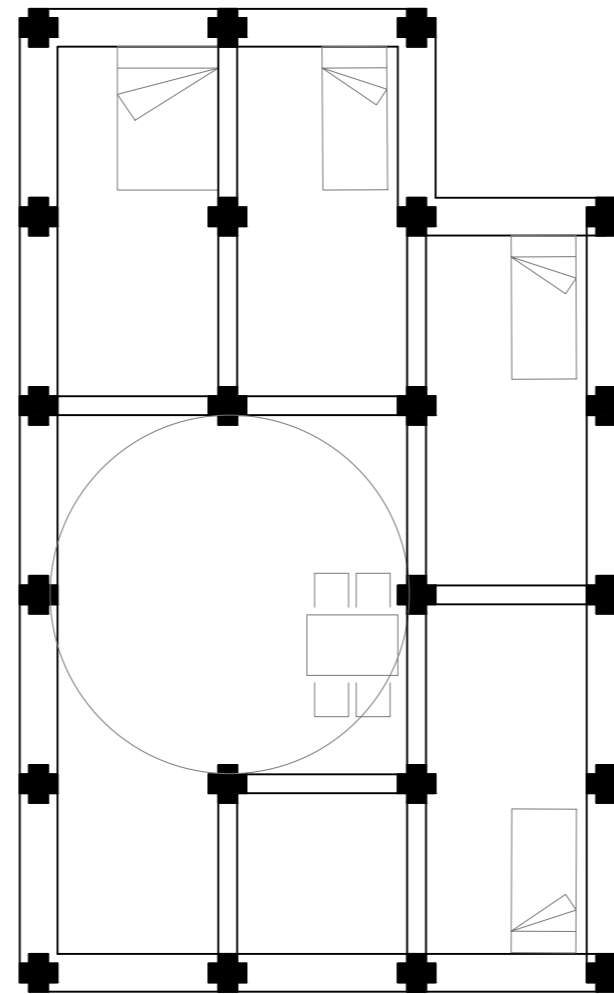
Limit the thermal exchanges between the ground and the housing environment by isolating and by disconnecting the floor

HOUSE UNIT



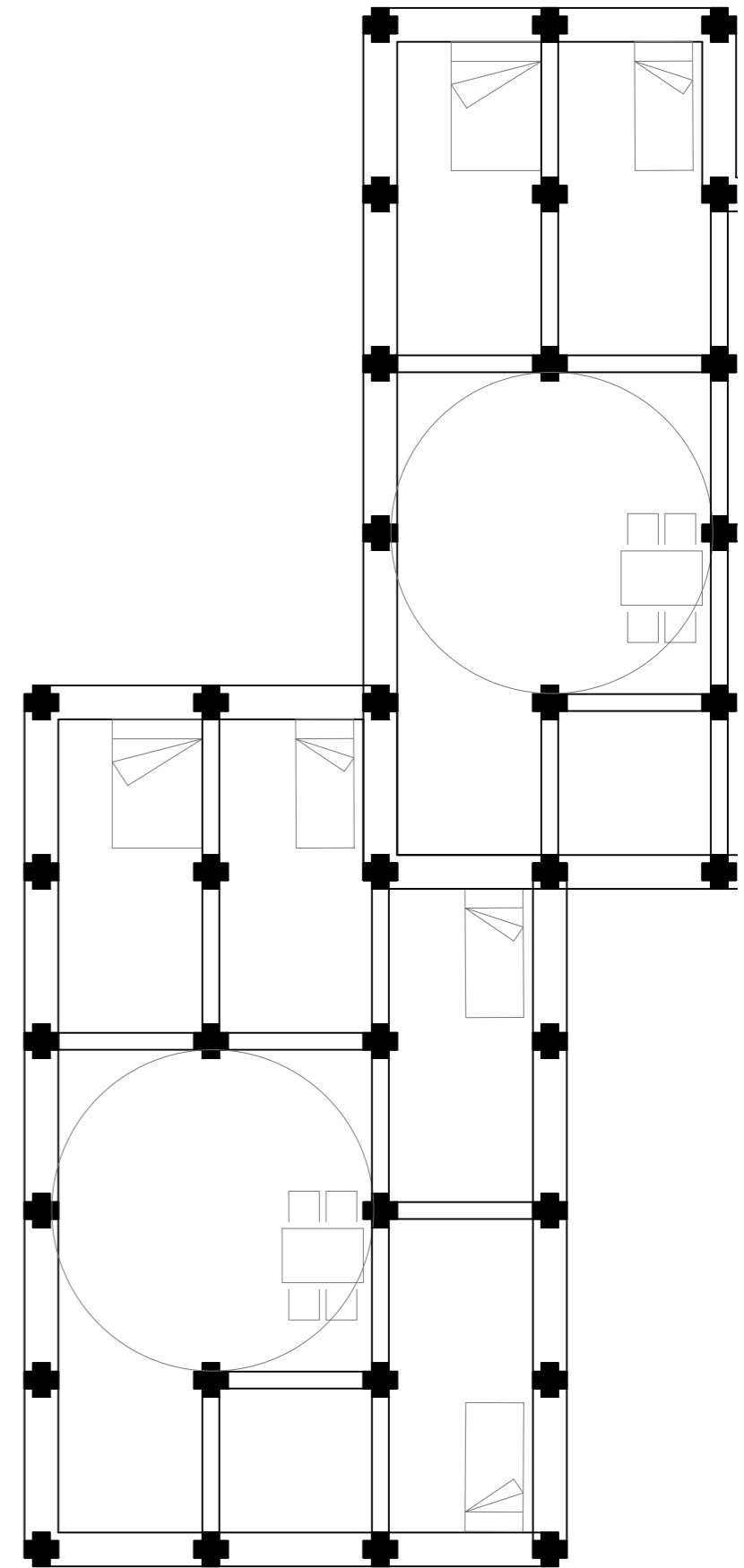
10 BLOCS

EXTENSION OF HOUSE UNIT



14 BLOCS

ASSEMBLY HOUSE UNIT



24 BLOCS