

PROJECT 10: SOCIAL CO-HOUSING

LESOTHO - MASERU - 2018

THE PROJECT IS CONCEPTUALLY BASED ON THE PRINCIPLE OF SHARING SPACE, SAVING THE MATERIAL NEEDED AND TO COMPENSATE FOR REDUCED OFFERS BY THE LAYOUT OF THE COMMUNITY SPACE. 9 FAMILY HOUSES ARE BASED ON CONCRETE BEADS. MULTILAYERED CAVITY WALLS COMPOSED OF TWO LAYERS OF MASONRY, ONE LAYER OF HEMPCRETE THERMAL INSULATION, AND VENTILATED AIR SPACES ALLOW BUILDINGS TO BETTER COPE WITH TEMPERATURE VARIATIONS AND COMFORT NEEDS THROUGHOUT THE YEAR. THE ROOFING OF THE BUILDINGS IS MADE OF WOODEN FRAME, THERMAL INSULATION LAYER AND METAL SHEETS WITH A TOTAL ROOF SLOPE OF 20°. FAMILY UNITS CONSIST OF A MAIN LIVING ROOM WITH AN INDISPENSABLE KITCHEN SECTION, TWO OPENABLE ROOMS AND HYGIENIC FACILITIES WITH A SHOWER, TOILET AND WASHBASIN. LAUNDRY AND EXTENSIVE CLEANING IS AVAILABLE WITHIN THE COMMUNITY UNIT. IT CONSISTS OF THREE INTERCONNECTED HEXAGONS, MADE BY THE SAME STRUCTURAL SYSTEM AS FAMILY UNITS. THE SPACE IS DIVIDED INTO THREE PARTS - DINING, LIVING AND PREPARATORY-HYGIENIC. IN THE SPACE BETWEEN LIVING UNITS THERE ARE NATURAL UNCOVERED MULTI-LEVEL AMPHITHEATRES FOR COMMUNITY AND SOCIAL ACTIVITIES. THE TOTAL CAPACITY OF THE PROJECT IS 9 FAMILIES BY 4 FAMILY MEMBERS IS 36 PERSONS.

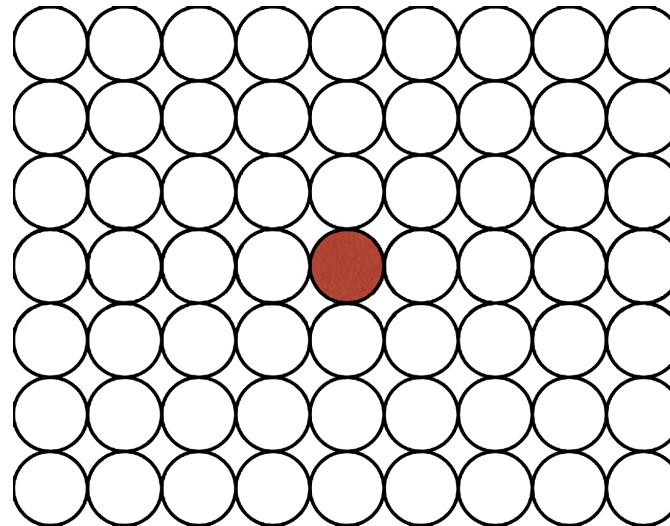


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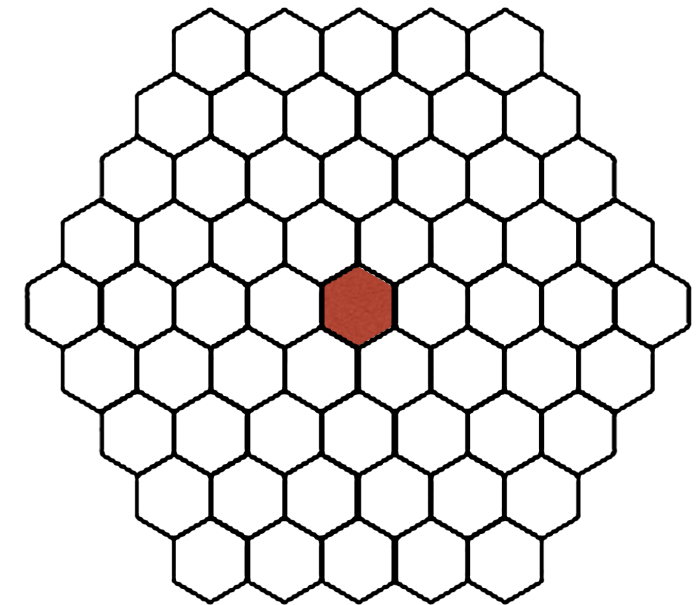
PERFECT SHAPE

THE PERFECT GEOMETRICAL SHAPE IS THE CIRCLE. MAXIMUM VOLUME OF SPACE WHILE MAINTAINING A MINIMUM AMOUNT OF "UNNECESSARY" MATERIAL. THIS KNOWLEDGE ALSO TOOK INTO ACCOUNT THE TRADITIONAL AFRICAN RONDAVEL, WHICH WILL BE THE STARTING REFERENCE FOR ME.



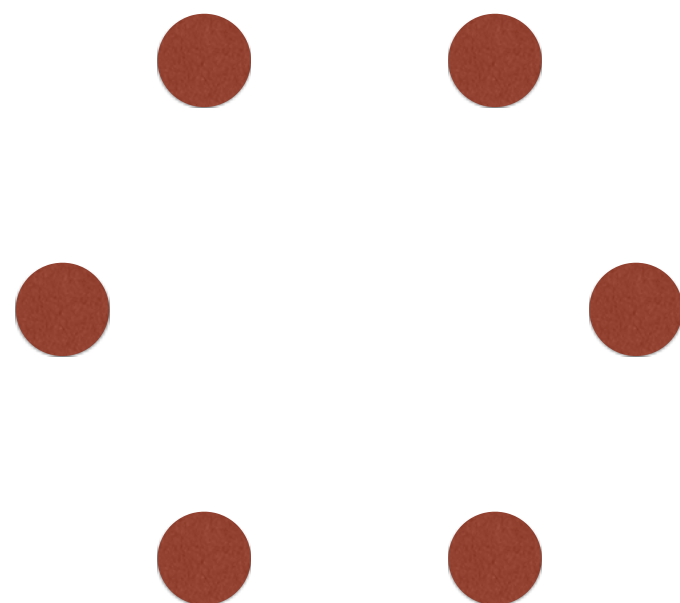
WASTE OF SPACE

IN THE MULTIPLE USE AND THE INTENTION OF CONTINUING THE TREND TO SAVE THE MATERIAL WHEN MAINTAINING THE MAXIMUM AMOUNT OF THE VOLUME, THE CIRCLE SHUTS TO BE APPROPRIATE, IF INTERIORS BETWEEN THE SHAPES ARE THE THEORETICAL WASTE.



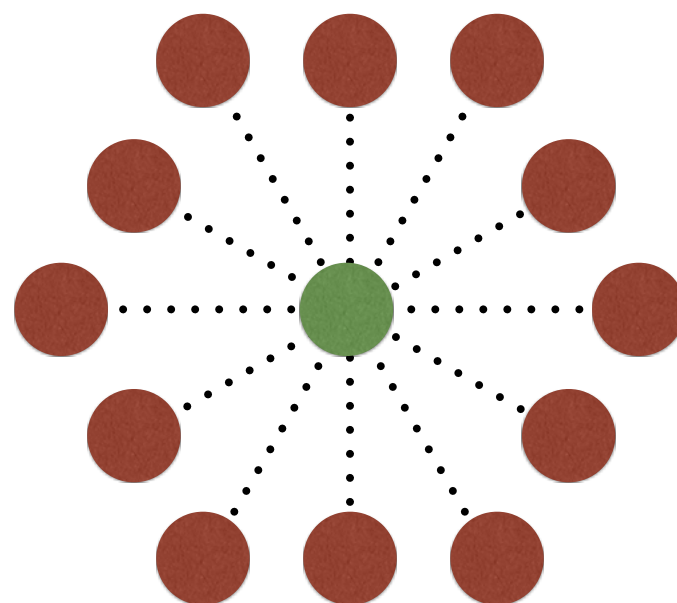
HEXAGONAL GRID

ANOTHER VARIABLE IS THE MECHANICAL STABILITY OF THE FORMED UNIT. IN NATURE, CIRCULAR GRID UNDER PRESSURE AND TEMPERATURE CHANGES WILL START TO CREATE ANGLES OF 120° UNTIL THE HEXAGONAL GRID IS FORMED. HEXAGON ITSELF IS PERFECT SHAPE FOR TERRACED HOUSING WITH PRESERVING THE BENEFITS OF DETACHED HOUSE.



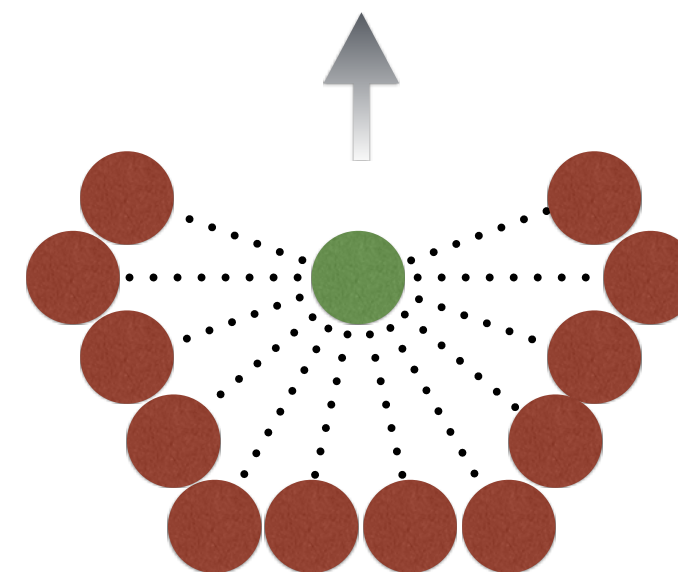
DISCONNECTED GROUP

THIS FAST, ON PERFORMANCE BASED AGE PROVIDES POSSIBILITY OF RESULTS, ACCORDING TO THE RELEVANT PERSONAL PERFORMANCE. YET, IT IGNORES THE HUMAN PART OF THE VULNERABLE BEING, WHO SEEKS FOR HELP. IN THE WORLD WITHOUT CONNECTION, WHERE ANY MAN HAPPENS TO LIVE ONLY FOR HIMSELF, THE LONELINESS IS VERY PROBABLE DESTINATION.



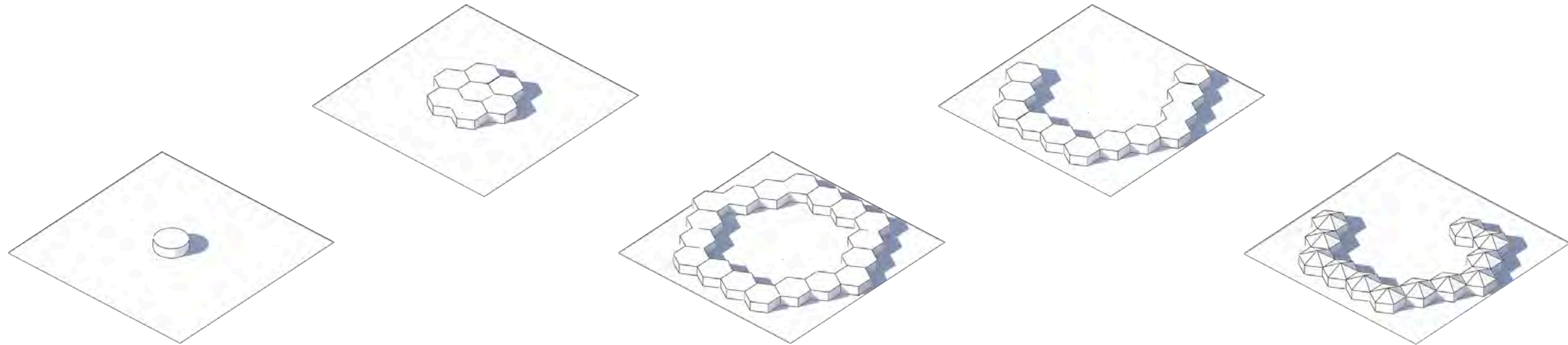
CONNECTION - COMMUNICATION

THROUGH COMMUNICATION AND AND SHARING OF PERSONAL LIVES, WE FULFILL OUR FUNDAMENTAL SOCIAL NEED TO CREATE THE BOND AND A TEAM. THE GROUP OF INDIVIDUALS WHO PROVIDE LOVE, RESPECT AND IN CASE OF NEED HELP, SUPERVISION AND PROTECTION. COLLECTIVE SHARED SOURCES OF THE LARGER GROUP ARE ABLE TO EXCEED THE POSSIBILITIES OF OPERATION OF INDIVIDUALS.



SHARING, CREATING OF SPACE

ON THE BASIS OF CREATING THE BOND AND MUTUAL CONFIDENCE OF THE GROUP OF INDIVIDUALS, THERE IS THE POTENTIAL OF CREATING THE COLLECTIVE OWNERSHIP OF SOME PROPERTY AND ITS AFFILIATED ADMINISTRATION AND CARE OF IT. THIS OWNERSHIP IS BASED ON THE PREMISE THAT IT WOULD BE OUT OF THE AVAILABILITY AND CAPABILITY OF SMALL GROUPS OR INDIVIDUALS.

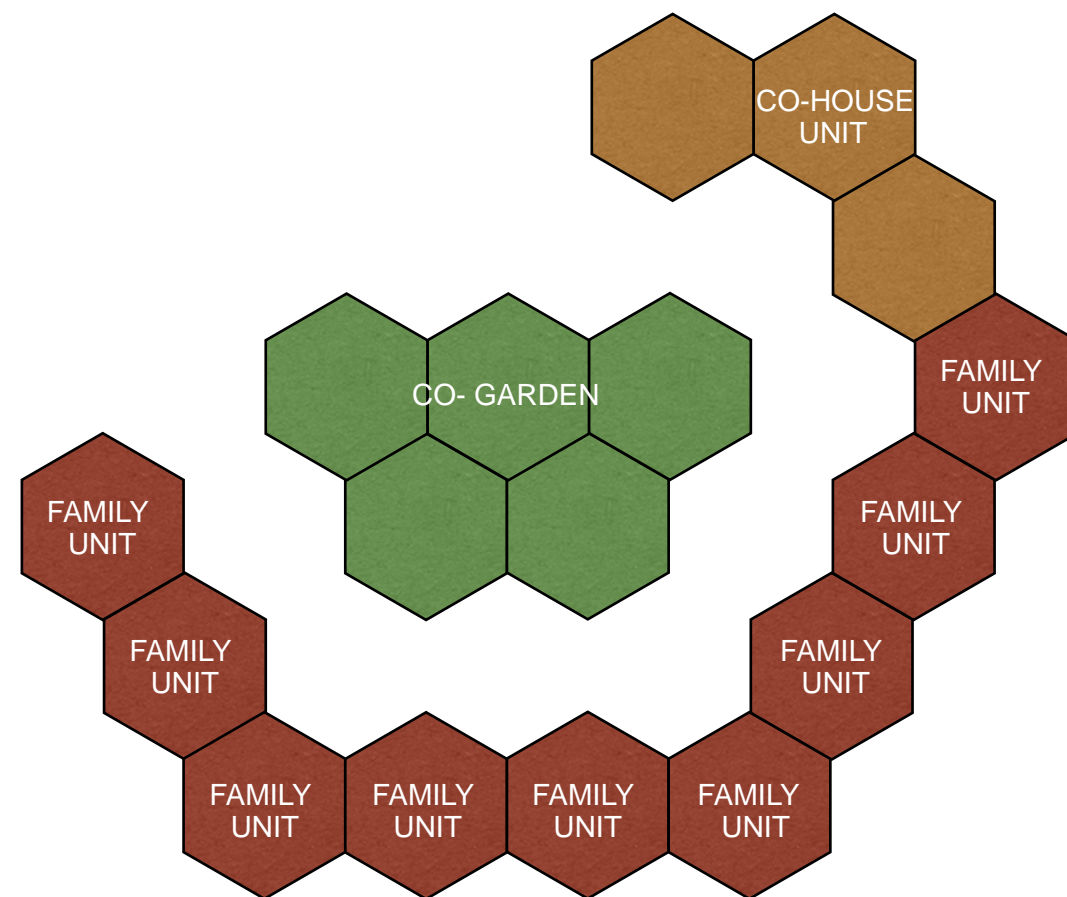


THE BASIC TEMPLATE FOR CREATING A FAMILY HOUSE IS A DETACHED SOLITER LOCATED ON A PARCEL. ORIENTATION OF THIS OBJECT IS OUTSIDE, CORE IS CONCENTRATED INTO ONE POINT. THIS ESTABLISHED EPICENTER, FROM URBAN POINT OF VIEW, ONLY CRATES PUBLIC SPACE (STREET) AND PRIVATE (GARDEN). IN THE STRUCTURE OF THE CITY, THESE TYPES ARE INFERIOR.

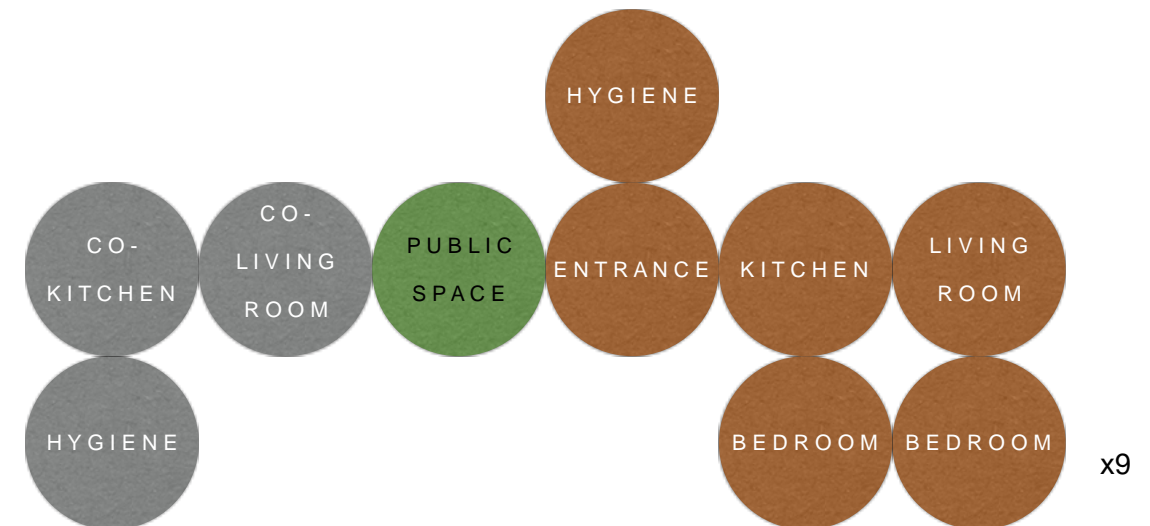
THE BLOCK ARRANGEMENTS THAT THE SPACE DIFFERENTIATES IS THEREFORE MORE SUITABLE. NECESSARILY SAID IN THE NEAR STRUCTURE OF BUILDING OF THE MASERU TOWN THIS TYPE IS NOT ABSOLUTELY NECESSARY. IT IS APPROPRIATE TO USE THE CONCEPT OF THE BLOCK AND TO TRANSFORM IT TO THE LOCAL CONTEXT.

THE BLOCK IS OPEN, INCOMPLETED, THE QUANTITY OF THE MASS OF THE OBJECT IS DECREASED, AND THE FLOW OF SPACE IS CONNECTED TO THE EXISTING GREEN LINE IN THE SURROUNDINGS OF THE PROJECT.

THE BLOCK IS OPENED INTO THE DIRECTION - NORTH. THIS GUIDELINE IS FURTHERMORE HELPING THE SUN ORIENTATION FROM EAST AND WEST.



THE AREA IS THE CENTRAL JOINT COMMUNITY "CENTER" WHICH IS DIRECTLY CONNECTED ONTO THE NINE FAMILY HOUSES - UNITS. THREE TIMES THREE-FAMILY UNITS ARE ATTACHED TO FORM HOUSES IN THE MATTERS OF MATERIAL EQUIPMENT SAVINGS. ONE TIME THREE-UNIT IS CREATING THE CO-HOUSING SPACE AT THE END OF THE SEGMENT.



THE FAMILY HOUSE COMES FROM A SINGLE POTENTIAL - ACCESSIBLE ENTRANCE WITH THE STORAGE AREA FROM WHICH YOU CAN ENTER THE HYGIENE ROOM AND THE MAIN ROOM. THIS ROOM IS RESPONSIBLE BY LINKING THE SMALL KITCHEN PART AND LIVING ROOM. FROM THE SPACE THERE ARE ALSO ENTRANCE INTO TWO BEDROOMS.



RED BRICK CAVITY WALLS



LIGHT COLOR WOOD



HEMPCRETE INSUALTION



METAL SHEET ROOF



Project 10 = 9 family units + 1 shared co-house. Close interconnection of individual households creates not only a stronger financial reach of the group, but also a social background for development of children and the creation of a friendly collective-neighborhood. Each family owns one unit that provides background and privacy. They also participate in the care of the co-house and garden, which greatly extends the possibilities of social and physical activities, which are not allowed by social housing itself. Project 10 is designed from affordable low-cost and local materials, making it easy to build the whole project.

PROJECT COST ESTIMATE: ELEMENTAL BREAKDOWN			
DESCRIPTION	AMOUNT	UNIT PRICE	TOTAL
BASE AND FOUNDATION			LSL 101 700
- family unit	5 M ³	1 695 LSL/M ³	
- 9x family units	45 M ³	1 695 LSL/M ³	
- co-unit	15 M ³	1 695 LSL/M ³	
WALLS			LSL 90 000
- family unit	100 M ²	75 LSL/M ²	
- 9x family units	900 M ²	75 LSL/M ²	
- co-unit	300 M ²	75 LSL/M ²	
FLOOR			LSL 46 080
- family unit	48 M ²	80 LSL/M ²	
- 9x family units	432 M ²	80 LSL/M ²	
- co-unit	144 M ²	80 LSL/M ²	
ROOF			LSL 64 800
- family unit	60 M ²	90 LSL/M ²	
- 9x family units	540 M ²	90 LSL/M ²	
- co-unit	180 M ²	90 LSL/M ²	
WINDOWS+DOORS			LSL 62 500
- family unit - windows	7 piece	620 /piece	
- family unit - doors	2 piece	500 /piece	
- 9x family units - windows	63 piece	620 /piece	
- 9x family units - doors	18 piece	500 /piece	
- co-unit - windows	12 piece	620 /piece	
- co-unit - doors	14 piece	500 /piece	
EQUIPMENT+FURNITURE			LSL 40 000
- family unit	1 unit	4 000 /unit	
- 9x family units	9 units	4 000 /unit	
- co-unit	1 unit	6 000 /unit	
CONNECTION (ELECTRICITY+SEWAGE)			LSL 50 000
- family unit	1 unit	5 000 /unit	
- 9x family units	9 units	5 000 /unit	
- co-unit	1 unit	5 000 /unit	

COMPLETE PROJECT COST ESTIMATE:
PROJECT COST ESTIMATE PER FAMILY UNIT:

LSL 455 080
LSL 50 565

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