OBJECTIVES-Creating 'portable'
schools

-Offering alternatives for schools facing evictions in Kenya

-Work with a new generation of youth who are interested in construction

-Allow students to become a part of the process

-Allow youth who couldn't afford to go to school a chance to get into construction

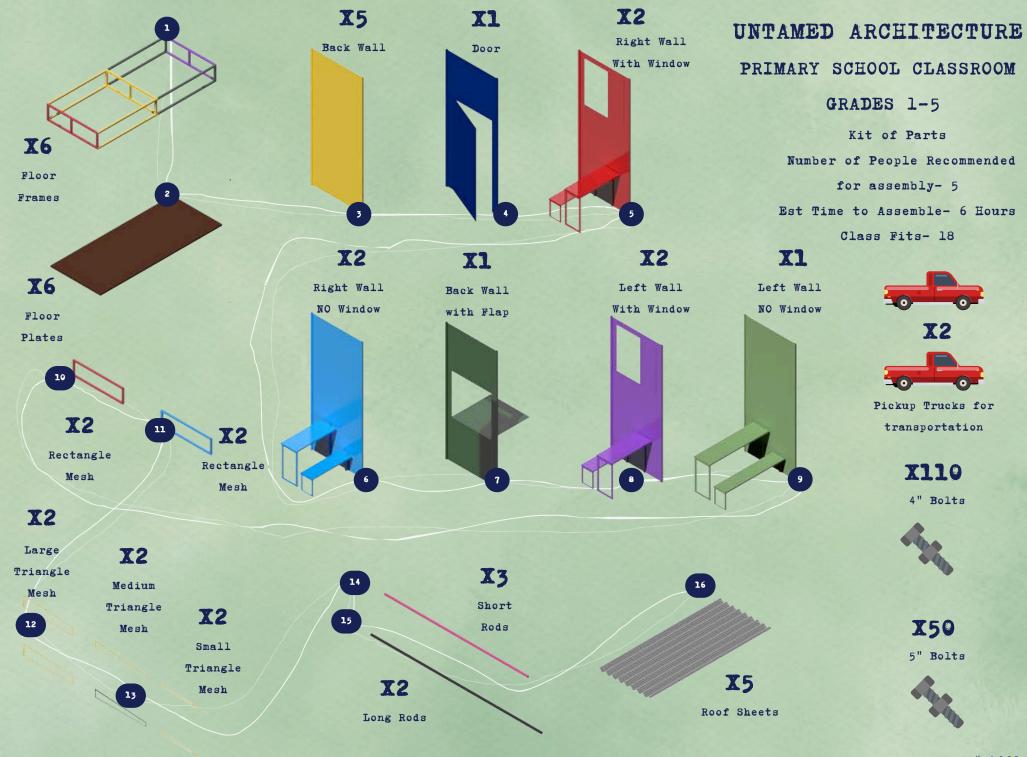


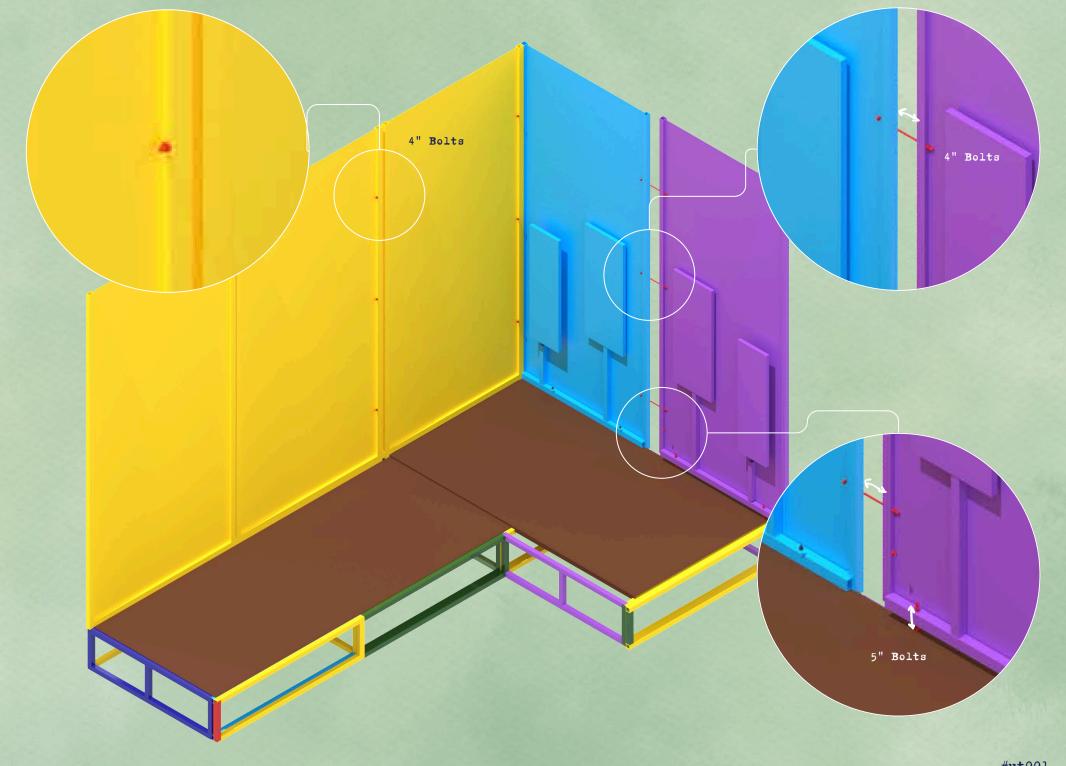
A significant challenge facing private schools providing critically needed educational services to hundreds of thousands of underprivileged children in the informal settlements (slums) of Kenya, and many other less developed countries, is the constant threat of eviction from the land that they are built upon, resulting in the loss of all infrastructural assets that the school possess. Recognising this challenge, the EJ Rihoy Trust, in collaboration with a local partner organizations, Earth Angels and St Stevens school, set out to see how it could be addressed in the most cost-effective and locally appropriate manner. Kenyan architect, Georgia Fernandes (Untamed Architecture, Kenya), designed and managed all aspects of the project, providing her invaluable skills and oversight on a pro-bono basis.

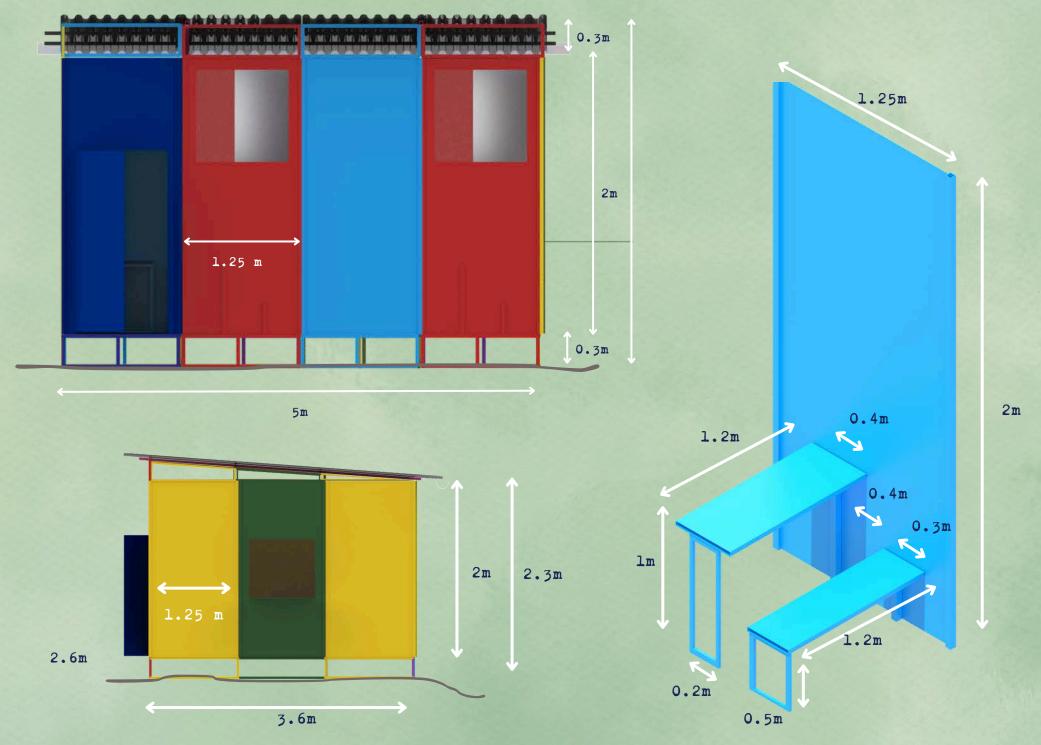
The outcome - the Mobile Classroom Unit - introduces a modular, color-coded classroom kit that can be assembled in just eight hours by unskilled labor with no prior construction experience, allowing for easy setup and adaptability. It is constructed and manufactured locally, using locally available and easily sourced materials and at a cost of £1,700 per unit accommodating 18 students, is approximately 80% cheaper to build than the standard brick and mabati (corrugated iron) classroom unit. It also accommodates design interventions that allow for rain-water collection, temperature regulation and cooling.

In addition to serving as a classroom, the structure can function as a food distribution center, community gathering space, and, with this specific prototype, a space for local women to establish a tailoring workshop when the building is not in use as a class-room.

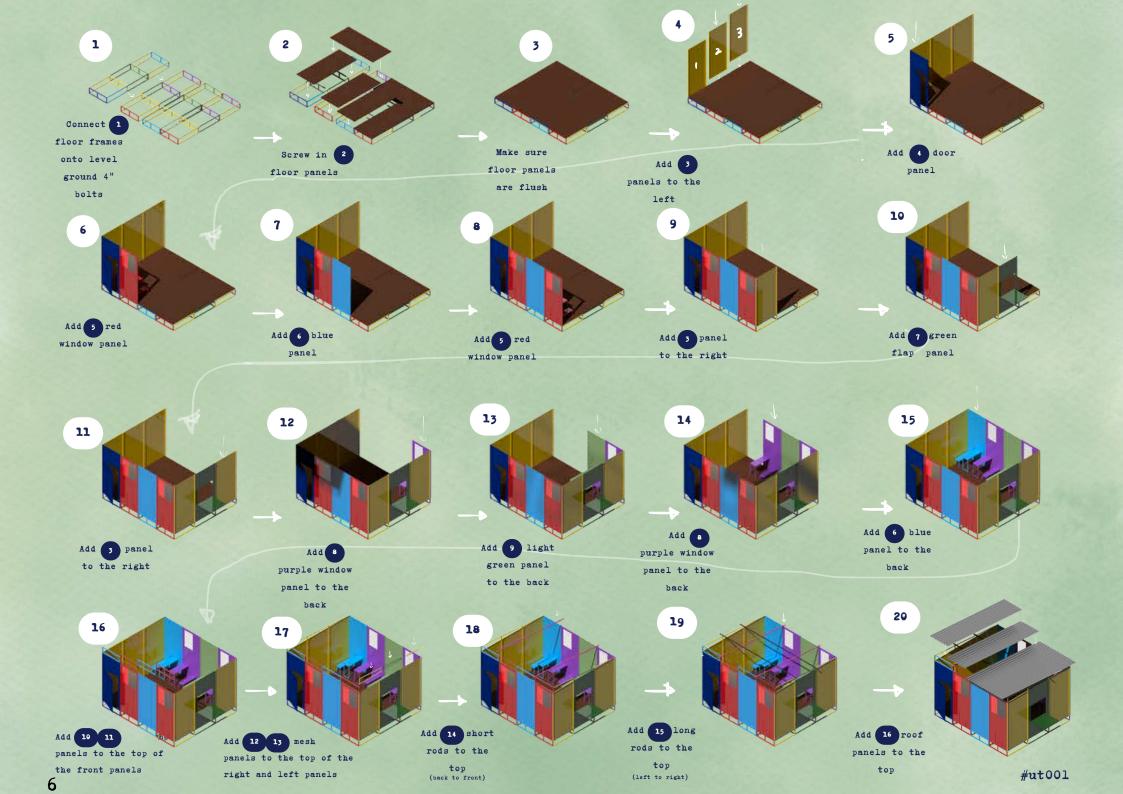
By involving the community in the building process, construction aimed to inspire unemployed local youth, promoting a sense of ownership and pride and providing them with new skills.







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MODULAR DESIGN

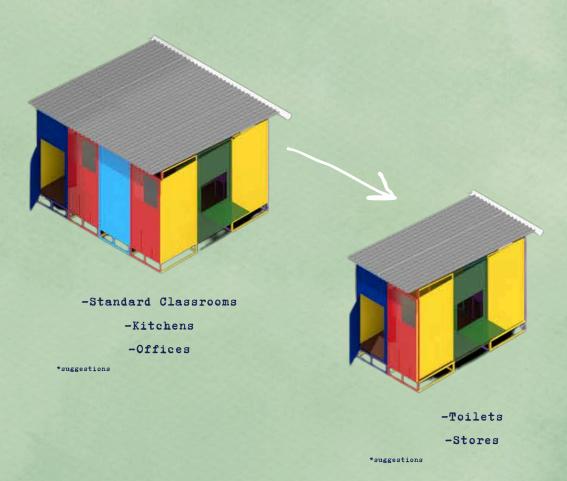
Modular Design

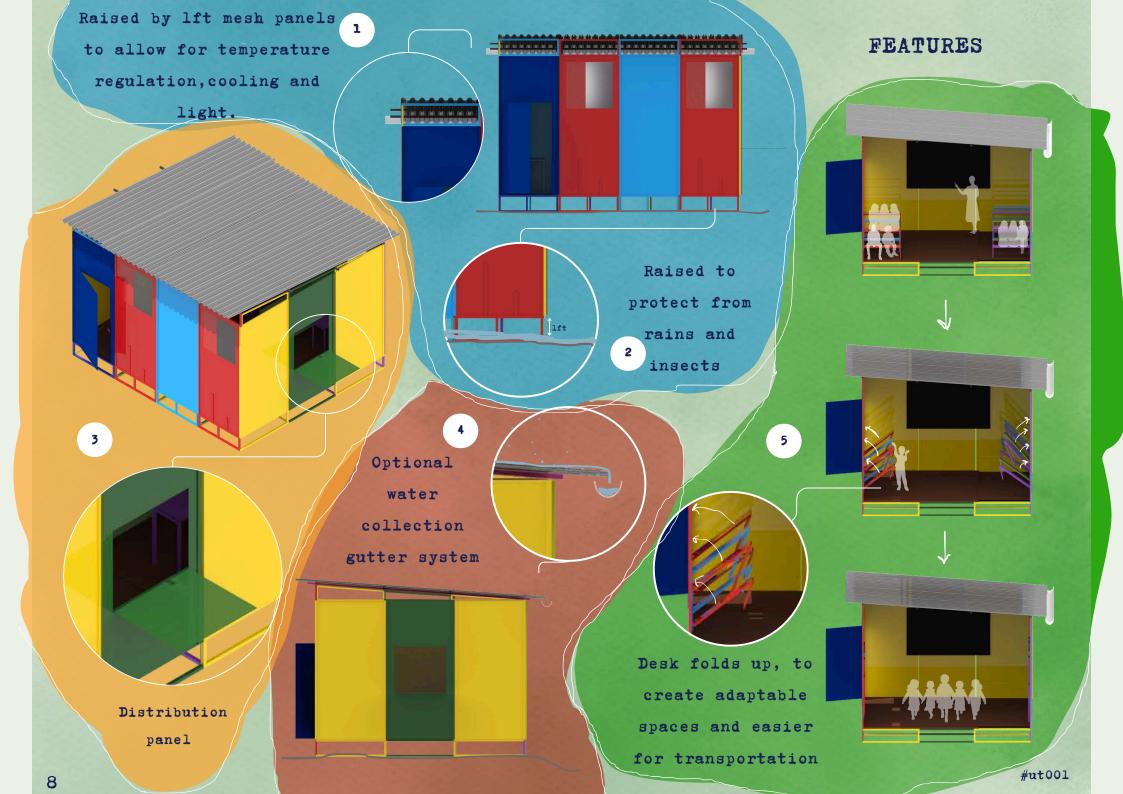
can be made in multiple

configurations for different

functions







| Name | Quantity | Dimensions | | | Cost | Total |
|-----------------------------|----------|----------------------------------|--------|-----------|-----------|------------|
| | 5370 15 | Width | Length | Thickness | | |
| Square Tube | 50 | 40mmx40mm | 6m | 1.2mm | 1,300.00 | 65,000.00 |
| Square Tube | 35 | 25mmx25mm | 6m | 1.2mm | 900.00 | 31,500.00 |
| Angle Line | 2 | 40mmx40mm | 6m | 3mm | 1,600.00 | 3,200.00 |
| Round Tube | 1 | | | 10mm | 1,200.00 | 1,200.00 |
| Black Sheet Mabati | 20 | | | 0.8mm | 2,300.00 | 46,000.00 |
| Perspex Sheet | 1 | 8ft x 4 ft | | 0.5mm | 10,000.00 | 10,000.00 |
| Wire Mesh Expanded | 1 | 8ft x 4 ft | | 1.5mm | 3,000.00 | 3,000.00 |
| Marine Board | 7 | 8ft x 4 ft | | | 3,000.00 | 21,000.00 |
| Bushes 6" Butterfly | 2 | | | | 250.00 | 500.00 |
| Bushes 6" Small | 32 | | | | 100.00 | 3,200.00 |
| Weld Rods (Packet) | 1 | | | 3.2mm | 1,000.00 | 1,000.00 |
| Cutting Disk SALI | 5 | | | 9 in | 150.00 | 750.00 |
| Grinding Disk UMBRA | 2 | | | 7 in | 200.00 | 400.00 |
| Plastic Gutter PVC | 1 | | 5m | | 1,500.00 | 1,500.00 |
| Gutter Clip PVC | 4 | | | | 200.00 | 800.00 |
| Outlet PVC | 1 | | | | 500.00 | 500.00 |
| End Cup PVC | 2 | | | | 200.00 | 400.00 |
| Elbow PVC | 3 | | | | 200.00 | 600.00 |
| Down Pipe PVC | 1 | | | | 700.00 | 700.00 |
| Roofing Sheet 2.5m | 14 | Coloured | 2.5m | 30 gauge | 1,250.00 | 17,500.00 |
| Roofing Screw Self Drilling | 200 | AND CONTRACTOR OF THE CONTRACTOR | 2 inch | 8mm | 10.00 | 2,000.00 |
| Bolts M 10 | 130 | | 4 inch | 10mm | 50.00 | 6,500.00 |
| Total Material Cost | 7 | | | | | 217,250.00 |
| Discounted Material Cost | | | | | | 210,000.00 |
| Paint | | | | | | 7,000.00 |
| Labour | | | | | | 50,000.00 |
| Transport | | | | | | 5,000.00 |
| GRAND TOTAL | | | | | * | 272,000.00 |

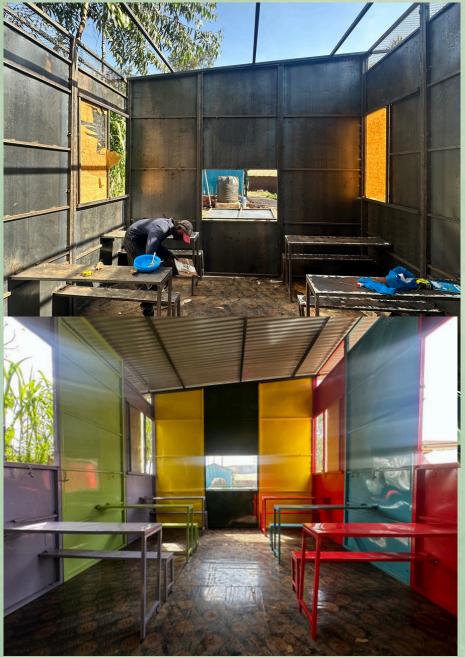
PROTOTYPE 1

GITHOGORO SLUM NAIROBI, KENYA

JANUARY 2025









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