

Khan Al Ahmar school

A Transformative Community Shelter

Our proposal envisions a dynamic structure that evolves over time, reflecting the ability of a group to settle depending on the political obligations. Its main skeleton is conceived as a nomadic structure, it is designed to be easily transported using a trailer, whether pulled by a donkey or a car. Later on, the lightweight skeletal framework will serve as the foundation for a permanent settlement. The structure's transformation is driven by its inhabitants, who infuse their creativity and labor into the coverings. This participatory approach ensures that childrens and the whole village collaborate to shape the structure, making it a unique and meaningful space that belongs to them.

The core skeleton is constructed from prefabricated tubes, cut into three lengths. These components are stacked together using joints made from thinner tubes, and the whole is secured with bolts. Tension cables brace the entire structure, providing stability. This design allows for modularity and flexibility while keeping the assembly process efficient.

So The project unfolds in three transformative phases. In the Emergency Phase, where the metal frame is anchored to the ground and covered with fabric to provide immediate shelter. In the Puberty Phase, the structure is elevated onto a stone foundation, and a double roof system is put in place with cane and fabric. This phase marks the beginning of more permanent modifications. The double roof allows the air to circulate freely in between and prevent overheating. Finally, in the Adult Phase, the cane walls are reinforced with a mix of mud and straw. Doors and windows are well placed, and the interior floor is raised above ground level, providing a durable and refined surface. Earth will insure rigidity and thermal mass. This layer is placed on straw to prevent the metal's heigh dilatation rate from causing cracking in the facades. Earth will ensure rigidity and good thermal mass.

The structure's modular nature is a key feature, following a 100 cm grid that can be replicated and altered to meet programmatic requirements. Columns that can support walls and doors can be added to enhance functionality. The design respects the geomorphology of the steep site, minimizing material excavation and integrating harmoniously into its surroundings.

This approach ensures sustainability while fostering a sense of ownership and pride among the community, transforming the structure into a collaborative and ever-growing architectural centerpiece for the village.