

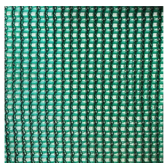
Materials



palm wood



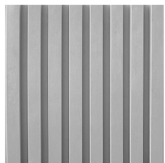
polyester mesh
(protecting the
solar panels)



polyester mesh
(fog harvesting)



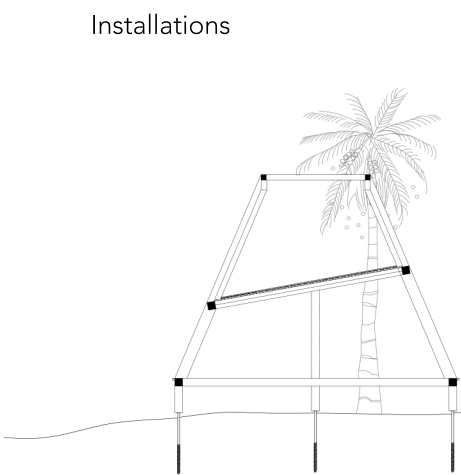
steel
(wood connections
and water containers)



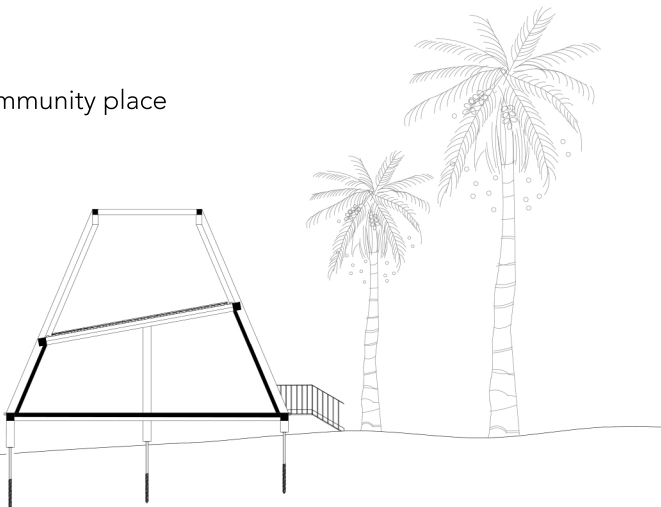
profiled steel sheet
(roof)

Sections

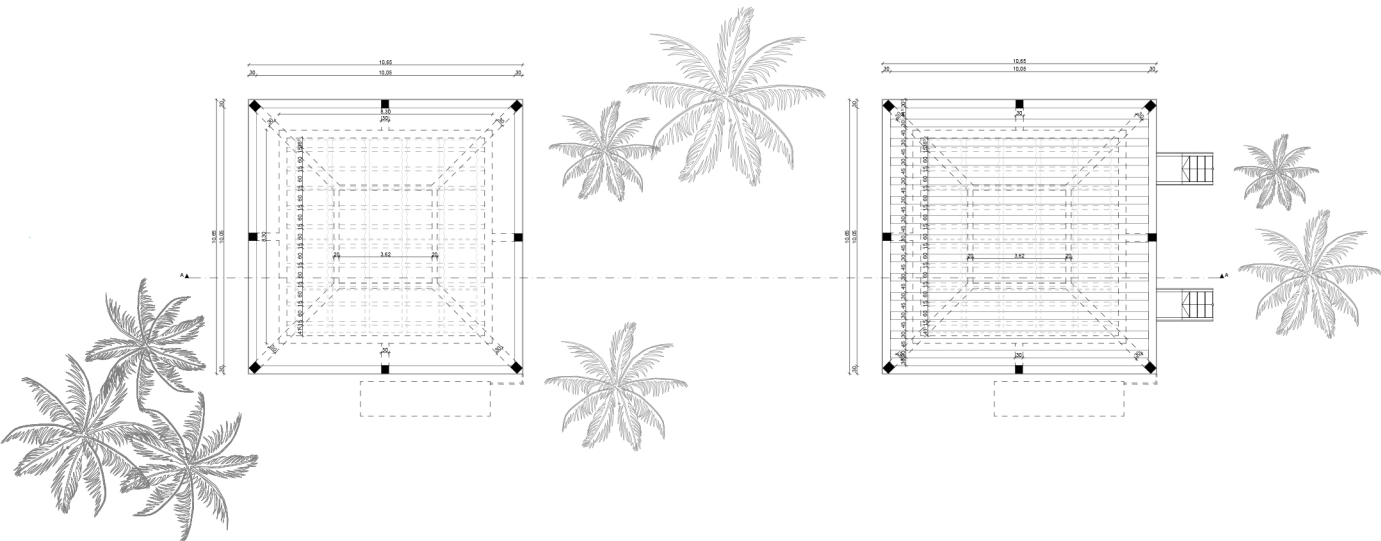
Installations



Community place



Floorplans



3. Technical Narrative

The design incorporates solar photovoltaic technology for energy generation and a sophisticated moisture collection system . In our project, we have installed 448 m² of solar panels, which together provide an impressive photovoltaic capacity of 84 kW.

Our aim is to harvest water from the atmosphere (rain, fog, dew) providing an alternative water source for the residents of the village. When the wind blows, it pushes moisture into the complex woven netting, effectively trapping it. Rubber expanders holding the nets to the frames reduce the impact of wind pressure on the net to keep them from breaking. It's capable of harvesting between four and fourteen liters of water per square meter of net.

Above the solar panels, the net is designed with a finer weave, serving primarily to protect the system from flying coconuts.

These technologies were chosen for their eco-friendliness and efficiency.



The foundation will be executed with **ground screw** technology.

System Inputs:

- Sunlight for solar energy
- Moisture in the air for the mesh collection system
- Local materials, such as palm wood

System Outputs:

- Electricity
- Collected water
- New community place

Wooden joints will be secured using **rope bindings** — a fast, efficient, and locally practiced technique widely adopted by the community.

