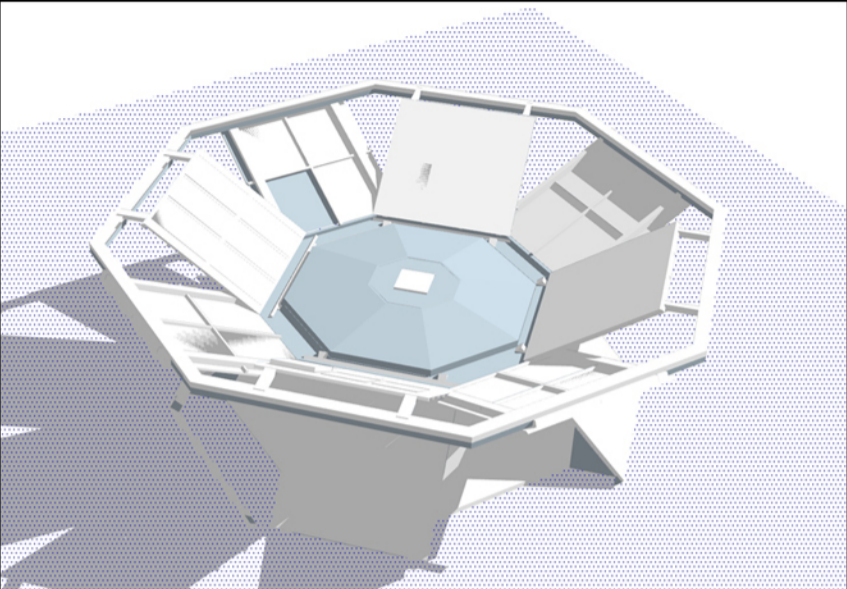


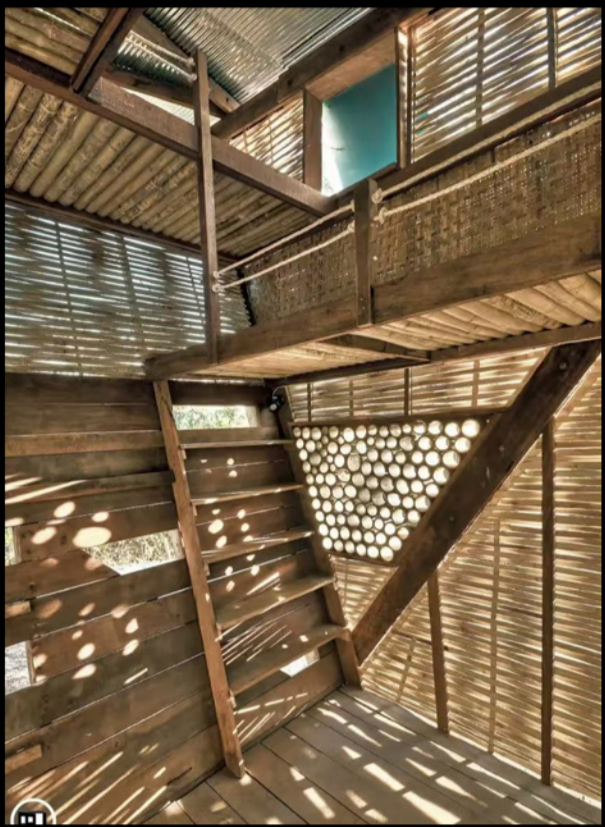
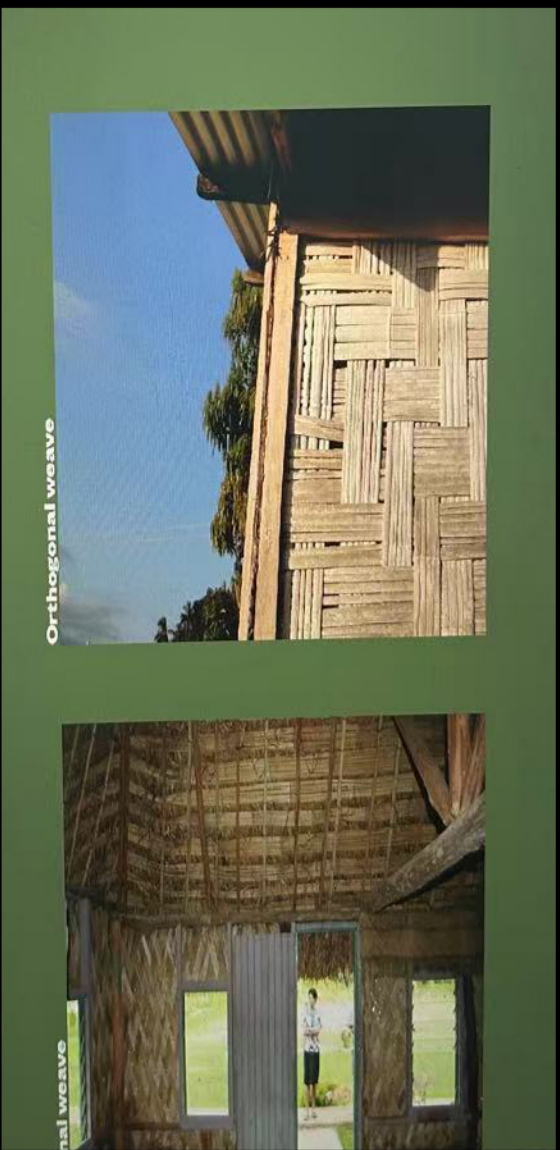
The flowing lines and layered structures of traditional Fijian attire symbolize the warmth and vibrancy of the local culture.



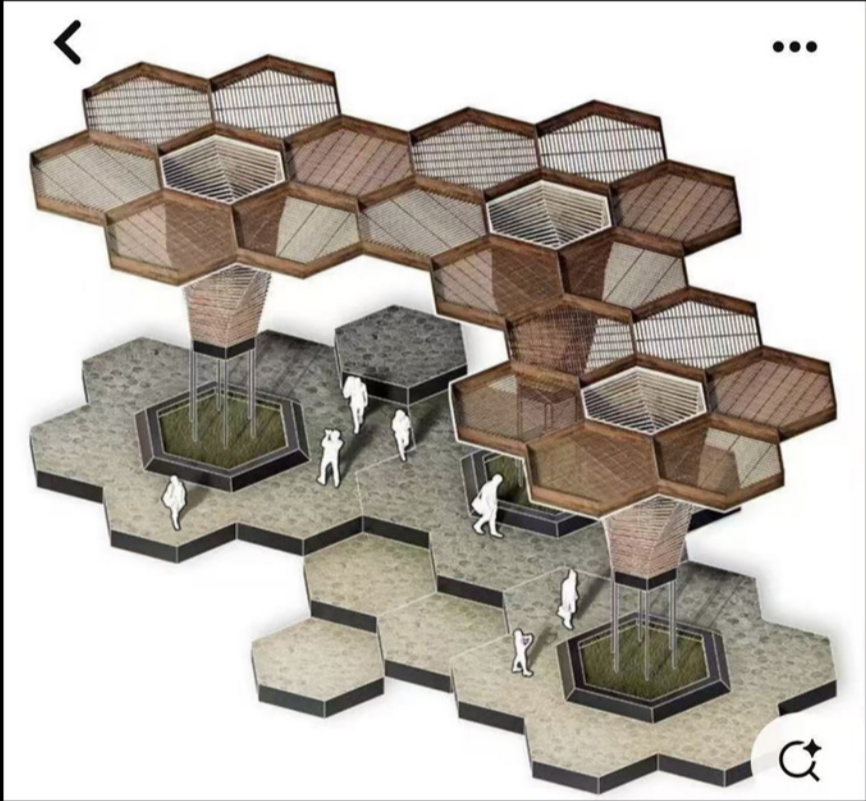
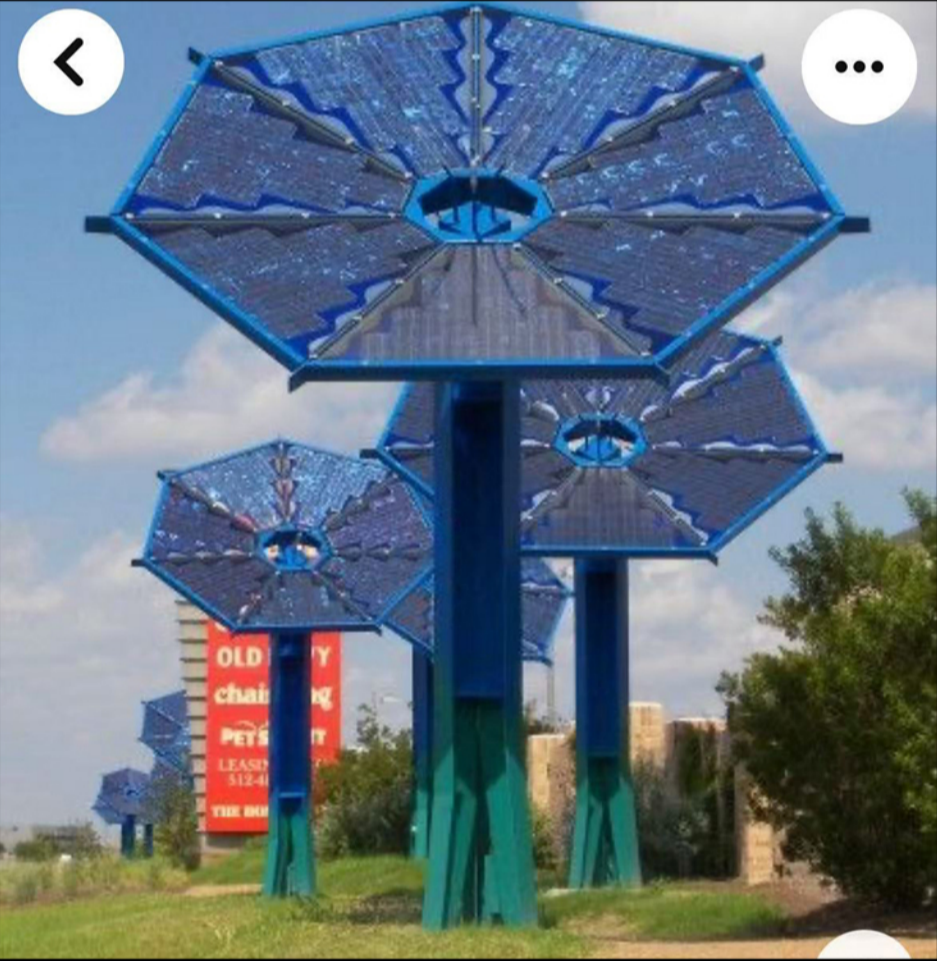
As Fiji's national flower, its vibrant hues and graceful form infuse the design with a natural vitality. The petals of flower are interlaced /layered/overlapping.



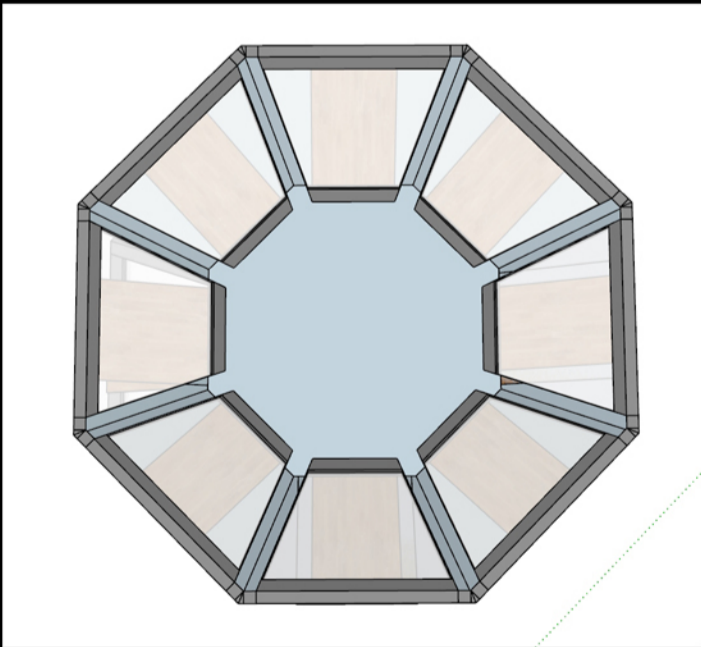
It adopts local Fijian residential materials, such as thatched roofs and bamboo and rattan weaving



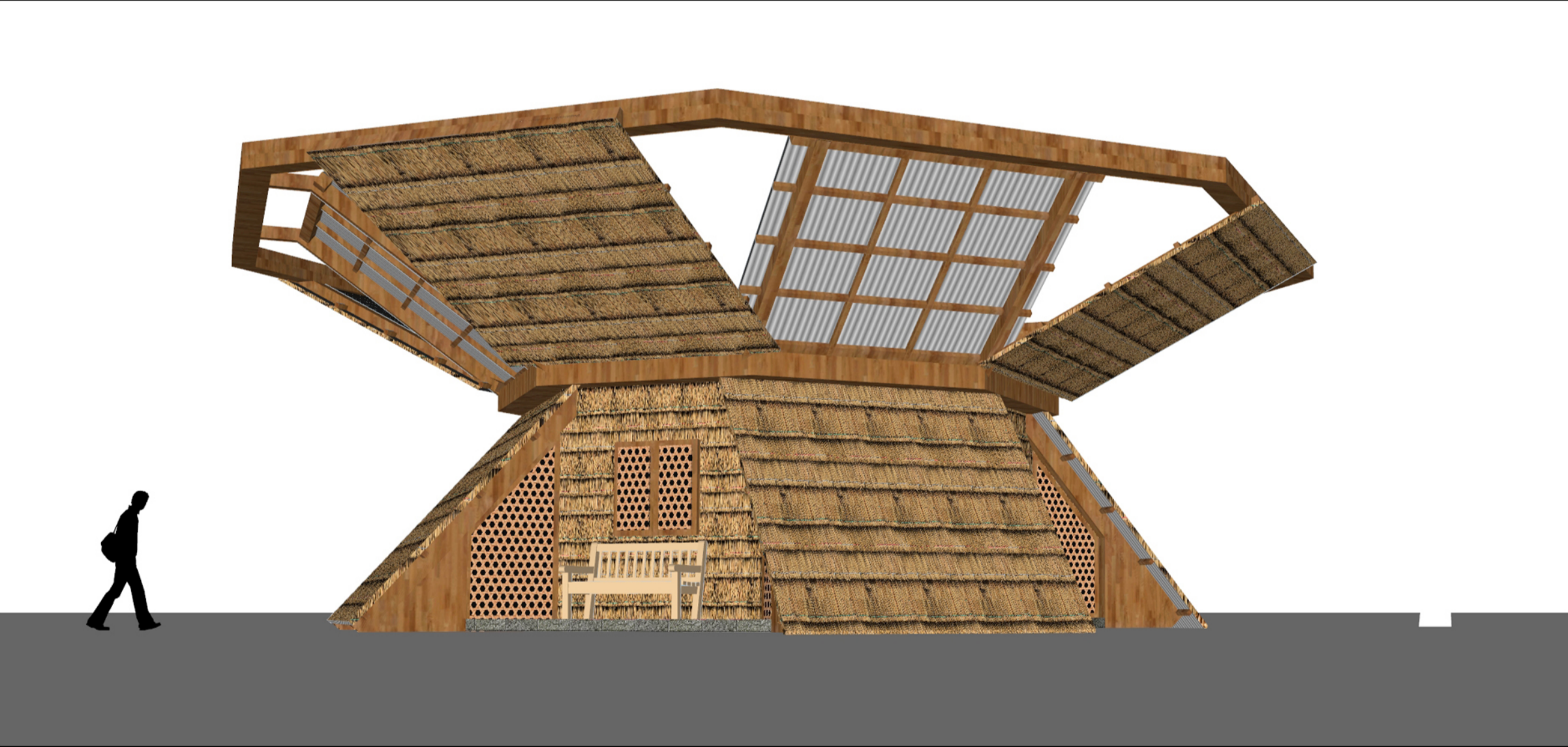
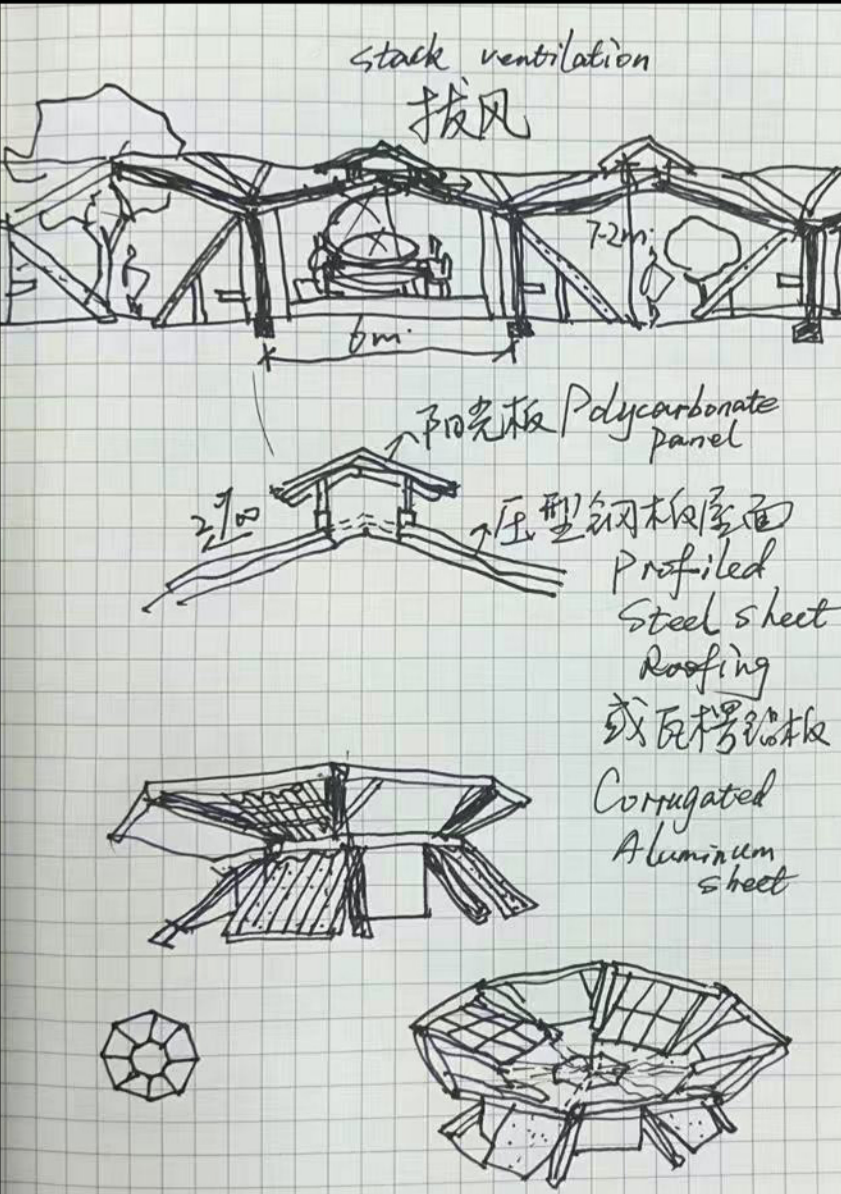
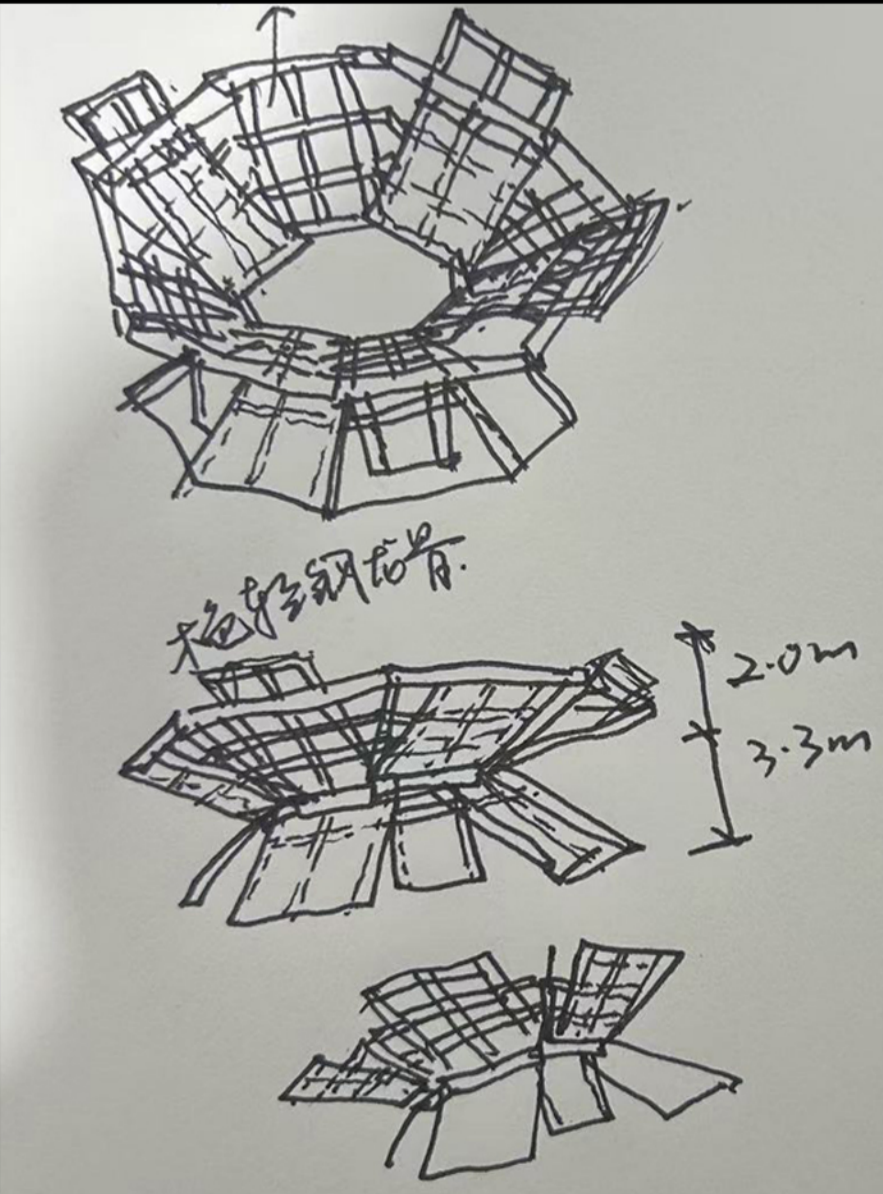
The color scheme was developed through ethnographic research: solar panels feature matte deep-blue gradient coating with strictly controlled 15% reflectivity; structural frames use coral-red powder coating mirroring Fijian sunsets; bases employ sand-white micro-cement blending seamlessly with beach environments. This palette satisfies technical requirements while strengthening cultural identity.



Design Concept: "Fijian Cultural Photovoltaic Garden"  
Centered on the theme of "Cultural Symbiosis · Green Energy," this project integrates photovoltaic technology with Fijian aesthetics to create a functional yet artistic installation. The structure mimics the layered waves of a traditional skirt and the graceful curves of a waterhouse's petals, while solar panels are arranged like scattered leaves—maximizing sunlight absorption while forming a shaded resting space.



Design .Octagonal building single plane shape, easy to modular development,easy to local residents construction, but also suitable for factory prefabrication production



Single photovoltaic module Summary Table(Theoretical value)			
Component	Key Specs	Dimensions (L×W×H)	Notes
PV Panels(about 30 PV Panels each PV Module )	350W/Panel,	about1.7m*about1m*about0.04m/Panel	Salt-resistant, PID-free
Off-Grid Inverter	12 kW, 48V	60cm × 40cm × 25cm	Integrated MPPT (e.g., Victron)
Li-Ion Battery	48V/400Ah (19.2 kWh)	60cm × 50cm × 20cm	2-3 units for 40-50 kWh
MPPT Controller	100A × 2	30cm × 25cm × 10cm	Victron SmartSolar
Distribution Box	AC/DC protection	50cm × 40cm × 20cm	Stainless steel, IP65

Entire village photovoltaic power generation Summary Table(Theoretical value)				
Design option	Panels total	Panels per module	Total modules	notes
Standard(450W per module)	about 168	about 12	about 14	High efficiency, easy maintenance.
Custom (300W per module)	about 250	about 10	about 25	Aesthetic flexibility, more wiring.