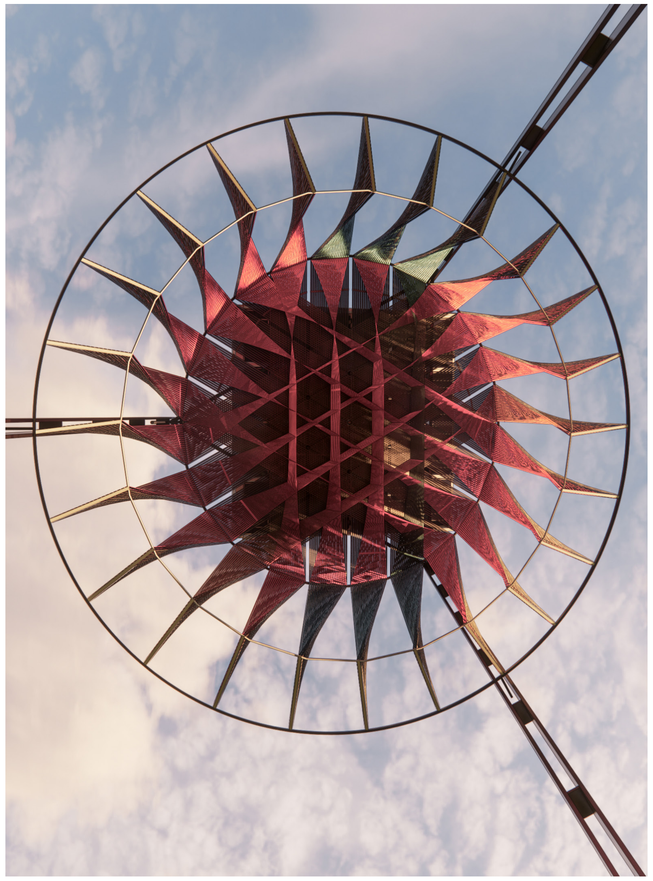
WEAVING SUNRISE

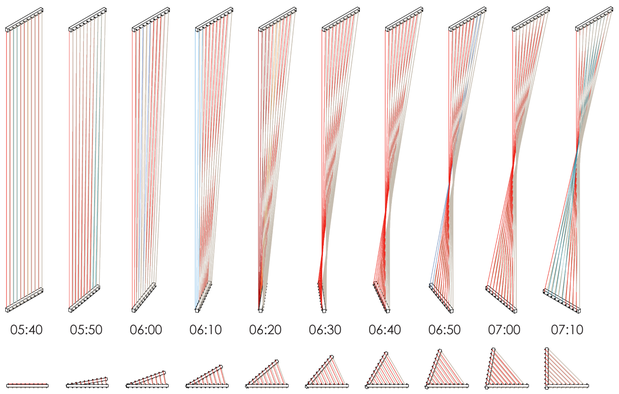
The Siga Siga system consists of 24–25 modular pavilions, each producing approximately 3.2 kW of solar energy through 8 roof-mounted panels. Panels are tilted at 15° and oriented to match daily energy demand. Surplus power is stored in offsite batteries to support evening use and backup needs.

Integrated gutters collect rainwater from the solar surface, directing it to a bioswale system that filters and stores water for irrigation and flood mitigation. Each pavilion is surrounded by a two-layer rope curtain—neutral outside, vibrant inside—that opens at sunrise via a cable system. The curtain's 30–60% porosity helps reduce wind loads on the structure.

All components are designed for ease of maintenance and local assembly using standard steel, natural ropes, and commercially available solar systems. Together, the installation supports clean energy access, water management, and climate resilience in remote village settings.

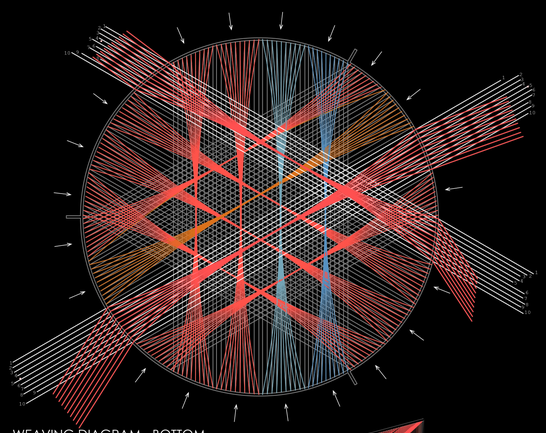


KINETIC CURTAIN MOVEMENT

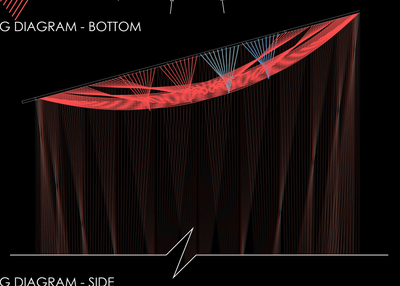


SYSTEM

A kinetic shading system made of 2 layers of colored strings visualizes solar energy as movement and cultural identity. A motor gently draws a cable running through pivoting brackets at the base of each curtain module when it starts to produce energy at sunrise and reverts it back to closed position when the power is stopped

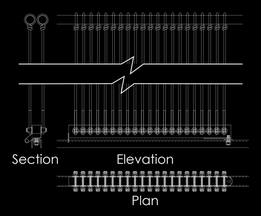


WEAVING DIAGRAM - BOTTOM

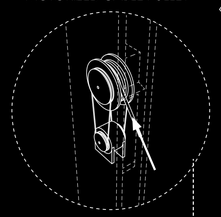


WEAVING DIAGRAM - SIDE

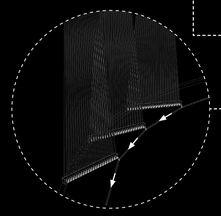
STRING FASTENING DETAIL

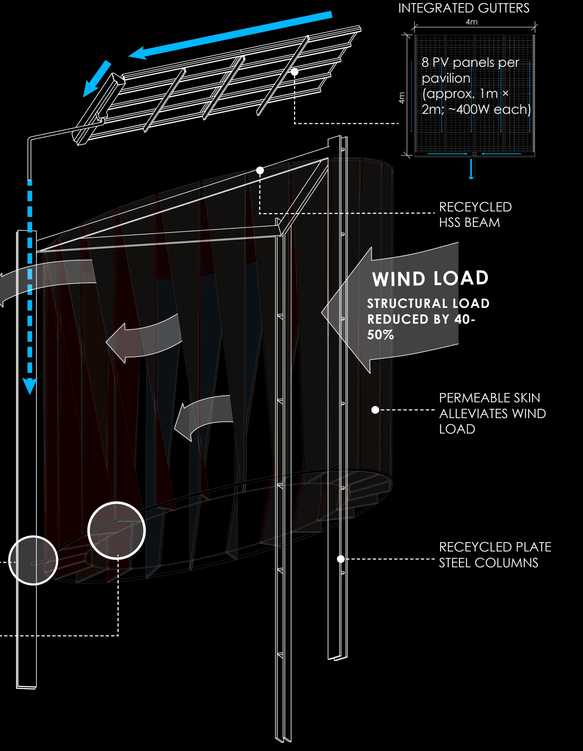


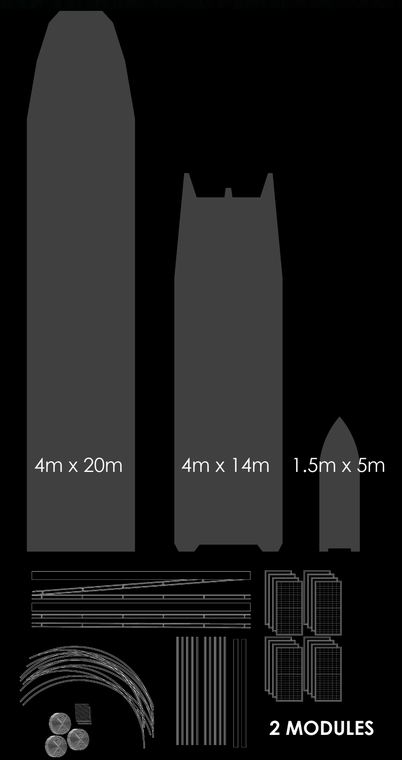
MOTORIZED CABLE PULLEY



KINETIC CURTAIN SYSTEM







TRANSPORTATION

A breakdown of materials required for 2 pavilions in comparison with the sizes of the common barges.