

THE SOLARSHELTER

THE PETAL UNIT



PETAL UNIT - CRANE/PULLEY SYSTEM

STRUCTURALLY THE DESIGN IS BASED ON A BASIC UNIT (THE PETAL) WHICH IS REPEATED AROUND TO FORM THE WICKIUP DOME. ALTHOUGH IT SEEMS COMPLEX, WE SEEK TO DEVELOP A SIMPLE ASSEMBLY AND DISASSEMBLY SYSTEM TO BE ABLE TO MOVE THE STRUCTURE WHENEVER NECESSARY.

THIS PETAL UNIT WILL BE COMPOSED OF A SYSTEM OF CELLS THAT WILL CARRY INTEGRATED PLATES OF ORGANIC SOLAR CELLS, A TECHNOLOGY THAT FOR ITS FLEXIBILITY AND ADAPTABILITY CAN FIT PERFECTLY WITH THE DESIGN. THESE CELLS ARE ATTACHED TO A BLIND SYSTEM THAT ALLOWS THE PETALS TO PERFECTLY FIT WHEN OPENING AND CLOSING.

EACH PETAL IS COVERED IN THE INSIDE BY A THERMAL FABRIC, WHICH ALLOWS TO MAINTAIN THE INTERIOR HEAT DURING THE NIGHTS, REMINISCENT OF THE OLD PAIUTE HABITAT AND THEIR WEAVING TECHNIQUES.



ORGANIC SOLAR CELLS
(ORGANIC PHOTOVOLTAIC)
"Power Plastic Series 40 (16w)"
built by Konarka
area of 0.18 m2, (Dimensions
67.6 cm x 27.3 cm)

Total Annual Capacity
12.1005 Mwh by Solarshelter

