**DESIGN**

Our base is located in Feilai Farm, Nevada, USA. It has the following characteristics: it belongs to Indian culture, lacks drinking water, rich landscape types, and has some infrastructure and activities under construction. Then according to the background of the competition to create the Burning Man Festival community, there will definitely be a need for living here, and the harsh desert climate conditions on the site, we will design the function as a shelter.

In addition, we tried to find the entry point of our design from some of the spirit of the most characteristic Burning Man festival in the local area. Among them, we are more interested in expressing our creativity, working together and participating in these points. Therefore, the design we are going to design is a shelter that faces the future Burning Man community members and can cope with the conditions of the site. In general, the artists and Makers in the future can participate by themselves, build and express themselves together. The shelter itself is sustainable and can cope with the local day and night temperature difference.

Our design is inspired by the eagle in the local Indian culture. We transform the flying attitude of the eagle into a flexible unit. This kind of mobility provides us with the possibility of different forms in the future. Then such a unit can be disassembled and packed into a 1.2-meter bag. Then everyone can receive one of these bags when they arrive at the venue. These include structural members, connecting nodes, pulling ropes, control members, covering films, etc. The specific materials are elastic rope, carbon fiber tube, and waste parachute materials. The total weight of these materials is 17.5kg.

Below I will introduce the construction of a single part in a similar way to the manual. First of all, we need to use the two processes of folding and embedding to prepare structural rods and rods that control the change of shape. The expansion and contraction of the rods are stuck by the spring pins on the rods and the small openings at different positions reserved on the rods. Then insert the rod and the connecting node and clamp it so that our frame is built. Then we use the elastic rope with small hooks at both ends to hook the hooks on the small holes reserved on the spring marbles. Probably such a process.

After understanding the assembly process and combination building method of the unit we designed, let us fully experience the Burning Man community we envisioned from the perspective of a burning man who participated in the Burning Man Festival activities. The entire narrative process is presented through illustrations. First, the burning man drove along Route 34 next to the base to the starting point of the nature walk activity inside the base. After getting off the car, he saw a reception point where people were picking up packages. At this time, he started asking people around for these packages. What is it for? The person next to it told him that you can use this package to build a community. This burning man started to try after getting the bag. He found that a single unit can build a functional structure for shading and wind protection, but it is difficult to form an overnight shelter. At this time, another burning man in the community walked over, and the two of them built a shelter for two people through the unit in their hands. After they finished the construction, a third person came over and asked if they could participate in the construction together, and then they jointly built a shelter for three people.

After completing the construction of the shelter, the burning man strolled in the Burning Man Festival community. He found that the unit in his hand could also be used to build some public spaces for parties, meetings and other different functions in the community. Eight days passed quickly. People participating in Burning Man’s Festival began to leave the venue one after another. People began to dismantle and recycle their units, packed them and carried them to a gathering point. Later, they jointly built a huge spiritual momument monument with the unit in their hands. The shape of this monument is similar to the important element of Burning Man Festival-the bonfire, as their footprints left on the venue after participating in Burning Man Festival.

This side view shows the process of building a spiritual monument. As we can see from the figure, people in the community have used units to build spaces for reception, gathering, residence and other different functions. In the upper right corner of the picture, you can see that people began to dismantle the built units, then packed and transported, and finally the monument was rebuilt.

From the general level, the growth process of the entire Burning Man Festival community starts from the starting point of the nature walk in the north of the base. Reception points are set up to distribute packages, and people build the community from north to south. In the process, it will pass through the original camping site of the site, and finally arrive at the former site of the 1997 Burning Man Festival on the south side of the site. It is here that people build spiritual monuments before they leave.

**TECHNOLOGY**

Quantum dots, which are also called photovoltaic paints are nanoscale semiconductors, which can capture light and change it to energy. They were developed by researchers from the University of Toronto. It is cheap and efficient method to produce the energy by covering the surface. The maximal efficiency is 13.4%.

Nanoparticles of Titanium Dioxide are coated with cadmium selenide or cadmium sulfide. The past is formed after mixing the composite nanoparticles with a solvent. During exposition to the light the energy is generated.

And PHOSPHORESCENT PAINTS and THERMOCHROMIC PIGMENT are also applied.