Burning Again

The design is called Burning Again and it is a composting toilet facility built by participants together. It is made from ash and recyclable waste left from the “Burning Man” festival. We aim to convey the spirit of “Burning Man” in a more practical way. On the one hand, it is an excellent way to make full use of the existing materials on the site and reduce secondary waste to achieve the purpose of environmental protection; On the other hand, it advocates cooperation to build it, which increases the interest of activities.

The design mainly uses the ashes left from “Burning Man” festival, namely the ashes of grass and wood. Although burning may seem transitory, blue, and unredeemable, we think it could be sublimated again. Ashes are not the end of Burning Man, but the beginning of a new life.

Therefore, we try to make it out of ashes and residual wastes, so as to complete the loop of material cycle, to achieve the purpose of saving material costs and transportation costs. Moreover, we believe it will be reflection of the “Burning Man” spirit, which is “Radical self-reliant”, “Leaving no trace”, “Participation”, “Immediacy”, “Communal effort” whole-hearted.

We set "toilet" as the main function. Because it would meet the current and future development needs of fly-Ranch. Besides, the main conception —— Build Together in the design provide a activity during Burning Man festival and its continuation, and response to the spirit of Burning Man.

To ensure the operation of the design, it involves mature technologies such as dry composting, solar panels, grass ash cement production, etc. The dry composting bin is located at the bottom of the toilet and is used to continuously store, decompose and degradation excrement and excess plant ash. The solar panels are designed to provide electricity to dry compost bins for constant temperature and mechanical ventilation.

In order to shelter the main functions mentioned above, grass ash cement and wood is adopted as the main building envelope materials in the design as they are environmentally friendly and accessible. Wood ash and wood are relics of Burning Man. In order to transform the ash into a solid building wall, it has to go through the process of water immersion, filtration, fire heating, masonry, sintering and so on. The reliability of this method has been verified by relevant tests and papers.

List of activities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Number | Name | Participant | Explanation | Interval |
| 1 | Cooperation to build | All  | It involves the manufacture of grass ash wall, the construction of wood frame, composting box and the installation of other mechanical and electrical equipment | No limit |
| 2 | Maintaining  | All  | Remove decomposing compost and dig a hole for burial  | About once every 2 months/composting bin |

The list of input

|  |  |  |  |
| --- | --- | --- | --- |
| Number | Content  | Sources  | Quantity  |
| 1 | Electric  | Solar panels  | 640W/four bays |

The list of output

|  |  |  |  |
| --- | --- | --- | --- |
| Number | Content  | Instruction  | Quantity  |
| 1 | Decomposing compost | buried (12 feet below ground) | about 2 m/2 months /four bays |

List of materials

|  |  |  |  |
| --- | --- | --- | --- |
| Number | Content  | Instruction  | Quantity  |
| 1 | Plant ash  | Burning man festival | 4.67 kg/four bays |
| 2 | Wood | Burning man festival | 1850 kg |
| 3 | Water | Local rainwater  | 6.43m3/four bays |
| 4 | Sand  | Site | 7.01 kg /four bays |

Cost estimation

The cost includes about 20,000 yuan for solar panels, compost bins and ancillary equipment.

Prototyping strategy

The function of the design is clear and is necessary for the site. In addition, in order to meet the desire of building together, the design form is simple and easy to build. As organizers, we encourage participants to cooperate in building the facility. We will provide detailed drawings and instructions to participants, giving all participants technical support for material preparation, construction, pouring, installation, etc. Nevertheless, there is still a lot of room for participants to diversify their designs to satisfy their sense of participation.

The environmental impact

The design has little negative impact on the environment. On the one hand, the source of materials is almost all existing surplus materials and wastes, among which the main construction materials are grass ash and sand, which is also an environmentally friendly substitute for traditional cement. Thus this is the innovation of our project. On the other hand, in the material processing and post-operation, no substances harmful to the environment will be produced. For example, in order to minimize the pollution caused by human excrement, composting toilet is adopted to reduce the risk.