Burning Man Shelter Tests

Location_Burning Man Festival, Black Rock Desert, Nevada, USA
Date_2001–5

In 2001 three distant cousins of the "Bucky Ball" emerged from the desert at Nevada's Burning Man Festival.

Now over a decade old, the annual event draws 30,000 freethinkers to the Black Rock Desert, where temperatures can soar to over 100 °F (38 °C) and dust storms and high winds are the norm. To some, this might seem like the last place on earth one would go voluntarily; for emergency shelter designers, it is the perfect location for testing their latest prototype.

The Icosa Pod instantly became an icon at the event, with its futuristic-looking shell and lightweight material. The shelter was designed by Washington-based Sanford Ponder, a musician-turned-Microsoft-executive-turned-designer. In May 2000 he was watching a TV program on homelessness and decided, "If people are living in a box, we need to build a better box." Sanford went through 200 iterations before settling on the geodesic Icosa. Seventeen months later he was testing his pod under the baking Nevada sun.

He based his design on two main principles: its triangular forms sustain more stress than rectangles and its dome shape provides more usable space. The fire-retardant, waterproofed laminated-cardboard walls create six-inch- (15-cm-) thick cavities providing passive insulation. In more temperate climates the cavities can be filled with insulation. The pod's windows are made from UV-resistant Chloroplast, a white translucent plastic with a five-year lifespan.

Since its appearance at Burning Man, the pod has shed its cardboard skin for a more

Aerial view of the Burning Man festival in 2003. (Vinay Gupta's Hexayurt is the 203rd structure in the fourth row to the right of the main tent.)
Dave Warner /Mindtel