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HEAD IN THE CLOUDS: RECYCLED PLASTIC BOTTLES DESIGN

Posted on March 18, 2021 by martabuges

Categories: Low Density, Project, STUDIOKCA, Territory and mobility, Urban Paradigms, XXL-XS

Tags: Aluminium, Architecture&art, Circular design, Colour, Ephemeral, Ephemeral pavilion, New York, Pavilion, Performative Envelope, Plastic bottles, Recycling, Structure, Temporary Interventions, USA, User's experience

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Selected and built as the winning proposal resulting from a design competition organized by the American Institute of Architects New York, the Structural Engineers Association of New York and Figment, the Head in the Clouds Pavilion on New York City's Governors Island originated with the desire to create a “place to dream in the city of dreams”. Made from 53,780 recycled plastic bottles – the number of bottles thrown away in New York City in one hour – it is a space that visitors can enter to contemplate the light and color filtering through the “cloud” from the inside out.

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A series of “pillows” made from one-gallon jugs form the exterior, while 16- and 24-ounce water bottles line the interior. A curved aluminum diagrid frame provides structural integrity and creates a small seating and dreaming area for 50 people at the base. The water bottles were filled with varying amounts of water and organic blue food coloring to provide ballast so that no foundation was needed.

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The team collected used empty plastic bottles from organizations, businesses, schools and individuals throughout New York City and beyond, then repurposed the bottles to construct the pavilion. More than 200 volunteers from the arts and architectural community and the general public helped build and assemble the pavilion.

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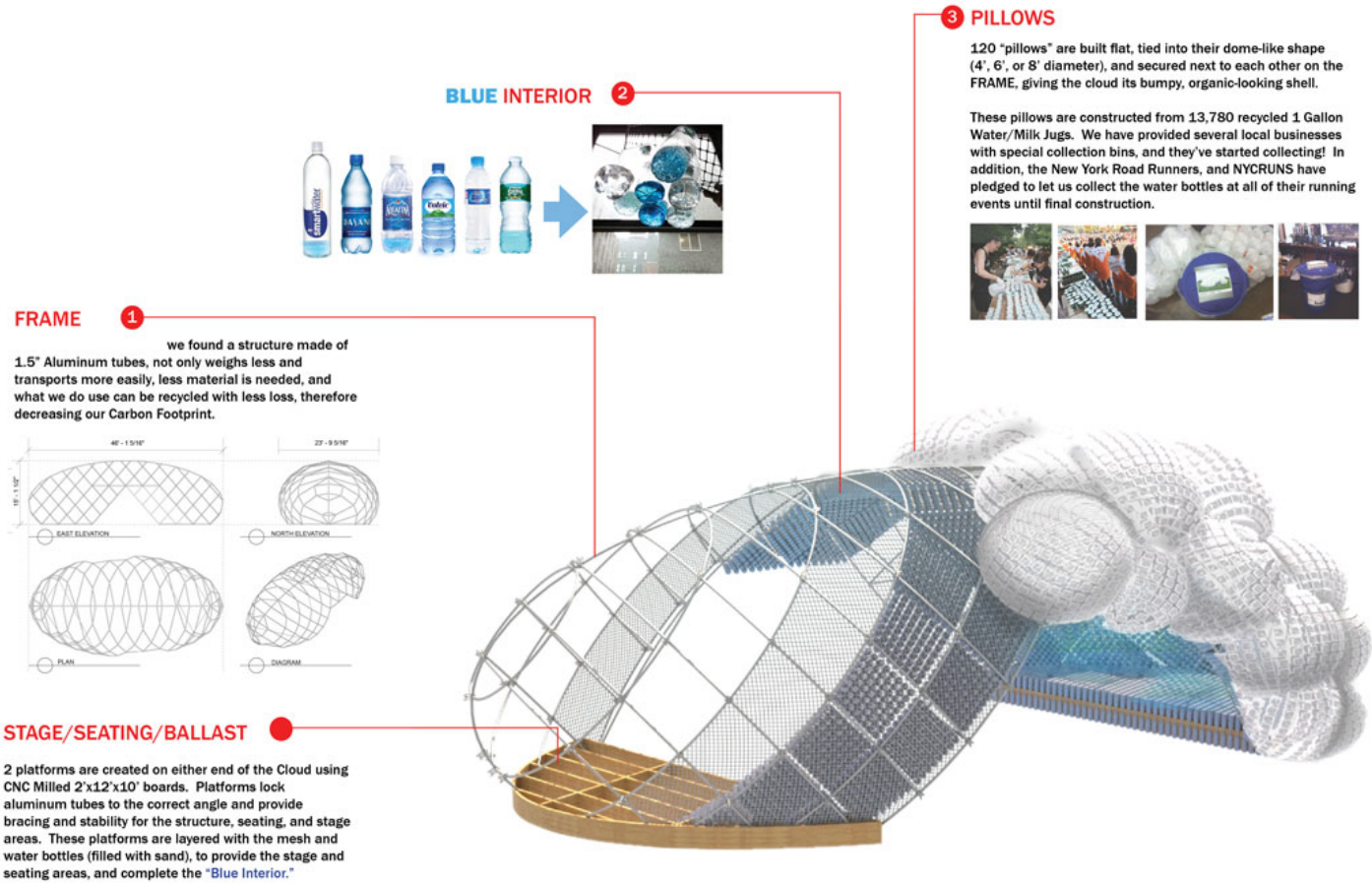

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All of the building components can be easily broken down and transported, including a lightweight aluminum diagrid: a simple way to provide structural integrity without relying on heavy steel beams or larger support systems. Rather than employing high-tech fabrication techniques to turn the bottles and aluminum into cladding and structure, the design team created a simple, repetitive, cost-effective system of connections, in order to quickly and easily assemble this free, public structure.

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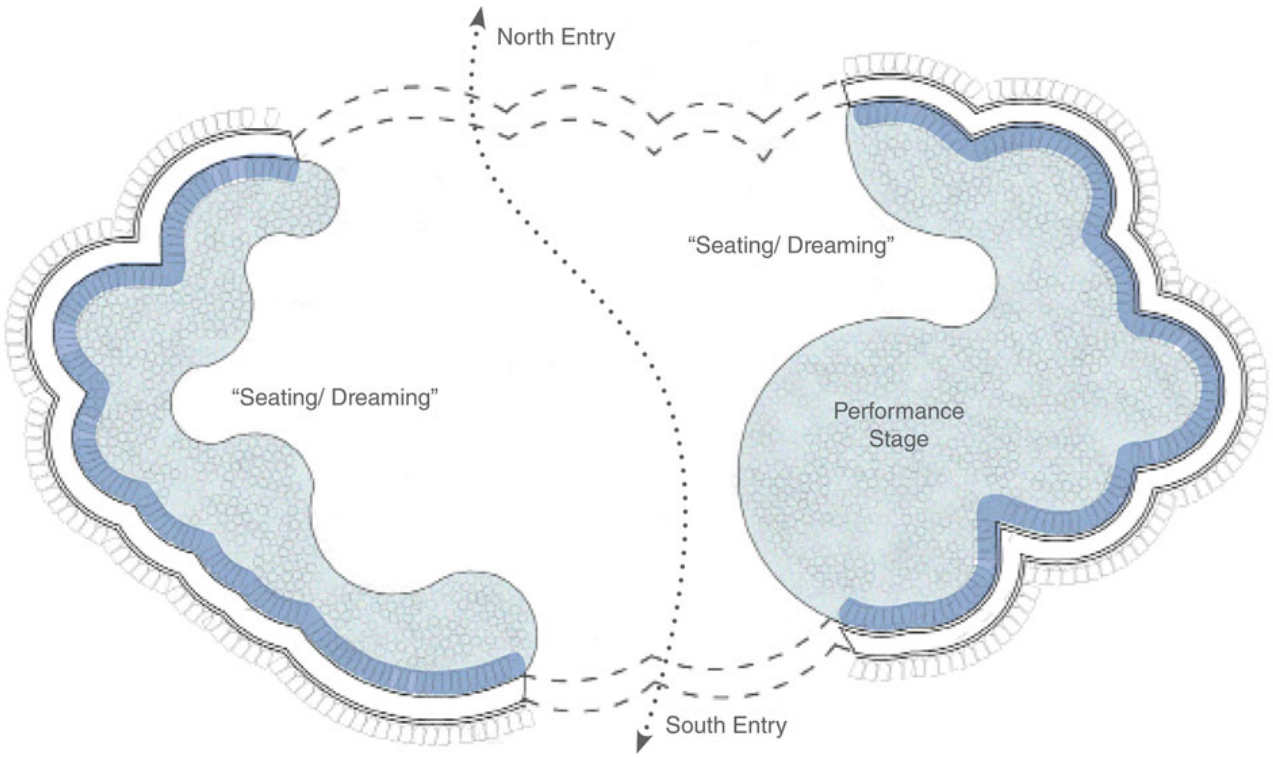

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