URBAN
FURNITURE

ARTPOWER

1.26 Amsterdam

Designer: Janet Echelman

Janet Echelman's 70-meter-long aerial sculpture was installed over the Amstel River from atop the Amsterdam Stopera, which houses the City Hall and Muziektheater. The sculpture is entirely made of soft materials, including Spectra® fiber, a material 15 times stronger than steel by weight, which allows it to attach to existing architecture without extra reinforcement. A unique lighting program integrates an undulation of changing and contrasting colors, reflected on the water below. The sculpture becomes an ethereal form which transforms day to night, and in darkness appears to "float in thin air".

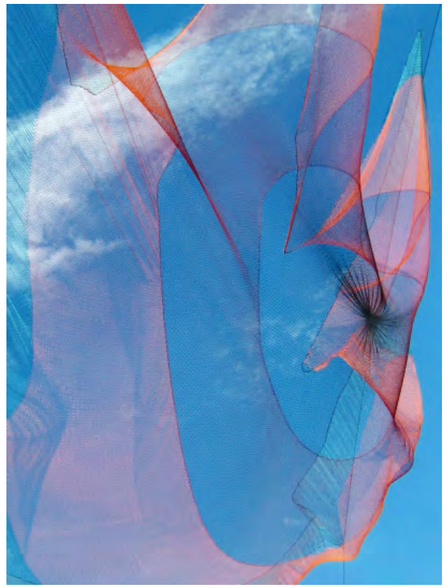
The form and content of the artwork draws inspiration from the interconnectedness of Earth's systems. The artist used laboratory data from NASA and NOAA on the effects of the 2010 Chile earthquake, and the resulting 1.26-microsecond shortening of the Earth's day. The sculpture's three-dimensional form is inspired by Echelman's mapping of tsunami wave heights across an entire ocean.

As the signature project of the 2012—2013 Amsterdam Light Festival, the artwork underscores global interdependence.

"In Amsterdam, the river and canals have been central to city life for the last four centuries," said Echelman, "The light reflections on the water's surface become a focus of the sculpture here, creating an opportunity for contemplation. The sculpture invites you to pause and consider how we're knitted into a larger fabric."

Rogier van der Heide, curator of the Amsterdam Light Festival, said Echelman's sculpture "provided more meaning to public spaces, showed the beauty of simplicity, and — probably most importantly — brought people together."

The installation in the Netherlands was the European premiere of the 1.26 project, which has now been exhibited on three continents. It was originally suspended from the Denver Art Museum to commemorate the inaugural Biennial of the Americas in 2010. In 2011, it travelled to Australia, where it was suspended in front of Sydney's historic Town Hall.



1.26 Denver

Designer: Janet Echelman

For its first installation, 1.26 was suspended from the roof of the 7-story Denver Art Museum above downtown street traffic to commemorate the inaugural Biennial of the Americas.

The City of Denver asked the artist to create a monumental yet temporary work exploring the theme of the interconnectedness of the 35 nations that make up the Western Hemisphere. She drew inspiration from the NASA Jet Propulsion Laboratory's announcement that the February 2010 Chile earthquake shortened the length of the earth's day by 1.26 microseconds by slightly redistributing the earth's mass. A 3-dimensional form of the tsunami's amplitude rippling across the Pacific became the basis for the sculptural form. Exploring further, Echelman drew on a National Oceanic and Atmospheric Administration (NOAA) simulation of the earthquake's ensuing tsunami, using the 3-dimensional form of the tsunami's amplitude rippling across the Pacific as the basis for her sculptural form.

The temporary nature of the Biennial and its accelerated timeline precluded the artist's use of a permanent steel armature, as employed in her previous monumental permanent commissions. Instead, 1.26 pioneers a tensile support matrix of Spectra® fiber, a material 15 times stronger than steel by weight. This low-impact, super-lightweight design makes it possible to temporarily attach the sculpture directly to the facade of buildings — a structural system that opens up a new trajectory for the artist's work in urban airspace.

The soft materials allow the artwork to be animated by the wind. Its fluidly moving form contrasts with the rigid surfaces of the surrounding urban architecture. At night, colored lighting transforms the work into a floating, luminous form while darkness conceals the support cables.

A book about 1.26 includes an essay by Sanford Kwinter, Professor of Architectural Theory and Criticism at the Harvard Graduate School of Design, cofounder of the journal Zone and Zone Books, and author of *Architectures of Time: Towards a Theory of the Event in Modernist Culture*.

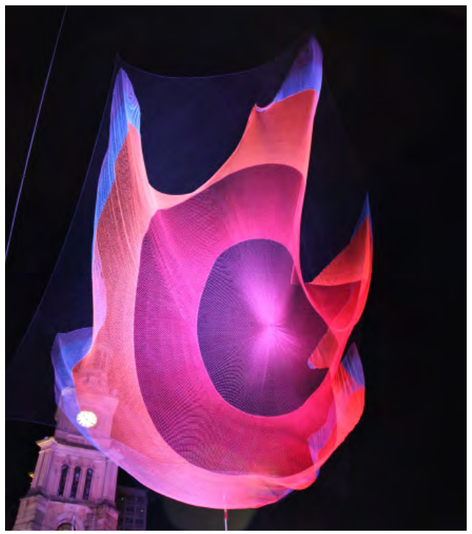
1.26 Sydney

1.26 Sculpture Project at the Powerhouse Museum's Love Lace Exhibition in coordination with the City of Sydney's Art and About Festival, September — October, 2011.
The second installation of the 1.26 aerial sculpture was in 2011, when it was suspended from Sydney Town Hall as part of the Powerhouse Museum's Love Lace Exhibition, in coordination with the City of Sydney's Art and About Festival. The artwork draws inspiration from NASA laboratory data on the 2010 Chile earthquake's ensuing tsunami, and the 1.26-microsecond shortening of the day that resulted from the earthquake's redistribution of Earth's mass. The work underscores the interdependence of the earth's systems and the global community. It asks the viewer to pause and consider the larger fabric of which they are a part.

Designer: Janet Echelman

Studio Echelman generated a 3D model of the tsunami in collaboration with scientists from NOAA (United States National Oceanographic and Atmospheric Administration). Software was used to transform the digital model into a sculptural form. Hand-knotted models were made to achieve the sculpture's complex shape.

The artwork utilizes Spectra®, a material 15 times stronger than steel by weight. The mesh was knotted by machine in order to withstand 90 mph winds, but is engineered to evoke the intricacy of handmade lace.

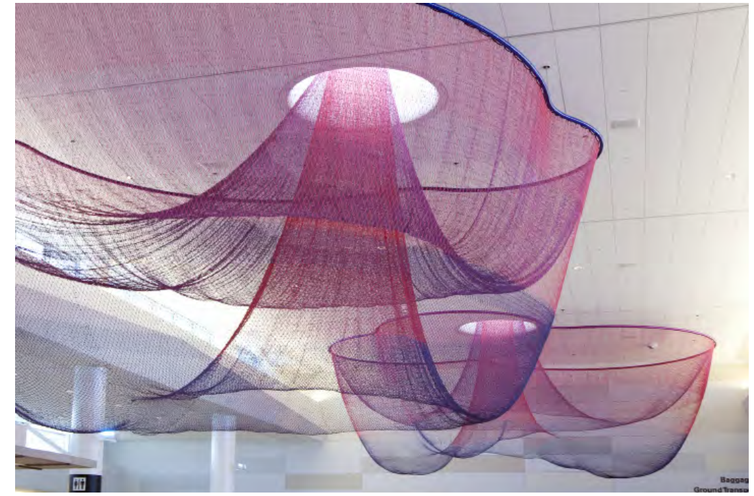


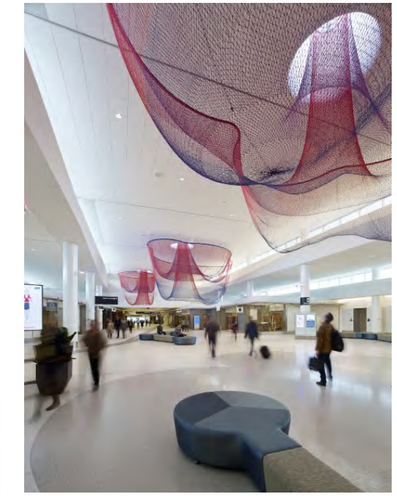
Every Beating Second

Designer: Janet Echelman

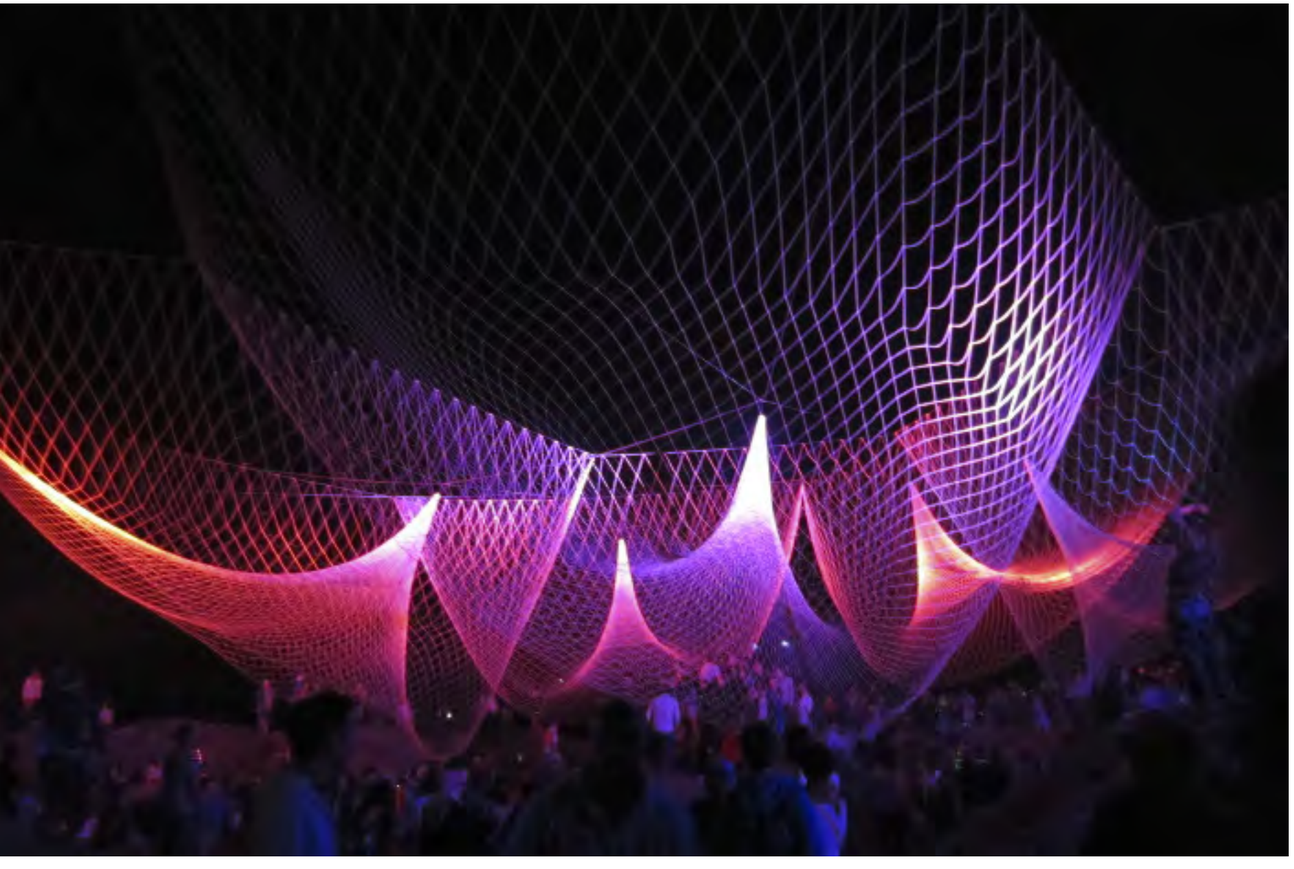
Artist Janet Echelman transforms Terminal 2 of the San Francisco International Airport with fictional nature that subtly engages viewers with real and imagined natural forces. Her sculpture installation cuts three round skylights into the ceiling, from which descend delicate layers of translucent colored netting to create three voluptuous volumetric forms. A series of shaded outlines below are embedded into the terrazzo floor, reflecting the precise shadows that would occur on the summer solstice if the sun could penetrate through the roof. During the day, sun streams through the skylights to cast real shadows that interplay with the fictional shadows in the floor. At night, the artist's program of colored lighting makes the sculpture glow from indigo to purple, magenta to red-orange. Computer-programmed mechanized air-flow animates the fluidly-moving sculpture at different intervals throughout the day, as if the wind could magically flow through solid walls.

The artist achieved the sculpture's physical presence by braiding fibers and knotting twine into sculptural netting suspended from powder-coated steel armatures. Despite their large scale, more than 120 feet in circumference for a single form, her sculpture is experienced as ephemeral and weightless. Visually, the sculpture evokes the contours and colors of cloud formations over the Bay and hints at the silhouette of the Golden Gate Bridge. Aesthetically, the sculpture looks both backwards and forwards, drawing its color from the heyday of psychedelic music, the Summer of Love, and San Francisco's prominence in the beat poetry movement, while also referencing the contemporary bay area as a hub of innovation and interconnectivity for the world of technology.





The Space Between Us



Studio Echelman team: Melissa Henry, Daniel Zeese, Ben Winters, Cameron Chateauneuf

Landscape Architecture: The OLIN Studio – Susan Weiler, Richard Roark, Ben Monette

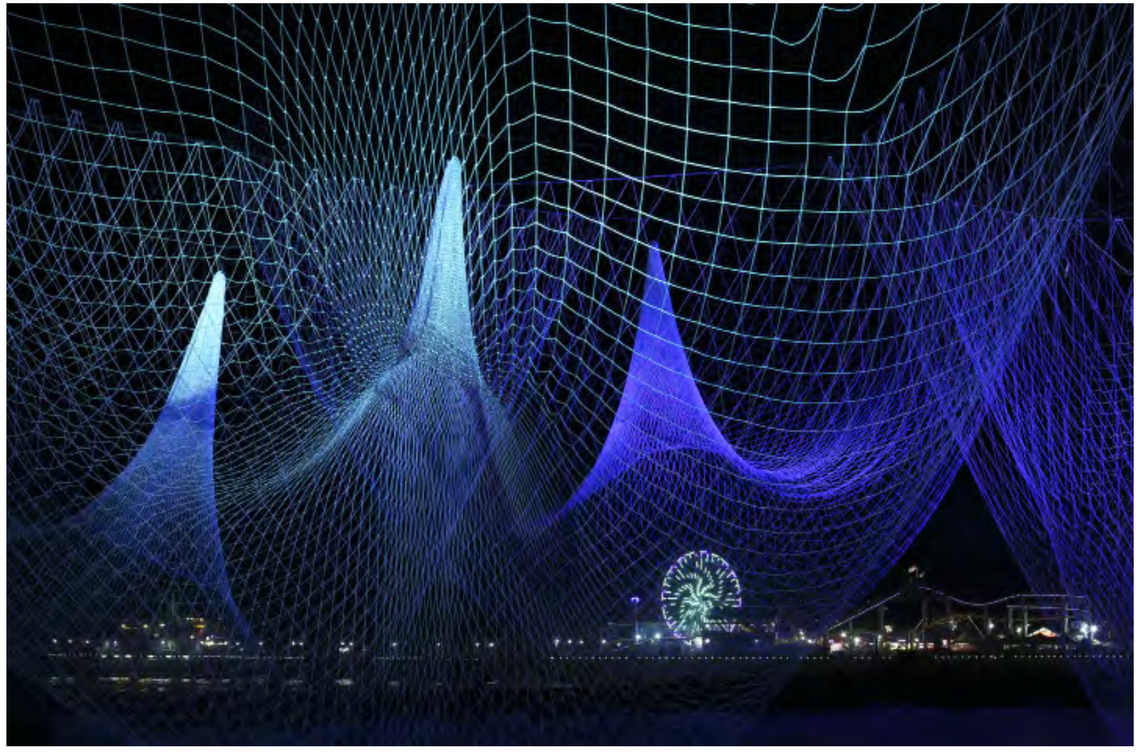
Lighting: Kinetic Lighting – James Schipper, Mark Flaisher

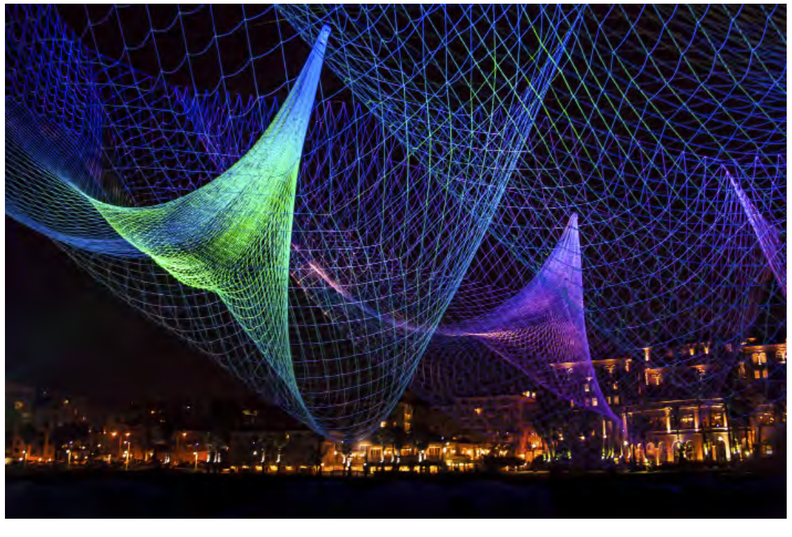
Engineering: ARUP – Clayton Binkley, Patrick McCafferty, Simon Rees

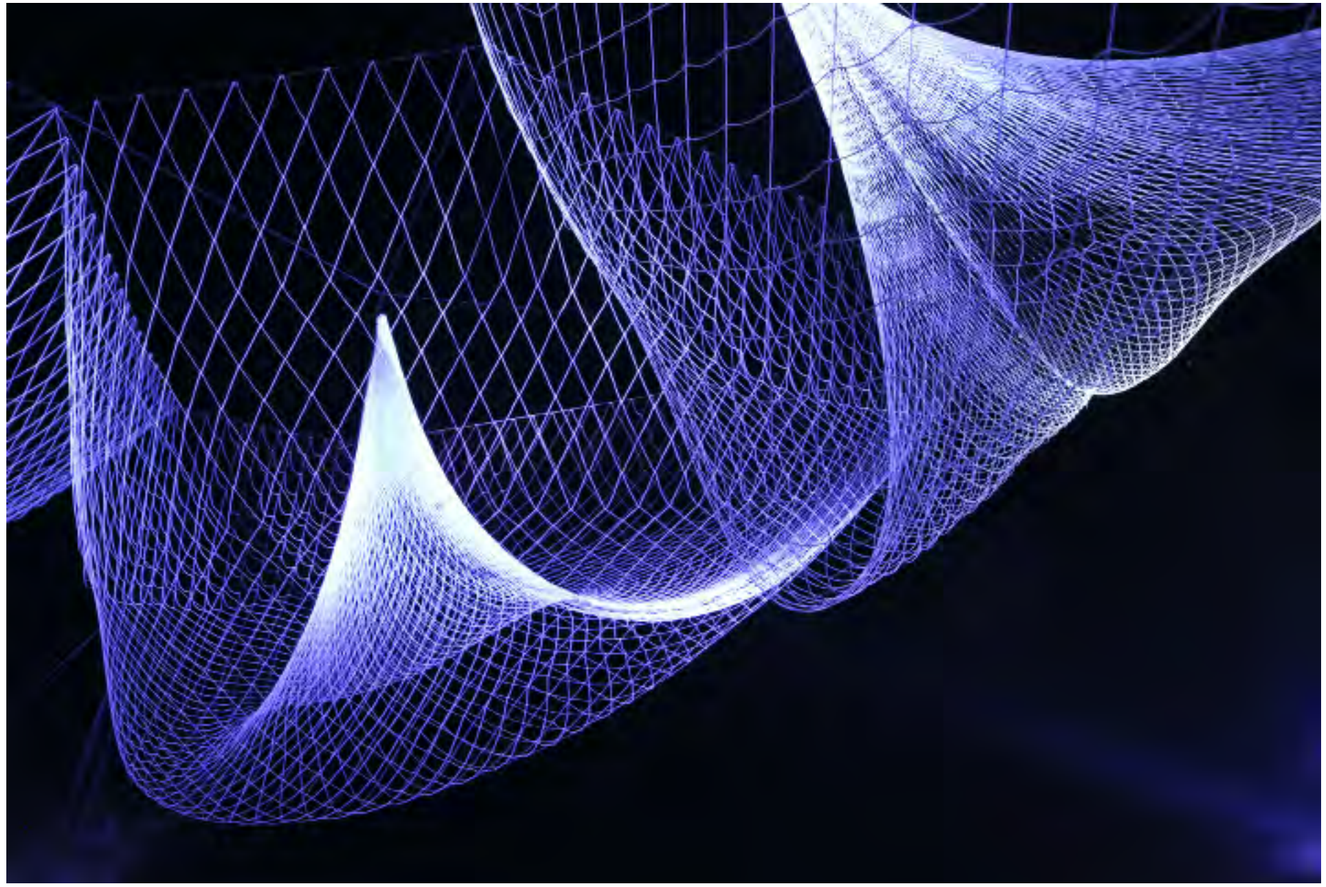
Photographer: Andrew K. Sachs, Rob Reid, Matthew Boyd, Alison Buck, Melissa Henry, Nicola Buck

Time-lapse Photographer: Matthew Boyd, Alison Buck

Location: Santa Monica Beach, CA, USA





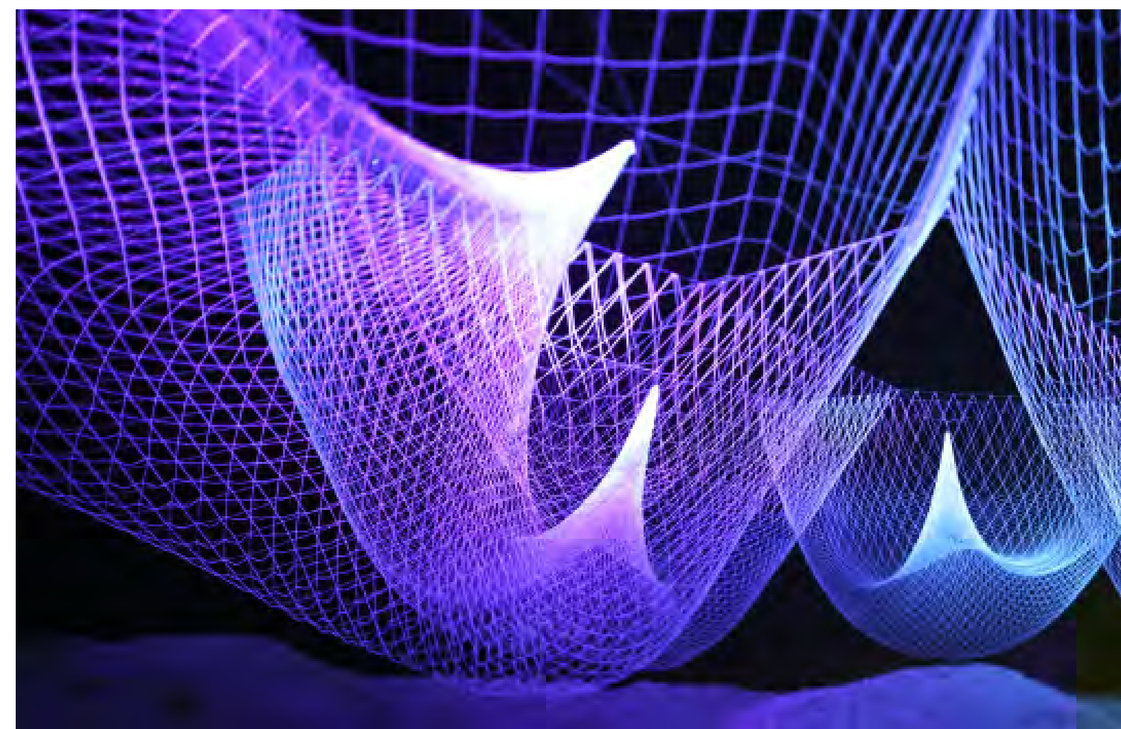


Janet Echelman was commissioned to create the headlining sculpture for GLOW 2013, the triennial art event for site-specific works on Santa Monica Beach. Lasting only one night — from dusk to dawn — the beach is transformed into a "playground for thoughtful and participatory, temporary art."

On the night of September 28, 2013, more than 150,000 people attended GLOW and participated in sculpting the earthwork beneath Echelman's aerial sculpture, "The Space Between Us," making it one of the largest public art events in the U.S. In an article published the morning after the event, *The New York Times* credited Echelman's work for "giving crafts a coolly conceptual edge".

Echelman's ground-breaking work utilized experimental elements, including shaped earth and an audio component that synced to a pulsating lighting program. The artist and her team collaborated with City Public Works staff to create carved sand indentations for visitors to enter and gaze up at the aerial sculpture, becoming a part of the immersive experience.

Echelman views this commission as a point of growth and departure. "The beach is the charged zone between human society and uncontrolled nature," she said, "I'm interested in sculpting earth and sky, and placing ourselves in between. It's the collision of heaviness and lightness, between our gravity-bound bodies which walk on sand, and the part of us which seeks to float in air, or in water."

"My goal was to invite people to have an ephemeral sensory experience without words — a moment of contemplation that can evoke preverbal memory and engage our Limbic brain."

Produced by the Santa Monica Cultural Affairs Division and the Santa Monica Arts Foundation, the goal of the evening was to "break through the public's preconceived notion of what art can be, encouraging both thoughtful contemplation and energetic participation," said GLOW organizers.