

**RAEL SAN FRATELLO**

2200 Adeline Street, Suite 340

Oakland, CA 94607

*ph.* (510) 207-2960

*e.* [studio@rael-sanfratello.com](mailto:studio@rael-sanfratello.com)

[www.rael-sanfratello.com](http://www.rael-sanfratello.com)

[www.emergingobjects.com](http://www.emergingobjects.com)

**TABLE OF CONTENTS:**

**SOL GROTTO**

recycled glass tubes from Solyndra

**STRAW GALLERY**

reuse and recycling of an agricultural by-product

**SUKKAH OF THE SIGNS**

reuse and recycling of corrugated board

## SOL GROTTO

Project Date: 2012

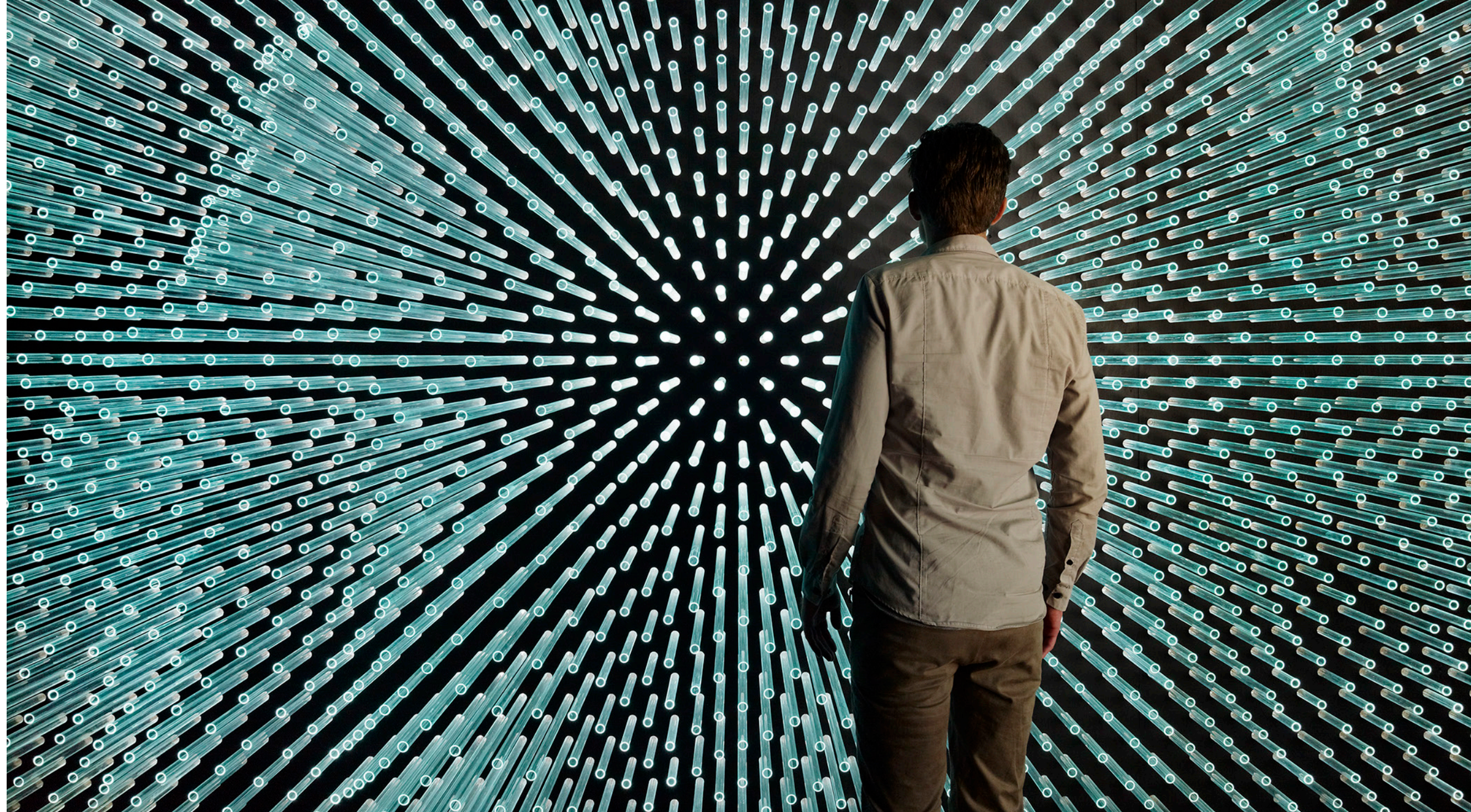
Project Team: Ronald Rael, Virginia San Fratello, Bryan Allen, Bridget Basham, Kent Wilson, Chase Lunt, Dustin Moon

SOL Grotto is a spartan retreat—a space of solitude and close to nature where one is presented with a mediated experience of water, coolness and light . The SOL Grotto also explores Solyndra's role as a company Sh\*t Out of Luck. 1,368 of the 24 million high tech glass tubes destined to be destroyed as a casualty of their bankruptcy, are recycled in the installation.

The project is located in the Berkeley Botanical Garden alongside Strawberry Creek in the California Native section as part of the exhibit Natural Discourse, which is a collaborative project between The University of California Botanical Garden at Berkeley and a multi-disciplinary group of artists, writers, architects and researchers who have been invited to spend time in the Garden's extraordinary collection of plants, engage with the horticulturists and develop new site specific work.

The tube's original role as a light concentrating element is extended to transmit cool air into the space via the Venturi effect, to amplify sounds from the adjacent waterfall via the vibrations of the tubes cantilevering over the creek, and to create distorted views of the garden.

The glass tubes are illuminated electric-blue naturally from the direct and ambient light that is conducted through the glass causing each tube to change in intensity throughout the day. Collectively, the tubes take on the form of a cave wall or a waterfall, evoking Plato's Allegory of the Cave where shadows, light and sounds call reality into question.

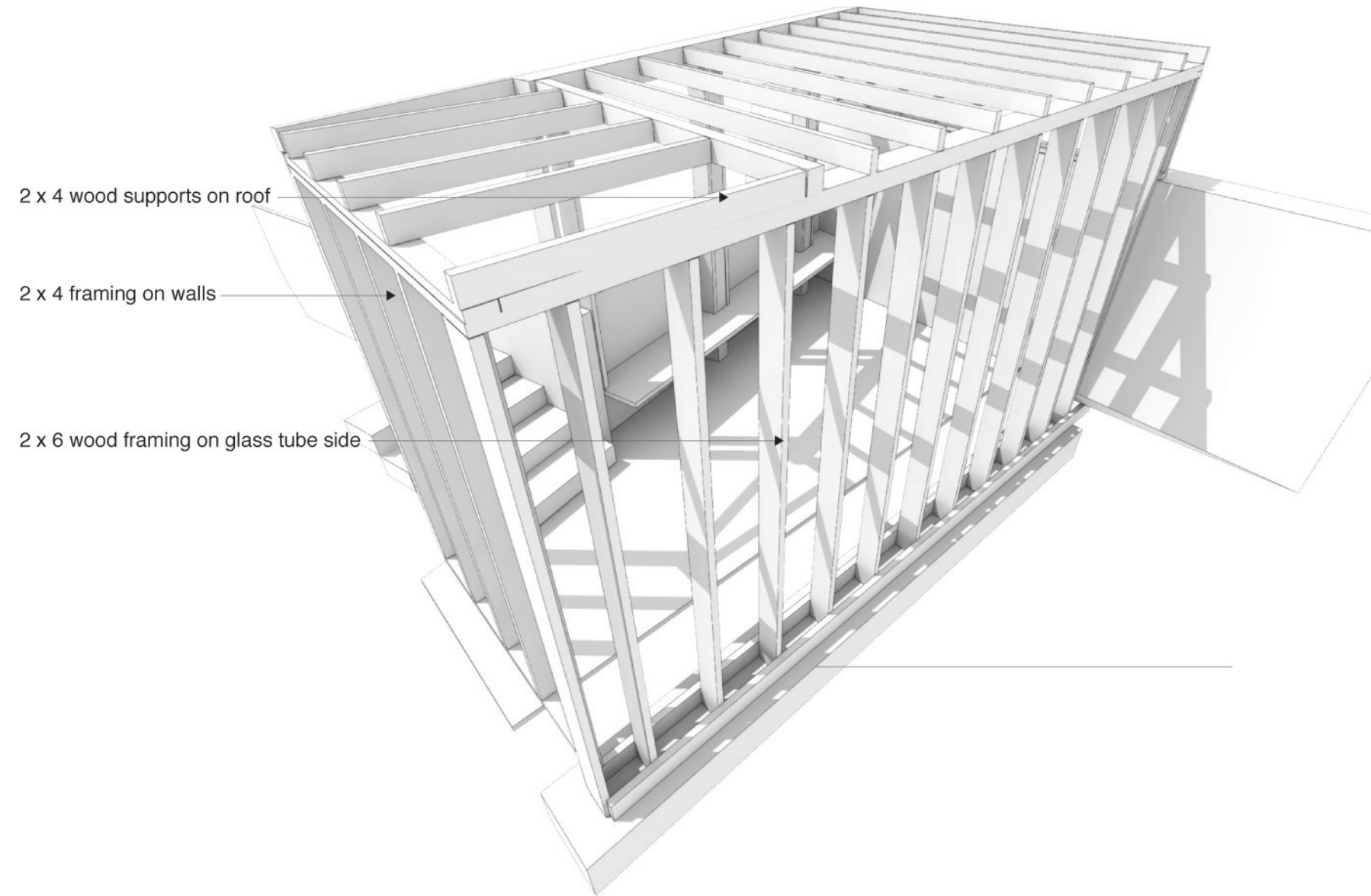
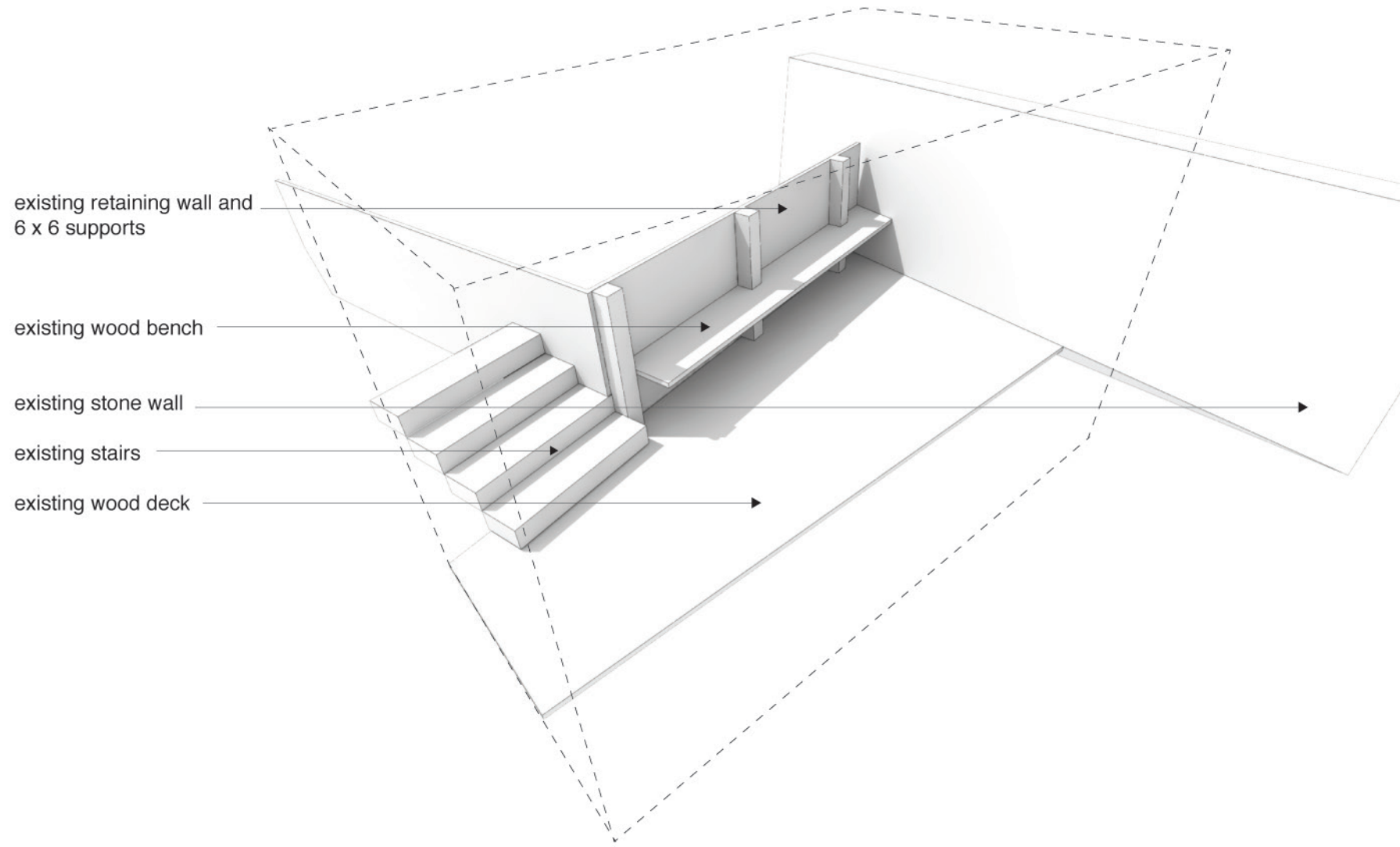




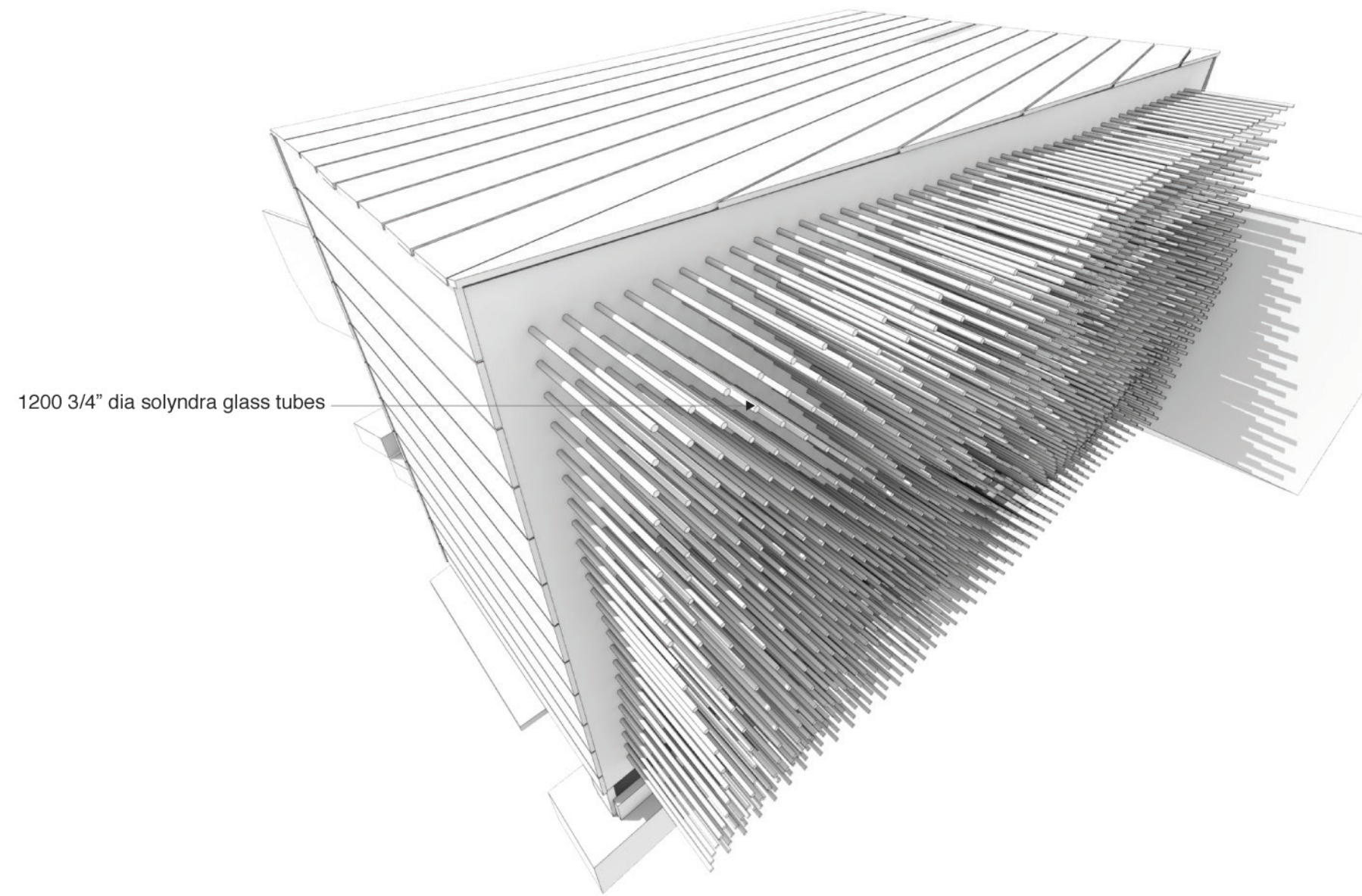
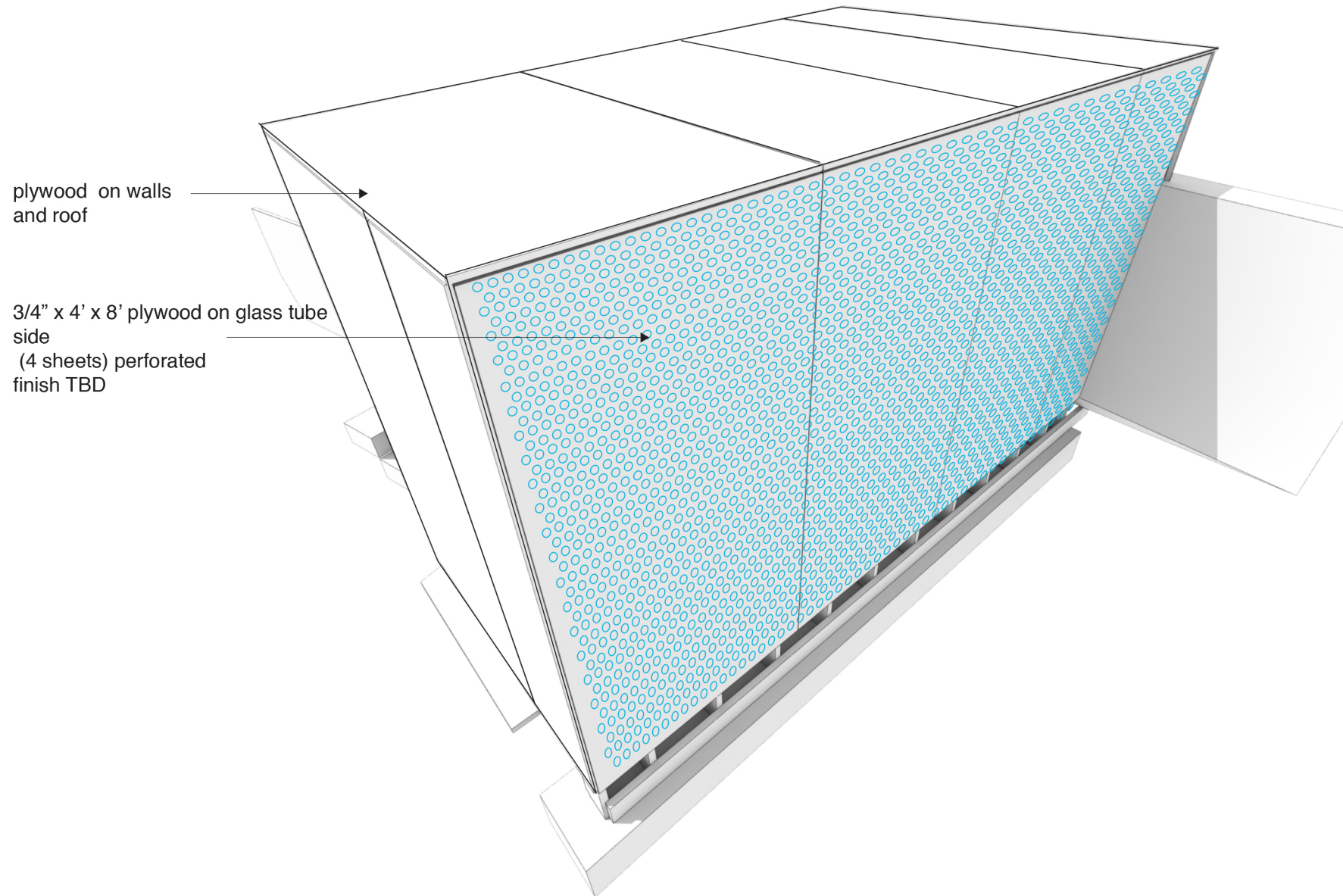
The view through the rods is simultaneously kaleidoscopic and mesmeric and has become home to several insects found in the garden. The sound of a waterfall is present inside The SOL Grotto and the combination of sound, light, views and coolness filtering through the cracks in the flooring creates a highly sensorial space.

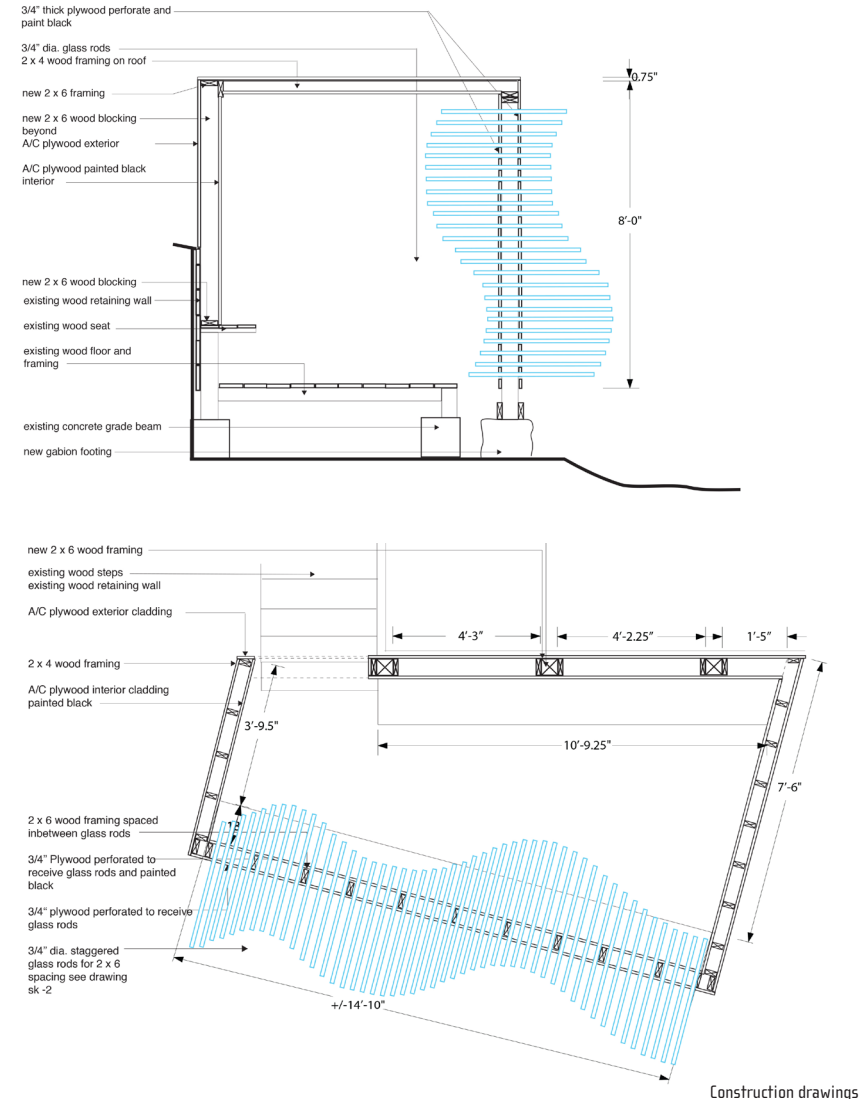
Additional Project Information: The project has been politicized by the Chairman of the House Energy and Commerce Committee, Fred Upton (R – MI) and conservative political commentator Michelle Malkin, as the most expensive artwork ever created, citing the \$535 million loan guarantee to now-bankrupt Solyndra who produced the rods. Sadly, Greg Gutfeld, host of the Fox News program “The Five”, promotes “taking a sledge hammer” to The Sol Grotto. The politicization of the work and the origins of the glass are discussed further in the San Jose Mercury News. More information about Natural Discourse at the San Francisco Gate. Read more... [ Wall Street Journal | NBC | Treehugger.com | Getty Images | CBS | Bay Citizen | Huffington Post | Los Angeles Times ]

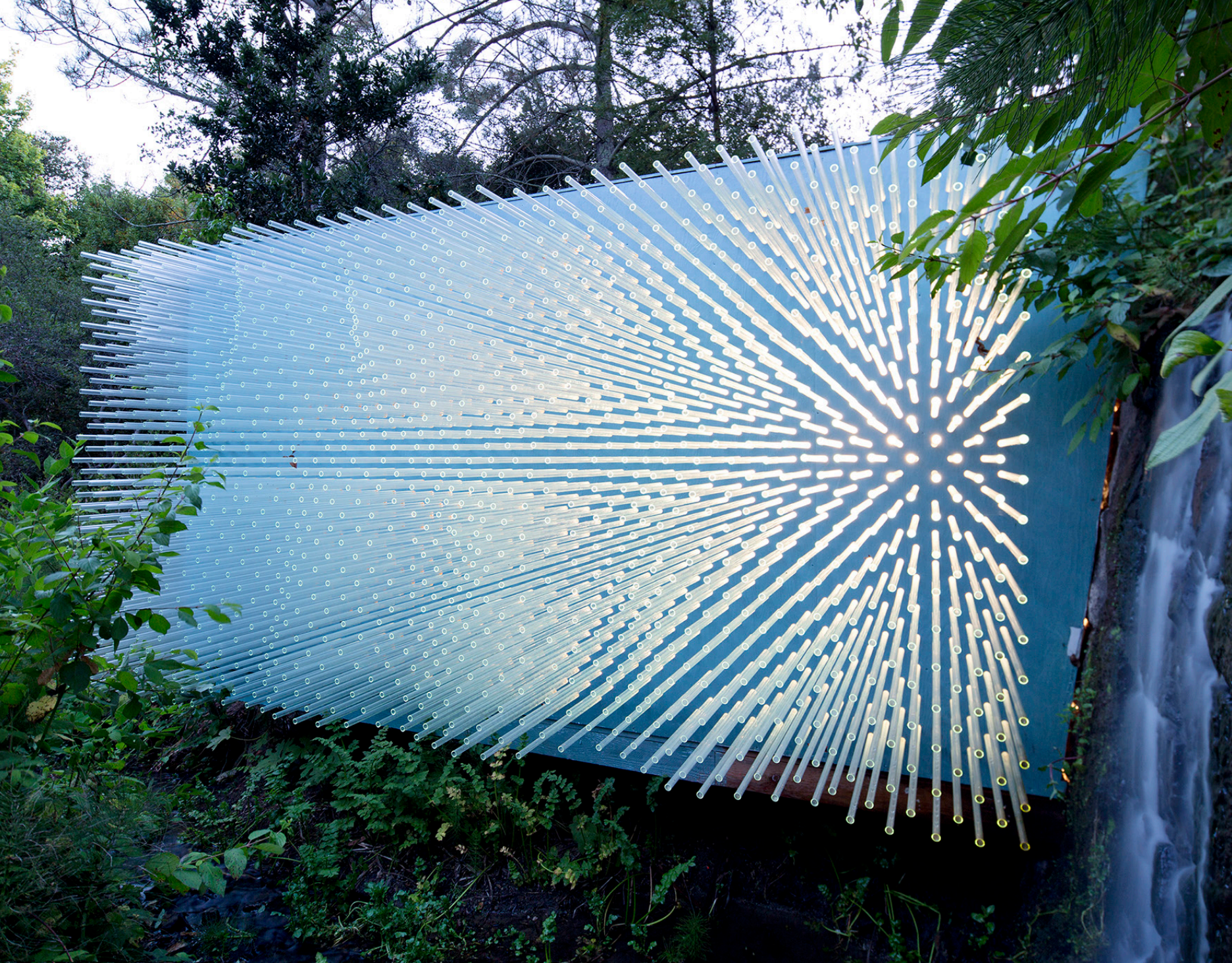
SOL GROTTO



SOL GROTTO







## STRAW GALLERY

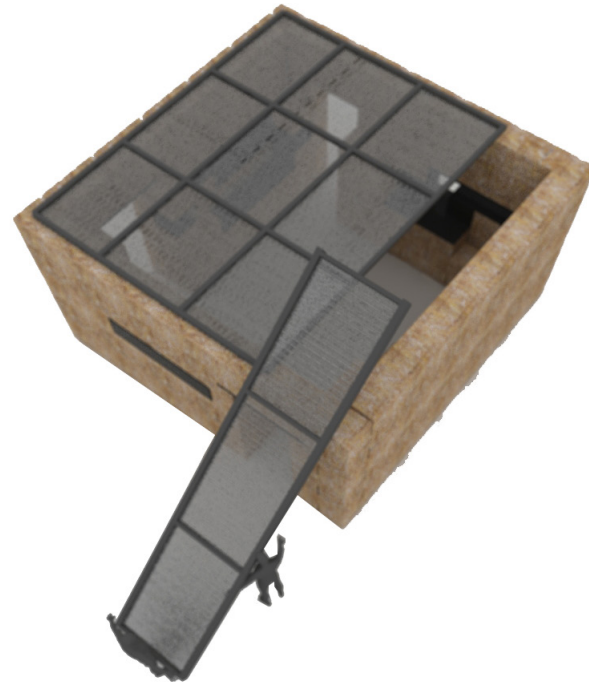
Project Date: 2011

Project Team: Ronald Rael, Virginia San Fratello

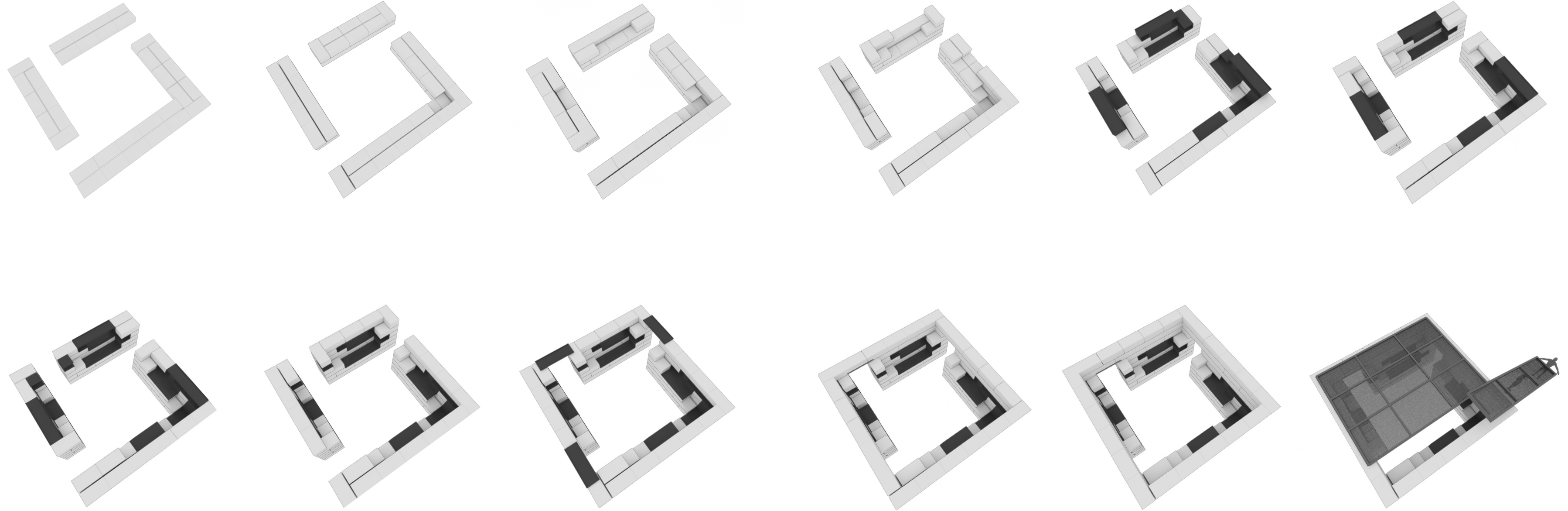
The Straw Gallery was designed for HEDGE Gallery for the 4th annual sf20/21 San Francisco Art and Design Show held at the Festival Pavilion, Fort Mason Center. The temporary gallery was on display from September 15th through 18th opening with a benefit for the San Francisco Museum of Modern Art's educational programs. The gallery is an aromatic, enveloping, and raw space in contrast to the refined and modern elements that are displayed within. The gallery consists of three unfinished, blackened steel display niches interwoven within the walls of straw bales. Each niche is an excavation that is filled with HEDGE's highly edited visions of 20th and 21st century design, art and craft, presented at different levels relative to the eye and the hand of the visitor.

The juxtaposition of the two materials, steel and straw—one industrial and the other representing a storied agrarian history—heightens the tactile sensibilities as one navigates between the richness of the hay and the clean surfaces of the steel compartments. Straw is an incredibly effective acoustic buffer and the walls are in most places two bales thick and placed strategically to block views to the exterior as you enter the space. The experience within Straw Gallery is one of quiet, calm and focused observation in contrast to a busy exterior.

The several hundred wheat straw bales, an agricultural by-product used for bedding, roughage and fuel, used to construct the gallery were returned to the feed store. The steel shelves were recycled and will be used to construct furniture and shelving in San Francisco.

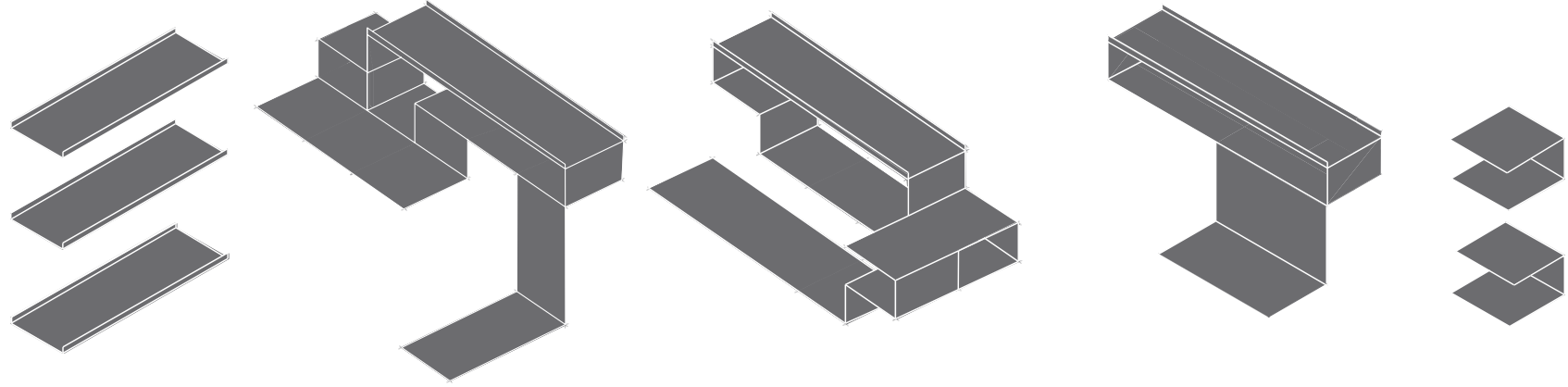


STRAW GALLERY



Construction assembly illustrating sequence of bale stacking and insertion of steel shelving

STRAW GALLERY



Steel shelves reused at the permanent HEDGE Gallery





All of the straw bales used in this installation were returned to pasture and used as bedding for animals.



Left: A view from the exterior  
Right: One of the main entrances into the gallery space

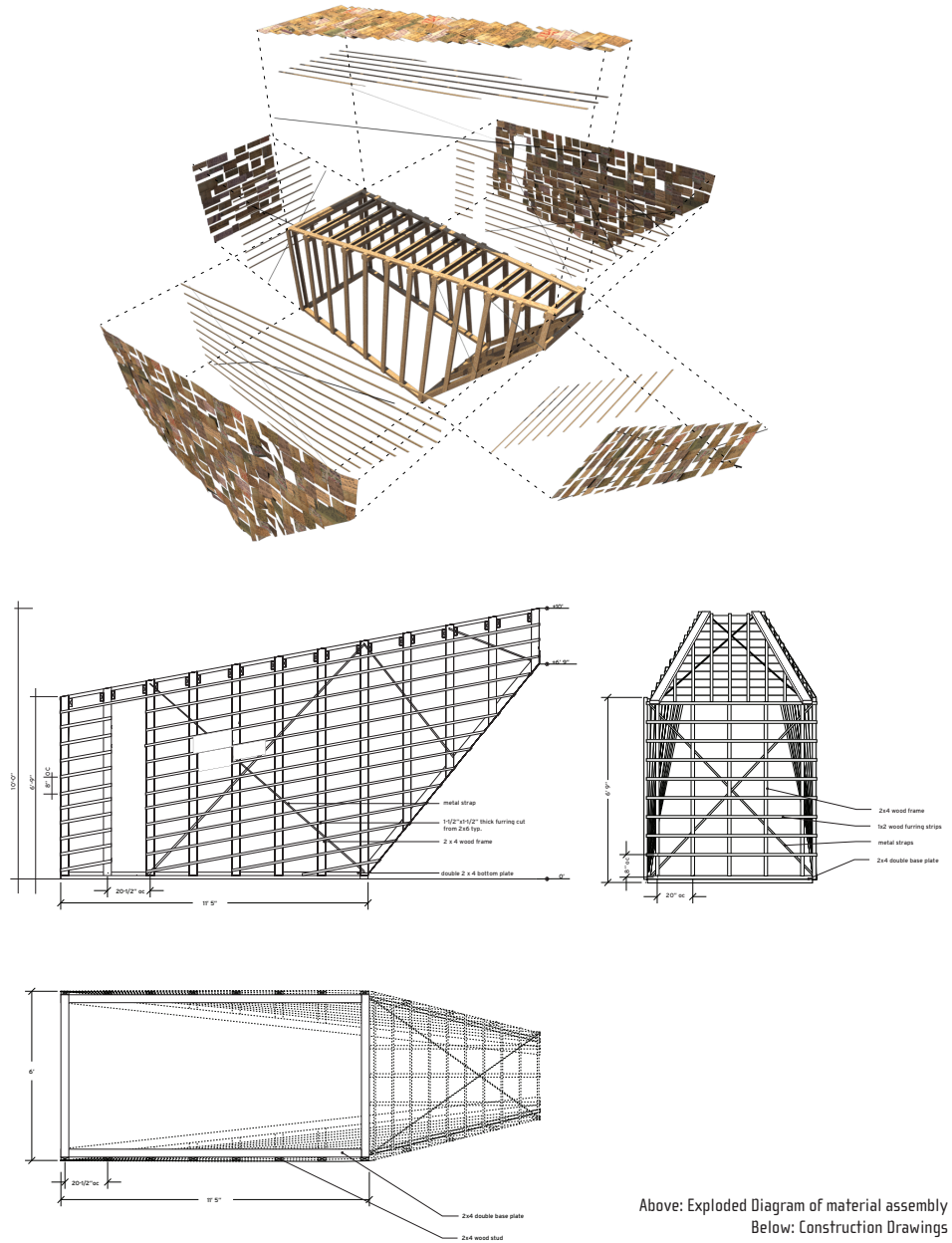
## HOMELESS HOUSE: Sukkah of the Signs

Project Date: 2010  
Project Team: Ronald Rael, Virginia San Fratello,  
Maricela Chan, Emily Licht

Ten years ago, architects Ronald Rael and Virginia San Fratello started buying cardboard signs off homeless people in and around their Oakland-based firm. The idea was to exhibit the signs as works of art, then sell them to raise money for charities that benefit the homeless. But the project stalled, leaving Rael and San Fratello waiting for an opportunity to resurrect them from storage. That came this year, with the announcement of Sukkah City: NYC 2010, a new, international design competition challenging architects to re-imagine the ephemeral, elemental shelter known as the sukkah.

Sukkah City is the brainchild of Joshua Foer, a journalist, author and member of Reboot, a New York-based nonprofit that encourages creative Jews to “reboot” Jewish traditions and make them relevant again in modern life. Reboot co-founder Roger Bennett was Foer’s partner in this endeavor. The project also received support from the Union Square Partnership, an organization that works to enhance the atmosphere of New York City’s Union Square. “We wanted architects to think about the sukkah in a way that was experimental and contemporary,” Foer said, “and show what kind of creative possibilities can lie within the constraints of Jewish law.”

The contest attracted nearly 600 entries from 43 different countries, including Kazakhstan, Bulgaria, Thailand and Paraguay. Rael and San Fratello, whose East Bay firm combines architecture, art, culture and environment, created the “Sukkah of the Signs,” a wooden structure clad with signs — some as small as a sheet of paper, some large enough to be a makeshift bed — made by the homeless and destitute.



Above: Exploded Diagram of material assembly  
Below: Construction Drawings





## HOMELESS HOUSE

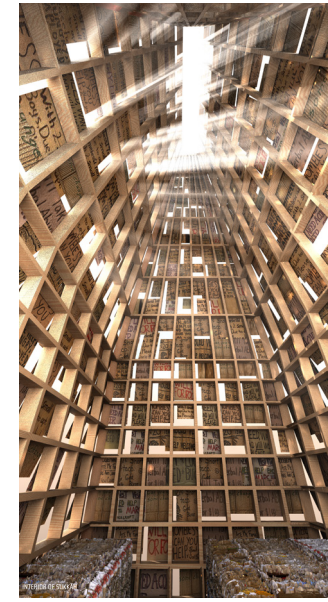
Golden Gate Park, he talked to individuals who lost their jobs and couldn't make rent, stuck in a vicious cycle they could not escape. "I was already empathetic toward people on the streets," Rael said. "To a greater extent, I understand the reasons of why they are there. Some accuse [the homeless] of being lazy or wanting to be on the streets, but so many have no choice."

Creating the "Sukkah of the Signs" inspired Rael and San Fratello to start the Homeless House Project, whose aim is to bring attention to homelessness in America. Rael hopes to publish a book with images of the signs used in the sukkah. "When we learned about the concept of the sukkah, it was a nice way to think about the contemporary issues of homelessness in the U.S. and the interesting stigmas that arise," Rael said. "In a sense we were waiting for a project like Sukkah City. We had the signs and it was a good opportunity to marry the two projects."

Erected for one week each fall during the festival of Sukkot, the sukkah is traditionally a space for sharing meals, entertaining, sleeping and rejoicing. Its construction must adhere to precise parameters: the structure must be temporary, have at least two and a half walls, be big enough to fit a table, and have a roof made of shade-providing organic material through which one can gaze at the stars. "We've inherited this tradition of sukkah building, but very few of us know the real rules or even build them anymore," said Reboot Executive Director Lou Cove. "For those who do it's very nice, but it's not a widely shared creative enterprise. The idea of making the sukkah an architectural piece was a way of reinvigorating that tradition." While the sukkah's religious function is to commemorate the temporary structures

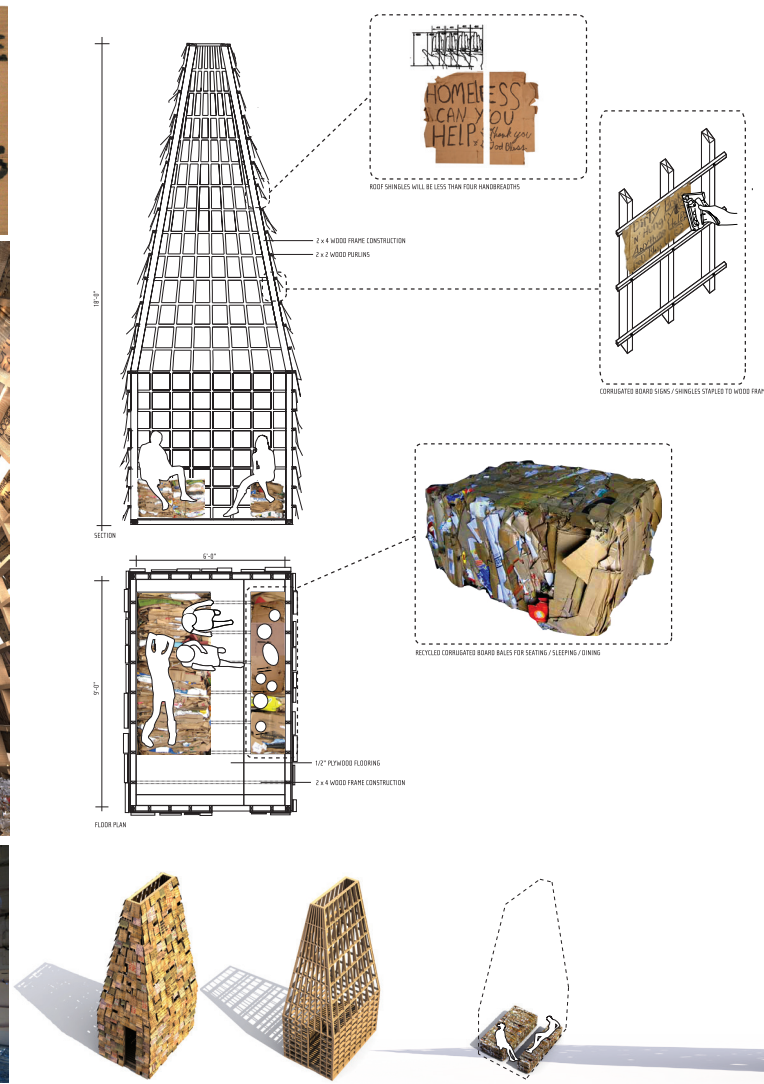


PLEASE HELP ME  
I'M HUNGRY,  
UNEMPLOYED  
AND HOMELESS  
THANK YOU



### CONCEPT:

Just as the sukkah commemorates shelter provided during the forty desert-wandering years of Exodus, the design for our sukkah brings attention to the contemporary state of homelessness and wandering within the United States and is clad with signs made by the homeless and destitute. By purchasing homeless signs from the individuals who made them, we are also contributing to the need for someone who might not otherwise be able to eat today in honor of the primary and traditional role of sukkah, which is a feast of bounty, of hospitality, and of welcoming strangers. Additionally the corrugated board shingles are made of the fibers of hand-cut trees, therefore one could equate them to the historical use of branches on the sukkah roofs. The frame of our sukkah tapers as it moves up toward the sky to draw the eye up and also to provide a smaller framework for the shingles that are less than 4 handbreadths—relating directly to the presence and scale of the hand-made signs. This sukkah, if built for Sukkah City, will be auctioned and the funds donated to a homeless shelter in New York City.



### STATISTICS:

—It is estimated that between 40% and 50% of homeless single adults residing in the municipal shelter system have a chronic mental illness.  
—Approximately 90% of homeless New Yorkers are black or Latino, although only 53% percent of New York City's total population is black or Latino.  
—Almost 17% of residents of the single adult shelter system are employed.  
Coalition for the Homeless, Updated May/2007  
New York Times, 2002  
Hunger Action Network of NYC, 1999  
NY Coalition Against Hunger, 1998  
http://www.ysap.org/statistics.htm

—Each year 100,000 New Yorkers experience homelessness.  
—Each night, over 38,000 homeless individuals sleep in the New York City shelter system. This includes more than 16,000 children and 8,000 single adults.  
—Nearly 1-in-20 New York City residents have experienced homelessness.  
—There are over 1,000 soup kitchens & food pantries in NYC and 2,700 in NY State serving 2 million New Yorkers annually. They will serve 60 million meals this year to hungry men, women & children.  
—Families make up 70% of New York City's homeless shelter population.  
—More than one-in-four children in NYC live in poverty. A typical homeless child is under 5 years old.  
—Over half of homeless mothers in New York City have a history of domestic violence.  
—Nearly one-in-five homeless parents were in foster care as a child.

### WHO IS HOMELESS RIGHT NOW?

Daily Census for July 29, 2010  
—8,087 Families With Children  
—1,310 Adult Families  
—7,376 Single Adults  
—35,148 Total Individuals are homeless in NYC today  
http://www.nyc.gov/html/ohs/html/home/home.shtml



## HOMELESS HOUSE

in which the Israelites dwelled during their exodus from Egypt, it is also a symbol of the transience of life as expressed in architecture.

Contestants did not have to be Jewish. The teams behind the 12 finalists received guidance from Judaic experts on how to craft a kosher sukkah. Neither Rael nor San Fratello are Jewish, but that didn't matter. "At this point, I think I'm much more familiar with the rules of constructing a sukkah than a lot of Jews," Rael said with a laugh. "Learning about lesser-known traditions of Judaism was really interesting." From dawn until dusk Sept. 19 to 20, nearly 200,000 passers-by wandered through Sukkah City in Union Square Park to marvel the sukkahs. "It turns out that architects viewed Jewish law in a way we could not anticipate," Foer said. "Working with the design constraints handed down for thousands of years was inspiring. They immediately understood how many levels of residence there are in the sukkah — what it means to be impermanent or homeless, to the role it plays in reconnecting Jews with their agricultural past. "All that is bound up with esoteric rules, some of which are playful," he continued, noting that a sukkah may be built out of an elephant's skeleton but no other animal's. "If that's not an invitation to do something weird, then I don't know what is."

*Excerpted from the article, "A booth with a view: Oakland architects build sukkah using signs from the homeless" by Amanda Pazornik. J! Weekly, Thursday, September 23, 2010.*

Photo: Nate Levy  
Sukkah City, NY

