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Baumgartner+Uriu's "Apertures" shell structure challenges the conventions of sustainable design

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B+U's "Apertures" at the SCI-Arc Gallery. Photo: Joshua White

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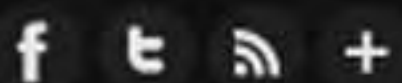
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[Baumgartner+Uriu](#) looked to none other than Mother Nature for their *Apertures* installation, which was publicly displayed at the [SCI-Arc](#) Gallery in Los Angeles this past spring. If B+U's *Apertures* sound familiar, perhaps you may recall their "[Animated Apertures](#)" Housing Tower that was exhibited at the FRAC Center in Orleans, France.

Whatever its organic form reminds you of, the shell structure let visitors catch a glimpse of B+U's ongoing exploration in architectural biomimicry and how it challenges the boundaries of ecological design.

Read on for more project details from B+U:



"Apertures reflect a current architectural discourse of digital ecologies, emphasizing the relationship between the natural world and advances in digital technology, which leads to a new type of interactive, organic buildings. The installation focuses on a symbiotic relationship between nature, building morphologies, and material expression."

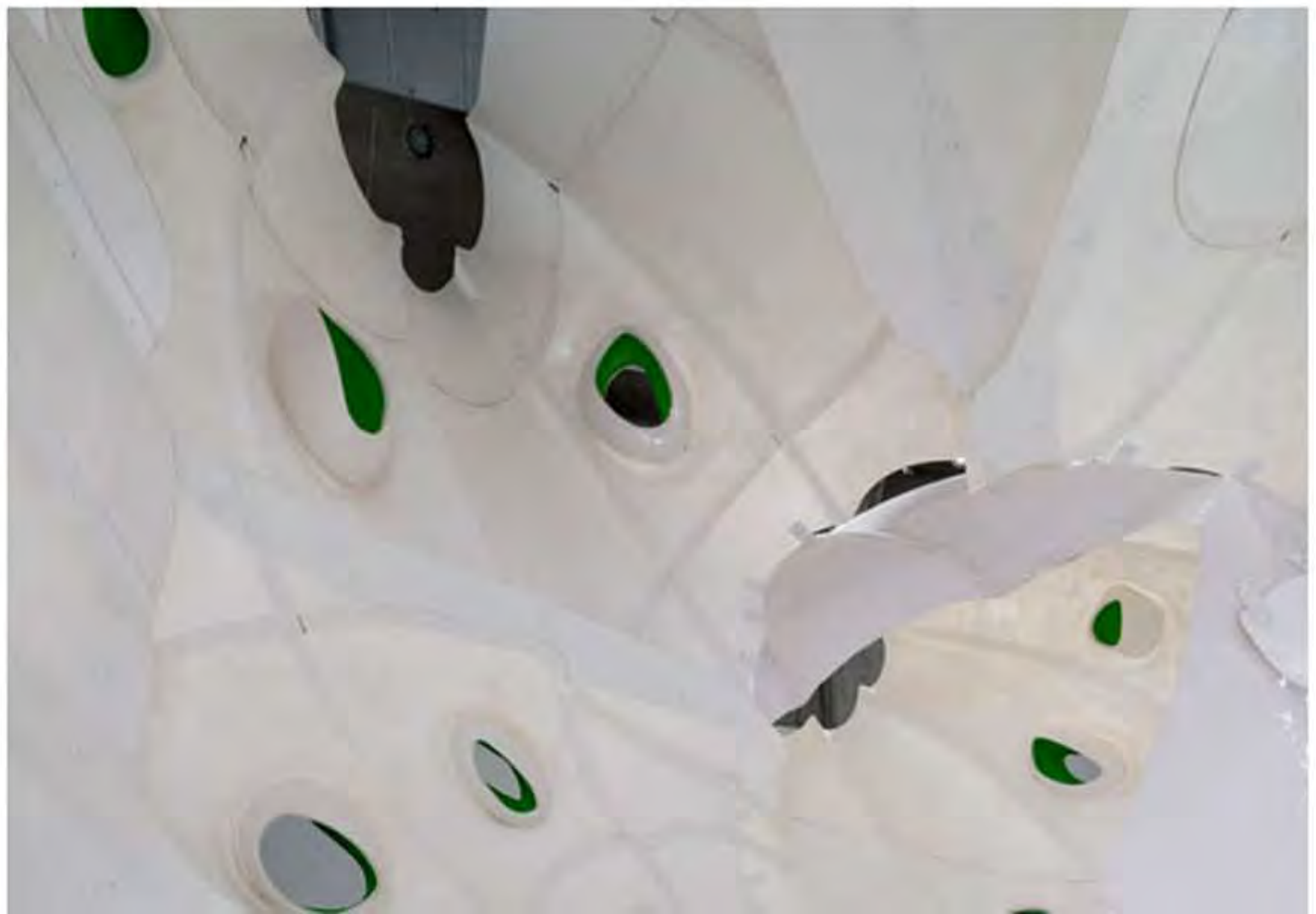


"Rooted in Baumgartner+Uriu's work and ongoing research, Apertures challenges the notion of an architectural opening as a static object. Moreover, it aims to redefine the DNA of a window both in terms of its appearance and materiality, as well as its nature as an object in continuous flux, responding to its environment through movement or sound."



"The pavilion and its apertures are designed to physically engage the visitor with the architectural work through sensors and sound feedback loops creating an immersive spatial environment in which the visitor can experience their own biorhythms.

The 16-foot-tall, thin shell structure was designed to solely rely on its extremely thin surface (1/8") as support, requiring no additional structural elements. Structure and surface are collapsed into a single component supported through its shape, creased surfaces and material strength only."





"Each one of the 233 panels is unique in terms of its shape. They are CNC milled from polyurethane foam, heat formed out of thermoplastic polymer resin, and then laminated together into a single object."

Project credits

Design: Herwig Baumgartner and Scott Uriu

Exhibition Coordinator B+U: Aaron Ryan

Exhibition Team B+U: Nema Ashjaee, Viola Ago, Nick Taylor, Derek Ramsey, Andranik Ognayan

Structural Consultant: Matthew Melnyk

Sound: Hannes Koecher - Media Artist, Vienna Austria
Filming: Ryan Tyler Martinez and Lord Ceniza
Music by: Deepshader and Nazca: Covered by the Blue Fog
Panel Fabrication: Warner Bros. Entertainment

SCI-Arc Student Workshop Team: Eduardo Bellosta, Kevin Chen, Lord Ceniza, Chuck Diep, Shahe Gregorian, Jeff Halstead, Suky Ho, Jessica Hong, Kyungjoo Kim, Dennis Lee, Yu Liu, Ricardo Lledo, Sara Loy, Michelle Lozano, Ryan McGriff, Pierina Merino, Sara Moomsaz, Tony Morey, Sergio Ormachea, Stephen Rafferty, Hemila Rastegar-Aria, Kirill Ryadchenko, David Sarafyan, Tommy Shao, Rea Sohn, Maricarmen Soto, Evelyn Tring, Benjamin Vanmuysen, Joao Velazquez, Carlos Vargas, Jacob Zindroski

Check out a video of the installation setup below.

For more photos, click through the thumbnail gallery.



Baumgartner+Uriu APERTURES



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