

Tomás Saraceno: *Solar Bell Ensemble*

What if a building was so light that on a windy day it could take off and elevate in the air?

This is the question that visionary artist Tomás Saraceno asked himself when developing *Solar Bell*. Collecting his interests in architecture, science, nature and utopian urban planning, this installation gives flight to Saraceno's vision of colonizing the sky. *Solar Bell* is a prototype towards a much larger and inhabitable platform-kite that would function as a plaza within a flying city, lifted above the clouds by the power of wind alone. The artist dreams of cities populating the sky, wistfully envisioning that, "If it's as windy as in my dreams, then the kite-city would actually take off. Imagine: buildings lifted up by wind energy, an entire city flying through the air, following the atmospheric conditions."

Solar Bell is built using the latest technologies in the field of lightweight materials and sustainable energy technologies. To optimize his design Saraceno and his team worked closely with the Aerospace Engineering Faculty at the Delft University of Technology. The ensuing model uses light and extremely robust carbon fiber tubing and flexible, paper-thin solar panels to make it lighter than air. Saraceno emphasizes that the geometric model for *Solar Bell* is the diamond lattice of molecular bonding (*diamond* being the Greek word for "unbreakable") and that these systems are formed in nature (ex. carbon and graphite).

The design of *Solar Bell* is based on the structure of a tetrahedron (or four-sided pyramid) employed by Scottish-born scientist, inventor, engineer and innovator Alexander Graham Bell (1847–1922) during his early investigations into manned flight. In addition to famously originating the telephone, Bell made important discoveries in the field of aviation and frame construction, and happened upon the strongest geometrical structure in the known cosmos — the octet truss — which Buckminster Fuller later employed in his Geodesic dome. And while Bell held the world record for longest manned flight before it was a truly feasible pursuit, Saraceno adds, "Today I am very interested in extending the possible length of the flight..."

With the ability to float, the traditional boundaries will be crossed between earth and space, between art, architecture and science.

- Tomás Saraceno

Sponsored by the National Endowment for the Arts, Sandra & Dr. Stephen Joffe and the Dr. Stanley and Mickey Kaplan Foundation. Courtesy of the Artist and Tonya Bonakdar Gallery, New York