

# Strandbeest

*For twenty years, Dutch artist Theo Jansen has wholeheartedly devoted himself to creating a new form of life. His "Strandbeests" (beach beasts) seem so organic that, from a distance, they could be mistaken for huge insects or prehistoric mammoth skeletons. But they are made of materials from the industrial age: PVC pipes, plastic bottles and adhesive tape.*

Strandbeests were born inside a computer, as an algorithm, but they do not require engines, sensors or any other type of advanced technology in order to walk. They move, thanks to the force of the wind, and the wet sand, they find in their habitat of the Dutch coast.

What was at first a rudimentary breed, has slowly evolved into a generation of machines that are able to react to their environment: "over time, these skeletons have become increasingly better at surviving the elements, such as storms and water, and eventually I want to put these animals out in herds on the beaches, so they will live their own lives."

Constructed as intricate assemblages of PVC pipes, wood, and wing-like sails, Jansen's creations are constantly being improved and have become excellently adapted to their sandy, beach environment. The creations sport legs, which "prove to be more efficient on sand than wheels...they don't need to touch every inch of the ground along the way, as a wheel has to."

From his laboratory in Ypenburg, Jansen studies the history of biological evolution to provide his new generation of creatures with greater capacities. His dream is that, one day,

they will learn how to evolve without his intervention and continue their lives as any other organism, subject to cycles of nature.

All those who observe the beauty of one of Theo Jansen's creatures moving around the sand, for the first time, immediately understand that the work of this engineer, scientist and artist is something special. However, over more than a decade, he has remained in the dark and has only recently been discovered by the international art community.

In the last decade, dazzled by the digital revolution, his works would seem rudimentary, above all compared to the sophisticated productions his contemporary colleagues have been carrying out in the field of robotic art. But, nowadays, in the age in which the coexistence between technique and nature in pursuit of sustainability is an urgent priority, his design strategies are more relevant than ever.

**Project:** Strandbeest

**Location:** Rotterdam, The Netherlands

**Designer:** Theo Jansen, Rotterdam, The Netherlands

**Technical info:** PVC pipes



# FiloSofia

*With the FiloSofia exposition, for the first time in its history, the Triennale Design Museum in Milan, and Material Connexion, suggest looking more deeply into the reality of a company originating from a world far away*

They present a scenario-paradigm that is developing by continuous evolution, and in which new people and cultures act as the main characters on the modern design stage.

FiloSofia is a striking example of how continuous evolution is being brought to the forefront. The story here is about projects being born inside Sofia, a Russian company that became one of the major European leaders in the manufacture of contemporary doors and sliding door systems.

The project value, adherence to experimentation with unusual design solutions, and a desire to compete with materials and high-quality products are fundamental elements, which rotate on the orbits of these new international-level design companies.

The exposition space, developed by Italian design team Ramef, is subject to the rhythm of the progressive motion of red, vertical PVC strings that fill the space over its entire height and design, the central space of which holds the entire exposition solution.

The red PVC strings are symmetrical and numerically balanced, producing a dialogue between line and space. When using strings, Ramef expands upon the material's sculptable potential and bring the installation into a third dimension. This creates a perceptual play of lines, colours, lights, and textures that is realised by the viewer's experience of, and interaction with, the work.

Ramef uses everyday materials to create a temporary, three-dimensional architecture that becomes an extension of the built environment. His work explores illusory and geometrical complexity by repeating and overlaying simple lines with pure shapes.

**Project:** FiloSofia

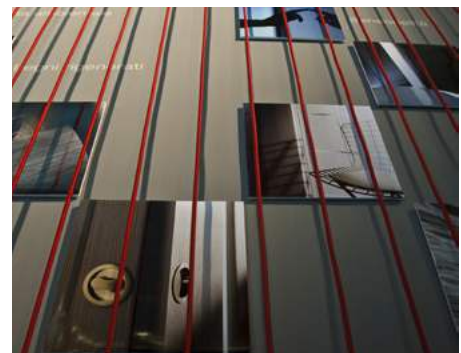
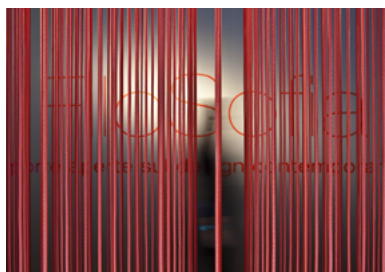
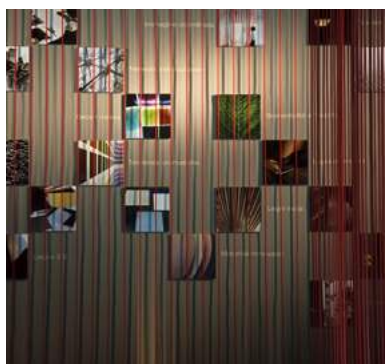
**Location:** Milan, Italy

**Designer:** Sección B Arquitectura, Madrid, Spain

**Technical info:** PVC cables

**Picture credits:** Enza Tamborra

**Website:** [www.ramefgroup.it](http://www.ramefgroup.it)



# Stuart Weitzman Flagship Store

*With the opening of the international flagship store on via Sant'Andrea in Milan, Stuart Weitzman presents an innovative retail concept, designed by London-based architect Zaha Hadid.*

The architecture of the store, in an area of 280 m<sup>2</sup>, is fluid and vital. A dialogue of geometry and materiality creates an enchanting rhythm of folds and recesses, further shaped by functional and ergonomic considerations. Modular display units showcase shoes, and also provide seating, while a seamless integration of diverse forms invites our curiosity.

The juxtaposition of these distinct elements of the design defines the different areas of the store. Rooted in a palette of subtle monochromatic shades, Zaha Hadid created an interior landscape of discovery, centered on two separate zones, to enhance the relationship between the customer and the collection.

Experimentation with materials and construction technologies further define the unique space. The curved modular seating, and freestanding display elements, have been constructed from fibreglass dipped in rose gold – a technique similar to that used in boat manufacturing.

The mix between the semi-transparent PVC ceiling and the glass-reinforced concrete of the store's ceiling and walls expresses lightness and solidity whilst, at the same time, the delicate precision of complex curvatures focus on special areas for display.

The location of the six large windows, at 10/A via Sant'Andrea, has been especially selected for the debut of this new retail concept. In the years to come, other flagship stores designed by the team of Zaha Hadid Architects will be opened in key cities around the world.



**Project:** Stuart Weitzman Flagship Store

**Location:** Milan, Italy

**Architect:** Zaha Hadid, London, UK

**Technical info:** Barrisol Membrane

**Picture credits:** Jacopo Spilimbergo

**Website:** [www.zaha-hadid.com](http://www.zaha-hadid.com)







# Parasite Pavilion

*The Parasite Pavilion is the outcome of the cooperation between Chinese architect Hsieh Ying Chun and TCA Think Tank, led by Italian architect Pier Alessio Rizzardi.*

The pavilion was organised to create an installation for the Synergy & Symbiosis event during the last Architecture Biennale, which was realised in the vacuum at the garden outside the Chinese Pavilion to attract visitors arriving from the Giardini and Arsenal exhibitions. The Dome offered shade, protection, a place where to escape from the great content of the Absorbing Modernity exhibition, allowing a direct experience of elements of architecture.

The structure in Venezia was used as physical research of fundamental elements of the traditional space. Understanding the basic concepts behind traditional Chinese spaces created the reference to developing the design.

A layer of non-woven textiles forms the support of the structure and a protection above the ground. On the top, a metal net was the grid to locate the position of the feet of the arches using coordinates.

The workshop uses contemporary and locally produced material, such as wires, metal nets and PVC pipes. The pipes are bent to create self-sustaining arches that guarantees zero impact, as well as a temporary environment for the fragile Venice Biennale venue. PVC was chosen for its structural flexibility, which allows several possible and flexible forms.

The geometry followed two guiding curves defining the surface edges coming from the interaction between the

existing structure and composition of the internal space. The 3D model showed the length of the arches and they are cut according to the measures. At this point the arches were ready to be put in tension with wires and fixed to the support, creating the self-sustaining system. Temporary structures bear the arches. Meanwhile, PVC pipes are woven on the arches and fixed using PVC pipe ties.

The interior was the result of four systems shaped by a single element as a curved mesh, creating different elements of the architecture. The entrance showed itself, inviting visitors to be absorbed from the surrounding, hiding the main room and creating expectation, pushing exploration inside. The corridor opened to the main space, where the scale gets wider as the texture of the ground gets bigger, changing the equilibrium and the sound of the experience.

The Parasite Pavilion has been an experiment, that goes beyond traditional architectural form and composition, to foresee fundamental aspects for Chinese architectural space.

**Project:** Parasite Pavilion

**Location:** Venezia, Italy

**Architects:** Hsieh Ying Chun, China; Pier Alessio Rizzardi - TCA Think Tank, Milan, Italy

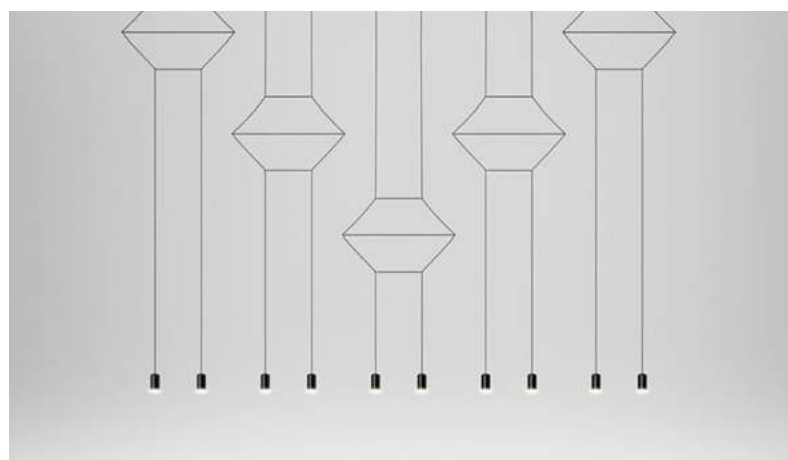
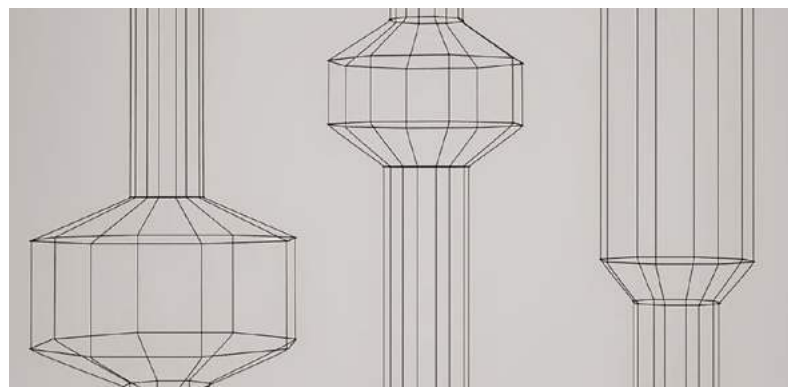
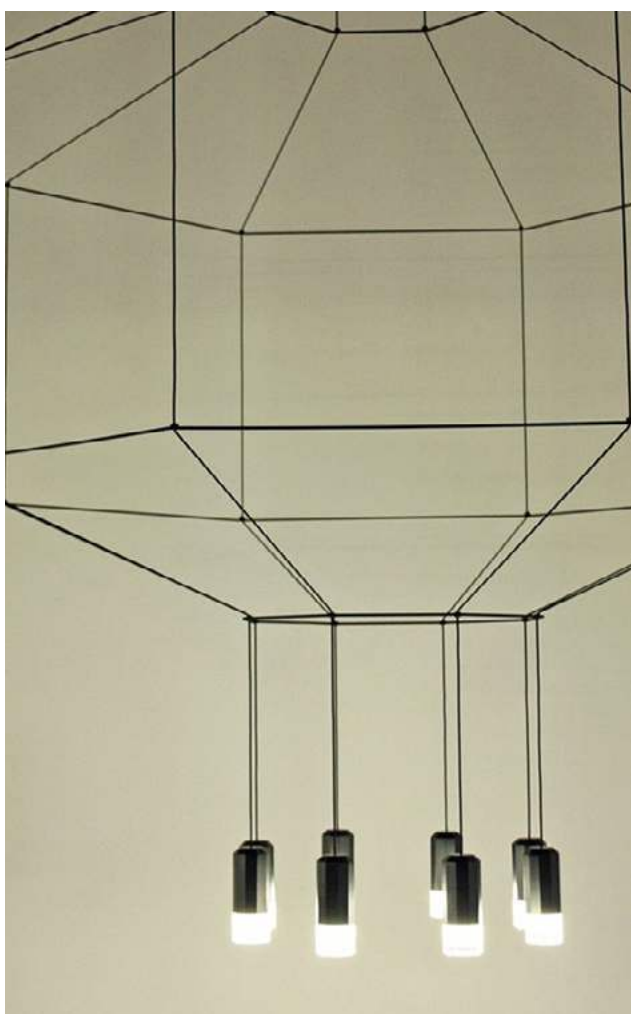
**Technical info:** PVC Pipes

**Picture credits:** Marco Cappelletti

**Website:** [www.marcocappelletti.com](http://www.marcocappelletti.com)

# Wireflow

*Wireflow, designed by Arik Levy. A hanging lamp which reviews and updates the chandelier-look through an exercise of simplification that explores its essence and enhances its outline with great delicacy and, at the same time, a strong formal presence.*



Its appearance, as a structure of fine cables finished with eight 3.7W LED terminals, discreetly connects with classic chandelier models, taking this type of lamp to a new, groundbreaking and futuristic dimension.

Wireflow explores geometries in two and three dimensions through a series of pendant-like, lighting fixtures which are composed of simple elements, which, from certain angles, appear flat, like a line-drawing suspended in air.

Designed by French designer Arik Levy, the structures are formed by thin, special, coloured PVC electric cable extrusions and metal rods which end in LED terminals (3W) for illumination, continuing the visual fluidity of the lines.

Produced by Spanish company Vibia (<http://www.vibia.com>), Wireflow explores presence and absence, transparency and luminosity, light and fluidity.

Employing CREA product configuration software, the design can be modified to adapt to your specific project requirements.



**Project:** Wireflow  
**Designer:** Arik Levy, Paris, France  
**Producer:** Vibia, Barcelona, Spain  
**Technical info:** PVC Cables  
**Picture credits:** Vibia  
**Website:** [www.ariklevy.fr](http://www.ariklevy.fr)



# Bota Bota Spa on Water

*Canadian Sid Lee Architecture were asked to create the architectural designs for Bota Bota, a modern twist on the traditional urban spa.*

This ambitious project, led by the Émond family, also owners of Balnea spa, located in Bromont-sur-le-Lac is now up and running, following a whirlwind two-year adventure.

Located at the foot of rue McGill in the Old Port of Montreal, Bota Bota is the new name given to a ferryboat that used to link Sorel and Berthier in the 1950s and has been renovated into a floating Scandinavian spa. Built in 1951 and measuring 170 feet and weighing 600 tonnes, the Arthur Cardin plied the waters between these two cities for 10 years. At Expo '67 in Montreal, it enjoyed a second life as a floating art centre thanks to Quebec's ministère des Affaires culturelles.

The linkage between the boat and water is the key concept, allowing the spa and the marine world to connect at once. This concept is veritably unique, and its brand image, unlike any other. Using a visual language characterised by pure, simple lines, the spa brings marks of the marine world to its logo, signage and stationery.

In addition to the concept, Sid Lee Architecture created an indoor space conducive to introspection and an outdoor space affording spectacular views of the city, from the upper decks. Visitors forget they're on a boat as they transition through the five different levels, discovering city views from each bridge.

Viewed from the shore, the boat fits comfortably into the scenic, post-industrial setting. It rises four levels above the

waterline, and its black paint and horizontal wood cladding complement the adjacent landscape at the entrance to the Lachine Canal. When the spa glows at night, the design elements are more pronounced, in particular the 678 portholes punched into the walls on the first and second levels.

The main floor includes a public bistro and lounge with epoxied concrete flooring, a shining, stretched PVC ceiling, custom banquettes, and signature tables in perforated acrylic.

The closer the spaces are to the water, the darker and more intimate they are; the closer they are to nature, the more impressive the views of the horizon. The relation between these two extremes comes thanks to the 678 portholes that dot the boat, allowing daylight to penetrate the treatment rooms. As such, the transition from water to sky, and dark to light, is made possible.

**Project:** Bota Bota Spa on Water

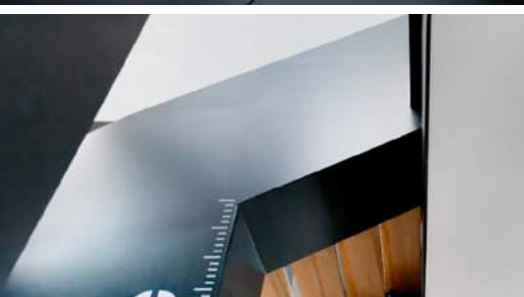
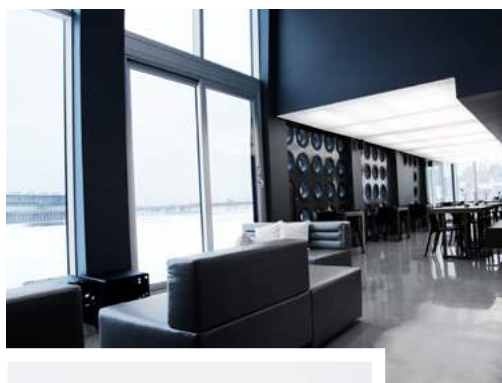
**Location:** St. Lawrence River, Montréal, Canada

**Architects:** Sid Lee Architecture, Montreal, Canada

**Technical info:** PVC ceiling and flooring

**Picture credits:** Sid Lee Architecture

**Websites:** [www.sidleearchitecture.com](http://www.sidleearchitecture.com)



# Yoda Chair

*Integrating locally-sourced organic materials with innovative hand-made production techniques, Philippines-based designer Kenneth Cobonpue, offers an alternative to the Western definition of modern design.*

After his European studies, Cobonpue returned home to Cebu, Philippines in 1996, founding his own brand and discovering that modern design could have a new face using natural fibres and plastic materials as the medium.

Integrating locally sourced organic materials with innovative hand-made production techniques mixed with plastic materials, he offered an alternative to the more conventional definition of design production. And observing creativity through an organic lens while paying homage to the talented handwork of the craftsman would form the core foundation of the designs produced today.

The Yoda Easy Chair expresses a balance between simplistic form and striking detail, with its novel backrest giving it its unique character. It's a clear example of a mix of different materials, sharing tradition and innovation: the chair is constructed of split rattan for the indoor version and flexible, extruded PVC rods for the outdoor version, both on a steel frame.

The Yoda taps the natural tension of the rattan vine and PVC rods, resembling tall blades of grass growing from the seat on a summer's day. With prolonged use, the "stalks" open and shape the back into its final setting.

Its rattan and PVC display offers comfort concealed in randomness reminiscent of nature's surprises.



**Project:** Yoda Chair  
**Designer & Producer:** Kenneth Cobonpue,  
Cebu City, Philippines  
**Technical info:** PVC rods  
**Picture credits:** Seiryō Yamada  
**Website:** [www.kennethcobonpue.com](http://www.kennethcobonpue.com)





# Parametric Pavilion

*The project of the Parametric Pavilion started with an algorithm: a pyramid-shaped component placed across a vaulted surface, creating a strong differentiation by changing its height.*

Another algorithm was elaborated to unfold all the 195 components to a flat surface to be laser cut, and then folded to generate the pyramidal shape from a single piece of 3-millimetre Coroplast.

The team carefully assembled all the components using an industrial staple gun and plastic cable zip ties and reinforced the structure with PVC pipes that were fixed to the ground. The pavilion will encourage future students to use digital fabrication techniques.

The smooth forms of the structures, influenced by pedestrian movement, create a series of spaces that flow from one to the next. The pavilion opens to the sky and creates a space for users to relax and enjoy the surroundings.

**Project:** Parametric Pavilion  
**Location:** Monterrey, Mexico  
**Architects:** Alejandro Rodriguez Design with Tecnológico De Monterrey  
**Technical info:** PVC tubes  
**Picture credits:** Alejandro Rodriguez Design  
**Website:** [www.rcrarquitectes.esit](http://www.rcrarquitectes.esit)

