Net Blow Up

Croatian-Austrian design collective Numen/For Use are best known for their large scale interactive sculptures, often using everyday materials like tape while building. Their latest structure, Net Blow, near the waterfront in Yokohama, is an inflatable, box-like space with buoyant black webs fitted tightly inside.

The blown-up exterior skin creates an immersive interior cavity filled with a complex network of interwoven mesh material. Visitors invited inside become temporary inhabitants of the playful balloon-like pavilion, completely encompassed in both net and bubble and able to bounce and boomerang off the ceiling, floor, and walls.

The soft PVC object deforms and mutates with every movement inside, making it a constantly evolving, kinetic expanse. At night, illumination from within almost becomes a projection screen, casting shadows of the shifting environment outside.

Net Blow up is a further development of the Net project both in means of construction and appearance. The object is inflated till the outer surface reaches adequate tension for stretching the nets connected on the inner side of the object. This construction excludes any use of additional structure.

The result is a soft object which deforms and mutates with every movement of its temporary inhabitants. The outer membrane acts both like a “soft box” diffuser of the outside light, or a projection screen in case of inner illumination of the installation.

**Project:** Electric Paris - Centre Culturel Alternatif  
**Location:** Paris, France  
**Architect:** Mathieu Lehanneur with Ana Moussinet, Paris, France  
**Technical info:** PVC, painted vinyl and wood fiberglass, metal mesh  
**Picture credits:** Felipe Ribon  
**Website:** www.electric-paris.com
Municipal Center for Citizen Activities

Three years ago Sección B Arquitectura, the Spanish architecture studio, received a commission for the partial demolition of an unfinished building to recover the components of the building that was previously on the site.

The architects were to design a project that would make compatible the recovery of the components with the neighbour program (spaces for neighbourhood organisations, Information Point for Women, adult education and multipurpose room).

The perimeter of the main courtyard is set using an auxiliary structure that supports the vegetation in planters at different levels, offsetting the volumes of the built areas that have a clear horizontal component. It features vertical and horizontal connections between uses. The conformation of the courtyard as a vegetal structure provides the necessary sun protection to exposed westward facades, while a fountain behind it transforms it into a cold sink (thanks to the evaporation of water in a shaded atmosphere).

The existing concrete structure has been consolidated and expanded with a metal structure. The partition wall consists of removable PVC panels to ensure maximum functional flexibility. Floors combine natural stones with PVC linings and industrial parquet. From the first sketches, we investigated eco-design criteria for maximum possible energy efficiency in the building.

**Project:** Municipal Center for Citizen Activities  
**Location:** Seville, Spain  
**Architects:** Sección B Arquitectura, Madrid, Spain  
**Technical info:** PVC panels  
**Picture credits:** Jesús Granada  
**Website:** www.seccionb.com
Collapse

The work of New Zealand-based designer Fletcher Vaughan, Collapse is designed as a sculptural representation of the precarious balance between industrial society and nature.

The sculpture’s site is directly exposed to the forces of nature, elements that are becoming more unpredictable and extreme due to climate change and global warming. Although firmly fixed, the illusion that Collapse could be toppled at any moment by a breath of wind represents the fragility of our planet and its inhabitants in the present day.

Standing 4 metres high x 3.4 mt long x 0.6 mt tall, the house of cards is composed of lasercut PVC/aluminum panels with stainless steel fixings and PVC decals.

Installed on the Hauraki Gulf of Waiheke island in New Zealand, Collapse is directly exposed to the forces of nature, and although it is grounded in concrete and composed of durable materials, the illusion that the sculpture could be toppled at any moment by a slight breath of wind represents the fragility of our planet and its inhabitants in the present day.

**Project:** Inflatable PVC  
**Location:** Gulf of Waiheke Island, New Zealand  
**Designers:** Fletcher Vaughan, Avondale, New Zealand  
**Technical info:** PVC, aluminium, steel  
**Picture credits:** Fletcher Vaughan  
**Website:** www.fletcher-systems.co.nz
Lift
Installation

Lift, which its designers at Snarkitecture describe as a ‘floating landscape’, was a spatial, performance-based installation that explored the expansive interior in which it was located.

Snarkitecture is a collaborative practice, established by Alex Mustonen and Daniel Arsham, operating in territories between the disciplines of art and architecture. Working within existing spaces or in collaboration with other artists and designers, the practice focuses on the investigation of structure, material and programme and how these elements can be manipulated to serve new and imaginative purposes. Searching for sites within architecture with the possibility for confusion or misuse, Snarkitecture aims to make architecture perform the unexpected.

Lift was their recent installation for the New Museum Gala in New York City. Each of the 45 performers had command over one inflatable PVC white sphere, the accumulation of which created a cloudlike effect in the space.

The performance was choreographed to slowly reveal new configurations of the spheres in what the designers called ‘playful yet elegant exercises.’ As performers manipulate the suspended plane, Lift dramatically alters the visual and spatial qualities of the existing architecture to create unexpected moments.

Project: Lift Installation
Location: New Museum Gala, New York, USA
Designers: Snarkitecture, New York, USA
Technical info: Inflatable PVC
Picture credits: Jesse Untracht-Oakner
Website: www.snarkitecture.com
Ferreyra Palace

The Ferreyra Palace has been converted into the Córdoba Province Museum of Fine Arts, to display a selection of the museum’s collection as a permanent exhibition.

A change in the original character of a building, such as that confronted in this conversion, poses complex problems. The original cultural heritage value of the building was that of a family residence; not that of a public building intended to show and preserve a different kind of cultural heritage. A challenge had to be overcome so that both heritages could coexist without one overshadowing the other.

The renovation, designed by Malaga-based GGMPU Architects, has preserved the pre-eminent hierarchical condition of the main hall as well as its relationship with all the original public areas, while at the same time creating a new multi-level space that now allows the visual appraisal of all the building levels at the same time, thus revealing the unified character of the building as a whole. This space, that lies perpendicular to the main building axis, has been designed as an ambiguous realm, which maintains a certain neutrality in contrast with the main hall.

The original enclosure of the building and its fenestration is shown through a translucent tensile PVC sheet which becomes a new skin for the building, shifting its appearance according to the light, which can be either natural daylight, regular white artificial light, or colored RGB lighting intended to create different effects. The design for the opposite side, which interfaces with the original spaces, was solved with a continuous glass plane covered by a micro-perforated PVC membrane printed with a pixelated photo of the main hall which gives it an abstract texture; the same hall can be seen behind the glass through its ambiguous transparency. The planes contained within this space have been dematerialised by covering them with mirror-polished steel.

A new wooden stairway, painted black and covered in black leather, reaches the black ceiling which extends towards the public areas of the last floor. This dark space eases the transition into the exhibition rooms, which due to the fragility of the exhibited material must be kept under low lighting.

Project: Ferreyra Palace
Location: Córdoba Province Museum of Fine Arts, Córdoba, Argentina
Architects: GGMPU Architects, Malaga, Spain
Technical info: PVC, aluminium, glass
Picture credits: GGMPU Architects
Website: www.ggmpu.com
Cloudscapes

Japanese Tetsuo Kondo Architects in partnership with German design team Transsolar created a small bank of clouds in the Sunken Garden of the Museum of Contemporary Art Tokyo.

The clouds billow softly in a compact, transparent container and can be seen from the entrance hall, exhibition galleries, outdoor plaza and other parts of the museum.

The transparent container is constructed of 48.6 millimeter diameter pipe. The elastic material added to the mid region, at a 6 metre ceiling height, makes the structure as a whole responsive to wind pressure. That elastic material also makes it possible to build the transparent container of nothing but thin pipes. The double layers of PVC sheets dividing the strata ensure stability of temperature and humidity inside the structure.

The constantly changing clouds are both soft structures and part of the natural environment that surrounds us. It is not the structure alone but the invisible differences in humidity and temperature and the weather, the time of day, and other aspects of the surrounding environment, all influencing each other, little by little, that make this work an artistic whole.

The edges of the clouds are sharp yet soft, and always in motion. Their color, density and brightness are constantly changing in tune with the weather and time of day. The temperature and humidity inside the container are controlled to keep the clouds at their designed height. The air inside the container forms three distinct strata, one cool and dry, at the bottom, a warm and humid middle stratum, and a hot and dry stratum at the top. The warm, humid layer is where the clouds form.

Cloudscapes is, in effect, an experiment in creating a new type of architectural space, one that achieves integration in engagement with its environment.

Project: Cloudscapes
Location: Tokyo, Japan
Architects: Tetsuo Kondo Architects, Tokyo, Japan; Transsolar (Nadir Abdessemed, Jakob Merk and Matthias Schuler), Stuttgart, Germany
Technical info: PVC sheets
Picture credits: Tetsuo Kondo Architects, Ken’ichi Suzuki, Yasuhiro Takagi
Hirose Dental Clinic

Eleven Nine, a Japanese architecture studio, designed a new innovative dental clinic where brisk clouds are drawn clearly on the glass at daytime. At sunset, they change into faint, washy mist-like lines of smoke.

The surface is double structured: a sheet with cloud designs is attached on the outside glass, the same design is also printed on the inside PVC sheet. Besides, putting the indirect illumination between films, magical perspectives occur when you see the building from the front.

This is as much a visual presentation as is the Japanese traditional bed net, Kaya. However, for the patients' privacy, the part where the treatment rooms are behind is grade-washed. The inside of the clinic is filled with an invigorating open space that is enhanced by the 4.5m high rooftop.

There, three towering columns are anchored and flow smoothly to the floor, where the front desk is set up inorganically as if someone had rolled over an egg. Part of the innermost wall is diced so that the sunlight shines into the director’s room.

Only this room has pure white tiled floors to make it seem sacred with opalescence. From the director’s room, you can see the back court, where green leafy ash trees are planted in the thick lawn, full of colour filling the sunlit cubic for ornamental use and catenary illuminations are hung inside of the dispensary room.

Oval lamps are strung from three locations appearing as if they are floating like clouds. The grass on the garden bring down the temperature of the ground, it combats global warming.

The grass photosynthesises and evaporates, keeping the air clean. At night time, the clouds on the glass hangs like the ink painting, sumi-e, taking in the reflection of rain, shadows, and moon.

Project: Hirose Dental Clinic
Location: Nosakucho, Kawachinagano, Osaka Prefecture, Japan
Architects: Eleven Nine Interior Design Office, Osaka, Japan
Technical info: PVC tents
Picture credits: Seiryo Yamada
Website: www.11-9.jp
Danae Lamp

Italian artist and designer Maurizio Galante teamed up with trend forecast analyst and designer Tal Lancman, to form Interware. An interesting example of their design approach is the Danae lamp, designed for Italian brand Boffi.

Interware’s crossover vision transverses the different design disciplines, from fashion to furniture, interiors, lights, food, architecture and gardening.

As the duo moves freely between disciplines, they revisit domains equipped with new understandings, insights and observations. The process results in a multi-faceted concept, with a subtle balance between the pragmatic and the irrational.

Danae is composed of triangular plastic sachets made of transparent PVC, filled with air.

The relationship between air and light is the starting point. Danae changes from water to air and shows itself in a spiral motion, animated and revealed by a play of light.

**Project:** Danae Lamp  
**Producer:** Boffi, Italy  
**Designer:** Maurizio Galante, Tal Lancmann, Interware  
**Technical info:** Transparent PVC  
**Picture credits:** Chen Chen and Kay Williams  
**Website:** www.maurizio-galante.com, www.boffi.it