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#25

Prefab's Last Frontier



One of the most pressing needs in many countries around the world is housing solutions. Governments have to deal with natural disasters like earthquakes, hurricanes or floods; cities face many complex issues due to social development which includes providing and maintaining high quality social housing to millions of people, in order to face fast urban development or to reclaim degraded urban areas.

Now, imagine being able to put up a structure that is easy, fast and cheap to erect. Think about being able to make inner rooms and spaces by just joining and rearranging panels? A place that is healthy to live in, self-extinguishing, maintenance-free and durable. Now, finally, imagine the building also comes with a solar panel system to generate power for different needs.... What a wonderful dream that would be!

Home 54sqmExcept, this dream has quickly become reality. HOME™ is a modular housing system that meets all the criteria that you can think of. As Friul Filiere Spa, the Italian company behind HOME™ puts

it, the *"aim is to create houses without any impact on the environment but living in harmony with it."* A structure that can be installed permanently, or temporarily: replaced, relocated or removed if needed.

HOME™ is perfect to build definitive villages - for fast, easy construction of new residential areas but, it can also be rapidly installed to give shelter to people in need, in case of natural disasters or violent conflicts, and can give people a better place to live in, with the basic sanitary conditions such as clean water, hygienic and hydraulic systems.

The basic model can be configured in different ways depending on interior needs and applications. The construction uses different profile components in assembly rather than a mono-block system. The main structure of the house is in steel which guarantees stability in case of earthquakes. Plastic profiles and panels are then installed on these steel columns.

This innovative concept makes it possible to use two different materials for the external and internal sides of the wall: acrylic layers on the inside, and PVC panels on the outsides. It is not even necessary to paint the walls – FFC, the ultralight, composite, patented material, looks like and can be worked on like wood, but acts as if it were PVC.

A special UV resistant layer is added on the external PVC surface. This material is modified with additives which influence lifespan, chemical, weather, abrasion and outdoor resistance. Stabilisers ensure the heat stability of the material and protect the product from changes.

To improve thermal insulation performance of the wall, the inner core can be empty or filled with different materials depending on use: plasterboard, sand, concrete, natural fibres like coconut, EPS and others. Avoiding the use of concrete makes it possible to disassemble the panels and relocate the house.

The internal panel is made of FFC™ material, it consists of the mixture of thermoplastic material with vegetal fibres, lightened with closed cells expansion. This material has the property to cease burning once the source of the flame has been removed. The internal panel transpires which makes

life on the inside of the house healthy thanks to both the FFC™ material of the internal wall panels and the ventilated roof which create a natural ideal microclimate. Many different windows and transparent Plexiglas spot lighting under the roof create a comfortable place to live in, and allow natural light inside the rooms.

These systems are ideal for interior partitions, complete modular prefabricated houses or to build construction camps and can find applications in building schools, industrial sheds, field/rural healthcare centres or refugee camps.

All the elements of the main panel are loaded in pieces which can be easily assembled at site. Different panels and profiles can be stacked together, thereby saving nearly 2/3d of the space in shipping containers.

A 54 square metre unit is delivered on site and can be installed (on the concrete base prepared earlier) within 7 to 15 days without any heavy machinery. And the whole structure: including steel columns, plastic profiles, fixtures, electrical and hydraulic installations, etc. can be shipped in a 20'' container which means that such structures can be rapidly transported and erected in times of need with a low environmental impact.







Friul Filiere Spa | www.friulfiliere.it



Cultural Park Castellum Hoge Woerd









The design for Castellum Hoge Woerd, the cultural park, is based on a architectural and landscape interpretation of an ancient Roman Castellum (fort), and represents an important, and unique, cultural heritage site in the Netherlands.

The project, developed by the Dutch SKETS Architectuurstudio, includes a theatre, restaurant, museum, environmental/sustainability centre, courtyard for events and an outdoor area used for community programs.

The Lower Germanic Limes, once the border of the Roman Empire, is an archaeological line that stretches along the Rhine between Finxbach, in Rhineland-Palatinate, and the mouth of the Old Rhine at Katwijk. The Lower Germanic Limes are part of the European Limes: an elongated collection

Architects | **SKETS Architectuurstudio**, Amsterdam, The Netherlands

Location | **Utrecht, The Netherlands**

Technical info | **Barrisol PVC Ceiling**

Picture credits | **Sven Eric Panjer, John Lewin Marshall**

of archaeological sites running from the Antonine Wall in Scotland to the Black Sea in Romania, which once formed a single coherent military system. The Limes are also known as the largest archaeological monument of Europe.

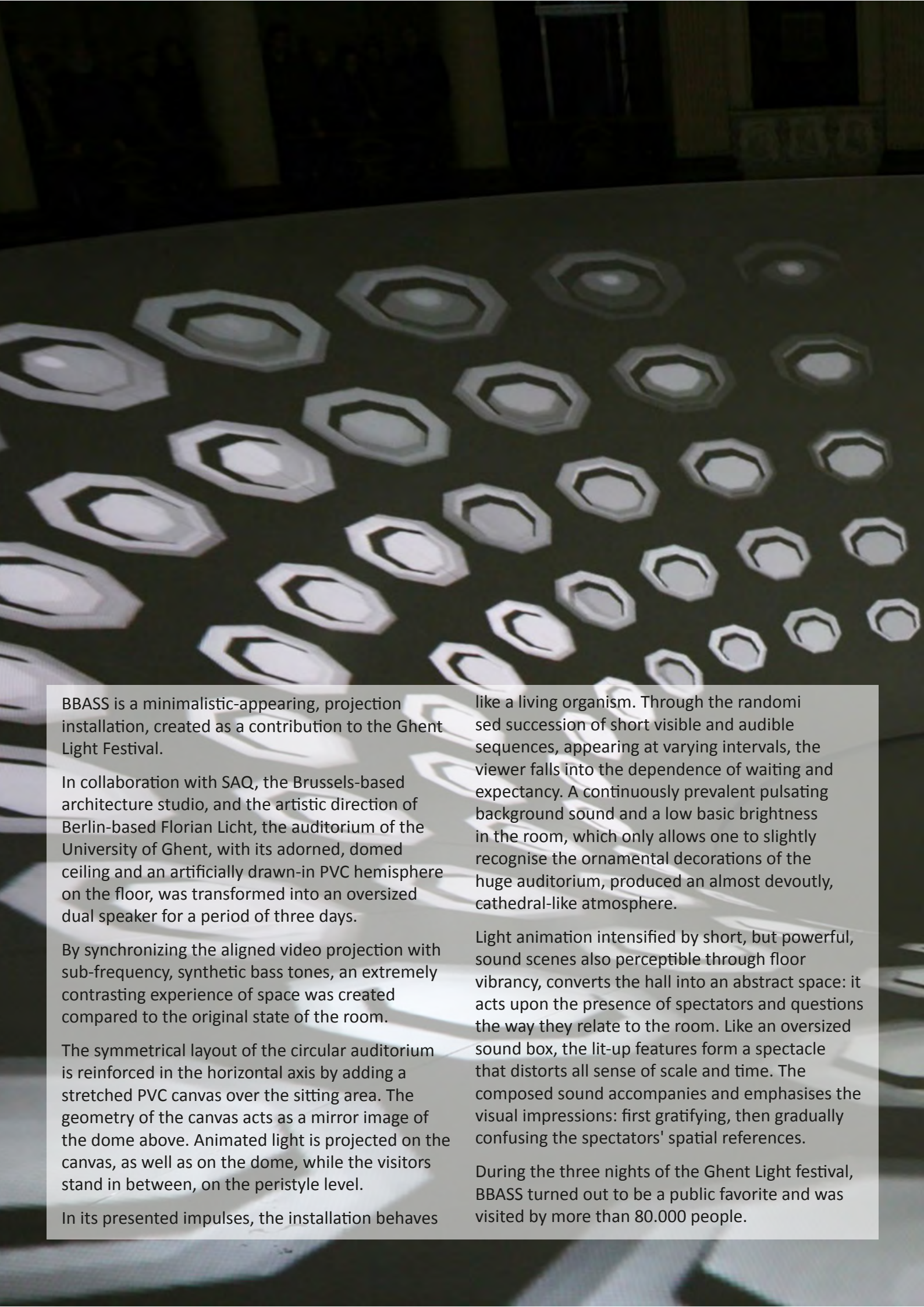
Deviation from a traditional Castellum can be found in the added pavilion building. The reason for this addition lies in the desire to find a space for the Meern 1, a completely intact two-thousand-year-old Roman ship, found and excavated during the development of the Leidsche Rijn. The pavilion is also the best solution to provide a modern auditorium for 250 visitors. The pavilion building cuts through the walls of the Castellum and represents the only element that crosses the fort and also provides a view to the courtyard.

The facades of the pavilion consist of patterned aluminium panels, making reference to the history of the place.

Inside the pavilion, functions are combined: the foyer of the theatre merges with the restaurant and provides an exhibition space for the Roman ship. The ship lies on top of glass sheets and around it people can read about its history. The white PVC ceiling diffuses the light in a sweet and homogeneous way, onto the whole exhibition space.

Almost the entire complex is built on sand, without a pile foundation, with the exception of the theatre on the first floor of the pavilion. Here four clusters of foundation piles are used, thus giving the pavilion a hybrid foundation.





BBASS is a minimalistic-appearing, projection installation, created as a contribution to the Ghent Light Festival.

In collaboration with SAQ, the Brussels-based architecture studio, and the artistic direction of Berlin-based Florian Licht, the auditorium of the University of Ghent, with its adorned, domed ceiling and an artificially drawn-in PVC hemisphere on the floor, was transformed into an oversized dual speaker for a period of three days.

By synchronizing the aligned video projection with sub-frequency, synthetic bass tones, an extremely contrasting experience of space was created compared to the original state of the room.

The symmetrical layout of the circular auditorium is reinforced in the horizontal axis by adding a stretched PVC canvas over the sitting area. The geometry of the canvas acts as a mirror image of the dome above. Animated light is projected on the canvas, as well as on the dome, while the visitors stand in between, on the peristyle level.

In its presented impulses, the installation behaves

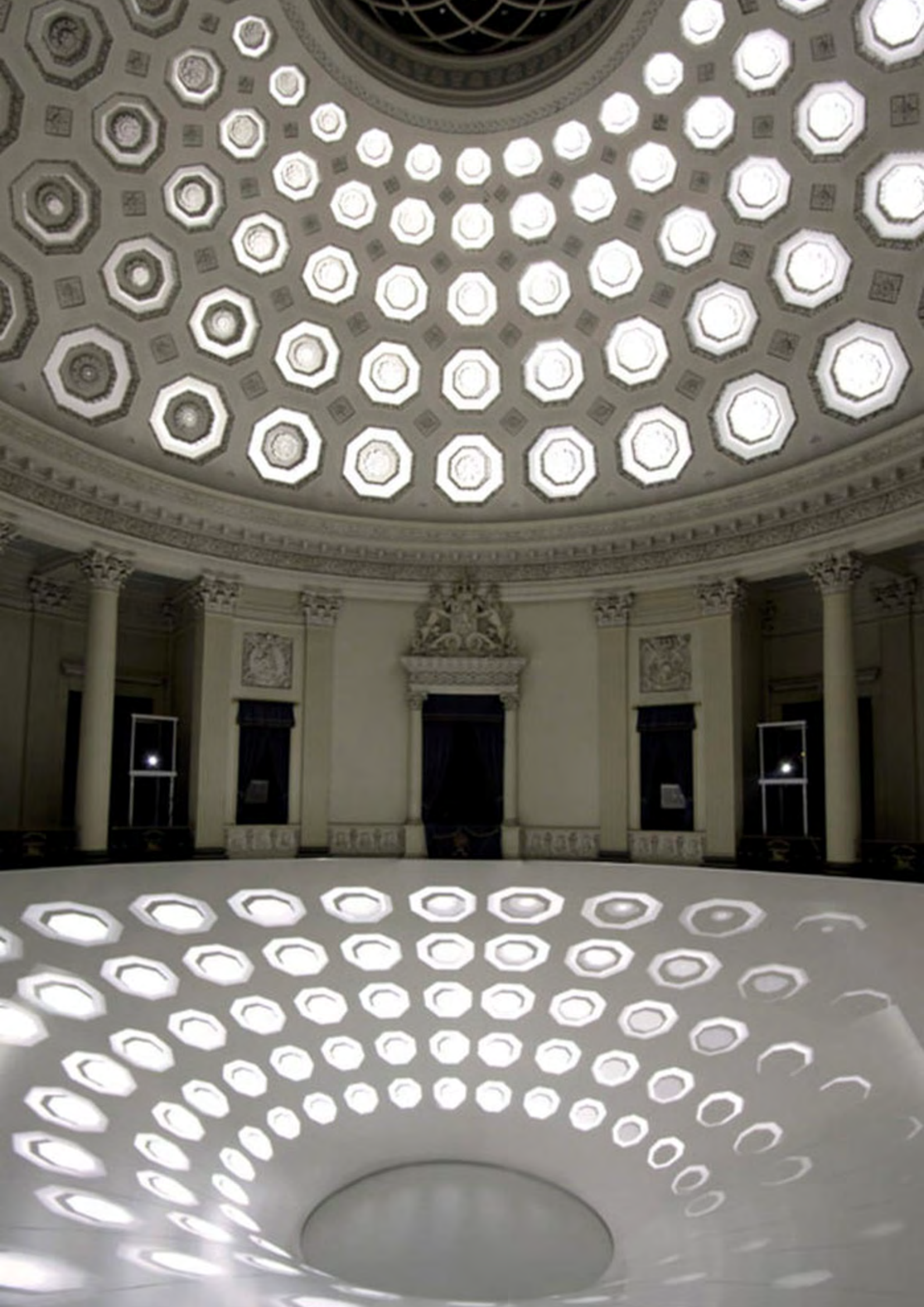
like a living organism. Through the randomised succession of short visible and audible sequences, appearing at varying intervals, the viewer falls into the dependence of waiting and expectancy. A continuously prevalent pulsating background sound and a low basic brightness in the room, which only allows one to slightly recognise the ornamental decorations of the huge auditorium, produced an almost devoutly, cathedral-like atmosphere.

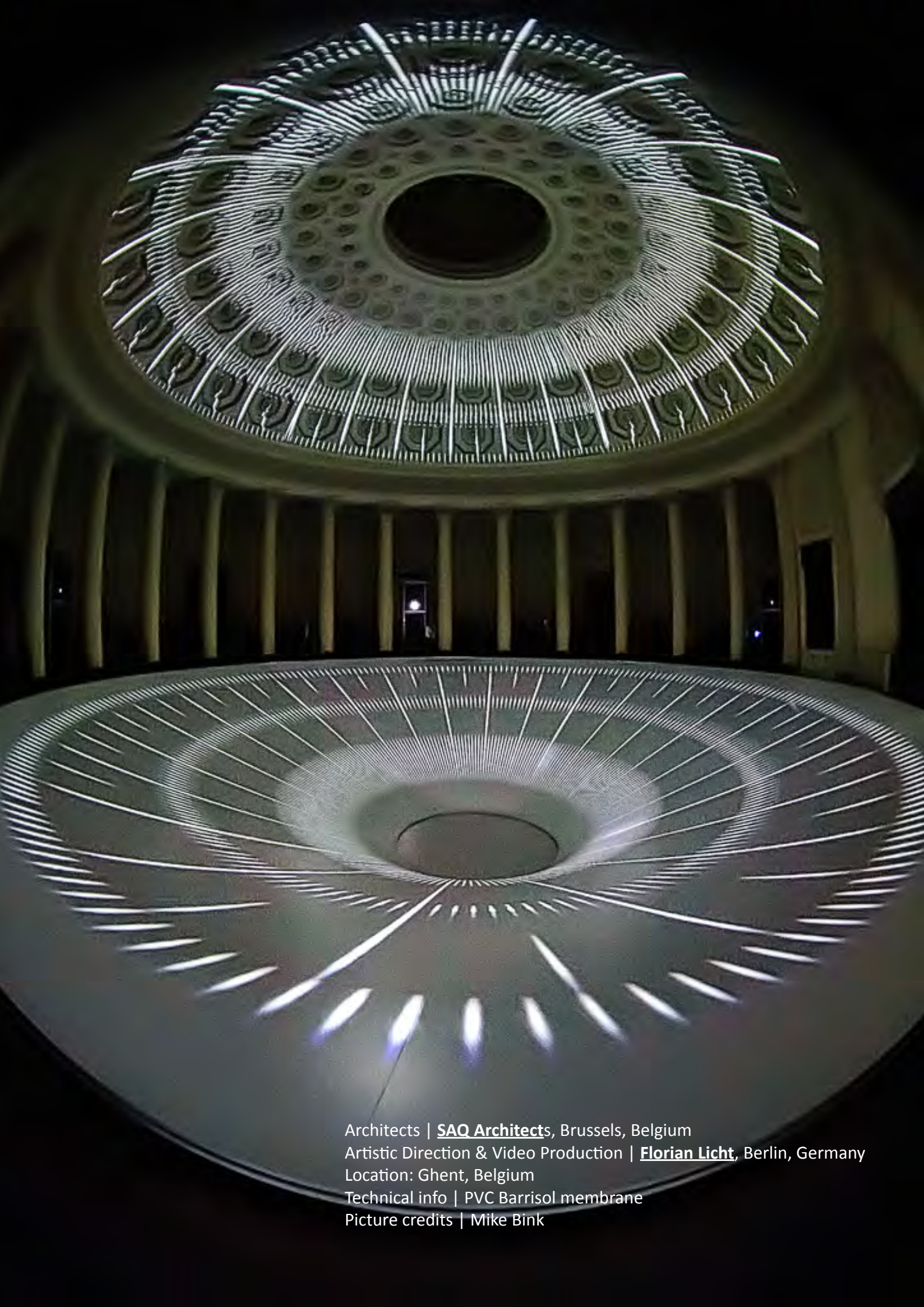
Light animation intensified by short, but powerful, sound scenes also perceptible through floor vibrancy, converts the hall into an abstract space: it acts upon the presence of spectators and questions the way they relate to the room. Like an oversized sound box, the lit-up features form a spectacle that distorts all sense of scale and time. The composed sound accompanies and emphasises the visual impressions: first gratifying, then gradually confusing the spectators' spatial references.

During the three nights of the Ghent Light festival, BBASS turned out to be a public favorite and was visited by more than 80.000 people.

BBASS







Architects | **SAO Architects**, Brussels, Belgium

Artistic Direction & Video Production | **Florian Licht**, Berlin, Germany

Location: Ghent, Belgium

Technical info | PVC Barrisol membrane

Picture credits | Mike Bink





Kaffee Partner Headquarters

Following the international award-winning Leonardo Glass Cube, German practice 3deluxe, have once again completed a piece of corporate architecture with an ambitious design and expressive formal language.


On all storeys, asymmetrically curved ribbons on the façade link the three edifices that make up the U-shaped complex with one another. They elegantly conceal the orthogonal grid of the concrete skeleton structure. The ribbons' flowing contours give the architecture momentum and create visual suspense, which culminates in the animated, vertically staggered composition of the administration wing. Positioned on the south-eastern corner of the plot next to the approach to the company site, this particular building represents a prominent eye-catcher. The PVC ceiling slabs, differently shaped and cantilevered on each floor are surrounded on all sides by the meandering ribbons on the façade, which here assume the role of a parapet.

The colour concept for the architecture and interior design of the new headquarters combines white as the main colour with near-natural hues from the world of coffee and, here too, helps create a holistic image of the company.

Accurately assembled from 150 custom-made pre-fabricated concrete parts, the façade ribbons structure the 100-metre view from the road of the corporate headquarters and create a sense of depth. Whereas on the cubic logistics hall, the ribbons still form a straight-lined relief, in the direction of the administration building their contours become increasingly curved before at least even their surfaces morph into gentle waves.

On the front of the ensemble the opposite is the case: On the façade of the customer support wing to the right of the four-storey administration structure, the façade ribbons once again take the form of straight strips running parallel to the front of the building. In line with the building's surroundings, the dynamic façade was designed with a view to being observed at eye-level and from a short distance. From the perspective of passers-by, be they on foot or motorised, the under surfaces of the overlapping storey slabs and façade ribbons present a particularly attractive, varied interplay between shape, light, and shadow. At times, the light reflecting off the copper-coloured window frames and sun-protection lamellas give the white surfaces a gentle metallic shimmer.





Architects | **3deluxe**, Wiesbaden, Hamburg, Germany
Location | **Osnabrück, Germany**
Technical info | **Barrisol PVC Ceiling**
Picture credits | **Emanuel Raab**



Bouncing Bridge



With the growth of World Cities in the 1990s, the contemporary notion of the Urban Gathering was born. Its essential characteristic is the creation of a specific urban sense of time through a scheduled series of varied ephemeral events. Paris has chosen the Seine River to anchor its warm-weather leisure projects, like Paris Plage, where stretches of heavily-trafficked riverside arteries are transformed into beaches of sand and palm trees.

The project, developed by French AZC Architects, allows locating an architectural reflection within the realms of urban transformation and enjoyment. The architect's intention is to invite its visitors and inhabitants to engage on a newer and more playful path across this same water.

AZC Architects propose a distinctive urban feature: Bridge Bounce, an inflatable bridge equipped with giant trampolines, dedicated to the joyful release from gravity as one bounces above the river. Installed near the Bir-Hakeim Bridge, Bridge Bounce is formed of inflatable modules, like giant life-preservers, 30 metres in diameter.

In the central part of each ring, a trampoline mesh is stretched. The floating buoys, fabricated in PVC membrane, are attached together by cords to form a stable and self-supporting ensemble. Each module under tension, filled with 3700 cubic metres of air, develops in space with an arch-like form. Designed entirely of light materials: PVC membranes, trampoline mesh, air... the project crosses the Seine at a specific point; it can of course adapt to larger or smaller dimensions at other sites.

Bridge Bounce allows every visitor a novel view of Paris from his or her own unique spatial position: upright and leaping, upside down and tumbling, gliding above like a circus performer.



A low-angle, upward-looking photograph of a man in mid-air, jumping from a curved, blue and red structure. The structure has a blue interior and a red exterior with black cylindrical supports. The structure is part of a larger, curved, white architectural element. The background shows a body of water and a line of trees under a bright sky. The image is oriented vertically, with the man at the top and the water at the bottom.

Architects | **AZC Architects**, Paris, France

Location | **Paris, France**

Technical info | **Barrisol PVC Ceiling**

Picture credits | **Sergio Grazia**



Yarra Valley Water





Architect | **Gray Puksand**, Melbourne, Australia
Location | **Melbourne, Australia**
Technical info | **Bolon PVC Flooring**
Picture credits | **Bolon**



The Yarra Valley Water workspace and staff canteen designed by Australian architect Gray Puksand were anchored on four key principles: Think, Chill, Focus and Meet.

The diversity of these spaces is achieved by using the building shell as a blank canvas. One of the key elements was to influence end-users and ultimately encourage thinking, enhance productivity, promote relaxation spaces and generate a communal 'meeting' orientated atmosphere, where knowledge-sharing and problem-solving combine in a collaborative forum.

Furniture injects colour into the space, while plywood is used extensively throughout to provide warmth. Plants provide a connection with nature and an animated stairwell vertically connects the levels to promoted harmony between the designated areas.

The vinyl floor has been developed mixing different tiles and creating interesting areas in various tones of grey. The grey flooring is a stylish backdrop to the vibrant furniture.

The completed project provides a workspace full of choices, intimacy and daylight that has been delivered to the highest standards of quality in keeping with the design principles envisaged for the development.



Designer | **Philippe Starck**, Paris, France

Producer | **Ipanema**

Technical info | **PVC**

Picture credits | **Ipanema**

Ipanema with Starck





Brazilian brand Ipanema has partnered up with world-renowned designer Philippe Starck to create a collection of sleek minimalist sandals that translate modern elegance and sophistication.

Starck lends his talent for minimal and organic design to re-envision a collection of modern, elegant sandals accessible to purveyors of stylish and smart innovation worldwide.

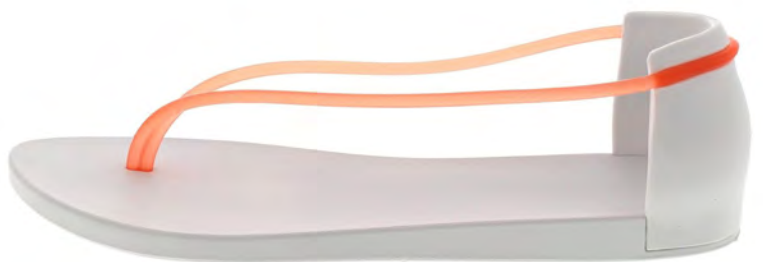
These dynamic sandals are inspired by various possible lifestyles and moods to recognise all dimensions of the modern woman: such as Arty, Glamorous, Natural and Sophisticated Chic.

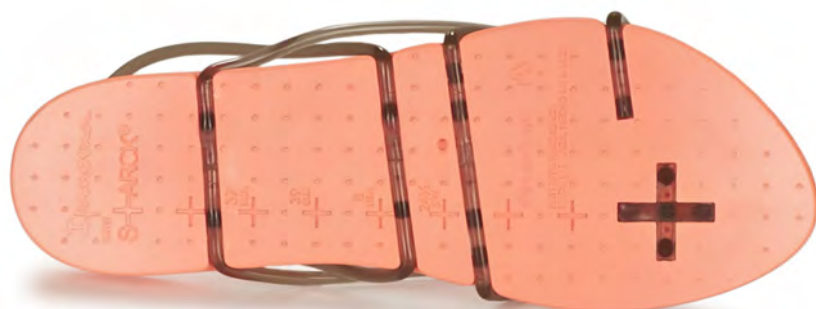
“The Ipanema with Starck collection explores the territory of high elegance paired with the utmost minimalism. When you reach elegance with a few dollars or euros, this is no longer magic; it is a modern miracle,” Starck explains.

The collection’s palette is a blend of neutral and citrus tones including whites, blacks, smoke, acid yellows, orange, rose, transparent yellows, and transparent orange.

Focusing on sustainability, Ipanema with STARCK was developed with 30% recycled PVC and is 100% recyclable.

The Ipanema with STARCK collection is the perfect balance between industrial production and artisanal savoir-faire.





Superstar Lamp





Designers | **Puff Buff**, Warsaw, Poland
Technical info | **Transparent inflatable PVC**
Picture credits | **Puff Buff**

Puff-Buff Design was started in 2003 in Warsaw, by Polish designers Anna Siedlecka and Radek Achramowicz. The studio explores the qualities of PVC and other materials, creating pneumatic structures and new kinds of light sources such as LED and fluorescents.

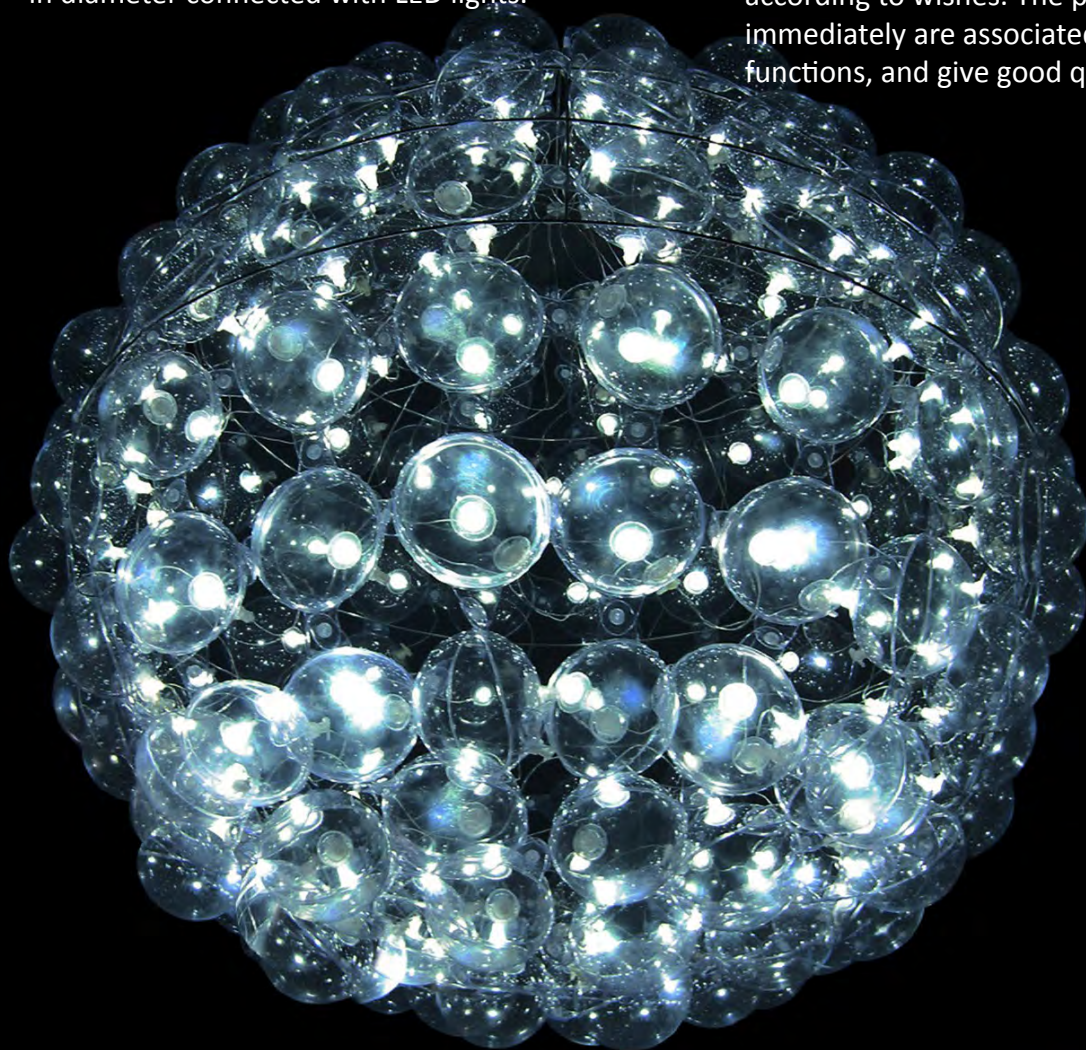
The Last lighting collection is inspired by the adventures of Alice in Wonderland. Anna and Radek dedicate their lamps to people who have an emotional relationship with the objects.

One of the most distinguishing products is the Superstar hanging lamp which is built with inflatable transparent elements from 11 to 15 cm in diameter connected with LED lights.

The spherical cluster of transparent PVC bubbles houses 150 white LEDs to shower the space with diffused daylight. A brushed stainless steel construction mounts discreetly on the ceiling. Thanks to this flexibility one can form glowing objects of various shapes and sizes - from single glowing walls of any size. The lightness of the system allows for bigger constructions.

During the creation of their projects the designers assumed that lightness and ease of transport were the most important factors.

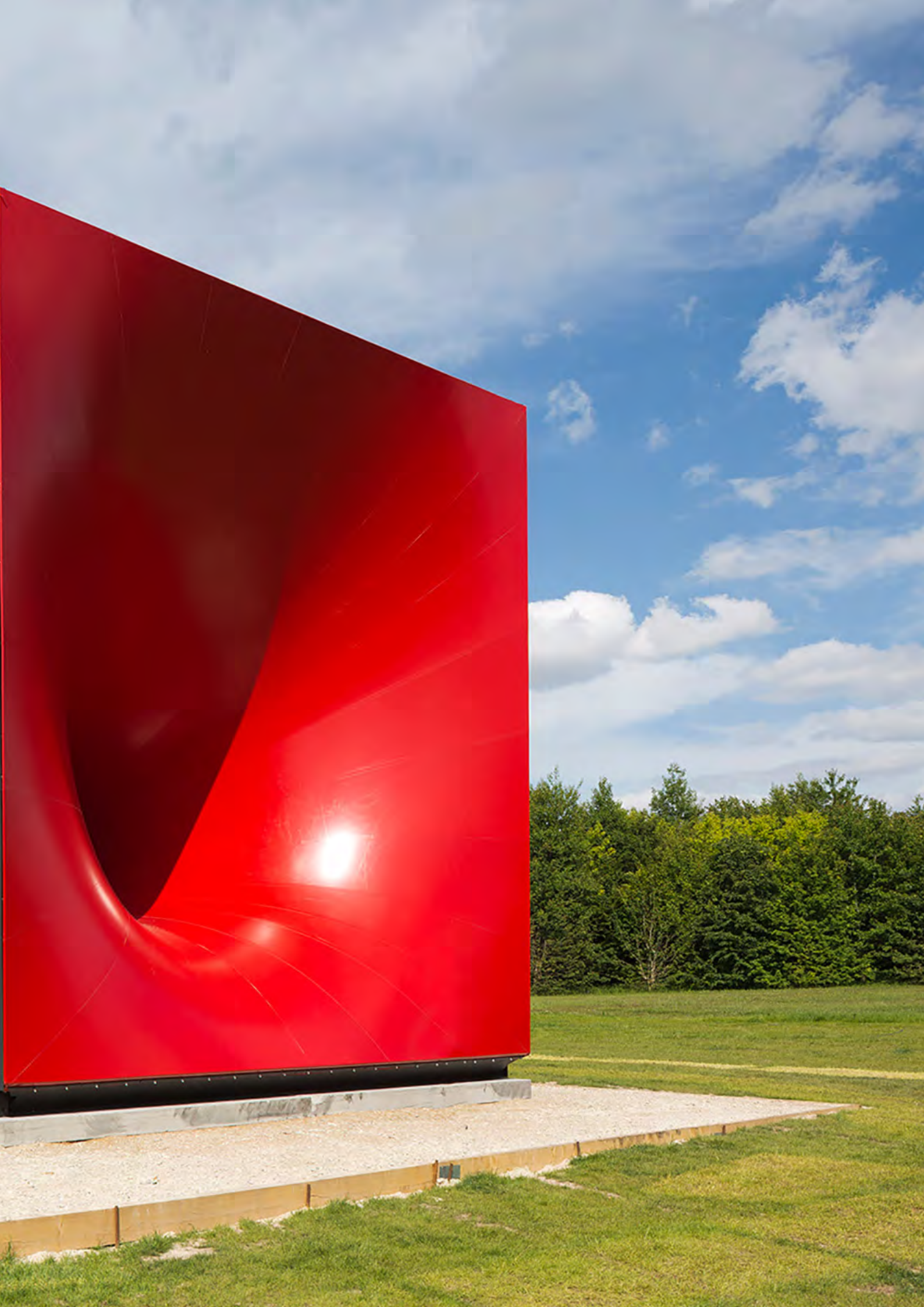
Another important thing for Puff-Buff is also to offer to the end-user objects that can be modified according to wishes. The products, though they immediately are associated with toys, fulfil their functions, and give good quality lighting.





Sectional Body Preparing for Monadic Singularity







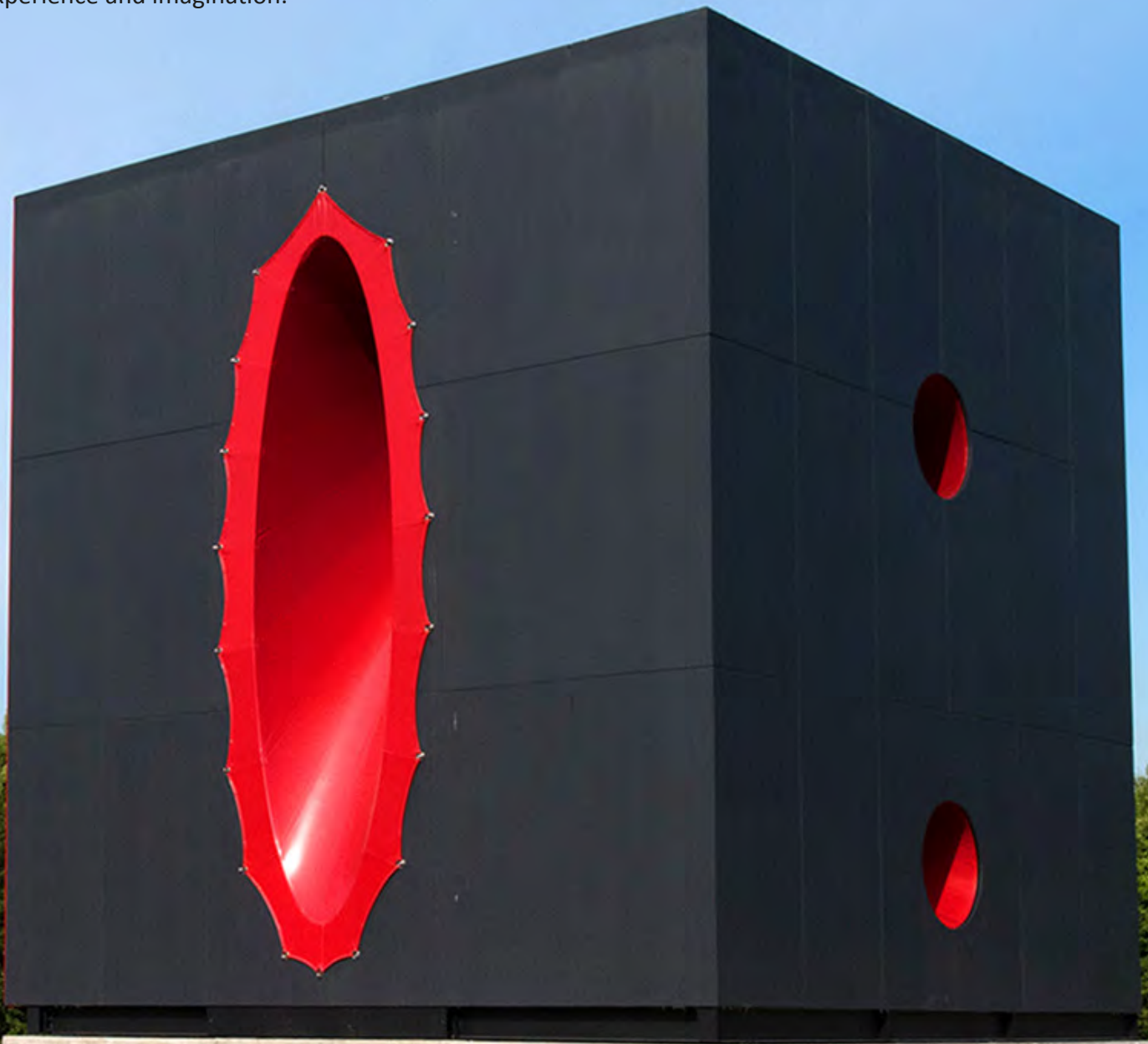
Artist | **Anish Kapoor**, London, UK
Location | **Château de Versailles, France**
Technical info | **Inflatable PVC**
Picture credits | **Fabrice Seixas, Silvia Neri**

'Sectional Body preparing for Monadic Singularity', a monumental artwork by British contemporary artist, of Indian origin, Anish Kapoor, was displayed in the gardens of the Chateau de Versailles, in Versailles as part of 'Kapoor Versailles', an exhibition of Kapoor's work.

For Kapoor, a work of art doesn't exist alone but through its viewer. The visitors at Versailles were witness to the dualities of the artist's work: heaven and earth, visible and invisible, inside and outside, shadow and light. This universe can be read through experience and imagination.

Kapoor's 'Sectional Body preparing for Monadic Singularity' invites exploration of the labyrinthine form of Le Nôtre's gardens and the "trouble about rationality and perception," as Kapoor suggested.

The originality of this exhibition, what made it unique, even to those who have long been familiar with Kapoor's work around the world, is that in Versailles his vision met an imagination, set in stone, by history.



Kaffee Partner Headquarters

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