

# WonderfulVinyl

ecvm  
The European Council  
of Vinyl Manufacturers

PVC in architecture  
and design



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# THE VINYLPLUS® PRODUCT LABEL

## GROWING RECOGNITION AS A LABEL FOR GREEN PUBLIC PROCUREMENT

The VinylPlus® Product Label not only helps companies to develop PVC products with higher sustainability performance but is also a tool to guide public and private buyers to select PVC products showing the best sustainability profile. In 2020, the VinylPlus® Product Label has been recognised as a valid Label for Green Public Procurement in Belgium and validated for an ISO/IEC 17065 accreditation at the European level. Thanks to the growing recognition of the Product Label, architects, designers and construction professionals across Europe can easily identify and select PVC products that meet the highest sustainability standards.



### RECOGNITION AS CERTIFICATION SCHEME FOR GREEN PUBLIC PROCUREMENT

The VinylPlus® Product Label is recognised by the Belgian Federal Institute for Sustainable Development as a label meeting the conditions of article 43(1) of the EU Public Procurement Directive 2014/24/EU.

From now on, the Product Label will be promoted to Belgian public purchasers via the [Guide for Sustainable Purchasing](#) in five product categories – windows and doors, products containing recycled plastics, protection films, flooring and rug products, textile flooring, alongside well-established sustainability labels such as Ecolabel, FSC, PEFC, Cradle to Cradle, Der Blaue Engel and The Nordic Swan.



The VinylPlus® Product Label is now also recognised in the new voluntary [Sustainable Carpentry Label](#) launched by the Belgian Construction Certification Association (BCCA) for the Belgian manufacturers of exterior carpentry.

Window manufacturers are now strongly encouraged to use Vinyl Verified® profiles for being certified. The Sustainability Carpentry Label will soon be included in the Belgian public procurement specifications.





**PICTURE CREDITS**  
Courtesy of Verseidag



### VALIDATION FOR ISO/IEC 17065 ACCREDITATION ACROSS EUROPE

The VinylPlus® Product Label has been since April 2019 one of the few voluntary sustainability certification schemes validated for an ISO/IEC 17065 accreditation in Italy by Accredia, the Italian accreditation body. Running third party audits by certification bodies specifically accredited by national accreditation bodies for a scheme is a pre-requisite for many public purchasers to include this scheme in public procurement specifications. In order to help the certification bodies to include the Product Label in their ISO/IEC 17065 accreditation from their home country accreditation body, VinylPlus® has successfully launched and completed the EA-1/22 procedure of the European cooperation for Accreditation (EA) allowing to extend the Italian validation to the 36 country members of EA.



### RECOGNITION AS ENABLER FOR A CIRCULAR BUILT ENVIRONMENT

Circular building has become a hot topic in Belgium since the launch in February 2019 of the Green Deal Circular Construction, which main objective is to deliver projects addressing all barriers to circular construction. One of these projects is the launch of [Circubuild.be](http://Circubuild.be), an online platform that identifies the best circular practices for Belgian architects and construction professionals through a peer review process.

The VinylPlus® Product Label has been recognised by the experts of [Circubuild.be](http://Circubuild.be) as an enabler of circular built environments.



**To date, the VinylPlus® Product Label is proudly held by 10 companies for 112 products and product systems manufactured at 18 European sites.**



**Find out more about the VinylPlus® Product Label and certified products at:**

[productlabel.vinylplus.eu](http://productlabel.vinylplus.eu)



# FOOTBALL STADIUM SALIF KEITA

## **TECHNICAL INFO**

PVC Roof  
Membrane

## **ARCHITECTS**

B+C Architects,  
Paris, France  
[www.bcarchitectes.com](http://www.bcarchitectes.com)

## **LOCATION**

Cergy-Pontoise,  
France

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The Football Stadium Salif Keita project strived to go beyond the traditional divide between architecture and external works, where construction is treated as an isolated project simply dropped into a site, followed by landscaping to culminate the work. Instead, the project was carried out with a coherent and unified vision to construction and landscaping.



To B+C Architects, a stadium is a living and breathing architecture with its image ever changing. The monument has been designed in a way to effortlessly adapt to its natural surroundings.

The structure of the tribune, which can welcome 1,000 spectators, is made of reinforced concrete. The roof, made of a tensile PVC membrane, protects the public from the sun and rain while allowing soft, natural light to enter.





The roof structure constitutes two arched glulam beams, reinforced by steel tubes above the PVC membrane with its variable geometry that allows the central part to augment over the tribunes.

On the north and south ends of the stadium, the roof opens into a triangular void, marking the two main entrances to the tribune. The translucent PVC membrane allows a play of light and shadow by day which becomes a glowing "lantern" by night.



**PICTURE CREDITS**  
B+C  
Architects



# PEOPLE'S PAVILION

## TECHNICAL INFO

Recycled  
PVC

## ARCHITECTS

Bureau SLA &  
Overtreders W,  
Amsterdam,  
The Netherlands  
[www.bureausla.nl](http://www.bureausla.nl)  
[www.overtreders-w.nl](http://www.overtreders-w.nl)

## LOCATION

Eindhoven,  
The Netherlands



The Dutch Design Week is the largest and most high-profile design event in Northern Europe. At the event, the central meeting place for creative thinkers and do-ers from all over the world is the People's Pavilion designed by Dutch design studios, Bureau SLA and Overtreders W.

To create the People's Pavilion, creative teams solely used borrowed and/or recycled materials. A design statement of the new circular economy, the pavilion is a 100% circular building where no materials were lost in construction.

The designers and architects have applied a radical new approach: all materials needed to make the 250 m<sup>2</sup> building were borrowed, not only from traditional suppliers and producers, but also from Eindhoven residents. Just to be clear, this was not 70%, 80% or 95%, but 100% of the materials (concrete and wooden beams, lighting, facade elements, glass roof and recycled PVC cladding) that was returned completely unharmed to the owners after the end of the Dutch Design Week.



The multi-coloured diamond-shaped shingles that covered the building were made from shredded PVC building products such as PVC window frames, PVC drainpipes and PVC rain gutters. The shingles were hung in overlapping rows from a single screw.

The People's Pavilion project won the Frame Awards in the Sustainable Design category, The Dutch Design Awards in the Habitat category, and the Innovation Award.

**PICTURE CREDITS**

Filip Dujardin



NBA

# OFFICES

## TECHNICAL INFO

PVC flooring & PVC adhesive applications

### ARCHITECTS

KMD Architects,  
San Francisco, USA  
[www.kmdarchitects.com](http://www.kmdarchitects.com)

### LOCATION

Mexico City,  
Mexico





The new offices of the National Basketball Association (NBA) in Mexico City offer a dynamic and playful environment, allowing visitors and employees to have unique experiences throughout their visit and workday. During the design process, KMD architects worked alongside the NBA's staff to become familiar with the environment and make improvements based on their needs.

The main challenge was to encapsulate the adrenaline and

excitement of basketball within an office design. The building framework allowed for a variety of working configurations, making the environment amenable for collaboration while allowing for individual workspaces.

The generous space features a high ceiling, large windows, bold graphics and an open floor plan. The design played on the red, blue and black colours of the NBA's branding that complement the solid and industrial

quality of the materials used such as perforated metal, exposed pipelines, PVC flooring and PVC adhesive applications. Each space was carefully designed to give it a strong visual identity, starting with the reception area where a suspended ceiling of basketballs is incorporated with a hardwood floor to place visitors in the free throw line upon arrival.

An "All Hands Space" is the core of the project - a flexible, multi-purpose area, with large windows, metal frame shelves for displaying the NBA's merchandise and a comfortable seating area for employees, clients and visitors. The space accommodates various activities - informal meetings, workshops, training, movie screenings and press/team presentations. As the heart of the office, it connects via a movable glass wall the reception, the boardroom, the private office space and the concessions area. The private office area contains two open working spaces along with small meeting rooms. They connect through a space for collaboration that feature large screens, blackboards, a wide range of furniture and a set of private phone booths.

**PICTURE CREDITS**

Dane Alonso



# ROLAND- GARROS TOURNAMENT



## TECHNICAL INFO

PVC  
membrane

## ARCHITECTS

ACD Girardet,  
Versailles, France  
[www.acd-girardet.com](http://www.acd-girardet.com)

## LOCATION

Roland-Garros,  
Paris, France

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The prestigious Roland-Garros tennis complex in Paris welcomes thousands of visitors every year. Built in 1928, the Philippe-Chatrier Court is the venue's main court, offering seats to 15,000 spectators. While the court has seen significant restructuring and improvement works since 2018, it recently underwent an even more dramatic transformation: the installation of a retractable roof to ensure matches can go on undisturbed in spite of bad weather or nightfall.



The retractable roof, built for the 2020 tournament, constitutes 11 steel wings, clad with a translucent and waterproof membrane made of PVC. The roof covers a total surface equivalent to 1 hectare and requires around 15 minutes to be fully deployed.

The challenge was daunting as the French Tennis Federation who owned the project had three expectations – full deployment within minutes, passage of natural light and good acoustic performance when the roof is deployed. While the challenge was difficult, it was successfully met.

**PICTURE CREDITS**

Maffeis Engineering

# ASAN WAREHOUSE

## TECHNICAL INFO

PVC pipes

## ARCHITECTS

Studio Atelier Maroo,  
Asan-Si, South Korea  
<https://www.archdaily.com>

## LOCATION

Asan-Si,  
South Korea



The Asan Warehouse is a building developed for the upcycling of PVC pipes, commonly found in the area. The project incorporated old PVC pipes into the building to increase natural lighting and drafts. This reuse not only increased the upcycling of PVC waste but also revealed how old PVC pipes can be reintroduced as new design elements.



The Asan Warehouse is a farm machinery storage with a façade made of 300mm - 400mm long PVC pipes. While superb in design, the practicality and economic feasibility of the warehouse are its essential aspects, storing farmery machines and vehicles owned by the Asan Agricultural Technology Center that are leased to farmers who need them.

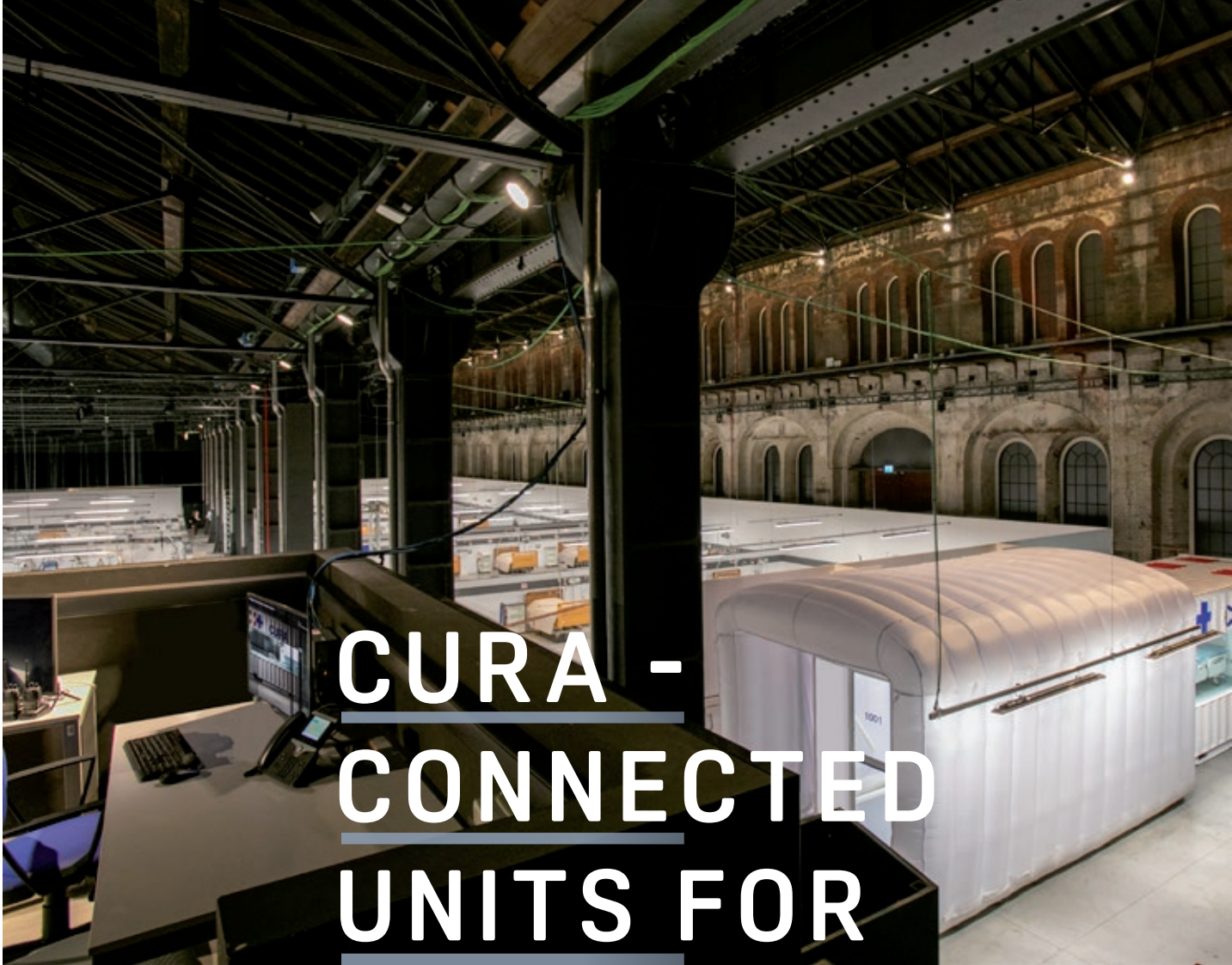


**PICTURE CREDITS**  
Narsilion

The new warehouse was designed to address reoccurring issues of the old structure. As the ventilation system of the previous warehouse consisted of a single blower, it caused acute ventilation problems when the machinery was started, producing exhaust gas and dust. In the new warehouse, the PVC pipes façade discharges exhaust from farm machinery outside

without the use of a blower and thanks to improved ventilation, moisture is removed effectively. Thanks to the new design, the Asan Agricultural Technology Center is able to save 4.2 billion won in costs of farm machinery purchase, maintain the health of workers operating in the storage facility and provide improved working conditions.





# CURA - CONNECTED UNITS FOR RESPIRATORY DISEASES



## TECHNICAL INFO

PVC  
membrane

## ARCHITECTS

Studio Carlo Ratti Associati,  
Turin, Italy  
[www.carloratti.com](http://www.carloratti.com)

## LOCATION

Turin Hospital, Turin, Italy  
[www.curapods.org](http://www.curapods.org)

In response to the COVID-19 pandemic, the first prototypes of plug-in intensive care units (ICU) made from shipping containers were built and installed at a hospital in Turin, Italy.

An open source project, CURA ("Connected Units for Respiratory Ailments" and also "Cure" in Latin) proposes a quick-to-deploy solution to expand emergency facilities and ease the pressure on healthcare systems overwhelmed with patients infected by COVID-19. CURA aims to enable the quick set-up of healthcare facilities that are as simple as mounting hospital tents, but as safe as regular isolation wards, thanks to the installation of comprehensive biocontainment equipment.

Each unit (pod) is hosted within a 20-foot shipping container, repurposed with biocontainment equipment. An extractor creates negative pressure indoor, complying with the standards of Airborne Infection Isolation Rooms (AIIRs). Glass windows installed on the containers also allow doctors to check on patients from inside and outside the pods. The set up also opens the possibility for external visitors to get closer to their loved ones in a much safer and more human setting. The units are easily transferable and can be promptly shipped to any location around the world to adapt to the needs of the local healthcare infrastructure.



CURA provides Intensive Care Units (ICU) for patients affected by COVID-19. Each pod contains all the medical equipment required to care for up to two ICU patients. The unit is connected to the rest of the hospital by an inflatable PVC structure, which serves as both storage and changing rooms for medical staff. The PVC inflatable unit can also be used to connect multiple pods to create multiple modular configurations, either in proximity to a hospital or as a self-standing field hospital.

**PICTURE CREDITS**

Max Tomasinelli

# WILD COAST TENTED LODGE



**TECHNICAL  
INFO**  
PVC  
membrane

**ARCHITECTS**

Nomadic Resorts and  
Bo Reudler Studio,  
St. Paul, Mauritius  
[www.nomadicresorts.com](http://www.nomadicresorts.com)

**LOCATION**

Palatuna,  
Sri Lanka





Nomadic Resorts and Bo Reudler Studio teamed up to design and construct the spectacular Wild Coast Tented Lodge - the first of its kind in Sri Lanka.

Sustainability, landscape and heritage are intertwined in the design of the Wild Coast Tented Lodge. Located on the edge of Yala National Park in the south of Sri Lanka, the 36-tent safari camp welcomed its first guests in November 2017. The eco-resort's organic architecture integrates seamlessly into the site, which comprises dryland forests that



merge into the rugged sandy coastline overlooking the Indian Ocean. The five-star lodge is designed to give visitors an intimate experience of Yala, celebrating the flora, fauna and culture of the area, with minimal intrusion on the landscape. Local influences were especially important, from vernacular traditions and materials to community involvement.

The project was commissioned by Resplendent Ceylon, a subsidiary of Dilmah Tea, whose unique resorts offer curious travellers diverse experiences linked to Sri Lanka's history, culture and nature. The architecture references to natural formations in Yala's landscape, like the massive, rounded boulders scattered throughout the park, at a macro scale, and termite mounds, at a micro scale.

The camp's main buildings appear as offshoots of boulder-like pavilions clustered together organically at each end of the site. Larger open volumes intersect with smaller enclosed domes that house more private functions. Connecting the welcome area at the entrance to the waterfront bar, restaurant and library, it is a meandering natural landscape lined with clusters of cocoon-like tensile membrane structures called Loopers.

For Wild Coast Tented Lodge, Nomadic Resorts has designed and built 28 customised and prefabricated tented Cocoon suites. The luxury tented pod is inspired by the form of a caterpillar where the 4.5m high vaulted ceiling provides a spacious interior while keeping a relatively compact and efficient layout. The units include a combined bedroom and living room, a fully functioning en-suite bathroom and an outdoor living area with a plunge pool.



The architects spent considerable time assessing the options proposed by a range of manufacturers. They needed to find suitable material for the Cocoon Suites that would resist extreme heat in summer, torrential rain during the monsoon season and the various animals living nearby. A PVC coated polyester membrane was chosen to provide both acoustic insulation and an attractive textured finish. Large, arched openings and high vaulted ceilings create a strong sense of space while the existing vegetation is retained to ensure an authentic experience of the natural landscape.

**PICTURE CREDITS**

Marc Hernandez Folguera,  
Ferrari

# WonderfulVinyl



**THE EUROPEAN COUNCIL  
OF VINYL MANUFACTURERS**

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