



# Evalam

## Project References





# Editorial

Evalam is a Pujol Group company, a leading group and international benchmark specialized in the development of laminated glass with EVA and other interlayers.

For the past 20 years, Evalam has designed and brought to market solutions for use in homes and buildings. This has made us the international reference company for EVA for architectural use.

At Evalam we are committed to designing products that help to improve the performance of glass on facades, allowing it to meet the requirements of end users in terms of comfort, protection and useful life.

Together with our partners and distributors around the world, we have equipped hundreds of buildings and unique works with the different product lines of our firm. Our projects cover a wide typology, ranging from equipment for public use, to residential buildings, educational, leisure or even means of transport.

By publishing this reference book, we wish to show a non-exhaustive description of some international projects completed with Evalam. We thus demonstrate that Evalam is your leading partner in the use of EVA laminated glass for architectural use. Because our clients and partners are our best ambassadors.

**SINCE 1911 NO LIMITS IN GLASS CREATION.**

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# Public

Buildings designed for public use must offer the best guarantees of safety for people and greater durability over the years. We invite you to discover how Evalam has contributed to the users to enjoy the projects.







# Morelia Convention and Exhibition Center

## Mexico

The modernization of the Morelia Convention and Exhibition Center (CECONEXPO), inaugurated in September 2021, was carried out by the state administration. It responds to the need to have a renovated and modern center with adequate capacity to increase the competitiveness of Michoacán.

Michoacán needed to have a first-rate facility where to celebrate large-scale activities. With this modernization intervention, the Convention and Exhibition Center has considerably expanded its useful area, reaching 15,500 square meters. The renovation has made it possible to increase by three its maximum capacity, which now stands at 8,400 people.

The new CECONEXPO also offers all the comforts and functionalities including 14 modular rooms with movable walls. Laminated glass plays a decisive role in the Convention and Exhibition Center.

In total, 7,300 square meters of laminated tempered glass have been used, distributed between an impressive glass cube that welcomes the visitor and the entire facade of the building.

For the lamination of the ribs, 2,100 square meters of laminated glass have been installed in panels of 40cm x 300cm, all of them with the same composition of 12.7mm + 12.7mm tempered glass and laminated with Evalam Visual 2 x 0.38mm and with the structural post breakage polymer AB-AR of 1.0mm thickness

The façade and roofs have a glazed area of 5,200 square meters of laminated tempered glass in panels measuring 300cm x 180cm and with a composition of 6mm + 6mm tempered glass laminated with two layers of Evalam Visual 0.76mm.

All of the 7,300 square meters of laminated glasses were transformed by Val y Val, an important Mexican company with a long tradition in the market dedicated to the transformation, sale, and installation of laminated glass, architectural and industrial tempered glass.

AB-AR is a structural post-breakage polymer developed and designed by Evalam. It provides passive post-break safety when tempered glass is used and is intended for use in applications that require additional security, such as glazed public spaces, large commercial spaces, or in geographic areas where it is very common to reach high temperatures during much of the year. AB-AR is the interlayer with the highest mechanical resistance performance on the market, ahead of ionoplastics. Its post-break stability is demonstrated at temperatures above 50°C.

Evalam Visual represents perfection and offers transparency, high adhesion, great acoustic insulation, and its crosslink index not comparable in the market. Evalam Visual is the ideal lamination solution in all those places where optics and durability are essential. essential requirement

**Laminators:** Val & Val

**Solution:** AB-AR 1mm+ Evalam Visual. x 0.38mm / EVALAM VISUAL 0,76mm

# Helsinki Airport

## Finland

The Helsinki-Vantaa airport is the country's largest airport, and also one of the busiest airports in Scandinavia. The Terminal 2 expansion project included the buildings known as "City Hall" and "Security Box". The "City Hall" building houses the check-in and arrival areas, while the "Security Box" is where the security control and baggage claim areas are located.

Travellers arriving at the airport are welcomed by a large glass-enclosed area, which conveys a feeling of spaciousness. This large glass surface also lets in lots of natural light, something in high demand in all public spaces. The design called for certain requirements offered by glass, that is, protection against excessive thermal loads and overheating, and also acoustic insulation and protection from the cold air outside. The last two requirements presented a major challenge due to the extreme weather conditions seen during the greater part of the year and also the building's acoustic conditions due to its use and location. Another important consideration was its design and final cost of the glass. These challenges were successfully addressed by Lasiliiri Oy, in cooperation with Teräselementti Oy.

Glass covering a total surface area of 2,500 m<sup>2</sup> was manufactured and installed; both the size of the glass and their design being the main challenges for the manufacturer. Lasiliiri Oy's investment in the Pujol lamination line made it possible for the company to manufacture all the large laminated glass at its own facilities, which ensured the successful completion of a project of this magnitude.

Both façade and interior windows feature Evalam-laminated glass, which was chosen because it offered better results when compared to PVB lamination. Evalam, a brand belonging to the Pujol Group, is the first EVA (ethylene-vinyl acetate) on the market whose properties surpass those of PVB. Its main advantages are excellent light transmittance, high adhesive strength, superb acoustic insulation, resistance to humidity preventing delamination, and crosslinking capabilities. This latter feature provides a unique reinforcement to glass thanks to its cross-linked molecular structure that lends resistance and durability to the laminated glass. Crosslinking in Evalam is more than 87%, making it the ideal solution for projects that demand high performance.





*View from inside of the airport through a laminated glass composition with Evalam Visual.*

**Architect:** ALA Architects  
**Laminators:** Lasiliiri Oy and Teräselementti Oy  
**Solution:** Evalam Visual  
**Laminated surface:** 2.500m<sup>2</sup>



*Glass laminated with Evalam 80-120*

# Valencia Subway

## Spain

Valencia's Benimàmet metro station, opened in 2011, presented a challenge and opportunity to play with colour and textures. For metro users, the resulting visual effect is a visual delight.

The enclosure makes use of dichroic glass, whose colour changes according to the time of day and the perspective from which it is viewed, thus creating a unique and spectacular finish.

Inside the station, there are also a number of laminated decorative elements that used Evalam and dichroic glass. The design conveys a unique feeling for travellers.

The EVA product selected for this complex work was Evalam 80-120. This EVA material is recommended for use in combination with special insertions for temperatures not exceeding 100 °C, which enables the lamination of impossible designs.

**Architect:** Luis Ferrer Obanos

**Laminators:** Luniglass-Crisdur

**Solution:** Evalam 80-120



**Hotel Riu Plaza España**

# Hospitality

The hospitality sector is in constant evolution and it is necessary to always be on the latest technology to be able to satisfy the needs and demands of this demanding sector. The buildings seek the originality and the surprise of their guests, differing in this way from the rest and being unique, discover how Evalam es participant in achieving the highest demands.



# Hotel Riu Plaza España

Spain



At 27 levels high, in one of the most emblematic buildings in Madrid, the “Edificio España”, a historic building considered the first skyscraper in the city and which was originally inaugurated in 1953. It is located in the ‘sky bar’, baptized with the name ‘From Madrid to heaven” and has become an obligatory place to all visitors of the city, which can now be seen from a different perspective: through a totally transparent and completely safe passable glass walkway that provides extreme and unforgettable experience customers without fear of heights.

The dizzying walkway has a length of 7 meters long x 1.8 meters wide. and is suspended 117 meters from the ground, these characteristics required strict security measures, for this reason, AB-AR was chosen and installed. AB-AR is the post-breakage structural interlayer designed to be used in all those applications that require a plus of security, especially for applications in places of public attendance and in walkable floor applications as is the case of the Riu Plaza hotel. AB-AR is the Interlayer with the highest mechanical resistance performance on the market, ahead of ionoplast; especially in post-breakage stability states above 50°C, they make it the perfect solution in geographical areas where it is common to reach these temperatures for much of the year.

Laminated glass railings with EVALAM Visual and illuminated with LEDs were installed in the sky bar of the Riu Plaza España hotel. These railings allow the visitors to enjoy 360-degree views of the Madrid skyline. Evalam Visual is the perfect solution for open edge glass applications where optics and durability are essential requirements. In addition, Evalam Visual is classified as stiffness family 2 for load cases due to wind gusts loads in Mediterranean areas, situations that, due to the height of the installation, may be more common. This classification complies with the EN ISO 16612:2019-03 standard.

The transforming company LUXGLASS TECHNOLOGY is specialized in advising and developing projects with sustainable glass and curtain walls as well as the design of spaces with low-emissive glass, sustainable and with customization with Led lighting integrated into glass, it was the transforming company of the glasses.

**Laminators:** Luxglass Technology

**Solution for the walkway:** AB-AR 1mm+ Evalam Visual

**Solution for railings:** Evalam Visual + LED

**Pictures:** Luxglass Technology & RIU



# Grand Park Hotel Rovinj

Croatia





# Grand Park Hotel Rovinj

## Croatia

No matter where he is in the hotel, the guest gets the impression he is staying in a park overlooking Rovinj, St. Euphemia, the island of St. Catherine and the most beautiful sea sunset. Located directly on the coast, near the marina and the promenade, it connects the inner-city area of Rovinj (Croatia) with the tourist attractions of the Monte Mulini zone.

The different levels of the hotel adapt to the slope of the terrain and form large terraces, Mediterranean gardens and swimming pools.

Italian architect and designer Piero Lissoni were in charge of the interior design. The common spaces of the hotel are characterized by a multitude of details, including the use of laminated glasses in the interior of the hotel as a functional and decorative element. Special attention was dedicated to styling. The materials, earthy tones and colors prevail in the rooms, a counterpoint to the blue sky and the sea that surround the hotel.

Evalam Visual, due to its excellent transparency and quality not comparable in the market, was the option chosen to be installed on railings, glass partitions, and other decorative and functional elements, thereby achieving an appearance of elegance and sobriety according to the Hotel category.

The architects of the 3LHD studio and the Italian designer Piero Lissoni who was in charge of the interior design, achieved the magic on this balcony of the Adriatic Sea.

**Architect:** 3LHD

**Interior design:** Piero Lissoni (Lissoni Architettura)

**Laminators:** Staklorez Buric

**Solution:** Evalam Visual





# Silken SAAJ Hotel

## Spain

Located in Las Palmas de Gran Canaria, Hotel Silken Saaj has, in a very short time, become one of Evalam's hallmark works. Not only does this hotel impress with its rooms and services, but also with all the details that have been taken into account during its design.

Its façade has become a now easy-to-identify symbol for the dichroic laminated glass employed in its design, which changes colour depending on sky's reflection.

TVITEC, a leader in the sector, was in charge of laminating all the glass used. This company's professional merits and capacity for innovation were called upon to serve the needs of the architects of the UAD studio.



For the exterior they manufactured almost 500 meters of 10 + 10 mm tempered glass, much of which requiring different shapes and laminated using dichroic foil and Evalam 80/120.

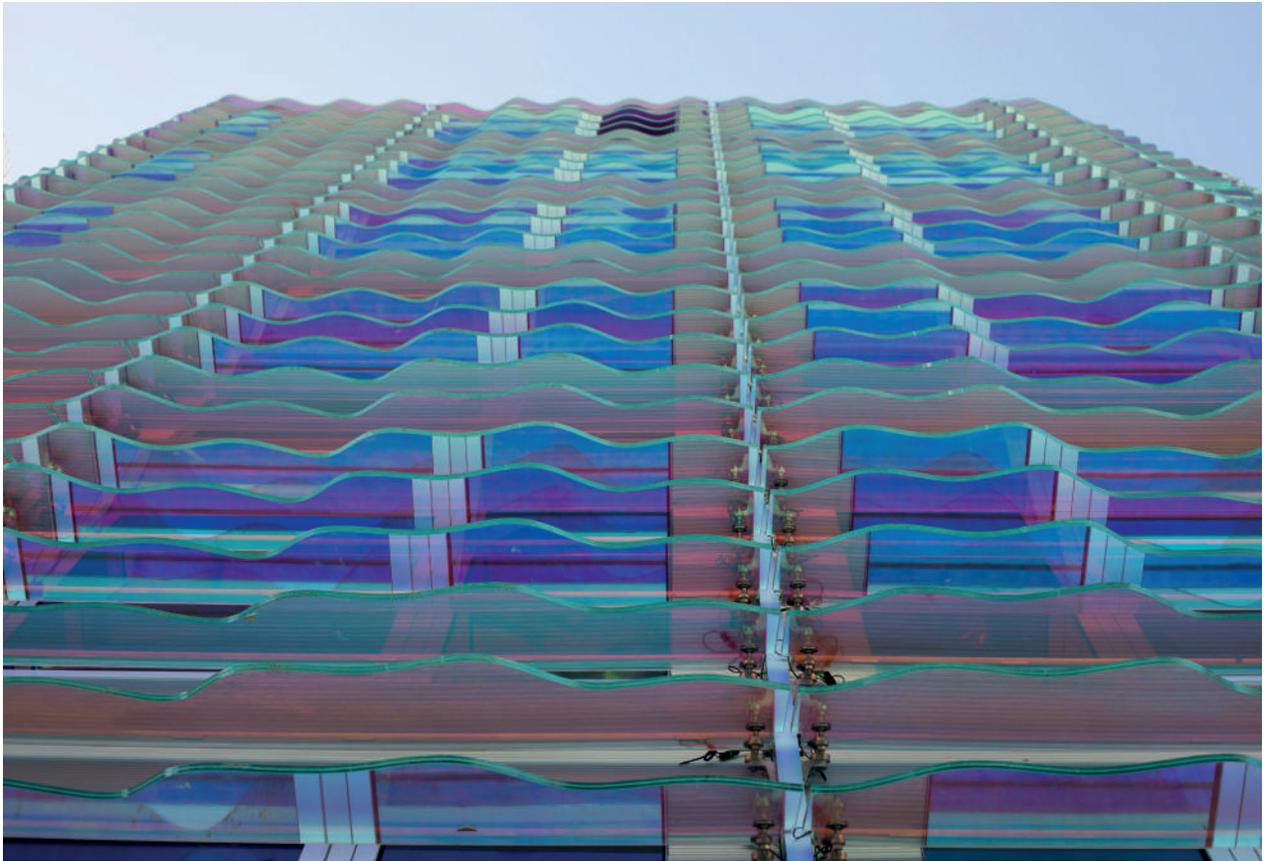
To avoid the dreaded delamination that occurs in the case of open glass edges exposed to unfavourable weather conditions, Evalam 80/120 was chosen as it is highly resistant to humidity. In this case, this hotel is located on the seafront, with the major concern being the negative effect of sea air and humidity, which usually takes its toll on exposed surfaces.

**Architect:** UAD

**Laminators:** TVITEC

**Solution:** Evalam 80/120

**Laminated surface:** 500m<sup>2</sup>





# Monument Hotel

## Spain

This hotel was opened in 2016 in collaboration with local architect Oscar Tusquets. Architects Carles Bassó and Tote Moreno collaborated with interior designer Mercè Borrell to achieve an incomparable end result. These were the individuals behind the restoration of Hotel Monument in Barcelona.

The principal challenge for the design and architecture team was to lighten the atmosphere in a room having dividing wall, as well as to lend a luminous quality to all of the areas within the hotel. This meant the construction of a skylight that would allow natural light to enter from the ceiling to give a greater sense of spaciousness.

For the glazing, laminated glass containing Evalam Visual was used throughout the building. This EVA interlayer was developed to meet the needs of customers seeking an ultra-clear glass requiring a neutral interlayer on the glass edges. These two properties make Evalam Visual a unique EVA product, far better than any other PVB or thermoplastic material.

**Pre-project:** Oscar Tusquets  
**Architects:** Carles Bassó and Tote Moreno  
**Laminators:** Vidres Viola  
**Designer:** Mercè Borrell  
**Solution:** Evalam Visual





*Balustrades laminated with Evalam Visual*

# Hotel Hydros

## Spain

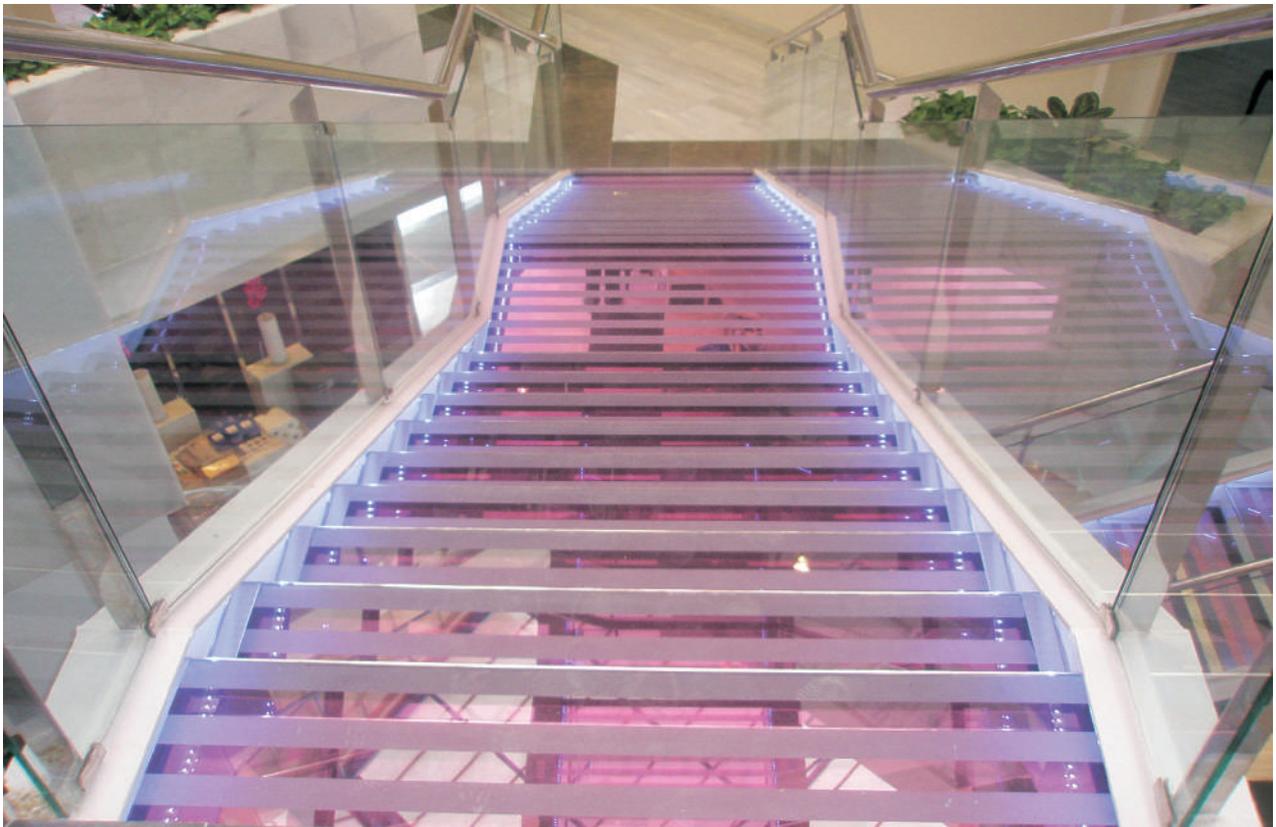
The Hydros is a hotel located in Malaga which opened in 2014. The main challenge of the project was the construction of elements using coloured glass located in its common areas and the accesses to the hotel room floors in particular.

Evalam Color was the solution chosen for the stairway. This product was designed to withstand temperatures of up to 120°C without colour fading near the edges. This ensures greater colour intensity over time compared to elements that are made using EVA colour at 80 °C, which prioritises uniformity of colour over the durability of the material. The use of Pujol laminating ovens ensures both objectives are achieved: durability and uniform colour.

For the balustrade, Evalam Visual was chosen. Once laminated, this material offers maximum transparency, resistance and durability.

**Laminators:** Lamiglass

**Solution:** Evalam Visual and Evalam Color



*Stairs laminated with Evalam Color*



# Residential

Discover how Evalam's interior and exterior solutions turn a normal building into a singular and modern building, as well as giving comfort and safety to its occupants.



# Brodsky Building

## Russia

Brodsky is an elite residential complex of the Vesper company in the Khamovniki metropolitan area. The concept of the complex was developed by the well-known office Tsimailo, Lyashenko and Partners and the facade was created in collaboration with a French architectural bureau "Antonini Darmon" and was presented at the MIPIM exhibition in Cannes. Brodsky is an example of "a modern interpretation of classical architecture" as conceived by the architects. The new building is a 14-floor monolithic building, the facades are decorated with arches of different sizes.

It has 65 apartments with a maximum living area of 150 square meters the height of the ceilings in the classic apartments is 3.6 m and 4.3 m at the penthouses

Despite the building's appearance and classic interpretation, the most advanced and actual architectural materials have been used, such as Evalam Visual, an EVA developed and manufactured entirely in Spain, for expert laminators looking for a solution with high added value. Evalam Visual is the ideal lamination solution in all those places where optics and durability are essential requirements.

Evalam Visual has the certification B-s1, do According to the UNE EN 13501-1: 2007 + A1: 2010, this performance with fire reaction was one of the determinants facts to choose Evalam Visual as the solution to laminate all French balconies of the façade and railings on the rooftop of this iconic building of the city of Moscow; LIT GLASSWORKS were the laminator company who did the job. Since 2008 LIT GLASSWORKS have been specializing in the manufacture of glass products and their complex processing.

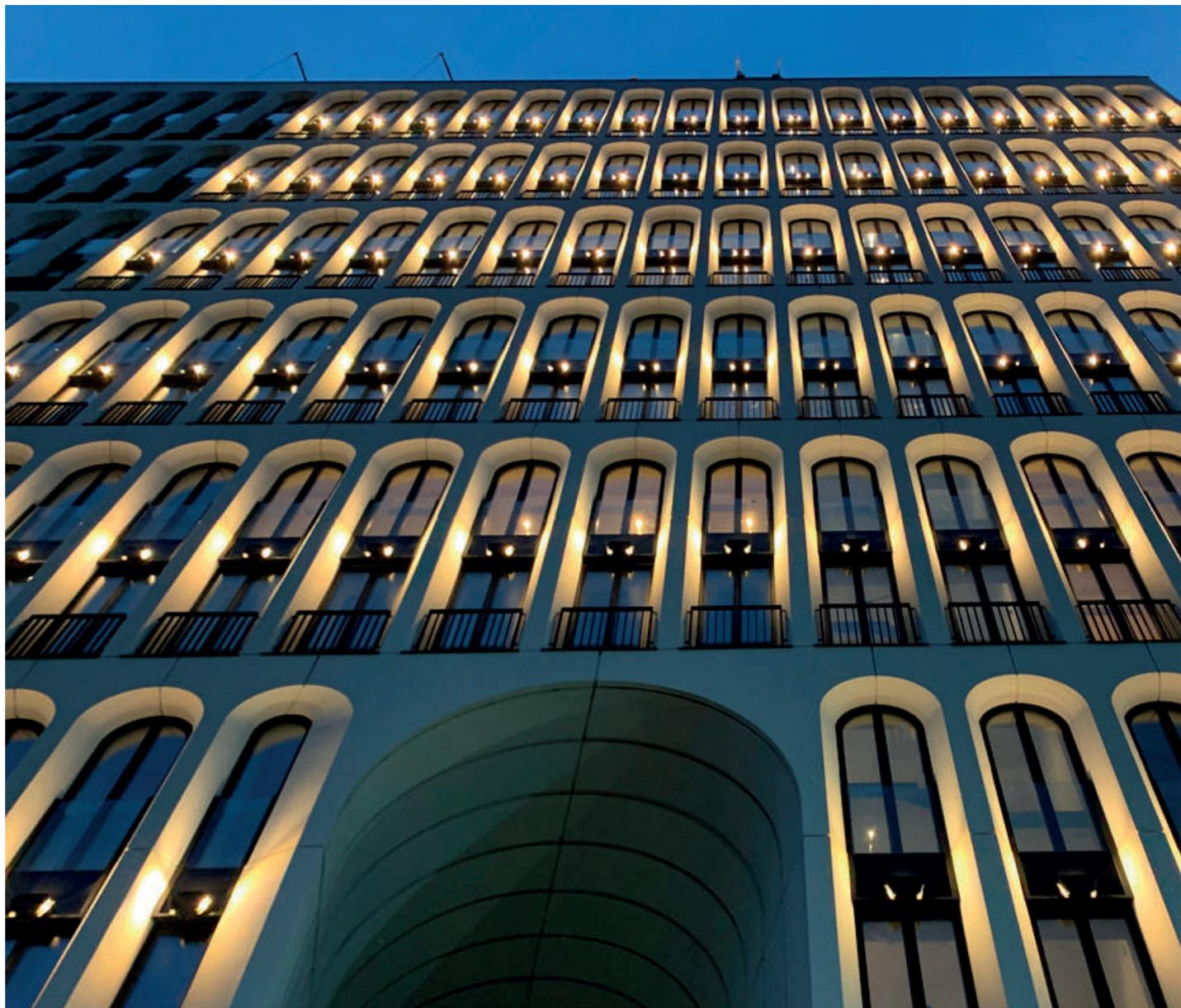
**Architect:** AB Tsimailo Lyashenko and Partners

**Laminators:** LIT GLASSWORKS

**Solution:** Evalam Visual

**Pictures.** Constructor Group.





# Sky Tower

## Cyprus

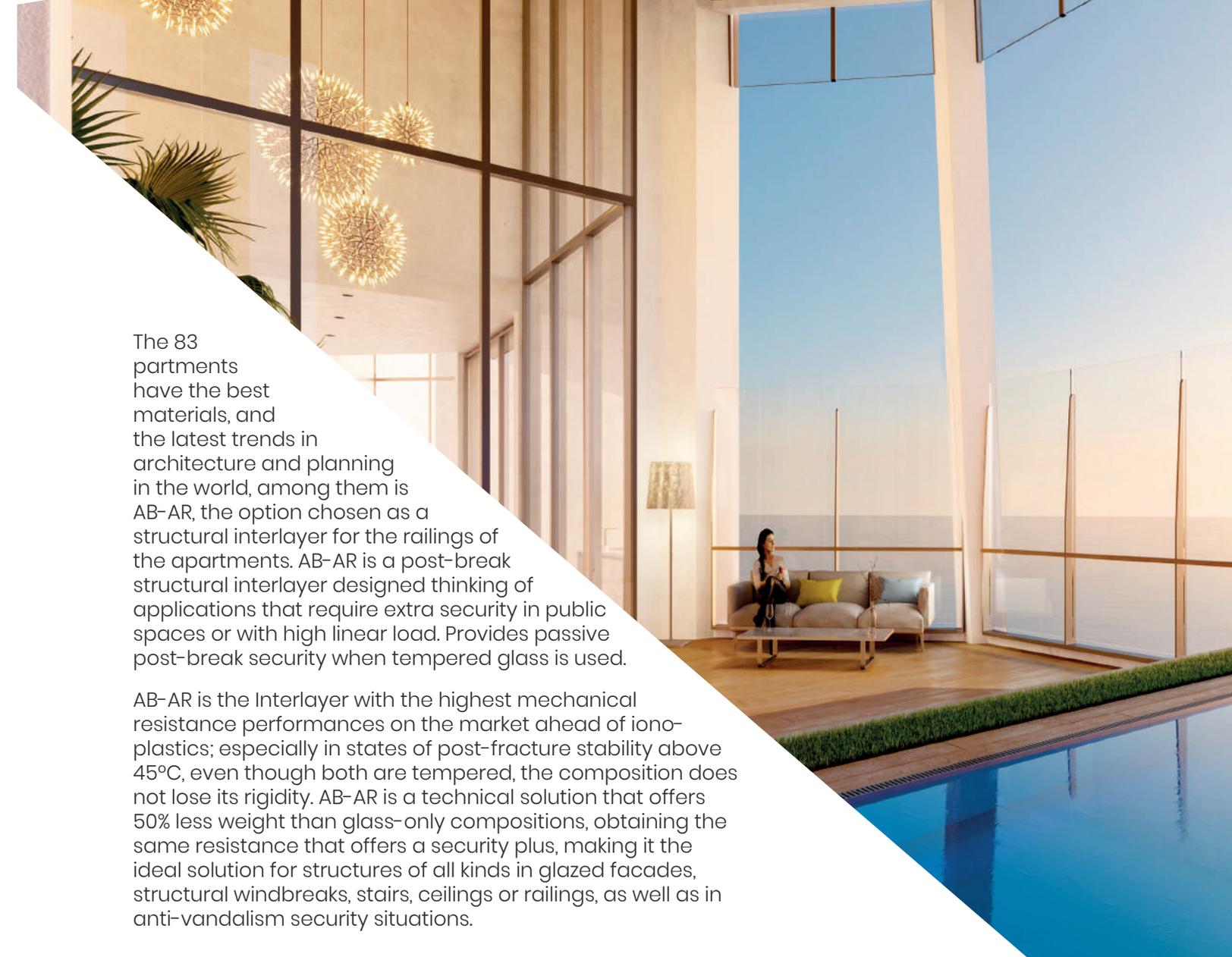
The Sky Tower is located in the historic city of Limassol on the southern coast of Cyprus. Located in a privileged area in the eastern part of the city, with a gross constructed area of approximately 30,000 square meters spread over 23 floors, this exclusive residential condominium.

The design is evident, a slim tower emerging from the landscape, but firmly anchored in the environment. The architectural expression of the tower is achieved with a series of linear elements that, like the roots of a tree, gently break the ground and finally rise towards the sky emphasizing the verticality of the structure.

The verticality of the tower is further articulated by profiles of the slightly changing terraces on each floor. The results in a gently undulating façade profile that gives the tower a unique organic language and makes it different from any other structure on the island.

Sky Tower rises more than 100 m high and has a capacity for a total of 83 exclusive apartments. The tower has been designed to ensure that each apartment enjoys stunning views of the Mediterranean Sea, the city of Limassol and its picturesque mountainous suburbs. Their residents will enjoy incredible panoramic views and the exceptional atmosphere of comfort and relaxation.





The 83 apartments have the best materials, and the latest trends in architecture and planning in the world, among them is AB-AR, the option chosen as a structural interlayer for the railings of the apartments. AB-AR is a post-break structural interlayer designed thinking of applications that require extra security in public spaces or with high linear load. Provides passive post-break security when tempered glass is used.

AB-AR is the Interlayer with the highest mechanical resistance performances on the market ahead of ionoplastics; especially in states of post-fracture stability above 45°C, even though both are tempered, the composition does not lose its rigidity. AB-AR is a technical solution that offers 50% less weight than glass-only compositions, obtaining the same resistance that offers a security plus, making it the ideal solution for structures of all kinds in glazed facades, structural windbreaks, stairs, ceilings or railings, as well as in anti-vandalism security situations.

**Architect:** UHA London

**Collaborating architects:** Panos Panayiotou & Associates

**Laminators:** Porfyrios

**Solution:** AB-AR 1.5 Interlayer

Images property of UHA London

# Single family home

## Panama

Located in Playa Coronado, this modern, luxurious detached house features wood, stone and glass as its main construction materials. All of these of the highest quality.

All of the glass elements for the project were produced by TEMPERBRAZ, a local company which supplied all the glass for the project. This included handrails, balustrades, windows, large-scale windows, as well as a glass structure serving as a protective wall for a jacuzzi integrated into the pool.

For the glazing of the pool, five ultra-clear 10 mm sheets of glass were used in the composition. Of these, four were tempered and the final one untempered which served to stiffen the others in the event of a spontaneous breakage. The sheets of glass were laminated using 1.52-thick Evalam Visual placed between each. Evalam Visual has been developed to resist prolonged humidity, avoid delamination arising from unfavourable weather conditions or high-humidity and high-temperature environments. The joints were sealed with transparent structural silicone. The panels were set into a concrete channel at a depth of 25 cm, supported on a urethane bed and anchored with quick-drying mortar.

8 + 8 mm Evalam Acid White laminated tempered glass was used for all the handrails inside the house and out. This finishing material holds the strictest European certification for outdoor use. In addition, Evalam Visual was chosen for the balustrades (10 + 10 low iron tempered) and remaining glass elements of the house (6 mm tempered hermetically sealed double glazed + 12 mm air space 5 + 5 laminated), due to its maximum transparency and the final optical properties of laminated glass.

**Architect:** Ivan Casis & Asociados

**Laminators:** TEMPERBRAZ

**Solution:** Evalam Visual and Evalam Color







Facade and balustrades laminated with Evalam Visual and Evalam Color

# The Sky Garden Tower

## United Arab Emirates

The Sky Garden Tower design is a unique example of modern architecture. The tower design is based on a conventional grid of columns suspended across several modular boxes. This iconic beach front project was designed by renowned architect James Law.

This state-of-the-art residential tower consists of blocks of various sizes stacked one on top of the other, creating architectural boxes that make the building look like a three-tiered garden.

Due to the demanding temperature conditions and its heightened exposure to sea air, Evalam Visual was used for its maximum transparency and glass protection once laminated.

**Architect:** James Law

**Laminators:** Glasstech

**Solution:** Evalam Visual and Evalam Color



# Infinity Building

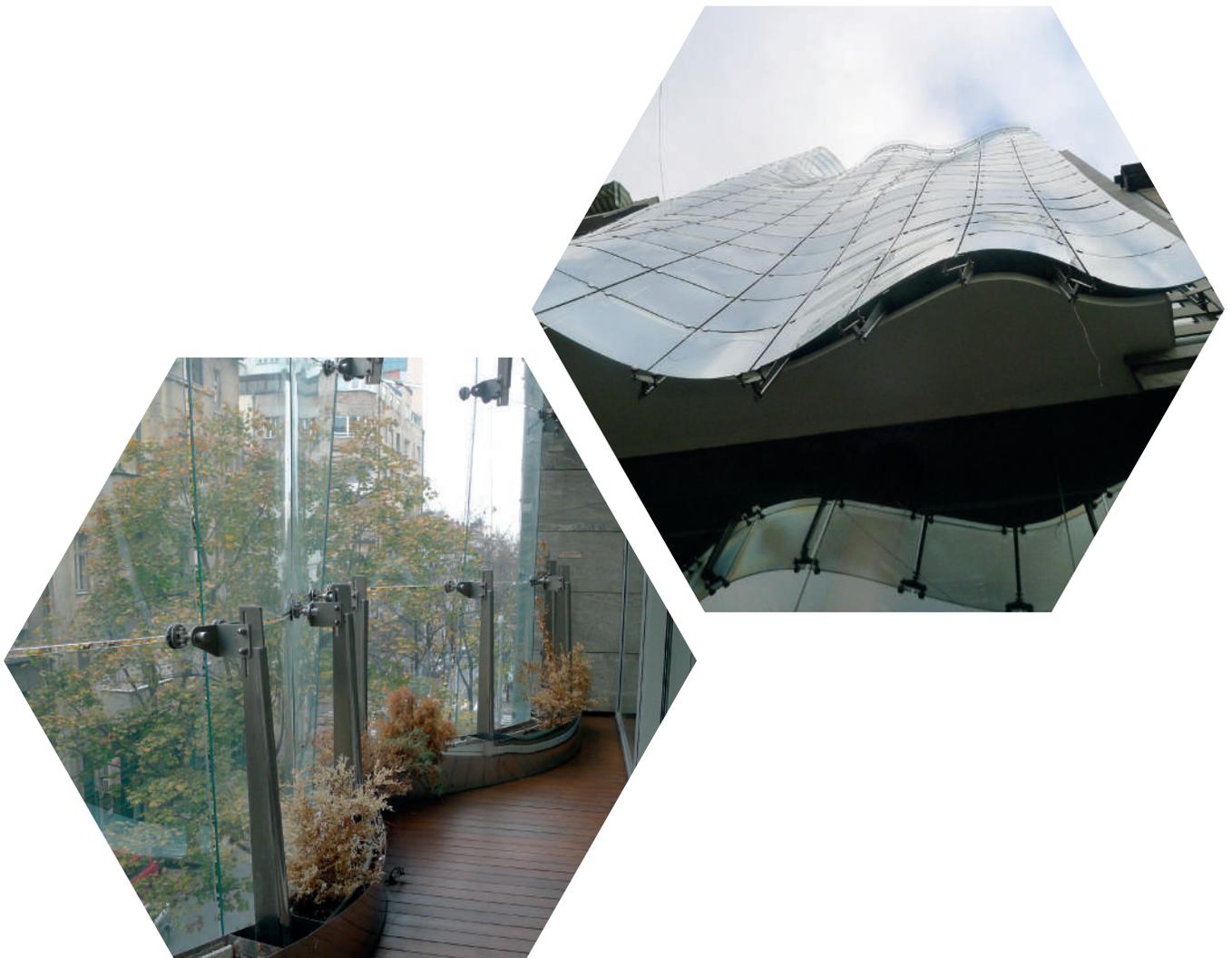
## Serbia

Completed in 2012, the Infinity Belgrade is a building that has changed the face of the city of Belgrade. It contains five spacious luxury apartments each with an area of 245 - 250m<sup>2</sup> and a 450m<sup>2</sup> penthouse that boasts a fascinating view of the city centre.

This building was constructed using materials of the highest quality, and is equipped with cutting-edge building systems including an advanced central air conditioning system that allows up to four different temperature zones in each apartment. It's been classified by experts as an architectural masterpiece, ranking it among the most modern buildings in Belgrade.

The challenge for Evalam was to conform with the rest of the materials and techniques used for the construction of this emblematic building. Evalam Visual was used; in addition to its durability, this product offers the best transparency, very good acoustic insulation, and a crosslinking index that is peerless among any other EVA product on the market.

**Architect:** Miodrag Mirkovic & Dragan Marčetić  
**Laminators:** Pavle Doo  
**Solution:** Evalam Visual







# Leisure

The constructions destined to the leisure projected with glass like main characteristic element suppose a high level of exigency, they must contribute so much with an interesting design, the durability must be assured and of course, the security of being a place of attended affluence of people must be guaranteed. Discover how Evalam has supported making the following projects in their cities iconic.



le chateau

MAC

MAC

MAC

MAC

MAC

Lips

MAC

# Nokia Arena

## Finland

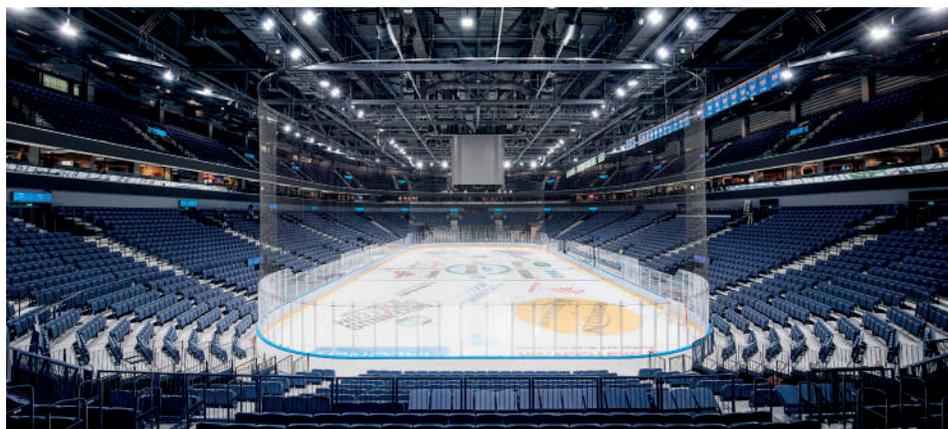


The Nokia Arena & Crown Central Deck project is an ambitious urban renewal project, situated at a pivotal location within Tampere (Finland). It stitches the urban fabric back together across an existing railway and connects East to West, creating a new vibrant hub of high-quality living, working, leisure and culture for the city and Finland.

The mixed-use program consists of a multi-purpose ice hockey arena with a hotel, five adjacent towers with a podium and includes residences, retail and offices.

The Arena, which occupies one fifth of the complex, will have the capacity to accommodate 15,000 visitors. With its shopping arcade, bars and restaurant at deck level, the arena redefines its pivotal function as a hub for diverse urban activities. The area also includes a hotel and five adjacent towers for office, residential and retail use.

For the execution of this large-scale project, the best materials and with the best performances were necessary, for that reason Ritalasi OY the local glass transformer was the company who was in charge to laminate the whole 1.000m<sup>2</sup> of indoor walls made with laminated glasses with measures 1.200 x 2.500 mm & 1.200 x 3.000 mm. Due to the safety conditions required for this high-traffic facility, it was decided to laminate the glass with AB-AR all wall glasses were laminated with the same configuration: 10mm tempered glass+ Evalam Visual 0.76+ AB-AR 1mm + Evalam Visual 0.76 + 10mm tempered glass



**Architect:** Studio Libeskind  
**Structural Engineer:** Ramboll Finland  
**Laminators:** Ritalasi Oy  
**Solution:** AB-AR 1mm Interlayer + Evalam Visual 0.76mm

Images Tomorrow AB / Hufton & Crow

# Roland Garros

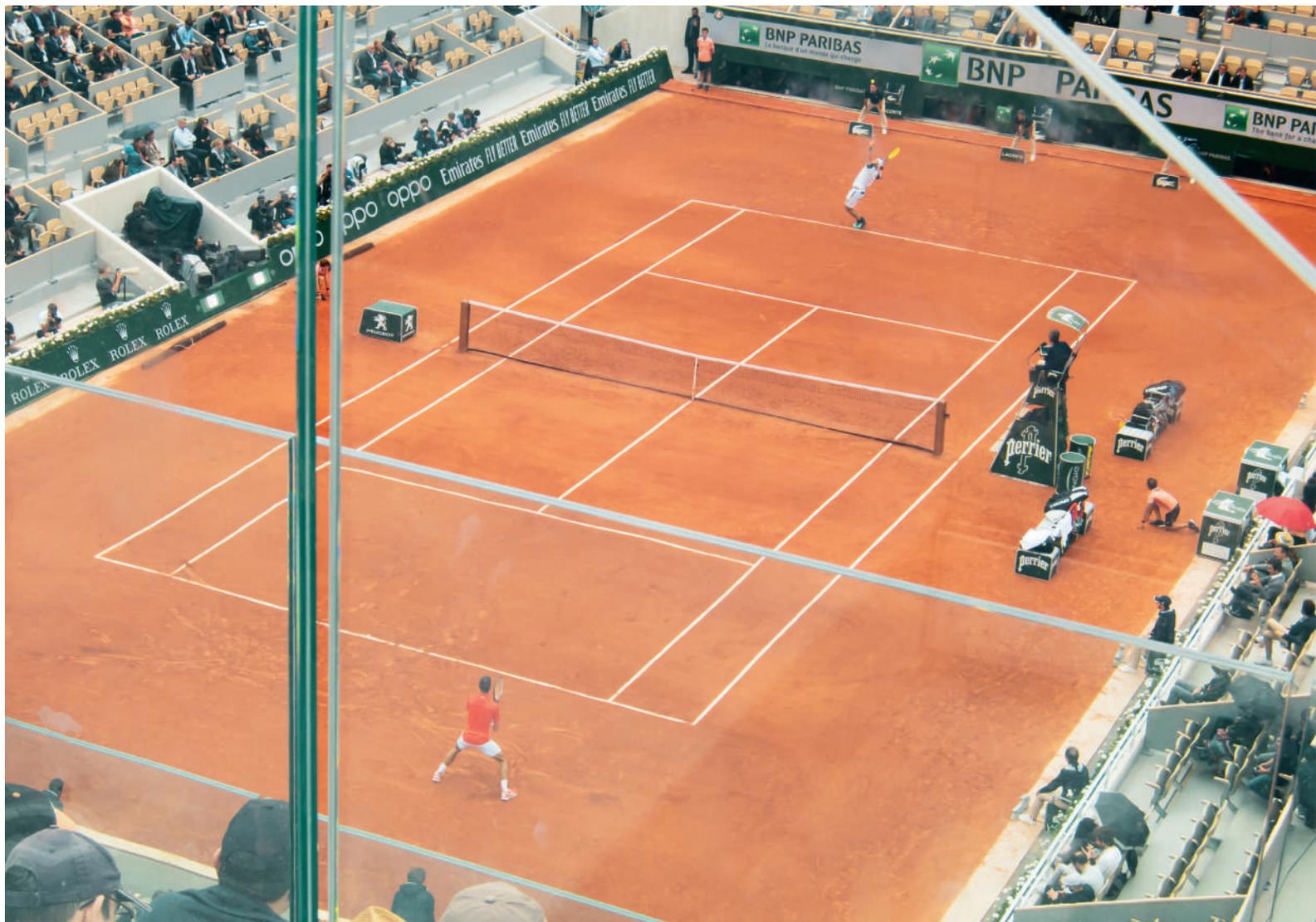
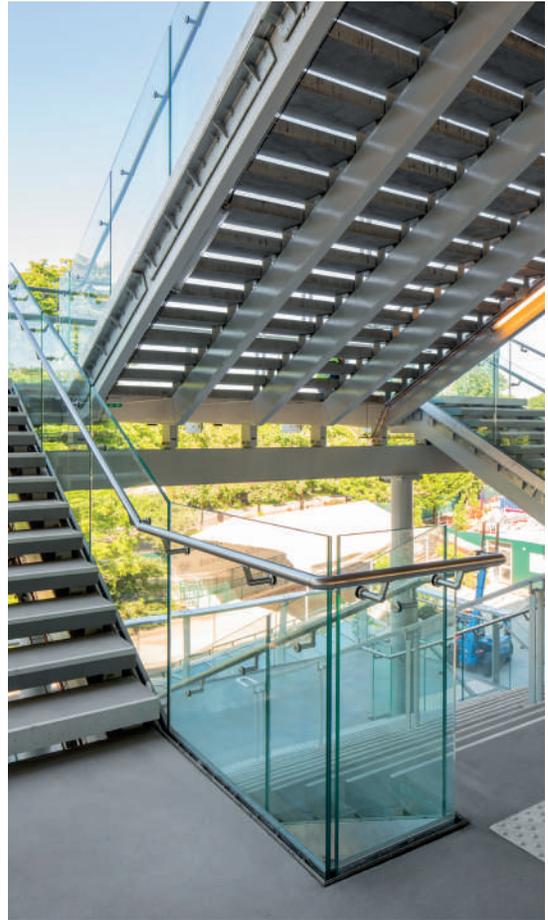
## France

Roland Garros is the most prestigious clay tennis tournament in the world, it takes place in Paris (France), in the facilities of the Stade Roland Garros complex, as the main venue of the tournament since 1928 and where historically the best tennis players participate.

The final of the championship is held on the "Philippe-Chatrier" center court with capacity for more than 15,000 spectators and has been the scene of epic matches that will be remembered by all lovers of good tennis.

The latest renovation of this tennis icon began in 2017 and ended in 2020, and included the installation of glazed railings both inside the stands and on the railings of the access stairs, for their laminate. chose Evalam Visual.

It is the EVA developed for lamination experts looking for a high added value solution. Its excellent and incomparable unique transparency, high adhesion,





great acoustic insulation, and a crosslinking index not comparable in the market, represent perfection and make it the ideal lamination solution to be placed in all those places where optics, durability, and quality are essential requirements.

The laminated compositions were installed on Ninfa Stadio model profiles from the Italian manufacturer Faraone. Therefore, the set of glass + railings chosen is a solution with very high safety performance and at the height of the characteristics required for this cathedral of world sport.

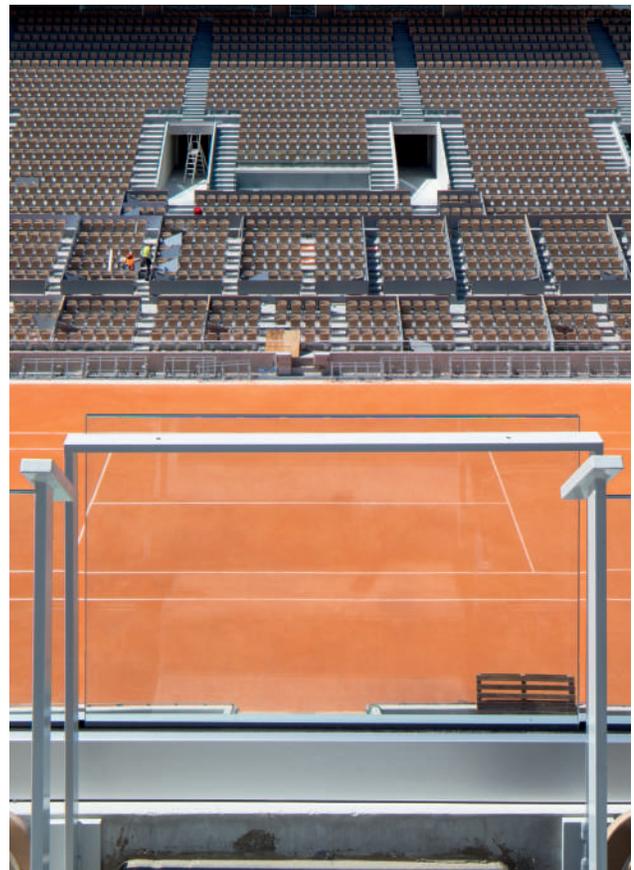
Game, set, and match for EVALAM!

**Architects:** ACD Girardet & Associates y Daniel Vaniche

**Laminators:** Glas Expert

**Solution:** Evalam Visual

Images property of Faraone Architectures Trasparenti



# Allas Sea Pool

## Finland

Opened in 2016, the Allas Sea Pool is a unique hub for urban life in Helsinki's South Harbour. The buildings cover a total surface area of 1,600 m<sup>2</sup> –sufficient for larger crowds–and are able to hold 3,500 visitors at a time.

The main challenge of the project was the creation of balustrades using laminated ultra-clear glass, as well as other elements of the building. Evalam Visual was finally chosen, as this material offers the best transparency for use in high-end architecture.

**Architect:** Huttunen–Lipasti–Pakkanen Architects

**Laminators:** Lasiliiri Oy

**Solution:** Evalam Visual





# Paranaense Arena

## Brazil

Inaugurated in June 1999, the Atlético-PR stadium was already considered the most modern stadium in Brazil. With a capacity of 25,000 people, the Arena da Baixada required some remodelling in preparation for the 2014 World Cup.

Architects settled on the creation of a new image that would serve as an icon for the city: an “illuminated box”. The requirements were that the materials be standard and preferably produced in the country. In terms of materials used, the designers sought a sense of permeability between the interior and the exterior that would establish real interaction with citizens through lightness, translucency, lighting, and image.

The stadium’s glass elements such as the balustrade, façade and VIP room elements were laminated using Evalam, which was chosen because it provided a high degree of reliability in terms of thermal-acoustic comfort and light stability against humidity and open edge structures.

**Laminators:** Unividrios

**Solution:** Evalam Visual

Images property of CAP S/A e carlosarcosarquite(c)tura (Luciano Machin Barriola)



*Structures laminated with Evalam*



# Ancient Serdica Museum

## Bulgaria

Commissioned by the Bulgarian Ministry of Culture, the ancient Serdica open-air museum covers an 800-square metre area and features three laminated glass domes.

The contractor was required to build a structure that would cover a 15-metre wide by 200-metre long space. Given the dimensions of this space, the architect, builder and contractor decided to divide it into three areas and cover each of them with transparent glass domes. Unique architectural monuments in their own right, the domes also meet strict European safety standards applicable to large public works with a large influx of visitors.

The glass domes are able to withstand loads of up to 226 kg and are 11/16" thick. The total dome area is about 800 square meters.

Thanks to the durability of Evalam Visual, both the adhesive strength and crosslinking properties are maintained. This is essential for use in curved tempered glass. This is why the project architects chose Evalam Visual over traditional PVB systems. Its adhesive strength is incomparable, over 140 N/cm<sup>2</sup> for Evalam versus 60 N/cm<sup>2</sup> for PVB. Evalam ensures greater durability and a lower risk of long-term delamination.

**Architect:** Prototyp

**Laminators:** DAKS 96 and Kristian Neiko

**Solution:** Evalam Visual

**Laminated surface:** 800m<sup>2</sup>

*Dome laminated with Evalam Visual*



# Harrods

## United Kingdom

In this project, it was London's legendary Harrods department store which saw the remodelling of its iconic central dome; this work allowed natural light to illuminate the entire space while ensuring a safe entryway into the department store. This structure was created using Pujol technology and materials exclusively.

The dome was designed by architect Ian Tomas and made with UK GLASS. It was created using curved glass, employing the Pujol BDG/V · 3 TALGO 50x22 oven; and the Pujol HLH / Multichambers 60x32 oven for lamination.

Evalam Visual was chosen as the interlayer for excellent transparency for the entire structure, as well as providing additional adhesive strength of up to 180 N/cm<sup>2</sup> in order to prevent delamination. Evalam also improved the acoustic insulation coefficient with respect to that stated in the initial requirements. Evalam's features are rated highly in cases such as these owing to the special requirements of the 5m x 2m curved glass panels that were part of the design.

Another reason for choosing Evalam over traditional solutions such as PVB, was its high crosslinking index (85%), but also because it is a thermosetting product, unlike other simple, unstable thermoplastics.

Along with the dome, the remodelling project included a grand lobby with escalators, marking a new phase in the history of the Harrods store.

**Architect:** Ian Tomas

**Laminators:** UK Glass

**Solution:** Evalam Visual



*Dome laminated with Evalam Visual*

# Rinascence Palermo

## Italy

The Rinascence department store in Palermo project is powerful yet delicate at the same time. Underpinning this balance was the choice to preserve traces of the existing building by superimposing an opalescent façade on them, giving the appearance of a transparent building. This “glacial skin”, created with Evalam Color for exteriors, is an architectural surface through which the old can still be seen, becoming one with the contemporary dimension. At night, the building is transformed into a bright, translucent lantern.

ASA Studio chose Evalam Visual and Evalam Color (Acid White), which provides excellent result on façades. After years of research, Evalam is the first company of the market to present five exterior colours holding certification according to European standards.

**Architect:** ASA Studio Albanese

**Laminators:** Labor Vetro

**Solution:** Evalam Visual and Evalam Color (Acid White)



*Facade laminated with Evalam Color (Acid White)*



*Balustrades laminated with Evalam Visual*

# Espai Cel

## Spain

The goal was to create a new space in the historic Termes Victoria de Caldes de Montbui Spa. The architectural firm in charge of the project (Arquetipus - projectes arquitectònics), was interested in uncovering the 250-year old portion of the facilities which were formerly used as storage tanks for hot spring and cooled water which was especially prized for its properties conducive to healing and well-being.

Prior to this project, this semi-underground area, whose function and features were more suited to the storage of water, had always remained hidden from visitors, their public use residual at best. It was essential that it be opened up and they understood that this captivating place was meant to be shown and converted into a unique space for the enjoyment of the senses.

In this project, the old storage tanks and part of the gallery housing the traditional baths were used for the different pools. Although each one has its own set of characteristics that makes it different from the others, all the pools have been designed to provide relaxation and to exploit the medicinal and mineral properties of these ancient thermal waters.

With the aim of conveying as neutral a feeling as possible, during the remodelling process the decision was made to preserve the imprint left by the various eras this space has seen. In several areas the original stone walls and ceramic vaults can be seen; in others, old water marks have been preserved in order to indicate their past use. In the last remodelling stage a number of contemporary constructive elements and materials were employed, such as i-ON by Pujol PDLC smart glass.





PDLC was chosen for one of the most exclusive rooms of the space designed to help visitors relax in private. i-ON by Pujol PDLC can instantly switch between transparent or opaque for maximum privacy for a person on the other side. Thanks to its excellent resistance to humidity, it was the ideal product for this project. i-ON by Pujol PDLC can be easily connected to any remote control system: home automation, smartphone, tablet or motion sensors.

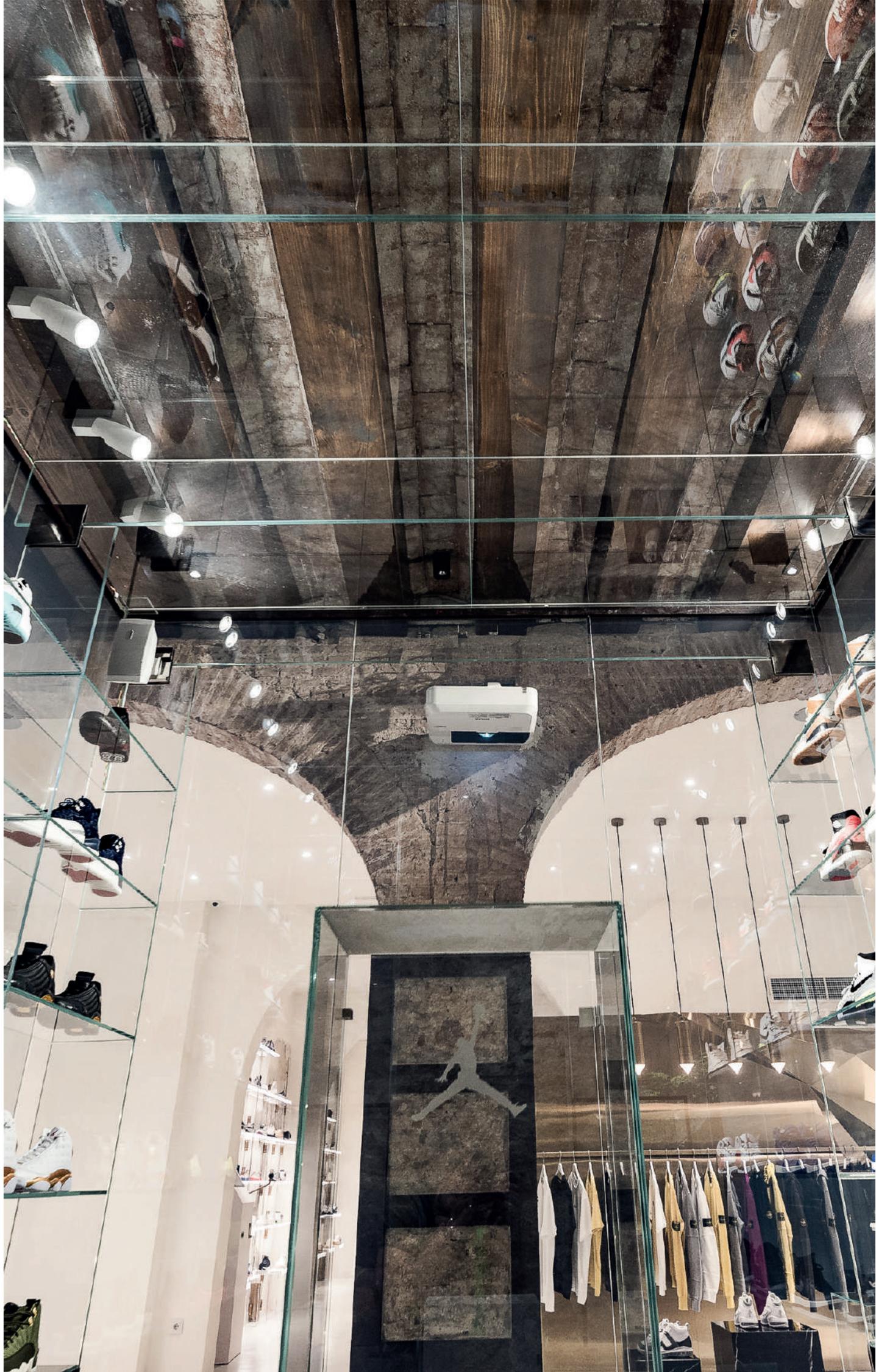
The resulting structure reveals the intense work and attention to detail behind the remodelling work; it's a space that invites you to look at it, but above all to experience and enjoy it.

**Architect:** Maria Almirall

**Execution Project:** Arquetipus - projectes arquitectònics

**Glassware:** Òscar Bassa

**Solution:** PDLC i-ON by Pujol



# Foot District

## Spain

Located in a centuries-old building in the heart of the Gothic Quarter of Barcelona, the Foot District store envelops its customers in an architectural dream. History, geometry, symbolism, and design imbue every inch of the store, which presents trainers and streetwear in a new light, their forms becoming works of art. A place where fashion becomes a kind of alchemy for the modern world.

The space underwent remodelling which preserved the buildings' historical elements and old-world charm whilst employing the latest technology. Under the Gothic arches, and in the space facing an outdoor garden that fills the store with light, stands a giant glass cube. Within the walls of the glass cube, various models of trainers can be seen.

A unique experience awaits anyone who enters this cube. Here, visitors select a trainer from the shelves and then are asked to place it on an image of a footprint which reads "Place Here." The walls of the cube turn opaque thanks to the i-ON by Pujol PDLC glass, providing the customer with a unique shopping experience.

i-ON by Pujol is the most advanced technological glass developed by Pujol for architectural uses. It is either transparent or totally opaque for privacy, as well as adapting easily to any control system.

**Laminators:** Valls Germans

**Solution:** PDLC de i-ON by Pujol and Evalam Visual



# Education

All buildings dedicated to teaching and learning have something in common: they transmit and generate knowledge. For this, comfort and quiet spaces are needed. With Evalam products, it is possible to create a comfortable environment suitable for all kinds of educational activities.



# Center for Novel Therapeutics

United States



The University of California is one of the top 15 research universities in the world. This institution is attracting the pharmaceutical industry to its campus, giving entrepreneurs and corporations more access to market research and furthering collaboration between public and private bodies.

The architects responsible for the design of this building were Perkins + Will. The Center for Novel Therapeutics is LEED® Gold certified owing to the renewable energy generated by photovoltaic solar glass laminated with Evalam Visual.

**Architect:** Perkins + Will

**Laminators:** Onyx Solar

**Solution:** Evalam Visual

Images property of Perkins & Will



# Melbourne Grammar School

Australia



Melbourne Grammar School is one of Australia's leading independent schools, with a tradition of excellence extending over more than 160 years. Evalam Visual was used to strengthen laminated glass with photovoltaic interlayers.

Aesthetically speaking, its singular structural form is marked by a clear and simple design which complements the heritage of the campus. Inside, the building is home to scientific and technological research conducted by students, encouraging creativity, learning, and social interaction.

This building's construction project was awarded to Architects Kane Constructions and Denton Corker Marshall.

**Architect:** Kane Constructions and Denton Corker Marshall.

**Laminators:** Onyx Solar

**Solution:** Evalam Visual



# Transportation

The demanding sector of transportation constantly seeks solutions that give emotions to get the loyalty of their users, this is as important as offering them the highest warranties in terms of safety during their use. Thanks to Evalam's solutions, it is possible to achieve all this successfully. Discover how in the following projects developed.





# Costa Smeralda

## Finland

The Costa Smeralda is the largest cruise ship operated by Costa Cruises and the only one in the world powered by Liquefied Natural Gas (LNG) fuel. In commissioning this ship, the Italian company was interested in developing a means of transport with the minimum environmental impact, practically eliminating particle and sulfuric acid emissions and reducing nitrogen oxide and CO2 emissions. It was the Finnish shipyard Meyer Turku that was commissioned to build the Costa Smeralda, Costa Cruises' new flagship.

To equip this 180,000-ton, 337-metre long, 42-metre wide floating city with laminated glass of the highest quality, the also prestigious Finnish company Kaune Oy relied on the combined power of EVALAM and Hornos Industriales Pujol. With over 100 years of history in the glass sector, this company was aware of the guarantees and the solvency of Evalam solutions as a world leader in laminated glass interlayers.

**Laminators:** Kaune Oy

**Solution:** Evalam Visual



For this large-scale project, some 3,500 square meters of decorative glass were installed, along with a further 500 meters of glass for use in balustrades distributed throughout the ship.

Every part of the Costa Smeralda was designed down to the millimetre, with a view to showcasing Italian refinement by using high quality products throughout. That is why the choice had to be Evalam Visual, whose characteristics and proven performance surpassed those of PVB, such as its maximum transparency, resistance to fragmentation after breakage, acoustic insulation, and its ability to ensure the safety of people and property as well as its superb resistance to moisture in open-edge elements. Everything that a project of this magnitude and characteristics could ever require.





# Mein Schiff 1

## Finland

Shipyard Meyer Turku (Finland) was commissioned to build the ship “Mein Schiff 1”, for the German company Tui Cruises. This new design is markedly different from its predecessors.

Measuring 315 m in length, this ship has a capacity for 3,132 passengers in 1,437 cabins, plus 1,092 crew members. This project contributes to environmental protection thanks to its greater energy efficiency. Catalytic converters in the main and auxiliary engines and the reduction of nitrogen oxide emissions are some notable characteristics of the ship.

Its main staircase is a key piece of its attractive design – with its steps and railings made of glass laminated with Evalam Visual, manufactured by the Finnish company Kaune Oy using a Pujol LAM PRO DUO lamination oven.

Evalam Visual was chosen for its maximum transparency, its resistance to fragmentation after breakage, its acoustic insulation properties, and for the safety it ensures for people and property.

**Laminators:** Kaune Oy  
**Solution:** Evalam Visual



*Stairs and balustrades laminated with Evalam Visual*





“Our ambition is to get the best solution for each need, there is no limit in glass creation”

Jorge Pujol  
CEO Pujol Group