



AUGUST 2024

ŞİŞECAM
MAGAZINE

ISSUE

348

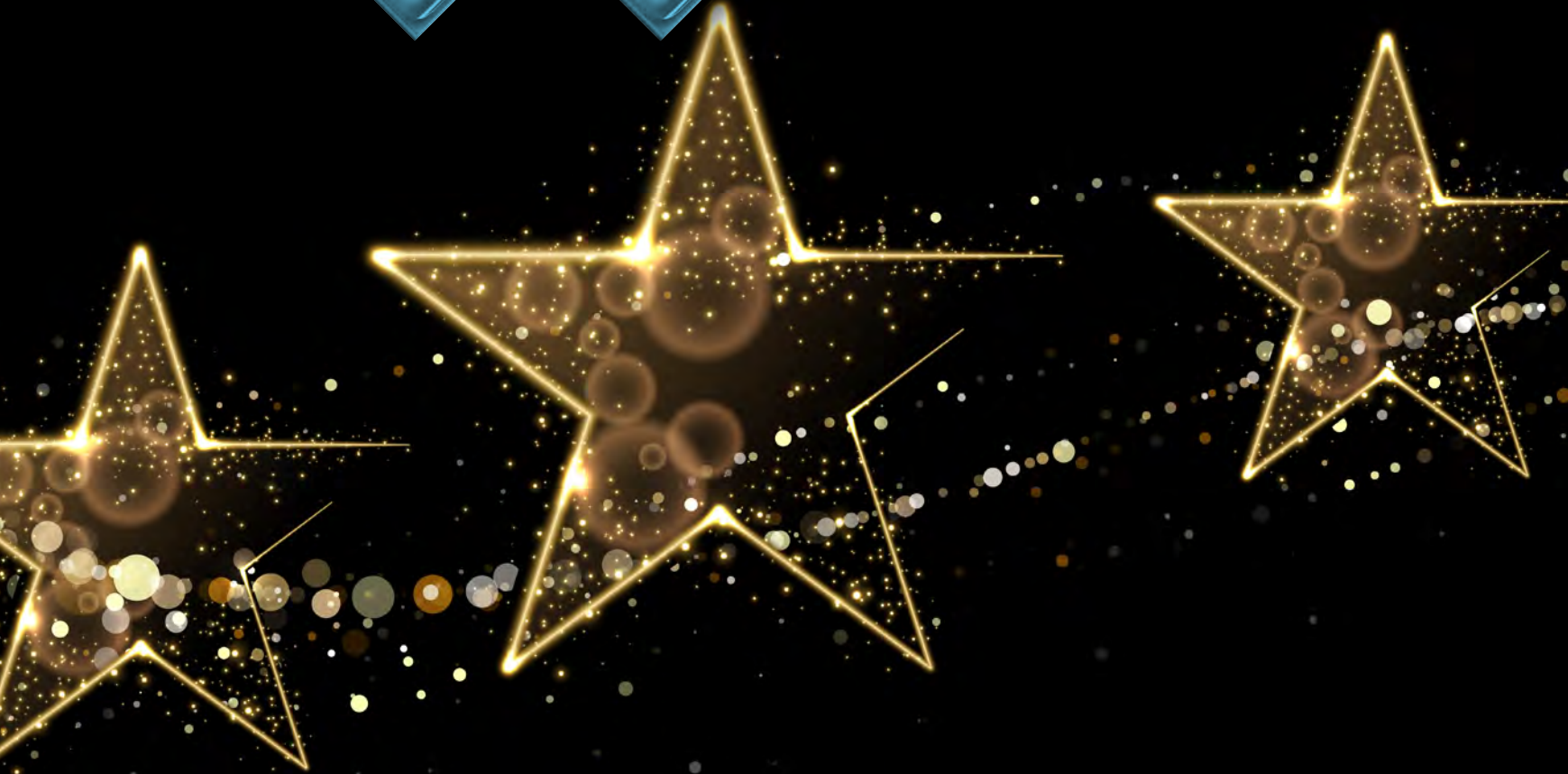
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CREATIVE AND DISTINGUISHED PROJECTS AWARDED AT

ŞİŞECAM
STARS
PARADE



ANCIENT
GREEK



ROMAN



BYZANTINE



OTTOMAN

The 5,000-year-
long history
of glass from
Ancient
Greeks to
Ottomans

Cylinder Bottle

It has a globe-shaped lid,
flat rim, short neck, cylindrical
body, and flat bottom.

The body is decorated with
three medallions, along
diamond and floral-shaped
cuts and gildings.

*You can visit the Şişecam
Glass Artifacts Collection to
see a 3D rendering of this
object and more.*





Dear Colleagues,

I am happy to meet you once again in the new issue of Şişecam Magazine.

One of the key factors contributing to Şişecam's success has been its skilled human resources since its foundation. This month, we celebrated the achievements of our employees at the Şişecam Stars Parade awards ceremony, recognizing the projects that are driving our company forward.

At the 12th edition of the awards ceremony, we celebrated Şişecam's successful operations in various countries alongside our dedicated colleagues who played a pivotal role in these implementations. We also presented awards to projects that significantly contributed to Şişecam's growth and development.

The positive impact of our digital transformation journey is evident in all aspects of our operations. In contrast to previous years, all award-related processes were carried out digitally this year. Once again, I would like to extend my sincere congratulations to all our colleagues who were recognized in the following categories: Stars of The Year, Special Category Awards, CEO Special Awards, Occupational Health and Safety, and Patent Awards.

In 2023, Şişecam solidified its position as the sector's export champion in Türkiye, a distinction it has consistently held for several years. At the Champions of Exports Award Ceremony organized by the Cement, Glass, Ceramics and Soil Products Exporters' Association, we were honored to receive the top prize in five categories, including "Company with the Most Exports" in the Flat Glass, Glassware, and Glass Packaging categories; and "Company with the Highest Export Growth" in the Glassware and Glass Packaging categories.

I believe these awards as a testament to our longstanding dedication and collaborative spirit. Our accomplishments also signify the trust we have fostered in global markets and our unwavering commitment to sustainable growth objectives. I am confident that these awards will serve as a catalyst for setting new targets and achieving even more remarkable export successes.

Şişecam remains steadfast in its commitment to implementing investments and operations that align with its Strategic Plan and Budget objectives. Given the prevailing economic conditions both in Türkiye and globally, it is imperative that each of us foster a strong culture of cost optimization, critical inquiry, and resource conservation, especially in the current period. The future success of our company is directly linked to the effectiveness of the measures we implement today. I extend my gratitude to your understanding and cooperation in this vital matter.

I hope you enjoy reading the latest issue of Şişecam Magazine.

Görkem Elverici
CEO



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T 0 850 206 50 50

Published for the employees
of Türkiye Şişe ve Cam
Fabrikaları A.Ş. and
subsidiaries.

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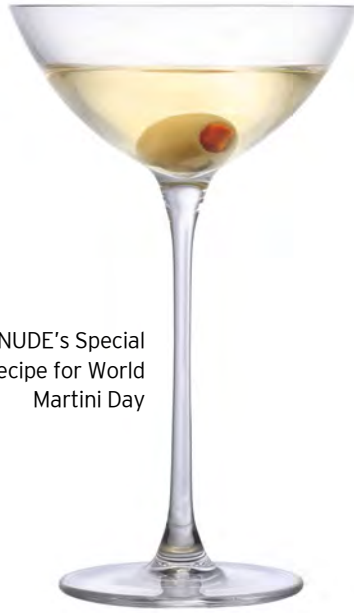
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TÜRKİYE
BANKASI
Company.

THIS MONTH

04
NEWS



NUDE's Special
Recipe for World
Martini Day



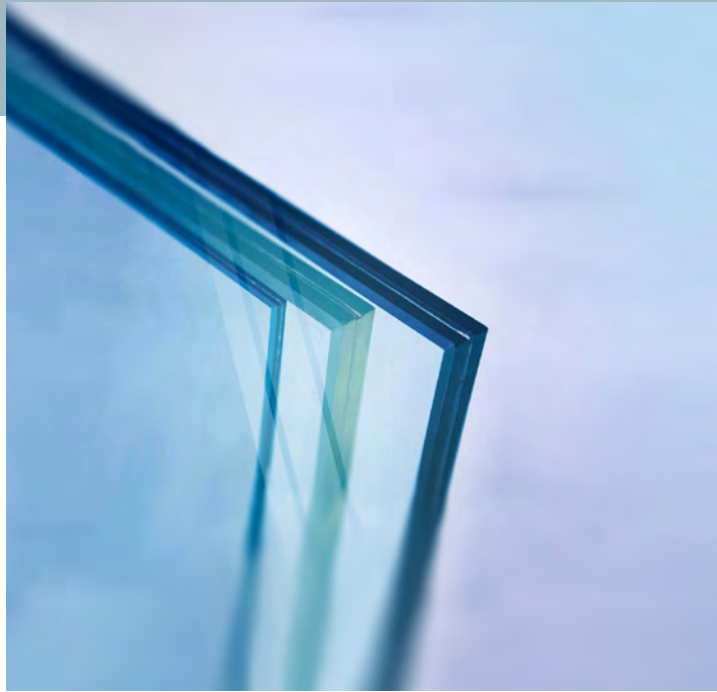
Paşabahçe Stores Bring
Elegance to Summer Tables



Şişecam Stars Parade
Awarded Creative
and Distinguished
Projects



"Şişecam Family Day"
Events Have Started



22 **INNOVATION**
Şişecam's Latest Applications in
Coated Glass Technology



26 **SUSTAINABILITY**
The Role of Glass in
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30
AGENDA



BRAND NEW DECORATIVE PRODUCTS

SUMMER

AT PAŞABAHÇE STORES





"Anfora"
Ceramic
Decorative
Object

"Testi"
Ceramic
Decorative
Object



"Aydın"
Metal Candle
Holder

"Traverten" Series



"Traverten"
Decorative
Bowl

"Traverten"
Candlestick

"Traverten"
Decorative
Object

"Traverten"
Decorative
Bowl

Paşabahçe Stores invites everyone to see its new products designed to beautify the summer months. Each carefully designed decorative product brings the freshness of summer into homes.

The "Aydın" Metal Candle Holder revives the pleasure of candlelight, an indispensable part of summer evenings, in a way that can continue without being affected by the wind. It will surely become the most favorite accessory of gardens and balconies. Both functional and aesthetic, this piece brings romance to summer nights.

Made of natural materials, the "Perge" and "Traverten" decorative objects draw attention with their simple forms. "Testi" Decorative Object and "Anfora" Decorative Object bring the power of simplicity to living spaces. Combining naturalness and elegance, these objects give a minimalist touch to summer decoration.

Bringing the fascinating atmosphere of Istanbul to homes, "Martıların İstanbulu" Oil Lamp and "Martı" Vase add a fresh atmosphere to homes with their blue details. These special designs bring the unique silhouette of Istanbul and the scent of the sea into homes.

Ideal for balconies and gardens, "Fidan" concrete pots offer a perfect alternative for different plant species with two size options. With a natural and modern look, these pots bring the most beautiful shades of green to living spaces, creating an atmosphere intertwined with nature.



PAŞABAHÇE STORES BRING ELEGANCE TO SUMMER TABLES

Paşabahçe Stores bring freshness and elegance to summer tables with stylish and aesthetic products. The "Olta" glass set and the "Soulmate" 2-cup set stand out with their elegance and are the best pieces to complement tables set with delicious seafood.

"Lal" Goblets with green, navy blue, and purple color options and "Istif" water and soft drink glasses, which save space with their stackable design, are ideal for refreshing drinks that are indispensable in the summer months.

"Bir Kalıp" Cheese Container will make morning breakfasts more enjoyable by bringing chic and practicality to breakfast tables. With its glass lid and design for easy storage, this special piece makes the first meal of the day more convenient and stylish.





"Celebration"
Carafe

"Pinot"
Water
Glass



"Istif"
Glass

"Balık"
Porcelain
Service
Plate



PAŞABAHÇE'S NEW MARRIAGE- THEMED CAMPAIGN

Paşabahçe, frequented by newlyweds and home builders, has prepared a special campaign film for the marriage season with the motto "Life Gets Beautiful with a 'Yes!'". The campaign movie was released on digital and social media channels and features pieces from Paşabahçe's wide product range. The campaign will collaborate with influencers who have large followings on social media. The brand will continue to release other creative works in different channels until the end of September. You can visit Paşabahçe's Instagram account to watch the campaign film.





FOR MEMORIES OF UNFORGETTABLE SUNSETS

Creator and photographer Roberta Mazzone (@_lagiuditta) chose Volcano wine glasses from the Stem Zero collection for a memorable evening at sunsets. Another noteworthy product on the table was the stylish "Vini" Carafe with its optical appearance. "Vini" was accompanied by the "Mist Lights" Candle Holder. Roberta Mazzone's inspiring sunset presentations were shared as reels on @nudeglass Instagram account.



A DELIGHTFUL TOUCH OF SUMMER

Italian content producer Clara Nanut (@gour.mode) included the inspiring colors of summer in her presentations. Nanut's summer cocktails served in cup glasses from the "Big Top" collection, and colorful flowers displayed in "Opti Vase" brought elegance to the invitation table she prepared in the open area. The pictures of Nanut reflecting the energy of summer were shared on the @nudeglass Instagram account.



SPECIAL RECIPE FROM NUDE FOR WORLD MARTINI DAY

NUDE celebrated World Martini Day with award-winning mixologist and NUDE designer Remy Savage (@remy_savage_). The martini recipe, made with

only three ingredients, was served in a Coupetini glass from the Savage collection, designed by Remy Savage himself. The making of the cocktail was shared on the @nudeglass Instagram account.





EXPORT CHAMPION ŞİŞECAM

Şişecam won awards in different categories at the Champions of Export Award Ceremony, organized for the sixth time this year by the Cement, Glass, Ceramics and Soil Products Exporters' Association. At the ceremony, where 2023 exporters were awarded, Şişecam won first prizes in the categories of "Company with the Most Exports" in the flat glass, glassware and glass packaging sectors, and "Company with the Most Export Increase" in the glassware and glass packaging sectors. Başar Tırpancı, Senior Regional Sales Director, received the award on behalf of Şişecam at the ceremony.

BOOK LAUNCH BY M+D

The launch meeting of the book 'M+D=35 1987-2022 PROJECTS', the 35-year document of the M+D Architecture office, was held at Salt Galata on June 11 in cooperation with Şişecam. Aimed to create cultural continuity and memory in the field of architecture, the book reveals the productions of M+D Architecture founders Metin Kılıç and Dürrin Süer from 1987 to 2022. Dürrin Süer and Metin Kılıç (M+D Architecture), Deniz Güner (editor), Erdem Erten, and Umut Altıntaş (graphic design) participated in the launch event of the book 'M+D=35 1987-2022 PROJECTS', which was awarded the best book design award at the 42nd Graphic Design Exhibition organized by the Graphic Designers Professional Organization (GMK), in cooperation with Şişecam. After the Q&A session, the Şişecam team had the opportunity to meet and chat with the participants, including architects, architecture students, and academics.



DR. SELMA ÖNER FEATURED IN THE MOST POWERFUL SUPPLY LEADERS IN TÜRKİYE LIST

Şişecam Chief Supply Chain Officer Dr. Selma Öner ranked sixth in the list of Türkiye's Top 50 Most Powerful Procurement and Supply Leaders, compiled by the Ekonomist magazine. According to the results of the research, Şişecam was the third company with the highest number of suppliers with a total of 15,000 suppliers. In the ranking based on the number of active suppliers, Şişecam topped the list with 10,000 suppliers.

ŞİŞECAM AT KAIZEN™ TÜRKİYE CONFERENCE

Kaizen Institute local offices around the world have been organizing KAIZEN™ congresses and conferences for years. These events create an environment of motivation and social communication by bringing together professionals, experts, and organizations from different sectors that have never met the KAIZEN™ philosophy before or are currently implementing it in their internal operations. This year, the conference was organized under the theme "Change for the Better for Everyone, Everywhere, Always". Last month, Şişecam Operational Excellence Manager Ozan Muslu was a speaker at the 1st Kaizen™ Türkiye Conference 2024, organized in cooperation with KalDer, Turkish Quality Association, and Kaizen Institute Türkiye. In his speech, Muslu shared with the participants the initiatives undertaken as part of Şişecam's continuous development principle.



ŞİŞECAM

STARS PARADE

12TH
Year

AWARDED CREATIVE
AND DISTINGUISHED
PROJECTS





The award ceremony for Şişecam Stars Parade was organized for the 12th time this year. At the ceremony, projects that produce creative solutions, make a difference with their technology and brands, and pioneer Şişecam's vision of becoming a global company that respects the individual as well as the environment were awarded. Unlike previous years, this year all categories were combined under the umbrella of the Annual Achievement Awards and the processes were completed entirely digitally. A video describing this new journey was also released. Speaking at the 2023 ceremony, where awards were presented in the categories of Stars of The Year, Special Category Awards, CEO Special Awards, Occupational Health and Safety, and Patent Awards. Şişecam's former Chairman Prof. Dr. Ahmet Kırman said: "Born out of the unique vision and dreams of our founder

Mustafa Kemal Atatürk, Şişecam's employees who dream and courageously pursue this dream are perhaps the most valuable elements that have brought us to this day. Continuous development is the foundation of Şişecam's success. In order to achieve this development, it is necessary to dream, generate innovative ideas, take the right risks, and be open to change. Despite all the uncertainties and adversities experienced on a global scale and in different fields in recent years, we continue to add value to all the geographies in which we operate thanks to our competent human resources, robust financial structure, strategic decisions taken with common sense, and technological competencies. One year shy of our 90th anniversary, I would like to thank all of you for your endless labor and dedication, and the entire Şişecam family, which I believe will achieve many more successes."





Şişecam CEO Görkem Elverici also made a speech at the ceremony and said:

"Sustainability of development is possible not through individual steps, but by learning together as a team, trusting each other and feeding off each other. At Şişecam, we embrace a corporate culture based on trust and cooperation. We benefit from our expertise and experience in different fields, and believe in acting responsibly and courageously in an inclusive dialog environment, learning from each other and improving together.

Every year, you raise the bar even higher by signing hundreds of successful works that inspire Şişecam's development and transformation journey. This year, the platform received 476 applications for awards. Many of our colleagues from different geographies and our headquarters shared their successful projects and results with us. Among these projects, 35 of them were selected for awards. I sincerely congratulate my friends who were awarded for their successful projects, thank them for their contributions, and wish them continued success."







35 AWARDS WERE PRESENTED IN THE CATEGORIES OF STARS OF THE YEAR, SPECIAL CATEGORY AWARDS, CEO SPECIAL AWARDS, OCCUPATIONAL HEALTH AND SAFETY, AND PATENT AWARDS.





GÖRKEM ELVERİCİ, ŞİŞECAM CEO: “WE BENEFIT FROM OUR EXPERTISE AND EXPERIENCE IN DIFFERENT FIELDS, AND WE BELIEVE IN ACTING RESPONSIBLY AND COURAGEOUSLY IN AN INCLUSIVE DIALOGUE ENVIRONMENT, LEARNING FROM EACH OTHER AND IMPROVING TOGETHER. I SINCERELY CONGRATULATE MY COLLEAGUES WHOSE SUCCESSFUL PROJECTS WERE DEEMED WORTHY OF THE AWARD AND THANK THEM FOR THEIR CONTRIBUTIONS.”



FAMILIES MEET AT “ŞİŞECAM FAMILY DAY”

BALIKESİR, AYDIN, AND KARABÜK WERE THE FIRST STOPS OF THE “ŞİŞECAM FAMILY DAY” EVENTS SERIES FOR FAMILIES.





The annual global “Şişecam Family Day” family events remind Şişecam to feel the power of being a family. The first stops of the events, which will be hosted by 20 facilities this year, were Balıkesir Glass Fiber Factory, and Camiș Madencilik Aydın and Karabük facilities. These events provide a fun atmosphere for children, where they can learn about the production journey and have a pleasant time with their families. The event series will continue with Bulgaria, Russia, and Georgia.



INNOVATION

ŞİŞECAM'S NEWEST APPLICATIONS

IN COATED
GLASS
TECHNOLOGY

HOW WELL DO YOU KNOW ABOUT COATED GLASS, A MATERIAL THAT CONTRIBUTES TO SUSTAINABLE ARCHITECTURE BY INCREASING ENERGY EFFICIENCY? LET'S TAKE A CLOSER LOOK AT THE SUSTAINABILITY OF GLASS AND ITS IMPACT ON THE ENVIRONMENT.



An integral part of human history for centuries, glass has become an important element used in modern architecture in various forms and geometries. Attracting much attention due to its aesthetics, transparency, and ability to transmit natural light, glass (to quote Jean Jacques Rousseau, "the most innocent of stones"), was initially used in windows. However, in recent years, the sustainability of glass as a building material has gained traction in parallel with the growing demand for environmentally friendly construction practices. Thanks

to innovative technologies, architects began to give unusual shapes to this versatile material, and many sustainable products have been made with glass.

Resulted by the energy crisis in the 1970s, European governments began to pursue policies to regulate energy consumption. Energy ministries determined that around 25% of residential heating costs were due to energy loss through the windows of buildings. This led to funding for research to reduce the amount of energy leaking from buildings.



In the 1970s, multi-pane windows entered the market and manufacturers ventured into marketing energy-efficient windows for the first time. Double glazed windows and doors proved to be an effective solution as they minimized the need for excessive heating or air conditioning by significantly reducing heat transfer. In the 1970s, coatings were applied to the glass surface to improve the thermal control ability of glass components in buildings. Low-E (low emission, meaning low heat loss) windows also came into use. The first Low-E coatings were made using thin layers of gold, which created a green tint. In 1981, Low-E coatings were

produced in more neutral colors using silver layers.

Şişecam's Low-E coated products are developed at Şişecam Science Technology and Design Center in line with the demands of the architectural sector. Researchers specialized in their fields carry out development activities to meet the demands of the architectural sector and offer different solutions. This process is completed in three stages. In the design phase, Low-E coating structures are modeled in a computer environment and the coating structure is determined. In the second stage, prototype production, the modeled structures are realized

in the laboratory to verify their performance. Prototype production is carried out at Şişecam Science, Technology and Design Center's coating devices in a vacuum environment supported by a magnetic field. Environmental and mechanical tests in accordance with architectural standards of Low-E coated structures are also carried out in the laboratory after prototype production is completed. Following the design and prototype stages, Low-E coated product candidates are ready to be transferred to production lines capable of large-area coating, which is the final stage. The product candidates whose R&D activities have been

completed are then trial-produced on Şişecam's coated glass production lines; thus, products whose performance is verified are added to the portfolio. Today, Şişecam offers a wide range of products in the field of Low-E coated glass. Responding to different aesthetic and thermal insulation demands with single, double and triple silver products, Şişecam offers effective solutions for the architectural sector.

SOLUTIONS TO PREVENT MOBILE SIGNAL LOSS

In addition to offering energy efficiency and thermal comfort, Low-E coated glasses can reflect and absorb mobile communication, wireless



communication, and GPS signals due to the metal (Ag) content in the coating. Especially as the carrier frequency of the signal increases, the strength of the signal decreases. This shows that as 4G, 5G, and new communication technologies become established, the problem will increase with increasing frequency. Coatings that provide thermal protection are even more reflective at high frequencies. It is seen that glasses with these coatings can attenuate signals in mobile communication bands up to approximately one thousandth. Şişecam has initiated studies to create Frequency Selective Surfaces (FSY) for Low-E coatings and to prevent signal loss in the

frequency band. Şişecam Science, Technology and Design Center is working on FSY integrated glass systems solutions that will reduce the attenuation rate of mobile communication signals by up to one hundred times.

BIRD-FRIENDLY COATINGS

Although Low-E coatings are the most effective way to transform traditional facades into energy-efficient surfaces, all glass surfaces pose an invisible threat to birds. In Chicago, for example, some buildings and skyscrapers are located in migratory bird paths. Birds don't recognize the glass of the buildings, so they crash into these glass surfaces,

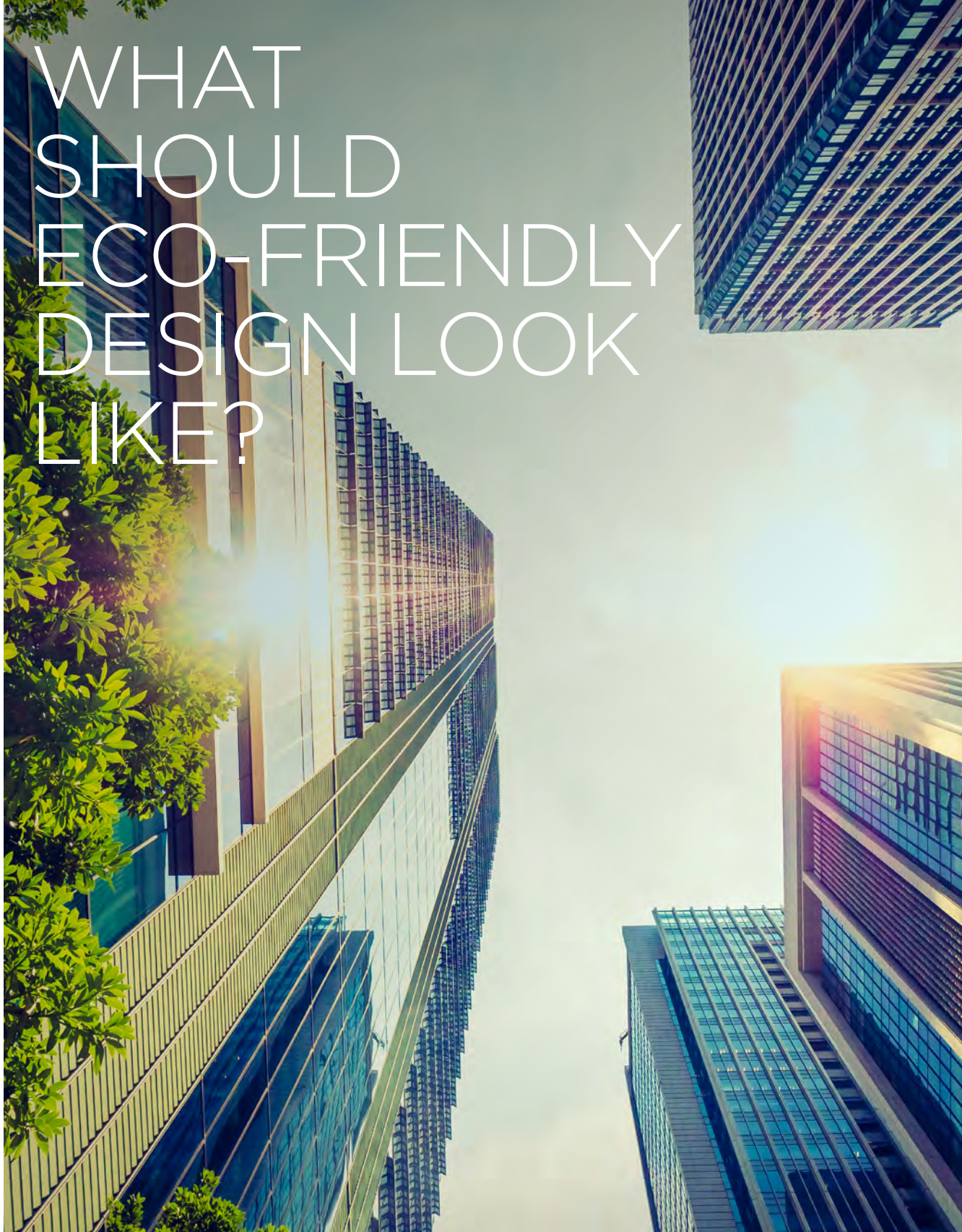
which unfortunately leads to bird deaths. Ways to reduce bird strikes on glass surfaces include the use of nets, stickers, patterned laminates, acid etching and frit. Since these solutions create an unaesthetic appearance on architectural facades and do not make glass more visible to birds, alternative solutions to this problem need to be developed.

Şişecam Science, Technology and Design Center has completed R&D studies on the design and development of two different structures of innovative UV-ray reflective functional surfaces in line with the needs of the architectural glass industry. Thanks to the products developed,

UV rays reflected from the glass will reach birds, thus preventing birds from hitting the glass. Since the developed coating will be outside the perception zone of the human eye, it will not be noticed by humans.

In addition to adding value-added features to Şişecam products, studies focused on architectural glass combinations with Low-E coatings are also highly efficient in terms of protecting the ecosystem. All bird-friendly coating structures that have been transferred to the production stage can be efficiently integrated into architectural glass combinations with Low-E coated glass.

SUSTAINABILITY



TODAY, THE APPROACHES ADOPTED IN INTERIOR ARCHITECTURE AND DESIGN MUST TAKE THE PRINCIPLES OF SUSTAINABILITY INTO ACCOUNT. THANKS TO THE MEASURES RESULTING FROM ECO-FRIENDLY APPROACHES, WE CAN PROTECT AND SERVE HUMAN HEALTH, INCREASE ENERGY EFFICIENCY, AND PRESERVE WATER RESOURCES, ANIMAL AND PLANT SPECIES. WE TALKED TO **DR. BEYZA ÇERMİKLİ**, HEAD OF THE DEPARTMENT OF INTERIOR ARCHITECTURE AND ENVIRONMENTAL DESIGN AT THE FACULTY OF ENGINEERING AND NATURAL SCIENCES AT ISTANBUL ATLAS UNIVERSITY, LECTURER IN LANDSCAPE ARCHITECTURE, ABOUT ECO-FRIENDLY ARCHITECTURE, SUSTAINABLE DESIGNS, AND THE ROLE OF GLASS IN ECO-FRIENDLY ARCHITECTURE.



Considering environmentally friendly approaches in architecture has become much more important today with the impact of the climate crisis. How is the climate crisis changing and transforming this sector?

The climate crisis has caused major changes and transformations in the architecture sector, which has an impact on the entire city, including the building, the built environment, and urbanism, making it obligatory to adopt environmentally friendly approaches. Problems such as global warming, ecosystem change, etc. affect people and nature, which are the subjects of the architecture sector. One of the most prominent impacts of the climate crisis is the concept of sustainability, which entered our lives in the second half of the 20th century. With this concept, sustainable solutions have started to be developed in architecture such as efficient use of energy and water consumption by minimizing energy and water consumption, renewable energy use, material reuse, recycling, environmentally friendly uses, re-functioning-modularity in

design, systems that save money, smart technologies developed, landscape applications such as green roofs-vertical gardens, rain gardens, urban planning, and transportation solutions. This brings about changes in the buildings, the materials that make up the buildings, the building environment, and thus the entire urban structure. Technological developments have also been effective in this change.

How can the adoption of eco-friendly approaches in interior architecture and environmental design contribute to the environment and the fight against climate change?

It is imperative that the awareness of sustainability in interior architecture and environmental design is formed not only in the designer but also in the user. For this, it is encouraging for interior designers to produce multi-purpose and functional spaces that encourage sustainable living, and to use sustainable materials and systems at every point, from materials to the installation system. Examples include well-

insulated walls, roofs, and windows; energy-efficient lighting solutions; use of natural light and ventilation; energy-efficient heating-cooling systems; acoustic measures; sustainable material preferences such as wood and glass; ecological and local material choices; reuse of recycled materials; waste reduction; choice of paints, adhesives, and other building materials with low volatile organic compounds (VOCs); water-efficient fixtures; use of greywater; reuse of shower and sink water in toilets or garden irrigation; use of plants; and developing designs that can easily adapt to changing needs from space to furniture. These are some of the important design decisions that can be made.

What is the benefit of a green building compared to a standard building in terms of carbon footprint, energy efficiency, etc.?

Green buildings play a crucial role in minimizing the negative impacts of the built environment on human health (physical and mental) and the natural

environment. According to a study conducted by the United States Green Building Council (USGBC), green buildings consume 30 percent less energy than American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards. According to data from the Resource, Environment and Climate Association (REC), green buildings consume 24 percent to 50 percent less energy and 33 percent to 39 percent less carbon dioxide emissions than average buildings designed and operated with traditional methods, with 30 to 50 percent reduction in water consumption, 70 percent reduction in the amount of solid waste, and 13 percent reduction in maintenance costs.

How important is the choice of materials in architecture and design from an environmental perspective? What kind of materials should be preferred and which should be avoided?

Materials obtained from recyclable or renewable sources in architectural design help to protect natural resources.

GLASS PLAYS AN IMPORTANT ROLE IN ARCHITECTURE AS A SUSTAINABLE MATERIAL THAT IS EASY TO RECYCLE, HEALTHY, DURABLE, FLEXIBLE IN DESIGN AND LONG-LASTING. IN ADDITION TO ADDING AESTHETIC VALUE SUCH AS LANDSCAPES, GLASS FACADES CONTRIBUTE TO ENERGY EFFICIENCY BY PROVIDING NATURAL LIGHT, OPTIMIZING TEMPERATURE CONTROL INSIDE THE BUILDING, PROVIDING THERMAL INSULATION, AND IMPROVING AIR QUALITY.

For example, we can prefer materials such as glass, bamboo, or wood, and especially locally sourced materials or materials produced in our country. This way, nature is protected, sustainability is ensured, carbon emissions from transportation are reduced, and the local economy is supported. Paints and coatings with low volatile organic compounds (VOCs), natural and chemically untreated materials are essential in protecting human health. Lead-based paints, PVC materials, materials containing formaldehyde, synthetic materials, polyurethane foams, materials containing volatile organic compounds (VOCs), and materials such as asbestos should not be used for reasons such as health, safety, and durability.

How would you evaluate waste management processes in our country? What are we doing right, what are we doing wrong, and what can be done in addition to current practices?

Implementing production and consumption activities based on producing less waste has an important effect on environmental protection policies in Türkiye, as it does all over the world. Within the framework of these policies, there are national legislations in force in our country. The accession process to the European Union is also effective in this. Türkiye has waste management regulations such as Regulation on Waste

Management, Regulation on Control of Packaging Waste, Regulation on Control of Waste Electrical and Electronic Equipment, Regulation on Control of Medical Waste, Regulation on Control of Vegetable Waste Oil, and Regulation on Control of Waste Batteries and Accumulators. Local governments' own resources are often insufficient for costly solid waste services. Here, I think it is important to have strategies and programs that are taken and implemented across the country with state support, rather than pilot or regional applications that cannot be completed. In addition, it is significant to develop university-industry collaborative projects. The contribution of public and local governments to this cooperation will spread the practices from pilot regions to all cities and even across the country. Another important issue is for companies to focus on recyclable materials, natural and local materials. It is a fact that society will not become conscious without individuals becoming conscious. It is essential for universities to carry out social responsibility projects in cooperation with the industry, and for companies to develop collaborations and projects with universities.

Energy efficiency is one of the most prominent issues when it comes to environmental approaches in architecture.

What role does glass play in sustainable and environmentally friendly architecture? How can we make the best use of glass and solar panels in this context?

Glass plays an important role in architecture as a sustainable material that is easy to recycle, healthy, durable, flexible in design and long-lasting. In addition to adding aesthetic value such as landscapes, glass facades contribute to energy efficiency by providing natural light, optimizing temperature control inside the building, providing thermal insulation, and improving air quality. Some or all of the building's energy needs can be met by generating electricity with solar panels integrated into the roof or facade. In addition to functionality, energy saving and environmental protection approaches, the modern designs and flexible mounting options of solar panels also offer creative and innovative solutions in architecture with different application areas such as roofs, facades, or sun shades.

Green roofs and vertical gardens are common applications in recent years. What role do they play in energy saving?

In addition to creating aesthetic value, green roofs and vertical gardens isolate the building against heating and cooling effects through vegetation and soil layer. This ensures that the internal temperature of the building remains more stable,

prevents overheating and cooling within the building, and reduces energy consumption as heating and cooling systems are used less. Green roofs absorb rainwater, allowing water to flow more evenly into drainage systems. This reduces the accumulation of rainwater in the city and reduces the risk of flooding. Vegetation improves air quality by increasing carbon absorption. Plants can also reduce external sounds entering the building or, with green walls, reduce the intensity of sounds at the urban periphery.

In addition to green roofs and vertical gardens, what other environmentally friendly solutions can be applied in landscape design?

One of the most important eco-friendly approaches in landscape design is rain gardens that are designed to collect and use rainwater. They allow rainwater to be naturally absorbed from the soil and feed underground water resources. In this way, it contributes to water management. Again, it is important to provide the right methods and materials in irrigation systems. Local and natural plant choices will reduce water consumption and maintenance in landscaping. Using compost and preferring organic fertilizers will keep the soil healthy and encourage plant growth. Again, with landscape planning, trees, and plants can play an effective role in sun and wind screening. As we have



recently seen in Istanbul, green valleys and plant corridors created as a continuation of each other throughout the city create ecological benefits by connecting different ecosystems.

In order for environmentally friendly approaches to become widespread, it is significant that not only architects or designers but also the public raise awareness. Not everyone may have enough knowledge about energy efficiency and waste management. What can be done to raise awareness on this issue? Organizing training programs for large segments of society in schools, universities, and workplaces; organizing seminars and developing social responsibility projects will contribute to raising public awareness on issues such as energy efficiency and waste management. I think that non-governmental organizations play a critical role in this regard. It is possible to reach a larger segment of the society through collaborative projects between educational units-public/local government-industry. In addition, it is very important to effectively

use the visual communication and media methods brought by the technological age. I believe that campaigns led by important local companies will be especially encouraging. States or local governments can develop policies that encourage environmentally friendly practices. For example, economic support such as tax reductions on the purchase of energy efficient appliances or incentives for waste reduction or recycling.

The world is facing the threat of water scarcity. How are we doing with water efficiency and rainwater harvesting? What can we do in addition to using low-flow faucets in our homes?

In Türkiye, water management strategies are being developed and implemented at national and regional levels. Various public institutions and municipalities organize campaigns on water conservation. For example, rainwater harvesting is carried out in various pilot areas in Istanbul and the use of this water for green area irrigation is encouraged. There are also water efficiency criteria within the framework of green building

certification systems, and the construction of buildings that meet these criteria is encouraged. Modern irrigation techniques (drip irrigation, sprinkler systems, etc.) are encouraged for more efficient use of water in the agricultural sector. Stream rehabilitation works are being implemented, and plans are being made to protect ecosystems and improve water quality around dams and lakes. Especially in recent years, the use of greywater in architectural planning has become prominent in Türkiye. Generally, greywater is the water generated in domestic areas such as bathrooms, sinks, washing machines, and kitchens. With the systems developed, it is possible to use greywater for purposes such as garden irrigation or toilet flushing. It is also possible to store water with rain gardens. Rainwater gardens are often integrated with rainwater harvesting systems and help rainwater to stabilize groundwater levels and protect water resources. Systems that contribute to rainwater harvesting can be developed especially on roofs, green spaces, and hard surfaces. Indoors, we can prefer low-flow faucets and showerheads,

or water-saving siphon systems, faucets, and showerhead fixtures.

Are there any inspiring examples of eco-friendly interior architecture and design from the world or our country?

Milano Bosco Verticale, Sydney One Central Park, Melbourne Pixel Building, and Rio de Janeiro Museum of Tomorrow are important eco-friendly architectural structures in the world. Other inspiring examples are Fukui Sea Park with its use of natural light in the interior, and Bilbao Azurmendi restaurant which adopts a sustainable design approach through the use of recycled materials and solar energy recovery.

From a futuristic perspective, especially considering the ongoing climate crisis, how do you envision the homes of the future will be designed? Do you have any predictions about the use of glass in these houses?

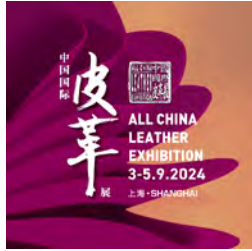
Here's my guess on what awaits us in the near future in terms of architecture: simple and minimalist designs; a return to natural material preferences; smart home systems and devices; avoiding harmful chemicals especially in materials such as paint, flooring, and textiles; using glass and plants more effectively in ventilation, sound insulation, and heating; durability and ergonomics at the forefront; and modular, functional, and personalized furniture. Here, transforming functional spaces and transformed materials will be especially effective. On the other hand, I think that we are very close to living in built and natural living spaces that stimulate our five senses in a virtual environment with augmented reality programs and the use of 3D prints in furniture with developing technology.

AGENDA



SHANGHAI, CHINA

September **3-5**



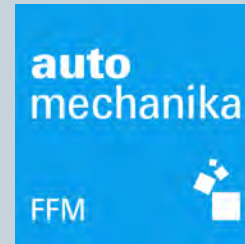
ACLE

All China Leather Exhibition (ACLE), the international leather fair organized in China, has been bringing together industry professionals from all over the world since 1998. ACLE

is an important event for international companies that want to take part in the huge market of China, the focal point of the global leather industry. Şişecam will present its leather chemicals products and meet with industry professionals at the fair organized by China Leather Industry Association (CLIA) and APLF Limited.

FRANKFURT, GERMANY

September **10-14**



Automechanika

Bringing together automotive production and repair professionals from all

over the world, the fair will once again take place in Frankfurt this year. Şişecam's team will provide information on new technologies and trends to officials from companies operating in the manufacturing industry, repair shops, and automotive trade.

CALIFORNIA, USA

September **9-12**



RE+

RE+ is celebrating its 20th anniversary in 2024. Bringing together the modern energy sector to create a cleaner future, the fair will bring together renewable energy leaders. Şişecam will take part in RE+, the largest and most comprehensive event of the clean energy sector in North America.

ORLANDO, USA

September **19-21**



Auto Glass Week

Auto Glass, one of the most important fairs in the field of automotive glass, will host automotive industry professionals from all over the world this year. Şişecam will host visitors and industry professionals at its booth at the fair, where automotive glass production, replacement and repair professionals will come together.



ANCIENT
GREEK



ROMAN



BYZANTINE



OTTOMAN

The 5,000-year- long history of glass from Ancient Greeks to Ottomans

Pitcher

It's bright red in color and has a flat bottom. The body is divided into three horizontal sections by gilded contours, decorated with enameled flowers in between. It has air bubbles on the bottom. It's made with free blowing technique and has a punt mark.

*You can visit the Şişecam
Glass Artifacts Collection to see a 3D
rendering of this object and more.*



