GKD METALFABRICS

FAÇADES, SAFETY SYSTEMS,
AND INTERIOR DESIGN

PICTURE BOOK

The picture book idea

Our metal fabrics have a wide range of uses in the field of architecture – as solar protection façades, acoustic ceilings, fall guard protection, wall cladding, room dividers, roller shutters, transparent media façades, or as elements of corporate architecture. This picture book includes examples that offer you insights into the wide range of systems and their applications on and in buildings throughout the world.

Our metal fabrics have been setting standards for more than 25 years in building shell and interior design, as well as security systems. As a partner to internationally renowned architects, we give their ideas an unmistakable face with metal fabrics that are available in widths of up to 8 m and custom lengths.

GKD // WORLD WIDE WEAVE

GKD - Gebr. Kufferath AG is operated as a privately owned technical weaving mill (founded in 1925) and is global market leader for metallic and synthetic fabric/mesh solutions, as well as spiral belts.

Four independent business divisions bundle their expertise under one roof: industrial weave (technical weave and filtration solutions), process belts (belts made of woven mesh and spirals), architectural metal fabric (façades, interior design, and security systems made of metallic mesh), Mediamesh® (transparent media façades).

Market proximity worldwide thanks to headquarters in Germany, five other production sites in the USA, South Africa, China, India, and Chile, as well as branches in France, Spain, Dubai, and representatives all over the world.

CONTENTS

FAÇADES 04

TRANSPARENT MEDIA FAÇADES
MEDIAMESH®/ILLUMESH 20

INTERIOR DESIGN
Acoustic & design ceilings
Wall cladding & room dividers 32

SAFETY SYSTEMS
Roller shutters, railings,
balustrades 44

COLORS & SURFACES 54

METAL FABRICS 62

KUNSTHALLE MANNHEIM MUSEUM OF MODERN AND CONTEMPORARY ART, GERMANY

Façade made from bronze-colored stainless steel fabric with varying degrees of transparency. The partially varying translucency of the stainless steel fabric with its specially developed mesh design, comprising stainless steel cables and bronze-coated stainless steel wires and tubes, lends the Kunsthalle Mannheim a delicate façade skin with varying transparency that spans over 4,600 m^2. The Kunsthalle Mannheim, which reopened at the end of 2017, is the largest new museum building in Germany to date.

FAÇADES

The use of metal mesh on façades combines versatility in terms of both design and function, impressing with many advantages.

UNOBSTRUCTED & ATTRACTIVE APPEARANCE

The rooms behind the semi-transparent architectural metal fabric can continue to be used without restriction, as outward views are unobstructed. At the same time, metal mesh reflects the surrounding environment in attractive facets depending on the incidence of light. Light shows also lend an additional dimension to this.

WEALTH OF CREATIVE DESIGN IDEAS & ENERGY EFFICIENCY

Rigid room partitions and static building shapes are increasingly becoming a thing of the past – with façade materials offering a flexible design that is more in demand than ever before. At the same time, building shells should support energy-efficient climate management by screening solar heat input in summer but allowing it in winter.

LARGE RANGE OF APPLICATIONS & EXCELLENT DURABILITY

Whether sliding or folding shutters, three-dimensional façades, double façades with mesh installed between the glass, solar protection façades with fixed or moving mesh elements, all the way up to large rotating louver blades, fall guard protection, or transparent media façades: our metal fabrics are particularly durable, rugged, and functional materials that impress in any application.

CERTIFIED SAFETY & QUALITY

All components of our systems with the Tigris, Omega 1520, and Escale 7x1 metal fabrics for façades, freely suspended ceilings, and fall guard protection have been subjected to stringent experimental and external tests by experts over a period of two years – and passed with flying colors. The result? General building approval, issued by the German Institute for Structural Engineering (DIBt). For the first time, this means that metallic mesh façades meet the requirements of standard-compliant construction products.

LUNA APARTMENTS, MELBOURNE, AUSTRALIA

In this Melbourne apartment block, the Australian architects from Elenberg Fraser used our Alu 6010 aluminum mesh to demonstrate how solar protection, energy efficiency, and unique façade design can harmonize perfectly. Around 300 visual screening and solar protection elements made of anodized aluminum mesh – some fixed, some manually folding – clad 600 m^2 of the glazed façade surface. These elements make the building a pleasant place to spend time thanks to their targeted and selectable shading that also offers a high degree of transparency.

LE GRAND THÉÂTRE DES CORDELIERS, ALBI, FRANCE

The three-dimensional membrane made of anodized spiral mesh envelopes the façade without hiding it. The flexibility of the Escale design mesh (made of gold-anodized aluminum in this case) and an unusual support structure were what made the spectacular façade design of French star architect Dominique Perrault possible. During daylight hours, the metal fabric façade reflects the majority of the solar energy striking the building and thereby significantly reduces the solar input. At night, the semi-transparent solar protection façade lends the building a sense of depth and elegance.

RABOBANK, GELDROP, NETHERLANDS

For the office building, the van den Pauwert architectural firm designed a façade with floor-length windows that included solar protection made of metal mesh which is guided in rails and can be rolled up. The variable system makes it possible to individually adapt daylight usage, heat input, and room atmosphere. The special solar protection properties of the aluminum shutters made of GKD's Licorne 13a mesh helped the building achieve BREEAM certification with the rating "Very Good".

FIFA HEADQUARTERS, ZURICH, SWITZERLAND

Architect Thilla Theus describes her façade design for the FIFA headquarters as "dancing walls". Thanks to its mesh façade, which is reminiscent of the net in a football goal, the building's structure really does have the appearance of a floating object. A special version of the Omega fabric with aluminum weft wire was developed by GKD specifically for this project. The key requirements of FIFA for the façade, comprising fabric panels mounted at an angle and wrapping around the top and bottom of the building, were sustainability, flexibility, and energy efficiency.

ÉCOLE D'ART DE CALAIS, FRANCE

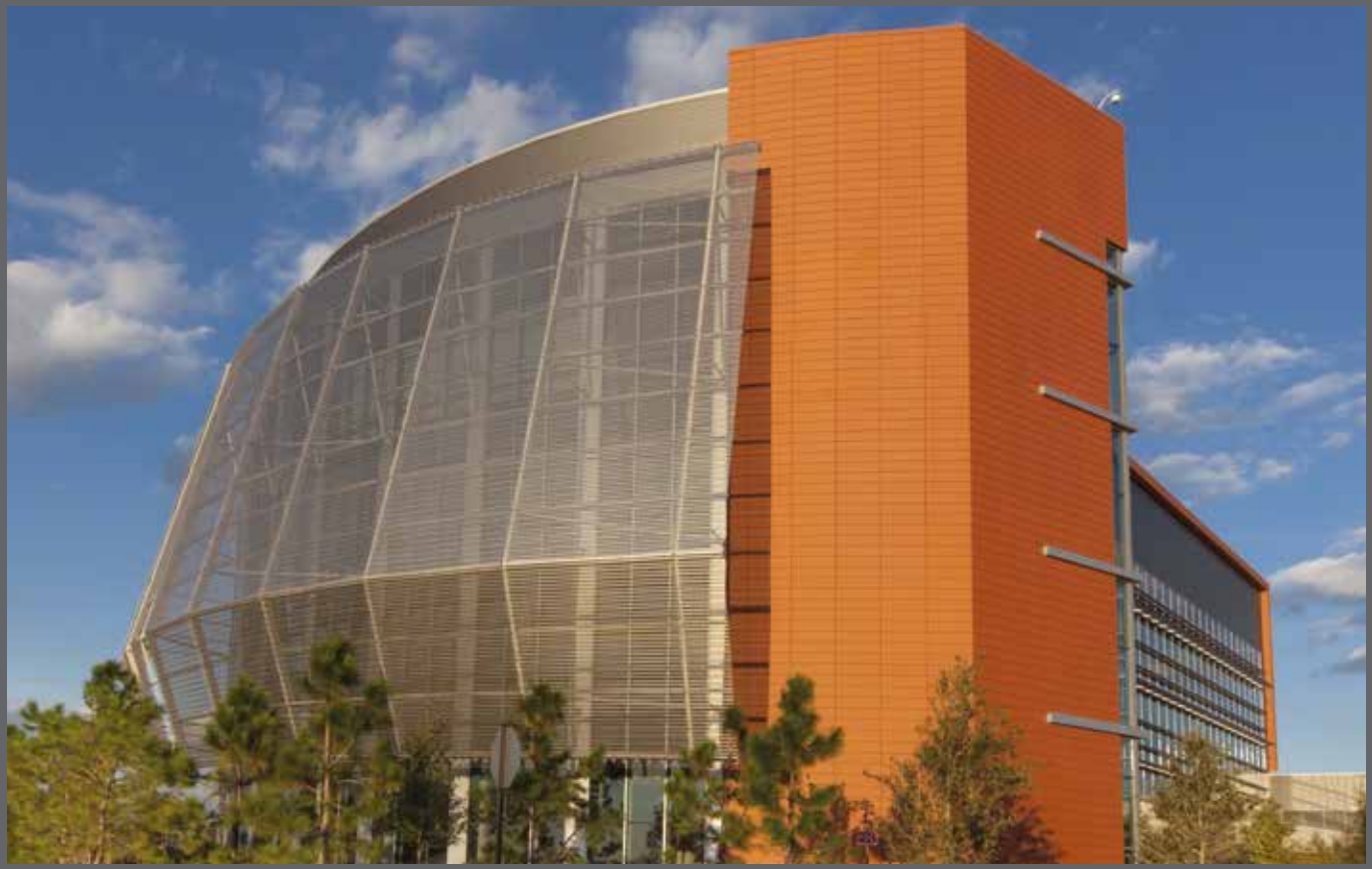
For the three-piece, curved solar protection façade of the art school, architecture firm Arc. Ame selected Escale 7x1 metal fabric with gold-anodized aluminum spirals. The woven, semi-transparent façade elements allow soft daylight into the east-facing atelier, while at the same time preventing the building from getting too warm in summer. During daylight hours, the sunlight lends the façade an illuminated appearance, while the interior lighting allows views into the rooms at night.

LOUIS VUITTON FACTORY, FIESSO D'ARTICO, ITALY

Omega 1520 stainless steel mesh was the first choice of Paris-based architecture firm Sandrolini for the façade of the renowned shoe factory. Some 114 individual metal mesh elements encase the four main façades of the building and are also used as horizontal solar protection elements in the inner courtyard. The architectural fabric covers a total of 2,025 m^2 and is fixed in place using the Fusiomesh NG system. With this system, the top and bottom edges of the metal fabric are glued between stainless steel profiles and clamped in position.

CAL ISO HEADQUARTERS, FOLSOM, USA

The Omega 1510 stainless steel mesh hung in front of the façade plays a key role in shading the building and thereby effectively and discernibly reduces the amount of solar radiation entering the building – in accordance with LEED Platinum certification. The California Independent System Operator Corporation manages California's energy supply from its new headquarters and sets a good example for energy-efficient architecture with its solar protection façade.



UF RESEARCH ACADEMIC CENTER, LAKE NONA, USA

The architects at HOK designed a building for the University of Florida in accordance with the conditions required for LEED Platinum certification. Part of the sustainability strategy is the distinctive solar protection façade made of Escale 7x1 stainless steel fabric from GKD. The solar protection façade, which covers a total area of approximately 750 m^2, comprises ten trapezoidal mesh panels and protects the glass façade beneath it from direct sunlight. The specific properties of the semi-transparent stainless steel mesh ensure that the offices enjoy sufficient natural daylight.

BARCELÓ RAVAL HOTEL, BARCELONA, SPAIN

The elliptical building of the four-star design hotel required transparent façade cladding that follows the special architectural shape of the hotel and frames it in an avant-garde way. The objective here was to secure the best possible view of the city, while also offering effective solar protection and visual screening. The Spanish architects from CMV chose Escale stainless steel spiral mesh in a custom design with the largest possible mesh aperture and expanded spacing between round rods.
The Escale spiral mesh can be used to create round, curved, amorphous or – as is the case here – elliptical shapes of any size.

PLANET M, HANOVER, GERMANY

The Bertelsmann media group presented a very special pavilion at the Expo 2000 world fair. The ellipsoidal shape of the seemingly floating building on stilts was almost completely three-dimensionally cloaked with flexible, formable stainless steel Escale mesh from GKD. This was the first project to successfully clad a round building of spectacular size in a visually enclosed mesh façade. A total of 440 linked mesh elements were used to cover the required area of approximately 2,400 m^2. Thanks to elaborate backlit illumination and the transparency of the fabric, the pavilion appeared to glow as night began to fall.

ICE GLASGOW, SCOTLAND

The ICE Glasgow (Imaging Center of Excellence) at South Glasgow University Hospital in Scotland is a medical research institute that brings together neurosurgical expertise from the university, industry, and health service sectors. Glasgow-based architects BMJ selected a solar protection façade made from GKD Lago stainless steel fabric for the façade design. The intention was for the zigzag structure of the 41 solar protection elements to visualize the dynamic interaction of the nerve pathways in the human body.

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE (EPFL), SWITZERLAND

The EPFL is one of the world's best universities founded in the last 50 years – with continuously growing space requirements. One objective of the new buildings and reconstruction work was therefore also to send out an architectural signal of the university's status. Architect Dominique Perrault designed a unique, three-dimensional zigzag façade for the current extension of the Pôle de bio-ingénierie from 630 horizontally movable solar protection elements made of GKD Escale metal fabric. Beside its functionality, the façade cladding acts as a visible sign of the renowned university's flexibility and dynamism.

HEADQUARTERS OF THE TURKISH CONTRACTORS ASSOCIATION (MESA), ANKARA, TURKEY

In order to achieve the highest Platinum LEED certification, the Turkish architectural firm Avci Architects designed solar protection made from Omega stainless steel mesh to stretch over the entire façade. An Omega fabric with a corresponding open area was specifically chosen for each side of the building – for example with small openings on the south side and more open mesh variants on the west, east, and north façades. A total of 900 m^2 of stainless steel fabric were used.

MUMUTH, HOUSE OF MUSIC AND MUSIC DRAMA, GRAZ, AUSTRIA

The double-curved glass façade of the MUMUTH in Graz, designed by renowned Amsterdam architectural firm UNStudio, is fitted with a total of 66 panels of Omega stainless steel mesh, each measuring 17.5 m in length and 3.30 m in width. Produced in various densities with flowing transitions, the metal fabric offers also solar protection during the day.

AMERICAN AIRLINES ARENA, MIAMI, USA

The American Airlines Arena is the home of the Miami Heat basketball team. The first impressive Mediamesh® installation in the US was implemented here. The 312 m^2 LED media façade is made from eight individual panels and boasts a total of 147,840 pixels with 5 cm vertical pixel pitch and 4.25 cm horizontal pitch. Thanks to the transparency of the stainless steel fabric, visitors to the Arena enjoy unrestricted outward views through the glazed frontage, while daylight illuminates the interior of the Arena. All kinds of information can be communicated via the display – whether advertising, live streams, or event dates. Live broadcasts of sporting events and concerts make the Arena forecourt a popular public meeting place.

TRANSPARENT MEDIA FAÇADES HIGHLIGHTS DURING THE DAY AND AT NIGHT

GKD media façades transform buildings and locations into high-class venues for media presentations. In combination with the corresponding media software, the bright rows of LEDs in the stainless steel fabric deliver high-resolution content both during the day and at night.

Transparent media façades with the very latest LED technology can be perfectly integrated into many varied architectural concepts. The high-grade fabric enhances building exteriors and sets a wide range of design accents, even when it is not in use as an LED façade. Transparent media façades from GKD are always attractive design elements – giving them a visible advantage over conventional LED displays.

Large degree of freedom to display varied content: whether large-format advertising, information that can be viewed from great distances, or impressive artistic staging, whether self-generating images or media-based interactions with the public. Transparent media façades provide dynamism and increase the value of architecture at a reasonable expense.

GKD media façades are always tailor-made. Factors taken into account during planning and manufacture include the viewing distance, the size of the media façade, the required brightness and resolution, the planned content, and the architectural design. Media façades from GKD can do it all: from general upgrading of buildings, through targeted corporate and brand communication, all the way up to urban enhancement or art-in-architecture.

PIAZZA DUOMO, MILAN, ITALY

During the renovation work to the Arengario Museum at Milan's Piazza Duomo, the massive scaffolding was clad with a Mediamesh® façade. Over the years, the 486 m² LED display was used as a means of communicating with those visiting the square. The content presented was diverse, including a speech by Pope Benedict XVI, a live broadcast of a football match for public viewing, or the results of a survey on the cleanliness and public perception of the city. The Mediamesh® installation was a prime example of the kind of interactions that are possible with a transparent media façade from GKD.

ETON CENTER, DALIAN, CHINA

The dual LED media façade made from GKD Mediamesh® at the Eton Center in the Chinese port city of Dalian displays both artistic animations and large-scale advertising. The 455 m² Mediamesh® installation is split into two independent displays that can be seen from great distances in a development area containing skyscrapers and an accompanying shopping center.

CLEVELAND INSTITUTE OF ART, OHIO, USA

A 146 m² LED media façade made from GKD Mediamesh® is used to display various content on the George Gund Building at the Cleveland Institute of Art in Ohio, USA. The content showcased on the large screens includes artworks by students as well as information on upcoming events.

COOK CHILDREN'S MEDICAL CENTER, TEXAS, USA

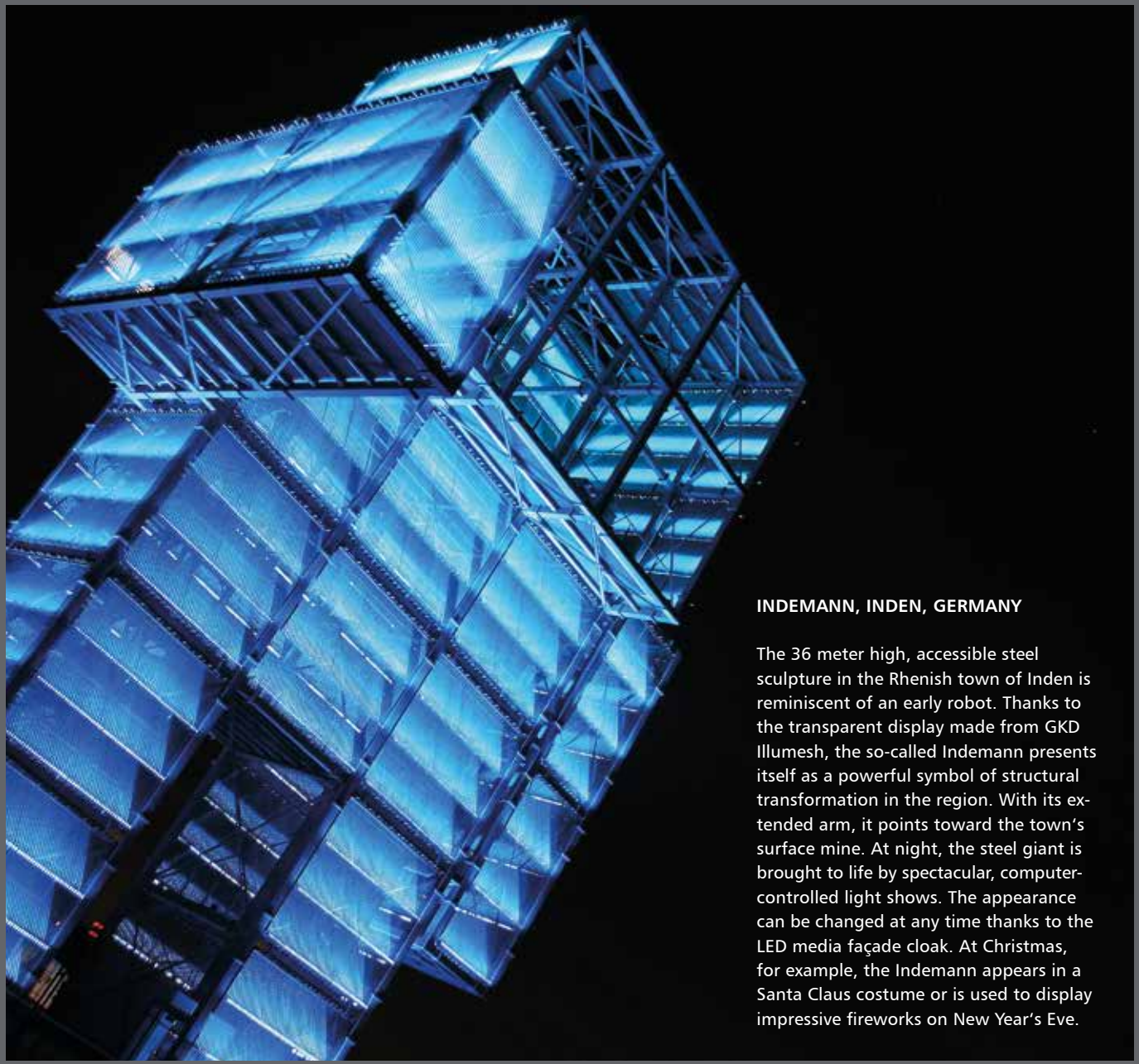
Mediamesh® greets both visitors and patients with photos and drawings of children. 97 m² of brilliant Mediamesh® is used to showcase paintings and photos of the children and those who support the children's hospital in Fort Worth, Texas. The two panels positioned on the corner of the parking garage, each of which is just under 19 m in length, welcome and bid farewell to the hospital's visitors every day. The stainless steel mesh therefore gives the garage an additional benefit that goes beyond the actual parking spaces.

LONG BEACH COURT BUILDING, CALIFORNIA, USA

A 60 m² transparent media façade made of Mediamesh® was used as a screen for the animation "murmuration" by artist Jennifer Steinkamp. In the fully glazed lobby of the Governor George Deukmejian Court Building, she projected flying feathers onto the woven screen in brilliant colors. The Egyptian goddess of justice, Ma'at, served as inspiration for the artist. This idea is based on an old legend, which states that feathers symbolize natural order and unaltered truth.

HAMAD INTERNATIONAL AIRPORT, DOHA, QATAR

One of the objectives when designing the new airport was to express the culture of the country – characterized by the mix of orientation to the future and deep tradition. To this end, US architecture firm HOK decided to go with an unusual design that combines a luxurious ambiance with sustainability. The four large-format Mediamesh® screens, developed and produced by GKD from stainless steel mesh with integrated LED profiles, underline this sophisticated concept in the main hall of the duty-free area and in Hall C of the main terminal.

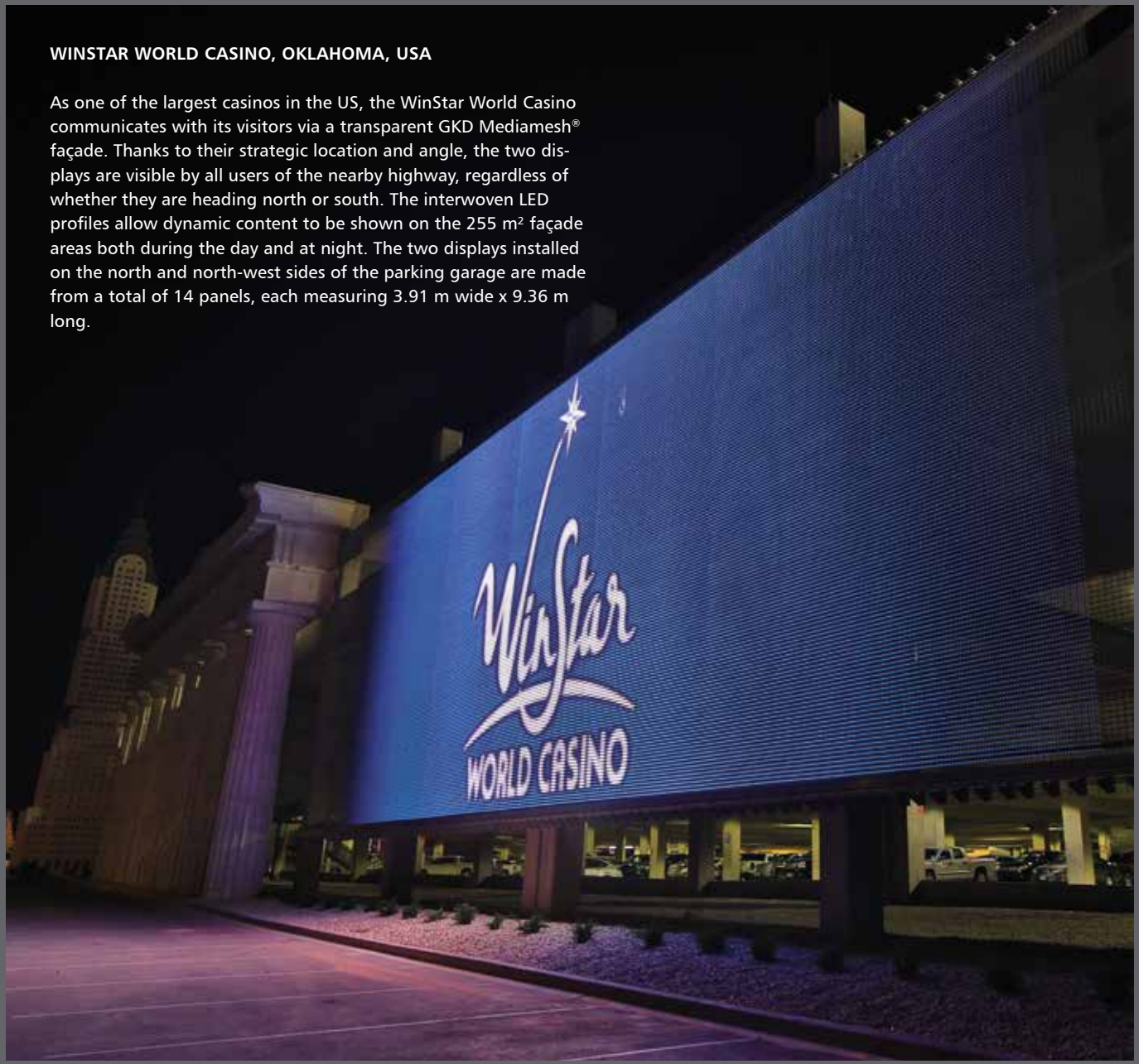


INDEMANN, INDEN, GERMANY

The 36 meter high, accessible steel sculpture in the Rhenish town of Inden is reminiscent of an early robot. Thanks to the transparent display made from GKD Illumesh, the so-called Indemann presents itself as a powerful symbol of structural transformation in the region. With its extended arm, it points toward the town's surface mine. At night, the steel giant is brought to life by spectacular, computer-controlled light shows. The appearance can be changed at any time thanks to the LED media façade cloak. At Christmas, for example, the Indemann appears in a Santa Claus costume or is used to display impressive fireworks on New Year's Eve.

WINSTAR WORLD CASINO, OKLAHOMA, USA

As one of the largest casinos in the US, the WinStar World Casino communicates with its visitors via a transparent GKD Mediamesh® façade. Thanks to their strategic location and angle, the two displays are visible by all users of the nearby highway, regardless of whether they are heading north or south. The interwoven LED profiles allow dynamic content to be shown on the 255 m^2 façade areas both during the day and at night. The two displays installed on the north and north-west sides of the parking garage are made from a total of 14 panels, each measuring 3.91 m wide x 9.36 m long.



ATLÉTICO DE MADRID, SPAIN

An LED façade made of 150 m² of Mediamesh® stainless steel mesh puts visitors to the Estadio Wanda Metropolitano in the mood for the upcoming match as soon as they enter the soccer stadium. The large LED display situated above the main entrance on the western façade of the state-of-the-art stadium shows bright, high-definition, high-contrast video content. Alongside its brilliant reproduction of images, the transparent media façade impresses with its weather resistance and freedom from maintenance. Moreover, because the heat- and cold-resistant display does not need any external cooling, the LED façade is especially energy-efficient.

TRIPOLI INTERNATIONAL CONVENTION CENTER, TRIPOLI, LIBYA

This transparent media façade boasts high resolution for perfect video quality. Besides individually created content, the façade can also show live events, conferences, or movies. Thanks to the automatic dimming of the LED screen, the content can be viewed both during daylight hours and at night. The transparency of the fabric offers visitors unrestricted outward views, while also allowing daylight to shine into the building.

INTERIOR DESIGN

As the leading technical weavers, we have established metal fabrics worldwide in the field of architecture. We implement design visions with future-oriented technical innovations – inside buildings, too. Architects and planners across the globe benefit from our expertise, as well as the great design freedom and acoustic quality offered by our metal fabrics and interior design system solutions.

ACOUSTIC CEILINGS & DESIGN CEILINGS

Our ceiling systems are equally at home in concert halls, hotels, or office buildings. This is because they offer the best acoustic properties in combination with design flexibility and top class aesthetics – no matter whether curved, freely formed, or flat ceilings. This is complemented by the ease of access offered by the ceiling elements – for example when room technology is hidden behind them.

WALL CLADDING & PARTITIONS

Just like our ceiling systems, wall cladding and room partitions made of GKD mesh offer the best acoustic and visual properties. From bronze metal fabric to color-anodized aluminum mesh: our solutions set highlights and make rooms of all different sizes more pleasant places to be in.

PALACE OF VERSAILLES, FRANCE

Dominique Perrault used exclusive metal mesh from GKD to create a modern interior design element for the Pavillon Dufour in the historic Palace of Versailles. Semi-transparent wall cladding and wave-like elements made of golden-coated metal fabric from GKD that are suspended from the ceiling highlight a clear path through the wing of the pavilion and create interesting viewing angles that were previously hidden.

EUMETSAT, DARMSTADT, GERMANY

Suspended ceiling made of gold-colored aluminum mesh: a special version of PC-Alu 6010 fabric was used in the canteen of the European Organization for the Exploitation of Meteorological Satellites (EUMETSAT). A total of 120 curved elements mimics the appearance of the sun's rays over an area of 400 m² thanks to the discreet shimmer of the fabric, as well as the LED lighting strips fitted along the edges. At the same time, the ceiling mesh hides the technology used for ventilation yet still grants easy access for maintenance.

HILTON AIRPORT HOTEL, FRANKFURT, GERMANY

Some 320 m² of Mandarin bronze metal fabric were used to cover the reception area of the luxury hotel located directly adjacent to "The Square", a huge office complex at Frankfurt Airport. Twenty curved mesh panels are fitted above both the reception area and the lobby bar located opposite, creating two oversize wings. In combination with impressive lighting of the metal fabric, this is a real eyecatcher.

VALUEACT CAPITAL, SAN FRANCISCO, USA

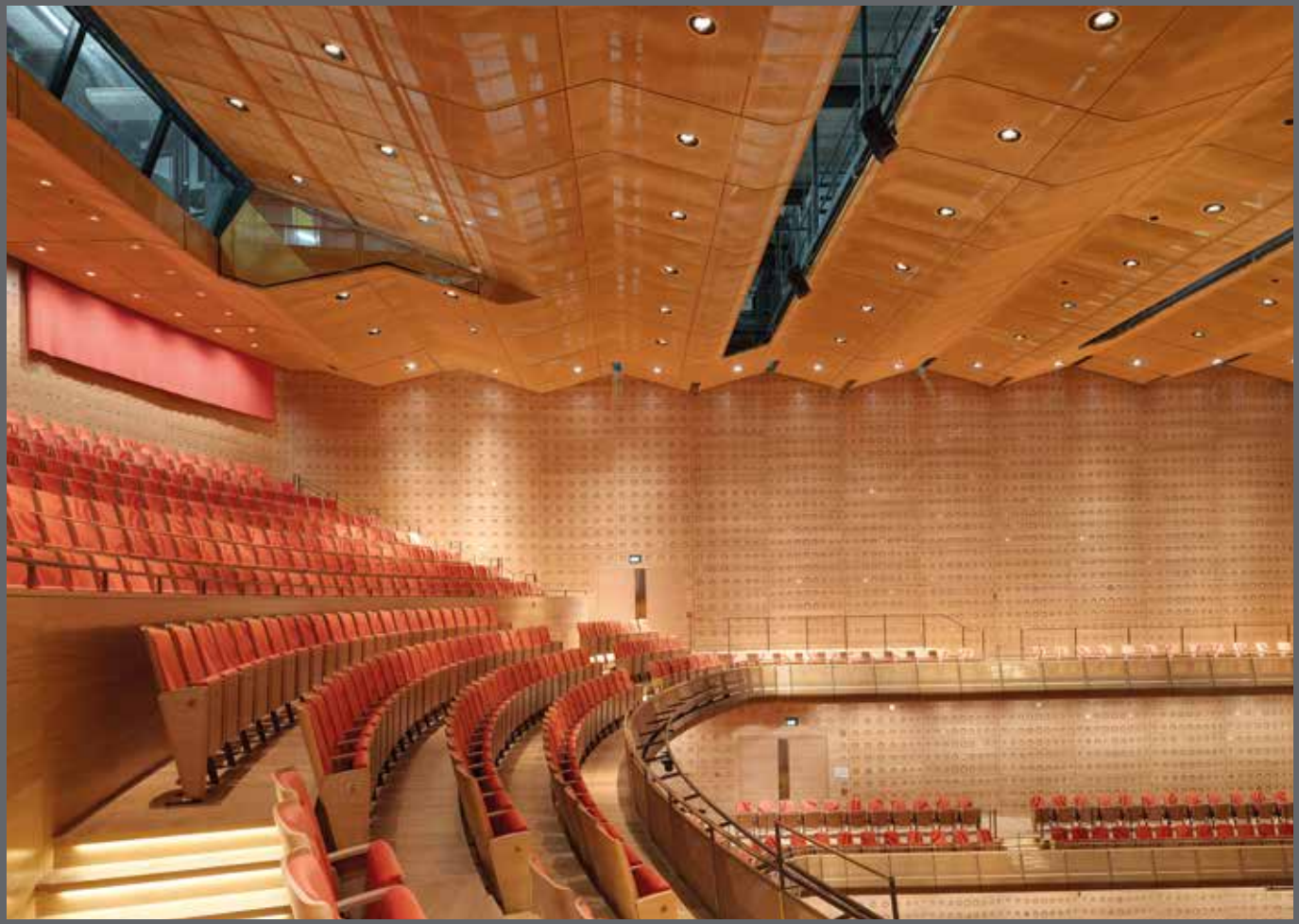
The architects at Gould-Evans selected PC-Omega 1520 stainless steel mesh for the ceiling design in the offices of US asset management company ValueAct. They received multiple design awards in the field of interior design for the metal fabric ceilings, including the Design Excellence Award of IIDA Southwest (International Interior Design Association) in 2015. Strict demands in terms of both aesthetics and design are met in full, as are the special acoustic requirements of open plan offices.

KÖNIG VON ENGLAND, STUTTGART, GERMANY

Within the scope of refurbishing the historic building in Stuttgart, which is today home to the Baden-Württemberg Finance Ministry, the top floor of the building was upgraded with ceiling elements made of gold-anodized aluminum mesh. This also represented the first ever use of a composite mesh for a suspended ceiling. The panels, which are resistant to bending, were installed over a large area and butt-jointed.

TONHALLE, DÜSSELDORF, GERMANY

The concert hall in this famous building proved a real challenge due to its hemispherical dome. The stainless steel Omega 1540 bronze metal mesh encases sound deflection elements which direct the sound into the dome. This enabled the acoustically neutral fabric to make its contribution to successful optimization of the room acoustics. Its transparency allows light from small lamps fitted beneath the dome to shine through, which is somewhat reminiscent of the building's original use as a planetarium.



KONINGIN ELIZABETHZAAL CONCERT HALL, ANTWERP, BELGIUM

Aluminum and stainless steel fabrics from GKD are used as a suspended ceiling, wall cladding, and on balustrades in the redesigned and acoustically optimized Koningin Elizabethzaal concert hall in Antwerp, Belgium. The fabrics provide acoustic neutrality, a high-quality visual effect, and fall guard protection, as well as concealing the building technology. Architect: Ian Simpson // Acoustic planning: Kirkegaard Associates, Chicago.

EUROPLAZA, PARIS, FRANCE

Sitting at the heart of one of Europe's most important and largest business districts, the 135 m high Tour Europlaza office building really sets standards. It has received the HQE exploitation & BREEAM in-use certification „Very Good" not once but twice. GKD's Silent-mesh acoustic system also made a contribution to this. CMP mesh elements on walls and as room dividers are highly effective in absorbing sound in the large lobby. Beside the positive acoustic properties of the system, the attractive aesthetics of the partially color-anodized aluminum mesh make a significant contribution to the improved conditions now enjoyed inside the building.

PROMESSO BOUTIQUE, MURCIA, SPAIN

The wall cladding, made of Mandarin bronze metal mesh, is the dominant design element in the boutique for choice menswear. Spanish interior designer Ignacio Davalos combined the elegant appearance of the metal fabric, which is clamped in frames, with effective lighting. This allows the bronze metal mesh to elegantly underline the boutique's first-class interior design.

EMPIRE RIVERSIDE HOTEL, HAMBURG, GERMANY

Wall cladding made of bronze metal mesh visually frames the hotel bar. The soft glow of the Mandarin fabric gives a pleasing aesthetic impression thanks to its textile nature. The large web dimensions allow installation of particularly long and high wall panels, thereby setting design accents.

EMILIO BALTHUS, SANTIAGO, CHILE

The Rodríguez & Rufin Arquitectos architectural firm designed the interior of the restaurant in the Chilean capital. The central element of the interior design is the Lamelle metal fabric. This architectural fabric, which acts as an island ceiling, spans the guest area in one sweeping piece. Another panel creates a semi-transparent partition to the neighboring bar area. The metal mesh panels were affixed using slide-in round rods and eyebolts.

HOLMENKOLLEN, OSLO, NORWAY

GKD mesh is used as an anti-turbulence net on the slope of the Holmenkollbakken, the famous 371 m high ski jump. The mesh has proven its value and effectiveness in performing this function worldwide in wind tunnels operated by the automotive, aircraft, and aerospace industries. The mesh converts the wind into a laminar airflow and thereby protects the jumpers from being caught out by gusts. The Sambesi light and PC-Sambesi stainless steel meshes also impress with their weather resistance, robustness, and virtually unlimited service life. A total of 7,300 m^2 of mesh was fitted to the steel ski jump, which can also be illuminated for night events thanks to interior lighting.

SAFETY SYSTEMS

GKD safety systems made of metallic mesh guarantee protection and safety. They are used throughout the world in a very wide range of buildings. Beside their robustness, resistance to wind and weather conditions, non-combustibility, and virtually unlimited useful life, the fabrics open up a wide range of creative design opportunities.

ROLLER SHUTTERS

Metal mesh roller shutters impress with their outstanding versatility. Thanks to application-specific preassembly, they are also used in buildings as room security barriers. As the metal shutters are rolled when opening and closing, they also require less space than conventional solutions.

BALUSTRADES & RAILINGS

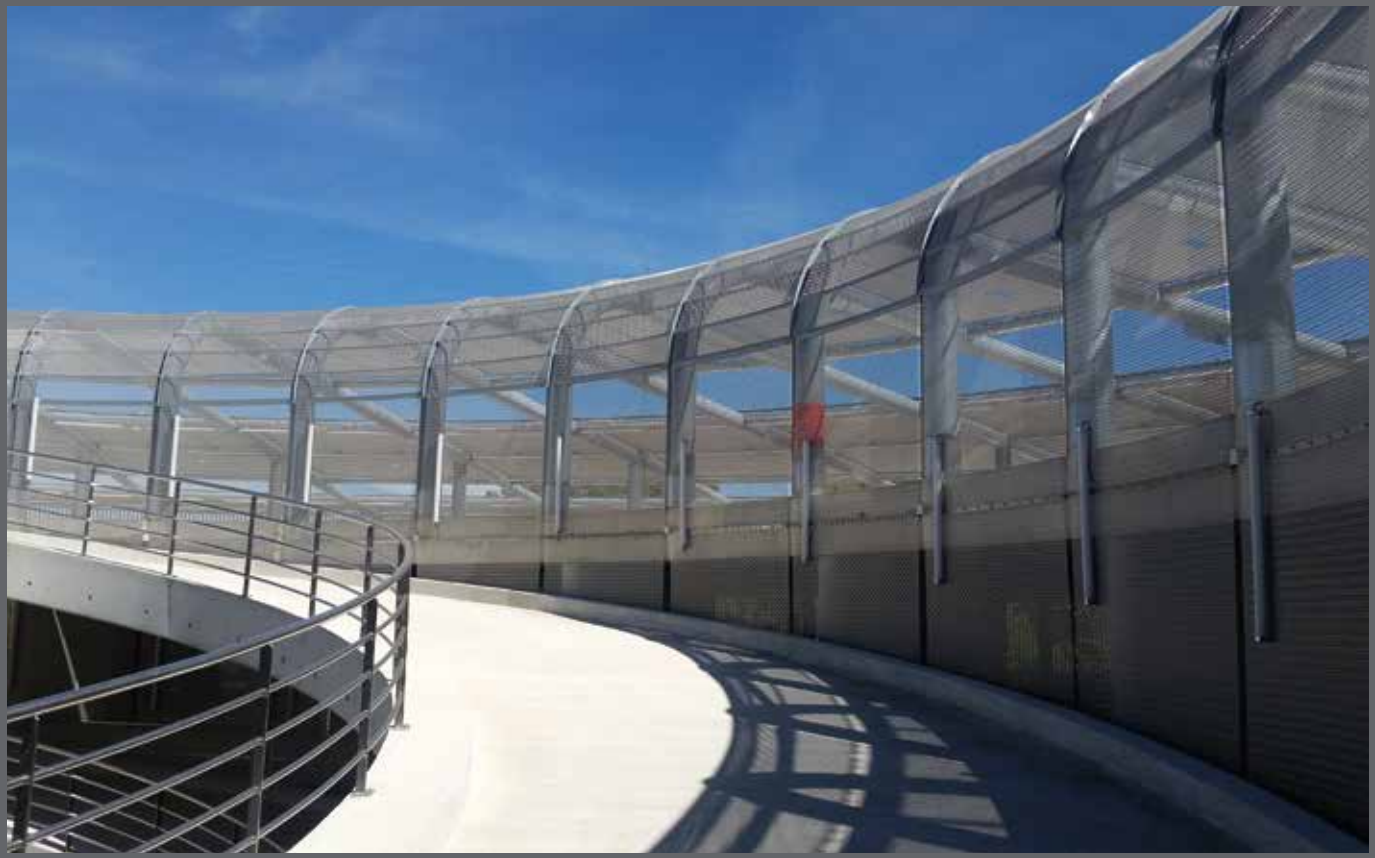
Whether in stairwells, on bridges, or even a ski jump: as fall guard protection, transparent privacy protection, or protection from winds and storms, our safety systems are strong and durable structures. However, they are also flexible enough to allow exceptional shapes to be created.

COMPANY CANTEEN, MÜNSTER, GERMANY

Tigris stainless steel fabric was used to create a multi-functional, electrically operated roller shutter. Here, two fabric segments (each measuring around 4 m wide and 1.20 m high) lend the meal serving area in the canteen of a major company an elegant appearance. Outside operating hours, the stainless steel mesh can then be used to securely close off the working area behind it.

MERCAT SANT ANTONI, BARCELONA, SPAIN

The covered market built in the Sant Antoni district in 1982 is given a modern look thanks to four different applications of GKD metal fabric. The four main entrances are encapsulated by metal fabric that follows their historic curved form. After business hours, a total of 26 folding doors and four roll-up systems made of stainless steel Tigris fabric and located inside the building secure the sales areas. Ten panels made from PC-Tigris fabric clad around 30 m^2 of the exterior wall. These robust fabrics serve as design elements and offer added security.



KRYPTON PARK-AND-RIDE, AIX-EN-PROVENCE, FRANCE

For the façade cladding of the largest parking garage in the intercommunal area of Aix-Marseille-Provence, architect Marc Dalibard opted for the shimmering, silver-colored Licorne 24a aluminum spiral fabric. Thanks to its flexible formability, transparency, and robustness, the spiral fabric impresses as an attractive solar protection façade and stable fall guard protection. In addition to this, it ensures unencumbered views and provides natural building ventilation, while also allowing ample daylight into the building. Despite its seemingly delicate structure, the aluminum fabric used is robust, weather-resistant, and durable.

CHICAGO ART INSTITUTE, USA

The balustrade at the Nichols Bridgeway, which is made from GKD stainless steel fabric, ensures the safety of visitors to the art museum and – thanks to the transparency of the fabric – also guarantees unrestricted outward views of the Chigaco skyline. The balustrade was attached using 112 frames filled with PC-Tigris stainless steel mesh.

EUROPEAN PARLIAMENT, BRUSSELS, BELGIUM

The sweeping bridge cladding made of Sambesi 4100 stainless steel fabric gives off a kind of golden shimmer in sunlight and offers pedestrians both safety and privacy, while at the same time ensuring unrestricted outward views. The bridge connects the parliament buildings on the first floor, while also granting access to the Place de Luxembourg. The 4 m high and almost 2 m wide stainless steel fabric elements are attached to the glazed façade of the bridge's structure using slide-in round profiles and eyebolts.

MANZANARES PARK, MADRID, SPAIN

Escale 7x1 architectural spiral mesh skillfully sets the scene for establishing the Arganzuela Footbridge – developed by Dominique Perrault – as the park's architectural highlight. The bridge has a helix of stainless steel mesh stretching in a shimmering spiral along its entire length of 250 m. The triangular looping elements are filled in alternation with 64 mesh panels (4,500 m^2 in total). While eyebolts provide the necessary tension on the angled sides, an inserted flat steel element is attached to the substructure at the top and bottom.

LAW FIRM, BATON ROUGE, USA

Stainless steel metal fabric from GKD offers protection and safety, while also complementing the interior design at the Phelps Dunbar law firm. In the stairwell, it is used both as fall guard protection and as a shimmering eyecatcher. Here, a 12 m long and 4 m wide panel of Futura 3110 stainless steel fabric was installed in the center of the stairwell, spanning three stories. Affixed using flat stainless steel elements and clevis screws at the top and bottom, and additionally secured along the stair string using point fittings, the metal mesh meets the very highest design standards in terms of both design and safety.

AUDI FORUM, NECKARSULM, GERMANY

At the representative Audi Forum Neckarsulm, visitors can experience the automobile brand in all its facets. To create an accordingly representative ambiance, the elevator and the surrounding stairwell of the new car collection center located here were clad in Tigris stainless steel fabric. The transparent fabric signalizes high quality, underlines the aesthetics of the architecture, which is characterized by openness, and also serves as fall guard protection.

COLORS & SURFACES

Our metal fabric types developed specifically for the field of architecture are manufactured from ropes, wires, or spirals. Although we predominantly use stainless steel as material, we also work with metals like copper, bronze, and aluminum.

WITH A LARGE NUMBER OF WEAVE TYPES we create application-based degrees of permeability and reflection. Depending on the lighting situation and weather conditions, the visual effect of the fabric then varies as desired and planned – all the way up to façades that appear almost invisible.

Thanks to a continuous process, we can guarantee true-color **COLOR COATINGS** for metal fabrics with special finish – for both flat and round wires.

Whether printed, coated, or painted metal fabric, whether anodized aluminum or surface treatment using a special etching process: working with GKD guarantees maximum design freedom for architects and planners.

SAMSUNG PARKING GARAGE, SAN JOSE, USA

Metal fabric façade at the new Samsung HQ in Silicon Valley: the architects at NBBJ selected Omega 1520 architectural fabric from GKD to clad the 3,345 m^2 façade. The stainless steel mesh was printed by GKD using a special color-coating process. The graphic design provided by Samsung is reminiscent of electrical circuits on PCBs – a great example of corporate architecture.

RAIFFEISEN-LANDESBANK, RAABA, AUSTRIA

The bank's new multi-functional center received the "Gold Certificate" from the Austrian Sustainable Building Council (ÖGNB), one reason for this being its exterior shading. A total of nine GKD metal fabric panels protect the building from direct sunlight and give the structure its individual character. Not least due to the large-format bank logo that was applied to the semi-transparent metal fabric and can be viewed from a great distance. GKD's Fusiomesh system was used for attachment.

CCLRT WESTBANK STATION, MINNEAPOLIS, USA

Art, architecture, and solar protection come together in a unique metal fabric façade. Designs created by artist Nancy Blum were applied to the Omega 1510 metal fabric using the etching process. In combination with large-format motifs made of stainless steel, migratory birds symbolize the region's eventful immigration history. The multi-functional solar protection façade shields the large glazed area of the two-story building from unpleasant heat in summer without restricting the use of daylight or transparency.

NEW WORLD SYMPHONY, MIAMI, USA

A GKD special fabric with round wires was used for the façade of the parking garage at the New World Symphony, the renowned concert hall in Miami Beach, USA, that was designed by architect Frank Gehry. The special Helix 12 spiral fabric was woven specifically in accordance with the specifications defined in the project for its many and varied applications. The almost 2,500 m^2 façade of the parking garage, consisting of 49 wire mesh panels in total, is illuminated in color by ground-mounted LED luminaires and functions as both a semitransparent eyecatcher and a multifunctional building shell.

PFISTER STORE IN TICINO, CONTONE-TESSIN, SWITZERLAND

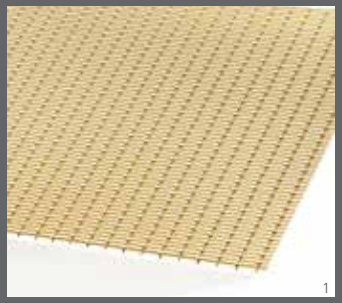
The architects responsible for a furniture store in the Swiss canton of Ticino developed a colorful solar protection façade from GKD metallic fabric. The material chosen was Lago architectural fabric with red-coated weft wires.

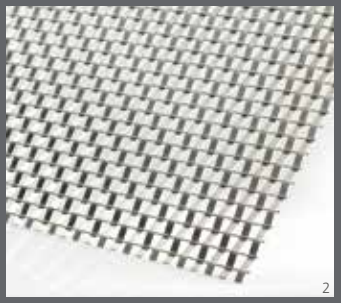
TENCENT HEADQUARTERS, SHENZHEN, CHINA

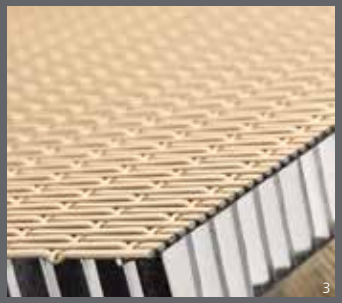
Some 1,850 m² of gold-colored metal fabric (28 panels, each measuring 16.5 m x 4 m) in a specially developed fabric design enhance the HQ of Internet giant Tencent. The decorative cladding of the public atrium also serves as reliable fall guard protection. Installed above the lobby, the transparent architectural fabric grants unencumbered views from the entry hall to the higher floors and vice versa. The new Tencent headquarters were designed by the renowned NBBJ architecture firm from New York.

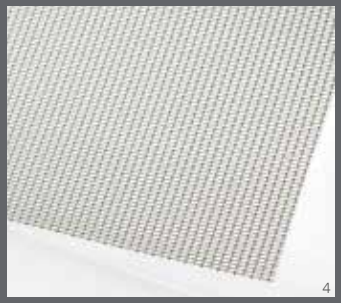
BMW DEALERSHIP, NEW YORK, USA

Façade cladding with large company logo: the desired logo was applied permanently to a large area of the Omega 1510 fabric using GKD's etching process to ensure visibility. Just over 562 m^2 of mesh, comprising 19 individual elements, dynamically change the appearance of the façade through alternating sun reflections and lighting at night. The logo applied can always be clearly seen.

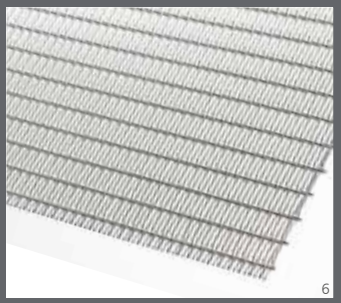

1


2

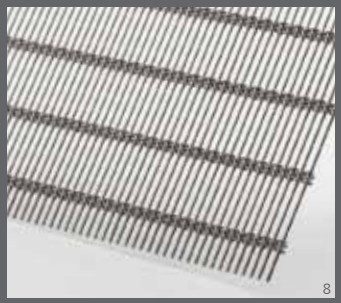

3

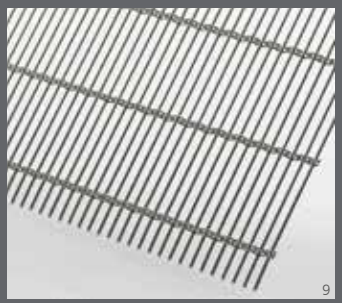

4

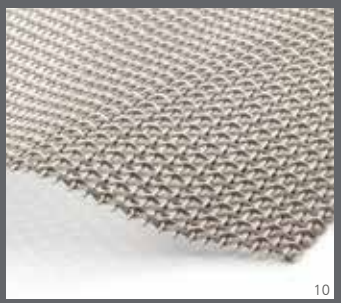
5

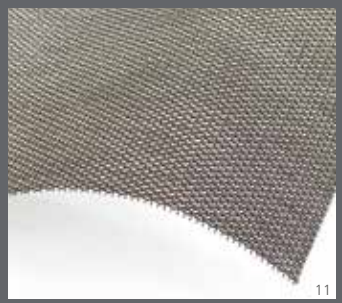

6

7


8


9

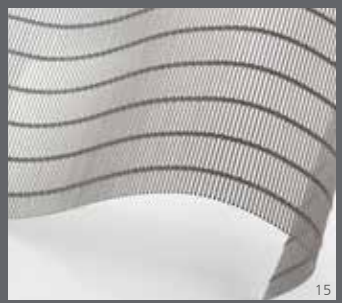

10

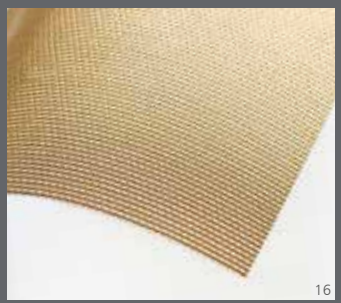

11

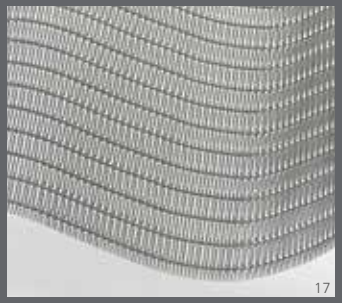
12

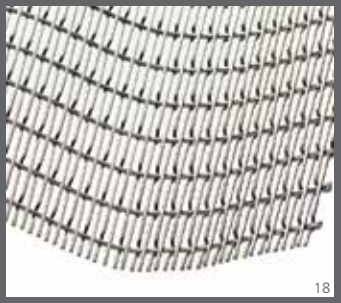
13

14


15


16


17


18

19

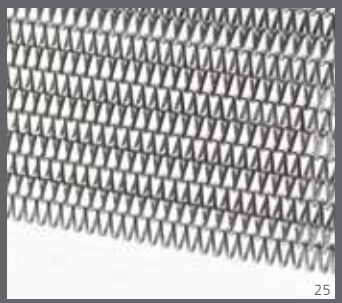
20

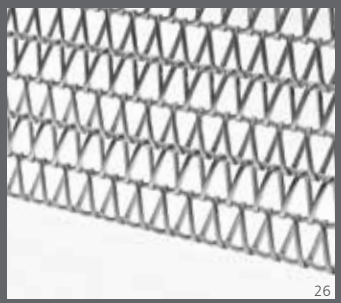
21

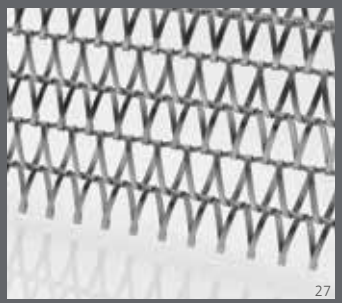
22

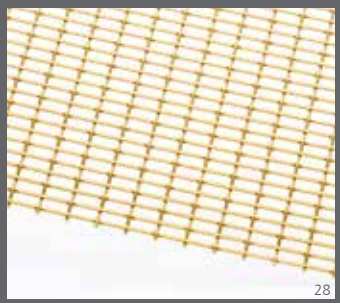
23

24

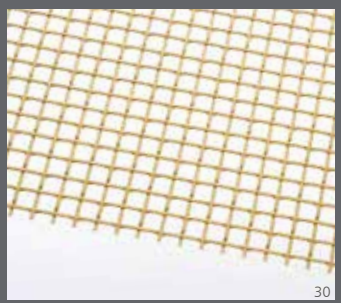

25


26


27


28

29


30

01. PC-ALU 6020
02. PC-Atlantic
03. CMP25-ALU 6020
04. PC-Ellipse 52
05. PC-Mira
06. PC-Omega 1520
07. PC-Futura 3110
08. PC-Sambesi 450
09. PC-Tigris
10. Baltic
11. Dolphin
12. Futura 3110
13. Kiwi
14. Lago
15. Lamelle
16. Mandarin
17. Omega 1510
18. Omega 1520
19. Sambesi 450
20. Tatami
21. Tigris
22. Escale 5x1
23. Escale 7x1
24. Licorne 18i
25. Licorne 13a
26. Licorne 24a
27. Licorne 26i
28. PC-ALU 6020 62%
29. PC-Orion ALU
30. PC-Tucana ALU

Versions/special fabrics available on request

WORLD WIDE WEAVE

Close to the market around the globe with the headquarters in Germany, five other production sites in the USA, South Africa, China, India and Chile as well as branches in France, Spain, Dubai and representatives all over the world. For more information please contact us:

metalfabrics@gkd.de

GKD - Gebr. Kufferath AG
Metallweberstraße 46
52353 Düren
Germany
T +49 (0) 2421 803 0
F +49 (0) 2421 803 227
www.gkd-group.com

GKD_Picture_book_Brochure_EN_02-20