



# SPECIALIST LAMINATES

3D LIGHTING & ARCHITECTURAL INTERLAYERS

LUMIÈRE SERIES





LUMIÈRE SERIES



## FASCINATING LIGHT STRUCTURES

**LUMIÈRE LUX** Three-dimensional light structures fascinate people rather like the Northern or Southern Lights. The aurora comes from electrically charged particles in the magnetosphere colliding with heavy ions in the upper layers of the earth's atmosphere, triggering processes and leading to changes in their electron configurations. The three-dimensional lighting effect created by **LUMIÈRE LUX** is far less complicated and rare. What makes this material so fascinating is how it interacts with LEDs, which allow it to take on any color at all. The secret lies in the composition of the **LUMIÈRE LUX** material, which can be used in countless ways. These 3D light structures break through the confines of spaces and create an optical depth which almost expands cramped areas.

**LUMIÈRE** Architectural laminates are made using solar control films, multi coated films, woven wire mesh, expanded metal sheets and other interlayers. These materials are combined with Low Iron, patterned or normal float glass. On the following pages you will discover many uses of **LUMIÈRE LUX** and **LUMIÈRE** products which can be used for interior as well as exterior applications.

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## LUMIÈRE

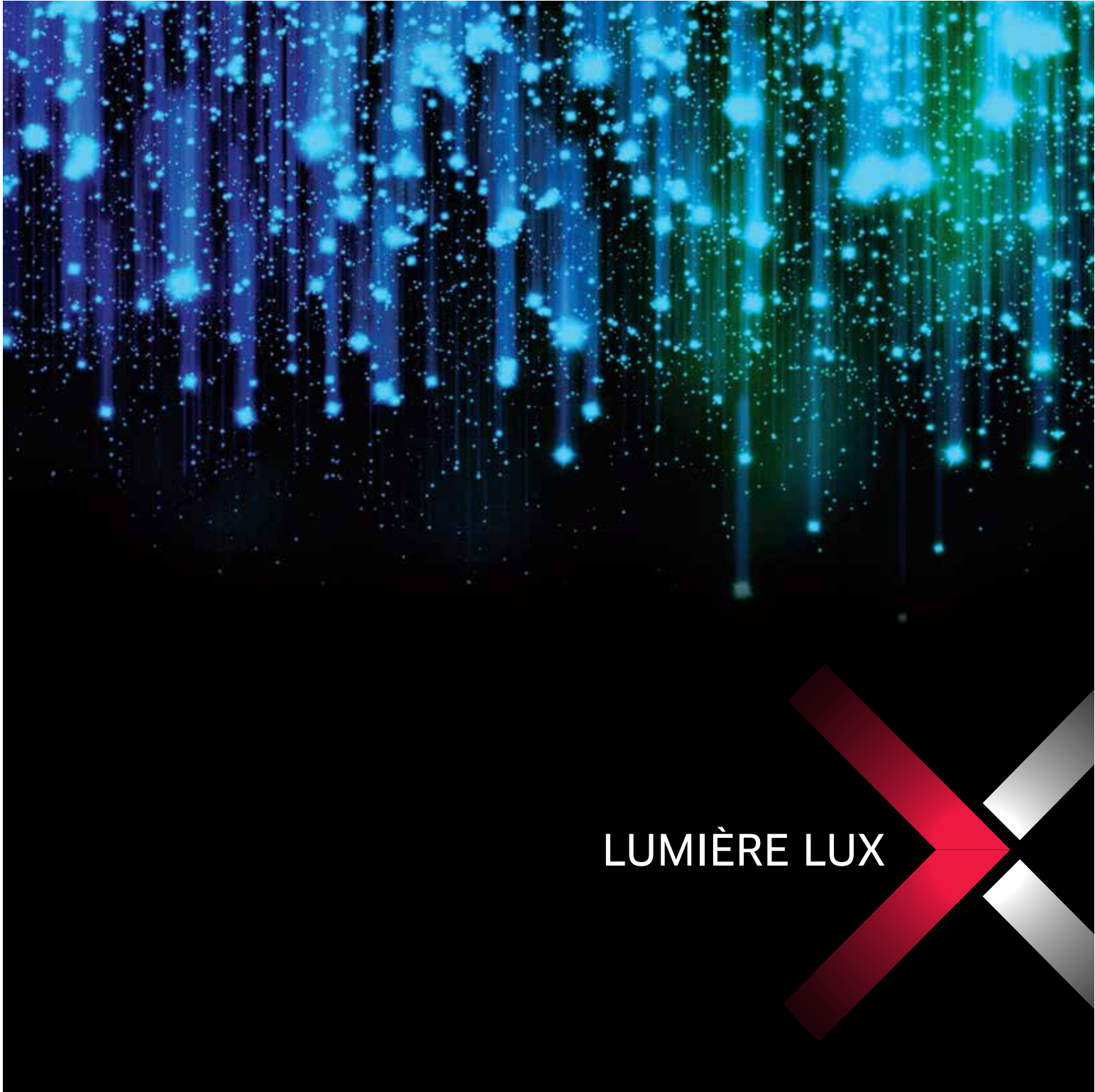
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LUMIÈRE LUX



**LUMIÈRE LUX** is a new direction in lighting within the enclosed space. The special reaction of LED's to **LUMIERE LUX** fabrics creates a feeling of space, depth and definition. Depending on your choice of fabric you could totally eliminate the position of the light source or define the exact position of it, thereby allowing a sense of space beyond the dimensions of the room. The combination is further enhanced through the use of RGB LED combinations. Whether it be a lift enclosure, a ceiling panel or simply wall décor, the enclosed space is completely renewed. The applications for this product are simply unending and can be used in kitchens, bedrooms, lounge furnitures, and even as complete ceiling panels.

**SPECIFICATIONS:**

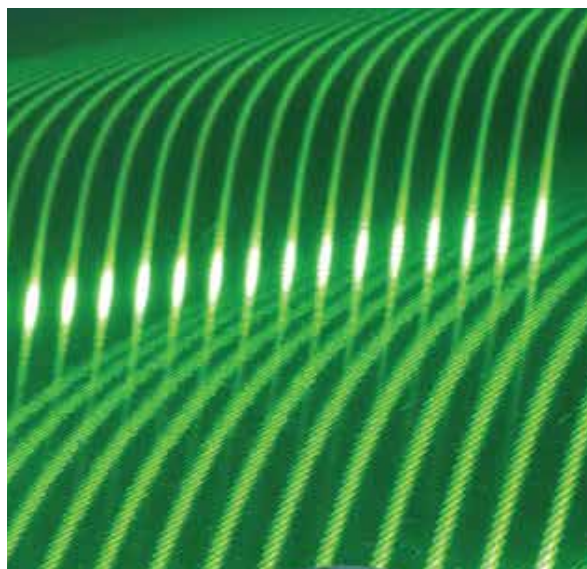
- A set of laminated fabrics (PET & PVDF) to create a specific design.
- UV Stable fabric colours.
- Always used in combination with LED's.
- Flame retardant capabilities.
- Standard widths range from 1.9 meters to 2.0 meters.
- Size of glazing - length is limited by size of lamination.



# 01. MOOD 3D LAMINATES

LUMIÈRE LUX Mood Laminates provides that fascinating 3D depth in combination with LEDs; the clarity of the material leaves a lasting impression. With a high-tech, less playful look, it gives you the absolute LUX experience.

A wide variety of finishes are available: embedded in glass or acrylic.



**HIGH-TECH TYPE** Mood materials are different kinds of special-effect materials which use lighting structures to change the feeling in a room. They come in the following types.

**MATERIAL** PET

**FLAMMABILITY** Flame retardant according to DIN 4102 B1

**USE** Indoor and outdoor (UV-stable)

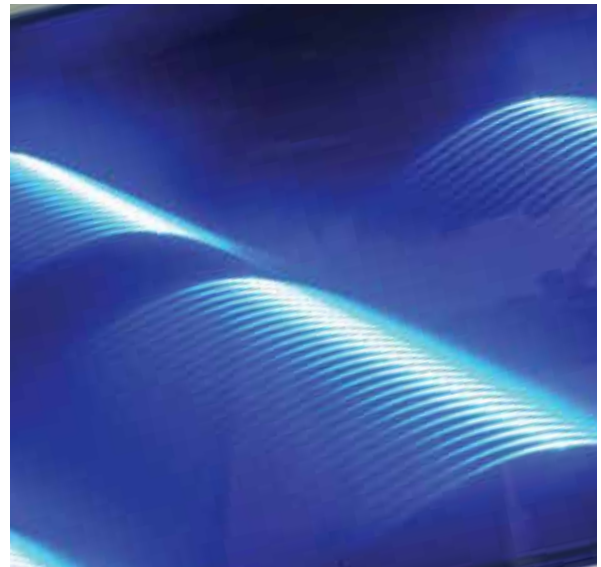
**DIMENSIONS** Width 2m (max.), lengths 5m / 10m / 30m

Type	Light effect	Transmission
MOOD 4352	long and structured	ca 21%
MOOD 4368	very long and structured	ca 54%
MOOD 4371	long and spread	ca 50%



## 02. MAGIC 3D LAMINATES

High-quality laminates of **LUMIÈRE LUX Magic** interacts with dots of light, e.g. LEDs. As they shine through the laminates, or are exposed to parallel lights, different illuminated shapes are created, depending on the laminate arrangement, distance and angle of viewing. These laminates have strong 3 dimensional effects, giving an appearance of depth extending far beyond the installation space. The color of light structures can be varied using RGB LEDs.

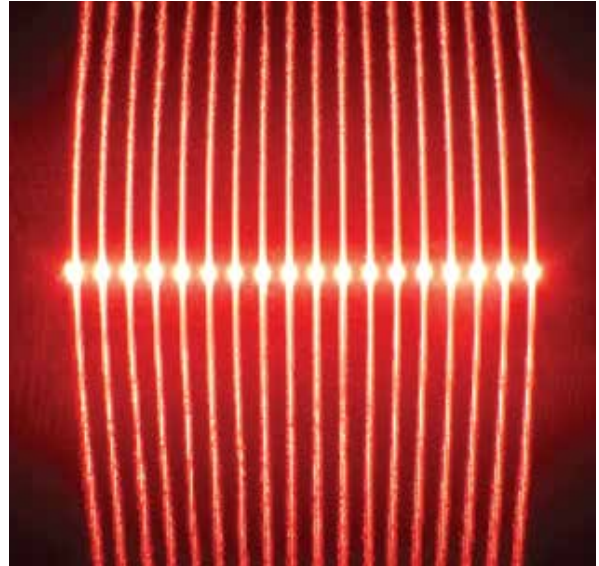


<b>CATCH THE EYE</b>	LUMIERE LUX Magic material can also be used to translate large-scale decoration ideas into reality – for example on floors, walls, ceilings and facades, etc. Give your creativity free rein. For events and shows, on stage and at functions, for sales promotions or as lighting to suit the season.
<b>FOIL TYPE</b>	EVA foil (no water absorption with EVA foil)
<b>MAX. DIMENSIONS</b>	1500 x 3000 mm
<b>GLASS TYPE</b>	<b>FLOAT</b> Mostly without bubbles, inhomogeneities, streaks and tensions glass breakage can result in dangerous, sharp-edged pieces of glass thermal shock resistance. <b>TEMPERED</b> Increased shock-, impact- and bending resistance decays mostly into blunt-edged, loosely connected crumbs.
<b>GLASS BUILDUP</b>	customized



## 03. DECOLUX 3D LAMINATES

The appearance of depth produced by this special laminate creates a spacious feel though it occupies only a tiny space; structures can look almost 50cm deep despite being just 5cm deep. Decolux Laminates and LED lights come together to form exciting, glowing 3D shapes with an unusual appearance of depth.



**TEXTILES WITH CHARACTER** Decolux fabrics come in a wide range of colourful decorative sets with stripes, blends or textured surfaces. The Decolux standard collection contains 16 patterns. On request, custom patterns can be produced.

**MATERIAL** PET, PVDF

**LIGHT EFFECT** long and structured

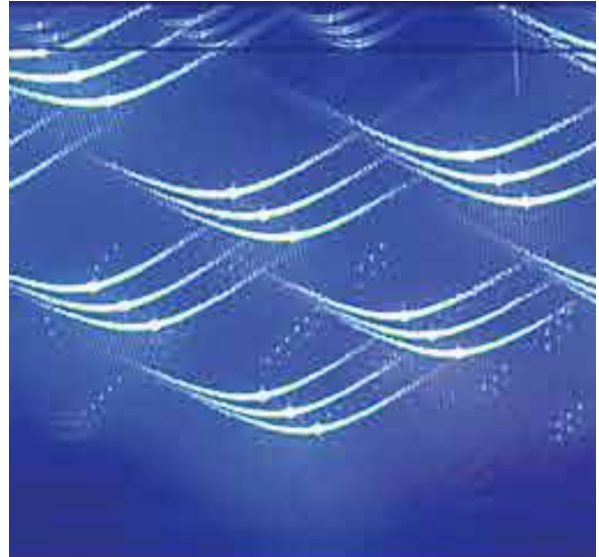
**USE** Indoor, Outdoor only with cover plate to protect against pollution (UV-stable)

**DIMENSIONS** Width 2m, lengths 5m / 10m / 30m

Type	Light Transmission	Shielding of background
DECOLUX 101	ca 24%	++
DECOLUX 103	ca 24%	+
DECOLUX 203	ca 29%	+++
DECOLUX 211	ca 24%	+++
DECOLUX 301	ca 27%	+++
DECOLUX 302	ca 34%	+++

## 04. MIRACLE 3D LAMINATES

The Miracle is a very special version of **LUMIÈRE LUX**. With these laminates, even the individual dots of light vanish. All that can be seen is light structures with the familiar **LUMIÈRE LUX** depth but no visible sources of light.



### MYSTERIOUS EFFECTS

The **LUMIÈRE LUX** Miracle is an exciting improvement on our tried and tested special-effect material. Here too three-dimensional lighting effects are created in the form of curved lines. What makes it so special is that the dots of light behind them are invisible. The luminous structures appear as if out of nowhere, with even greater depth and 3D shape thanks to the lack of contrast.

### LIGHT EFFECT

extra long and clear, no visible light spot

### USE

Indoor and outdoor (UV-stable)

### DIMENSIONS

Nominal width 1,90m, length 5m \ 10 m \ 30m



# REFERENCES

Kitchen Backsplash, Show Kitchen, Germany

# H2O HERFORD

## SWIMMING POOL WITH SPA, SPORTS AND LEISURE FACILITIES

**PROJECT DESCRIPTION:** The light installations on the walls and ceiling of the newly designed shower areas at the H2O sports and leisure center in Herford bathe them in a sea of light and color. The shower areas are fitted with four elements in all. Laminate ceiling panels in the women's showers and luminous ceiling plus a wall element in the men's showers create a feel-good atmosphere.





# MAWELL RESORT

## SPA HOTEL IN HOHENLOHE

**PROJECT DESCRIPTION:** At the 27-metre-high tower bar of the Mawell Resort, the LED-lit 3D laminate light structures blend extreme functionalism and an attractive design. The luminous laminated panels were produced using a decorative Decolux laminates; its three-dimensional light structures give it a fascinating effect of depth. In the evening the ceiling bathes the stylishly furnished cocktail bar with its neighboring lounge area in an atmospheric mood. During the day, guests at the spa can relax and enjoy a coffee with a unique laminate light design.



# AJANDO LOFT

## MANNHEIM DOCKS

**PROJECT DESCRIPTION:** An award-winning loft design was created at Mannheim Docks. The lighting design is part of the corporate architecture concept envisaged by the internationally renowned architect Peter Stasek. The long wall of the Ajando conference room features a special lighting design created using **LUMIÈRE LUX** Mood laminates; Light as a wave, light as particles; mono-color, wavy LED lines: this was the theme behind the lighting design in the corridors, lobby and open-plan office.





Office building - Karlsruhe, Germany



Dresser top, private home



BMW Pavillon Munich





Restaurant, Germany





LUMIÈRE

01.

## DICHROIC INTERLAYERS IN GLASS

Dichroic interlayers in width of 1400mm, 1800mm or less can be laminated with Low Iron Glass or normal float glass. Laminated glass can also be incorporated with insulating glass unit or combined with solar control glass in order to achieve stunning color effects as well as performance. These interlayers create exciting and occasionally intangible mix of form, volume, function and materialization. Facades created with these interlayers are breathtaking, depending on the light source and viewing angle, these interlayers creates dynamic colors and spectrum, these products bring buildings to life.

Depending on project requirement color effects can be adjusted in several ways using Dichroic films.



## Specialist Metalized Interlayers

Metalized interlayers are incorporated with low iron glass or normal float glass to achieve very interesting effects from outdoor as well as indoor. Whilst outdoor appearance is reflective (Gold, Silver or Blue) from inside soothing light grey or clear. These metalized interlayers offer thermal performance thus reduce heat coming through glazed areas whilst allowing day light into the building.

These metalized interlayers can further be part of Double Glazed units combined with multifunctional coated glass to achieve higher solar performance from insulating glass units.

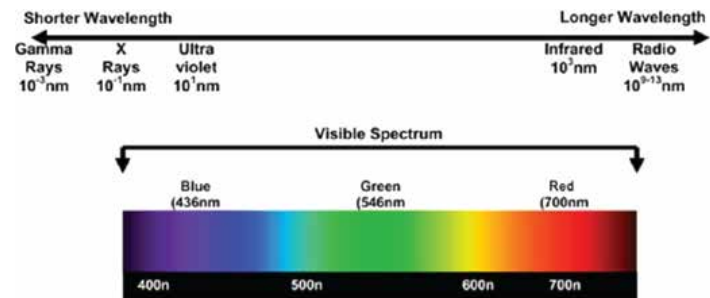
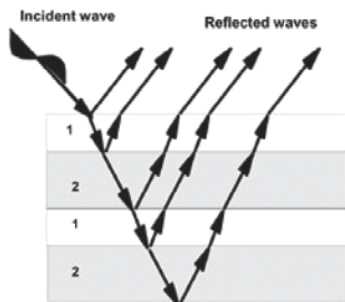






## TECHNICAL INFORMATION

- The films consist of over 200 layers that affect light rays
- Multilayer reflectors amplify this effect
- Each boundary between layers reflects a fraction of the incoming light
- Reflective colour film that changes dependent on the viewing angle
- Multi layer polymeric film with a polyester surface
- Metal free that is non corroding & non conductive
- Thermally stable and low shrinkage
- Lumiere effects fall in the area between certain bandwidths (500 - 740 nm)
- The light that is visible depends on three factors
  - Angle of the sun
  - Location of the person
  - Position of the building



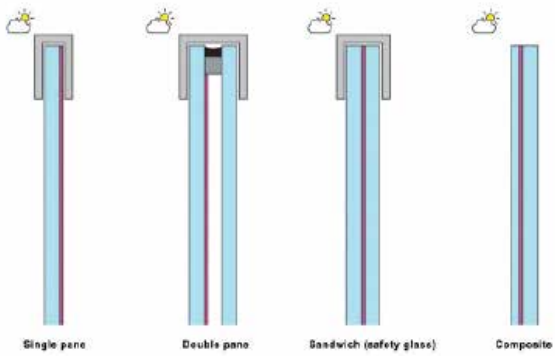




UKBB Children Hospital - Basel, Switzerland



**Application in four different ways**



**SHEET WIDTH** 1500mm (Recommended)

**SHEET LENGTH** Full height Glazing panel

**LAMINATE** SGP (Sentry Glass Plus)

We guarantee the product as a facade product for the period of 10 years.

## 02. EXPANDED METAL MESH

Laminates created by using Expanded Metal, Woven Wire Mesh and other materials

When combined with Low Iron or normal float glass Architectural Metal Interlayers create fascinating light effects (in reflection) from outdoor as well as indoor through transmitted light into the building.

Architectural interlayers such as Stainless Steel Woven wire meshes and Titanium, Copper, Aluminium or Stainless Steel expanded sheets can be laminated with 2 or more Low Iron / normal float glass panes or can be suspended in the cavity of Insulating Glass Units.

Depending on type and angle of these metal Interlayers in Laminated Glass or Insulated Glass Units these interlayers can reduce heat transmission into the buildings and avoid glare thus offering solar protection in addition to brilliant and attractive Architectural harmony with glass and metal.





# Metal Architectural Interlayers\*

- Mesh size dictates sheet size
- Factors like mesh length, mesh width, strand width, strand thickness, sheet length (overall), sheet width (overall) are important.

NOTE: Available in steel, aluminium and stainless steel (also certain precious metals upon request).

MESH	LENGTH	WIDTH	STRAND WIDTH	STRAND THICKNESS	SHEET THICKNESS	SHEET WIDTH
Micro	3-6 mm	1.7-3.4 mm	0.5-0.8 mm	0.5 mm	0.5-1 mm	600-1000 mm
Small	7-28 mm	4-10 mm	0.8-2.5 mm	0.8-1 mm	1-3 mm	1000-2000 mm
Medium	28-66 mm	12-30 mm	1.5-6 mm	1.5-4 mm	3-5 mm	2000-2500 mm
Large	76-300 mm	35-100 mm	3-8 mm	1.5-3 mm	3-5 mm	2500 mm







Deutsche Börse Cube, Eschborn, Germany



U-Bahn Station  
Germany



Wohnpark Binzen  
Germany

## 03. WOVEN METAL MESH

- The metal is woven so that large sizes are possible (length and width).
- Style of weave to be considered.
- Weight and aperture size to be taken into account.
- Loading factors like status of building structure, especially retrofits.
- Long warranties
- Special patterns available with a minimum order quantity.
- Size: 1500mmx 2850mm (Special sizes upon request).
- Colour coatings available upon request (RAL Shades).

### Specification:

- Type of mesh needs to be known.\*
- Type of glass (low iron, normal float, fire resistant, etc.) needs to be clarified early.\*
- Structural aspects need to be clarified early (wind loads, etc.) for adequate buildup's.\*
- Type of installation methodology (butt joints, framed, etc.), considered for edge glass finishes.\*
- Extra large sizes to be clarified, size of panels limited by size of the autoclave.\*
- Laminate will use EVA or SGP.
- Has acoustic properties, with additional panel strength.

(\* Assistance is available)







McGill University, Canada



Qatar National  
Convention Center, Doha



Restaurant Shiki, Vienna, Austria



## 04. ORNAMENTAL GLASS

A board selection of patterned glass creation with widely differing structures with interesting light play effects, as well as excellent light scattering, provide architects and clients alike with attractive planning and design possibilities. Rolled Glass creation undergo stringent quality controls, as well as being manufactured by what it at the most environmentally-friendly method.

Thanks to their excellent quality, patterned glass products are favourites for a wide variety of applications and can be toughened/tempered, laminated, insulating glass, screen printed or enamelling. Some of the uses are whole-glass doors, insulating glasses, partitions, wall cladding, furniture glazing, shower cubicles, balustrades, lamination, facades, canopies and skylights.\*

Certified according to DIN EN ISO 9001:2000, in accordance with DIN EN 572, Part 5.

\* Possible to produce special customized patterns on demand. Lamination possible with different interlayers.

**SHEET WIDTH** 1350mm

**SHEET LENGTH** Full height Glazing panel



## Patterned with Dichroic Interlayers

Textured surfaces combined with various interlayers of Dichroic Films, Copper, Stainless Steel Woven Wire mesh or Titanium, Zinc, Copper, Aluminium Expanded metal can create numerous possibilities.

Further Textured surfaces can be produced on Low Iron Glass as well on normal float glass.

Rich Textured glass surfaces combined with Dichroic Interlayers and or in combination with Architectural metals meshes or sheets creates decorative and artistic effects.





Showroom Reception, England



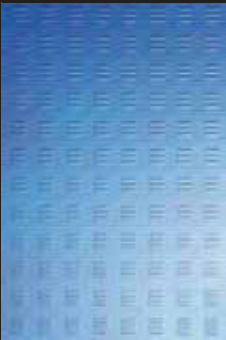
Pool Feature Wall in Private Residence

# Ornamental Glass Types

KING



TRIO



FLASH



BAROCK



B



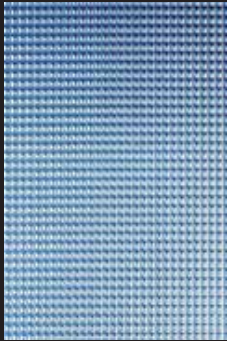
A



2000



597



528



523



521



520



504





ICE



GARTENGLASS



FR



K



D



Z178



X187



S



ROHGLASS



PRISMASOLAR



SILK



NEOLIT



MR



L



KK







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\* Expanded metal mesh and wire mesh sheet over 1.5mm thick will be supplied as suspended component in insulated glass units.



KAPHS S.A.  
Avenue des Alpes - 104  
1820 Montreux, Switzerland  
Tel: +41 21 963 2466  
sales@kaphs.ch  
[www.kaphs.ch](http://www.kaphs.ch)