



**BRUAG**  
Innovation for Architecture

# Innovative Cladding Elements

When Architecture for Exterior and Interior Applications  
Becomes Tangible!





## Innovation for Architecture

Bruag Design Factory AG is your partner for customised building materials. We combine years of experience in the laser processing of wood and wood-like materials as well as the surface processing of these materials. We not only implement ordinary, but also innovative ideas and want to enable architecture to design individual buildings with the help of our products. We are a family-run Swiss SME with a team consisting of creative but also technically experienced people. We look forward to working with you to make unique buildings a reality.



### Individual

Maximum freedom in shape, colour and material for creative minds: because the best innovations are created in cooperation with you. Your customised product entirely according to your wishes.



### Innovative

Innovation arises where something is created and implemented. We are constantly looking for new applications and materials so that we can always offer you the right solution to all your challenges.



### Reliable

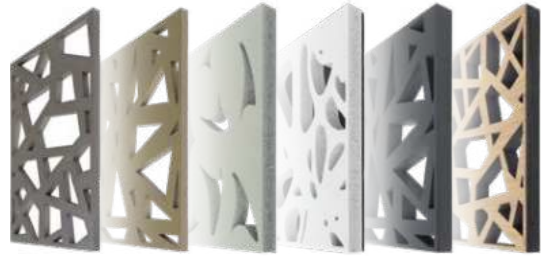
Time is a rare commodity. It is all the more important that you can rely on timing when it comes to product supplies. We deliver made-to-measure products in record time.



### Familial

We are a family-run SME without sluggish structures. We personally look after your project from the first consultation to production from a single source - one contact person throughout the entire process.

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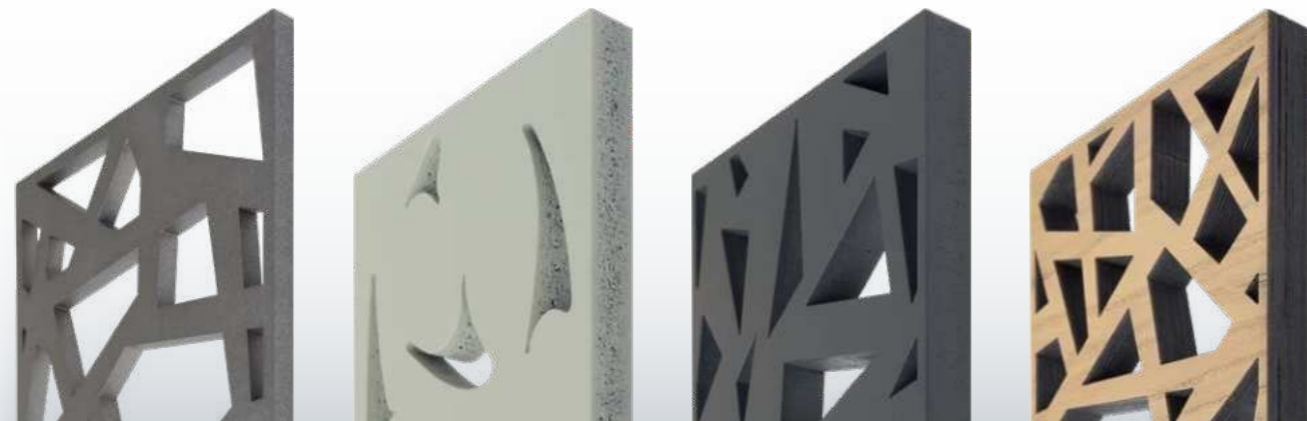


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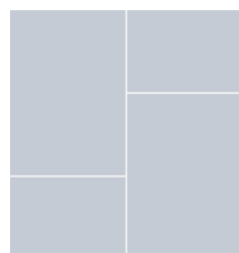
# 01. Materials Overview



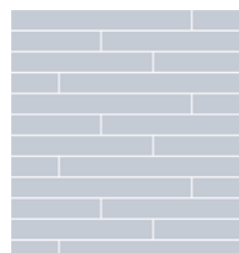
CELLON®	FORMBOARD TOP PINE®	MDF	OAK PLYWOOD
Exterior and interior	Protected exterior	Interior	Interior
Compact high-pressure panel (HPL), 70% cellulosic web and 30% phenolic resin	Highly-compressed bonded wood-based panel	Medium density fibreboard	Oak Plywood with little knot, multilayered
8 mm / 10 mm	10 mm / 18 mm	10 mm / 19 mm / 30 mm	18 mm
<p>FORMBOARD TOP PINE® is convincing with ecological aspects and breaking strength while being used in protected exterior applications, CELLON® offers decisive advantages in comparison with other materials for outdoor use. The extremely weather-proof, UV-resistant panels are very fracture-resistant compared with fibre cement. Compared to metal, CELLON® has the advantage of less expansion, a more natural haptics and lower weight and thus the possibility of thicker sheet material with more depth effect. CELLON® consists of 70% FSC certified cellulose fibres and is therefore wood-based, but thanks to its resin content, it has no shrinkage or swelling behaviour, which is very advantageous compared to wood.</p>		<p>The materials we use for indoor applications are captivating with their naturalness and warmth. Due to the wood base the panel material gives a harmonious feeling of space. Thanks to the thick panel material of up to 30mm thickness, the designs also have a great depth effect. In addition to the advantage of the three-dimensional effect due to the thickness of the panel, the use of a 30 mm MDF panel also allows, for example, stair railings to be made without an additional substructure, i.e. self-supporting. In the case of acoustic solutions, thicker panels support the absorption of low tones.</p>	

## Cutting Variants

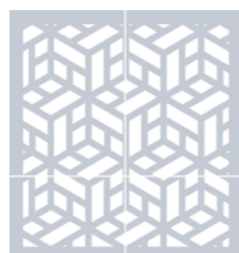
Whether cut to size in classic (large-format panels), stripes (small-format panels) or design (perforated panels) style, each element is designed precisely according to your needs and cut with the laser according to your plans - whether rectangular, round or in other shapes.



**classic**  
large-format panels



**stripes**  
small-format panels



**design**  
perforated panels

## Design Options of Perforated Panels

Laser cutting makes it possible to provide the panels with a completely individual design. You can create your very own perforation at no extra charge. With your DXF or DWG file we implement your design idea in our production. As an alternative you can select a pattern from over 100 existing design types. Our various design collections have been completely adapted to the needs of the respective applications. For example, while openings in balcony railings should not be too large to prevent from being climbed, large openings in a facade look much better. For applications that do not have any special design requirements, such as partitions, wall panellings and acoustic solutions, you will find suitable design suggestions in our A collection.



**A-Collection**



**B-Collection**

especially for balcony balustrades & stair railings



**F-Collection**

especially for perforated facades



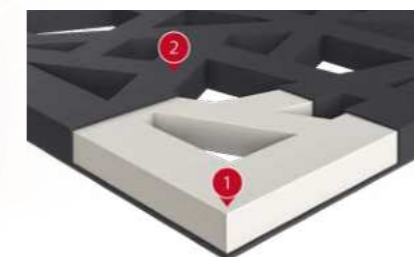
## INDEX 2050



## Colours and Surfaces

In addition to the individuality of shapes, the colour options are also very broad. After the cutting process, the material is coated in one of over 3'000 possible UV-resistant colours (according to RAL, NCS S, IGP, DB or in special metallic colours). The edges of the panel are coated, too. For a natural appearance in the interior, the panels are also available in oak plywood with elegant black edges. Alternatively, CELLON® panels of certain quantity can be ordered with different decor surfaces (e.g. stone or wood look).

### Panels with Coating



- 1 Core material
- 2 UV-resistant coating according to RAL or NCS S Edition 2 scale

### Panels with Decor Surface



- 1 Core material
- 2 Decor layer
- 3 Transparent protective layer

## Ventilated Facades

Are you tired of adapting your facade plans to the limitations of the panel manufacturers and instead want fast delivery time, unlimited colour options and all that with cost advantages compared to competitors?

Then you are right with us. We are a manufacturing company that adapts to its customers. With the material CELLON® we offer an extremely weather-resistant material that can be supplied in a wide variety of designs. Whether as a large-format variant (classic) or in small-format (stripes), whether coated according to RAL, NCS S or a special colour or with a decorative surface, we would like to turn your design wishes into reality.

A ventilated facade ensures a better indoor climate and scores with a long service life. CELLON® is also FSC-certified and consists of 70% cellulose.



CELLON® classic / stripes

Perfectly articulated facade thanks to mass production. Implemented in a cost-conscious manner thanks to optimised waste costs.



Technical  
Data Sheet



## + CELLON® stripes

CELLON® stripes, the small-format alternative for lively facade images. Whether it's a striped look or a striking pattern, the different laying methods and harmonious colour nuances allow freedom of design in terms of shape and colour. With CELLON® stripes you can create expressive architecture easily, quickly and cost-effectively.



## Large-Format Facade Panels and Lettering Made of the Same Material

Bright green and striking yellow are the company colours of Neuteerbit AG in Salmsach. For planners and clients, it was therefore quickly clear what the company's new building should look like. Not only the colour options of Bruag products, which allow the implementation of the facade panels exactly in identity of the company logo even with small quantities, convinced the architect to plan his facade with CELLON® panels. The possibility of using the same material for the yellow facade band with round ends, which is important for the architecture of the building, including the suspended logo, were also decisive points. Corporate identity down to the last detail - easy and budget-friendly to implement in cooperation between the architecture and production partner Bruag.

## Perforated Facades

Do you want a building that is as individual as its residents and orientation? Are you looking for options for an extraordinary, unique facade?

Then you have now found what you are looking for. Our filigree, perforated facade elements transform every building into a special, distinctive object. The laser cutting technology enables us to realise your individual wishes. Choose an ornament from our design collection specially developed for perforated facades or send us your own ideas.

The possibility of designing the facade with a design that is not interrupted at each edge of the panel, but runs smoothly across all elements, creates an architectural generosity in the building.



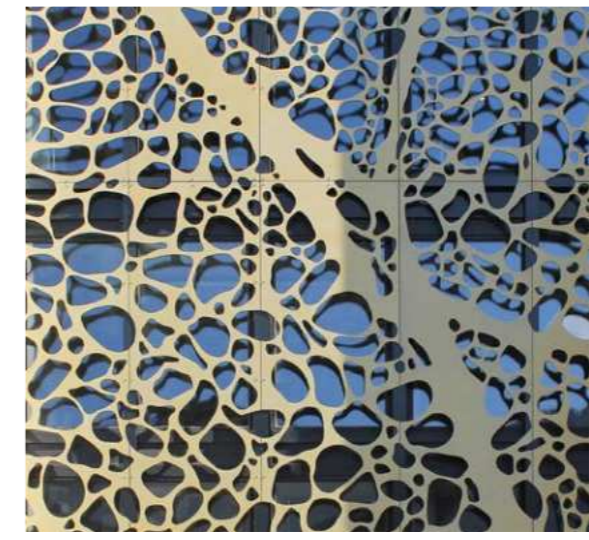
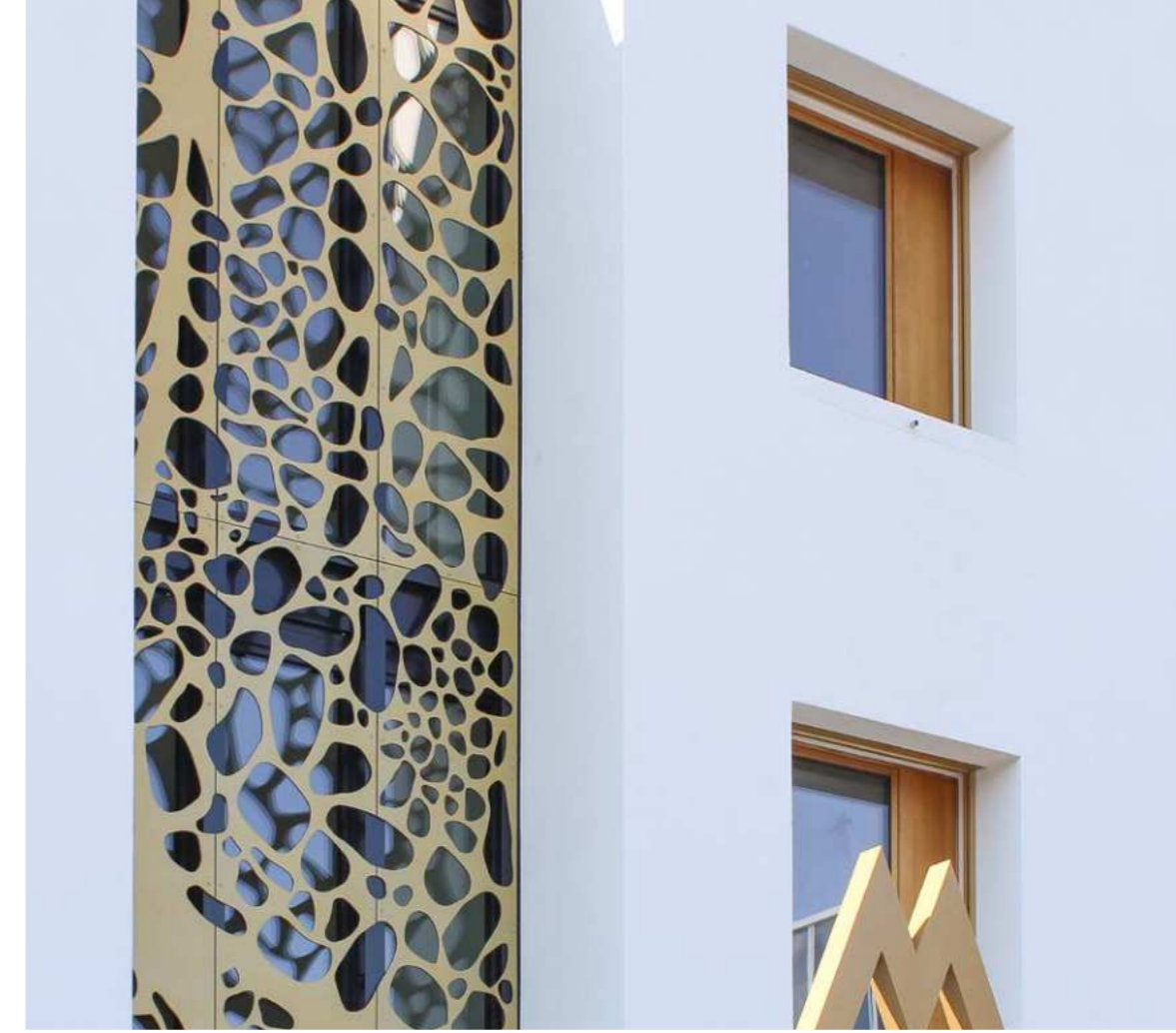
CELLON® design

A flagship project in the region. The perforated facade complemented with lighting as an eye-catcher.



Technical  
Data Sheet





Photograph: Alexander Gempeler



## Human Being at the Heart of Architecture

The most striking building of Malans combines the best medical care with modern infrastructure. Sun protection and light source in a very special way: the team of architects from the Ritter Schumacher AG has created a design for the most distinctive part of the facade, which is not only unique, but also directly relates to the purpose of the new building. As with the specialists working in the Medical Centre, the focus of the facade and the acoustic solution on the interior ceiling is also on human beings. On the building, this is symbolically represented in delicate oversized muscle sections, which were implemented by Bruag in the material CELLON® and MDF on the basis of the architects' plans. "I was surprised at how easy it was for Bruag to transfer my drawing to the laser program and how smooth everything was until delivery," praises architect Markus Wolf.

# 04.

## Balcony Railings

You are searching for a stylish, semi-transparent solution for balcony railings? Would you like a view, but not too many insights at the same time?

Then you will find the solution for your railings in CELLON®. Due to the complete freedom of design, the permeability of the balcony balustrade can be individually adapted to your wishes. On the one hand, you can choose from over 100 design options from us, or you can create something of your own that harmonises ideally with the environment of the building. We would be happy to help you and work with you to develop balcony railings that cannot be seen anywhere else.

In addition to the free choice of design, a gradient from bottom to top across the panel is often desired. For example, the lower part of the balustrade can be produced without perforations, while the upper part of the panel is more open. For as little insight from the street as possible, but as much view as possible from the balcony.

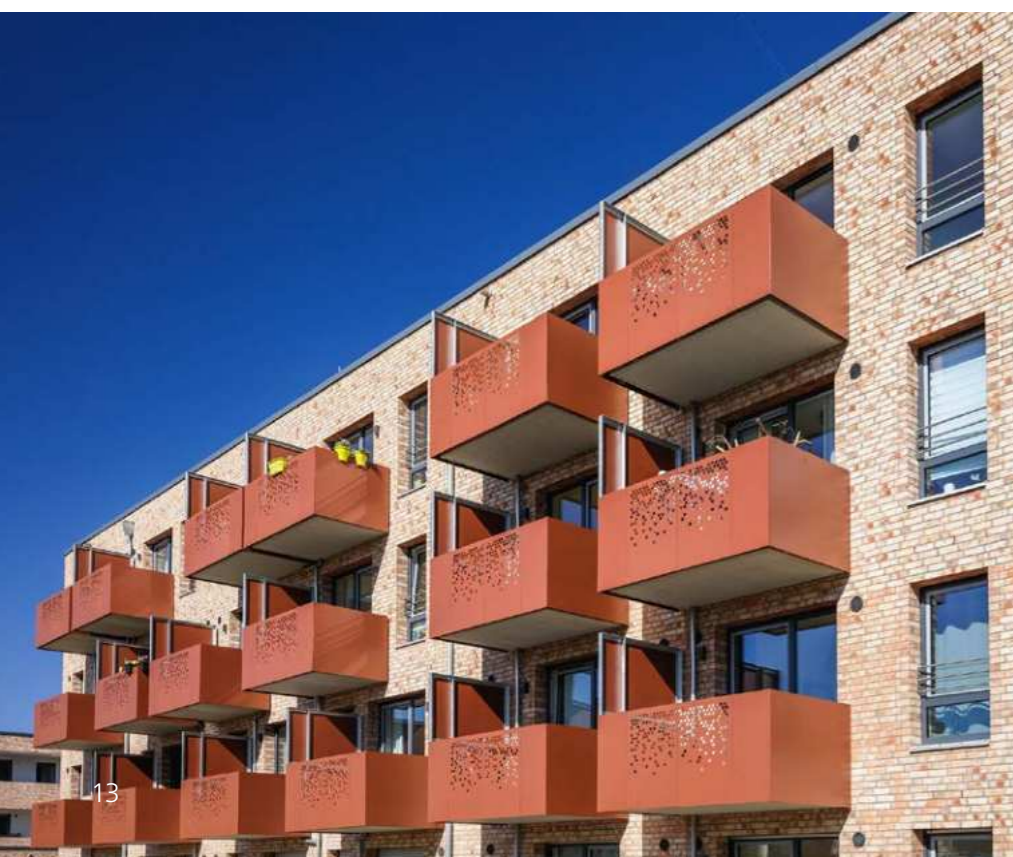


CELLON® design / classic

Not closed and not fully transparent.  
Semi-transparency combined with a clear architectural  
expression without annoying frame interruptions.



Technical  
Data Sheet



## From the Design Idea to the Finished Product - a Close Cooperation Between Architect and Bruag

With some reference pictures of what the balcony railings could look like and the indication that the client wanted something "organic", the collaboration between the architect and Bruag started for this residential property. Based on these guiding principles, our design department developed new unique perforation patterns, which they presented to the client using a visualisation, thus simplifying the decision-making process. The chosen design was stylishly implemented over the entire balcony parapets of the building and accentuates the facade impressively. Another advantage of the customised design is to close the panel in areas in front of the concrete slabs to cover dirt and algae.

# 05.

## Sliding, Folding & Shading Elements

Are you looking for a shading solution that dampens the sun's rays and is a visual highlight at the same time? Ideally, this solution would also be either slidable or foldable and can thus be placed selectively to suit the weather conditions?

We offer you solutions. The CELLON® panels allow you to adapt the permeability of the shading to the respective geographical conditions. The elements create very special plays of light and shadow by day and night.

Due to the relatively low weight of the panel material, the elements can be complemented with almost all sliding and folding fittings and can therefore be easily moved.



CELLON® design / classic

Caribbean seagrass as a design for shading elements and balcony railings at the Marriott Hotel in Haiti. Architectural highlights that are tailored to the building project.



Technical  
Data Sheet

Photograph: Seán Murray



## Perforated Sliding Shutters as Visual and Functional Highlights on the Facade

The simple cubature and the wooden facade integrate the single-family house harmoniously into the townscape. Perforated, electric sliding elements from Bruag as selective highlights make the facade interesting without being overwhelming. They ensure a special ambience day and night. During the day, the sun's rays find their way through the imaginative perforation pattern and create an interesting play of shapes on the inside. In the darkness, the exciting play of light and shadow penetrates to the outside.

## Balcony Acoustic Systems

You feel stressed by the nearby street or neighbour's noise, although the balcony should be a place of relaxation?

With our new balcony acoustic solution, this noise pollution can be significantly reduced. Conversely, the system also prevents the conversations you are having on the balcony from being heard on the street through the reverberation via the ceiling. FORMBOARD TOP PINE® or CELLON® not only impress acoustically, but also visually.

Perforated panels with cut-outs tailored to acoustics are combined with a fleece and absorber and thus achieve audible improvements in sound insulation values.



FORMBOARD TOP PINE® design  
CELLON® design



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### Perforated Panels as a Problem Solver in an Urban Context

Structural measures for sound absorption are increasingly becoming an official requirement in the approval process. Located directly on a busy street, this project in Winterthur had to meet the higher requirements for sound absorption. In their search for suitable solutions to achieve high sound absorption with a small absorption area, the planners came across Bruag. By choosing a design with an open area of more than 45%, the required a value was easily achieved and the requirements were met. This not only solved the acoustic problems, but also set design accents at the same time.

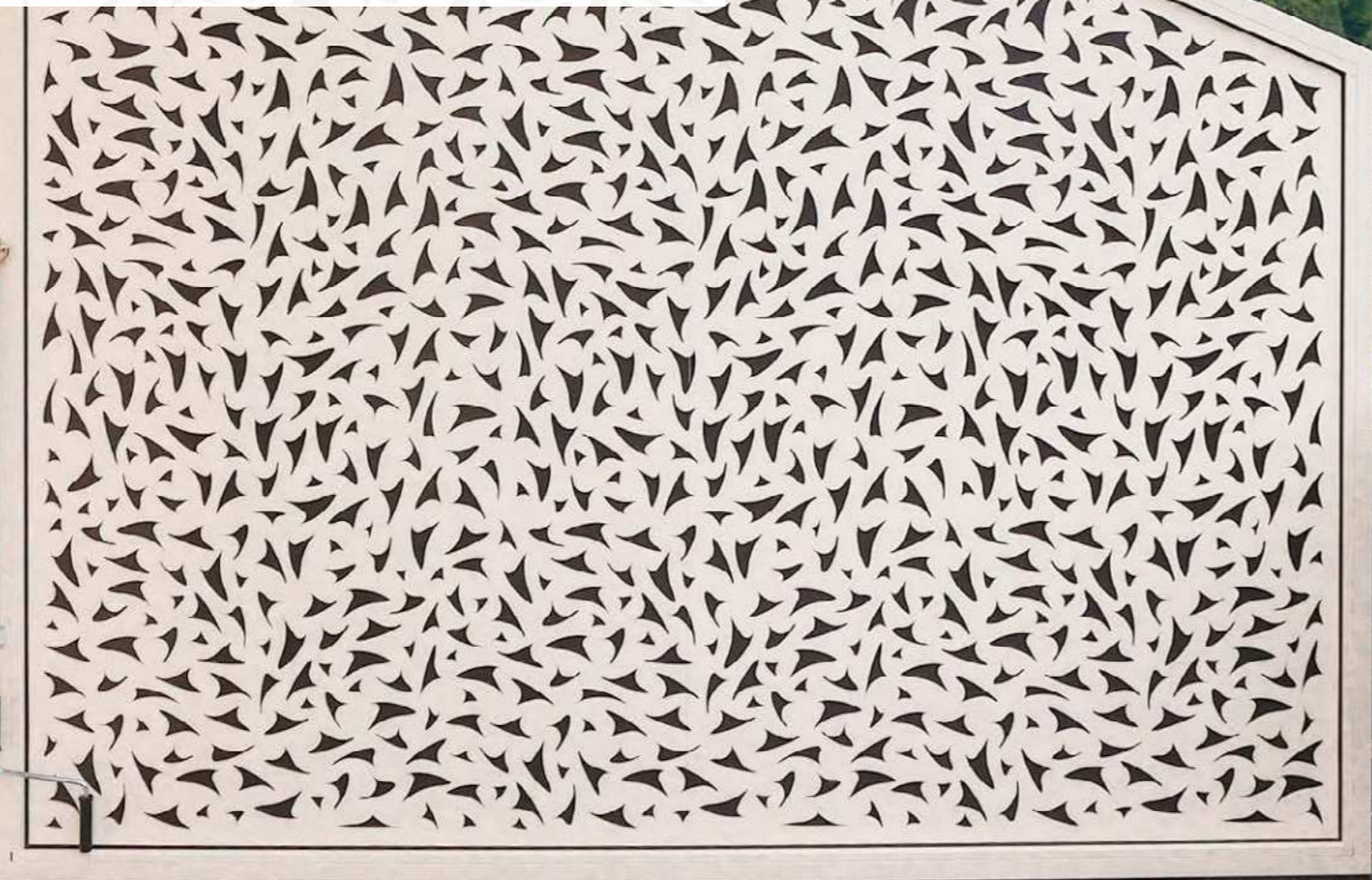
## Balcony Partitions & Cabinets

You want a visual boundary to your neighbour that is both functionally usable and at the same time enhances your living oasis?

Whether as a cabinet or as a privacy screen, you can design your partition individually using CELLON® or FORMBOARD TOP PINE®. Opaque as closed panels, semi-transparent with perforation or stylishly backlit, there are no limits to your creative ideas. In this way, privacy is guaranteed and the outside area remains bright and friendly.



CELLON® design / classic  
FORMBOARD TOP PINE® design / classic



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### The Apple Trees of the Surroundings Harmoniously Integrated into Different Building Materials

The various application and material options for Bruag products were ideally exploited during the planning and implementation of the Hotel Golfpanorama in Lipperswil. As a motif for the balcony partitions and wall cladding in the wellness area, a design was chosen that is based on the apple trees that surround the hotel. In addition, care was taken to ensure that the selected perforation is translucent but not too transparent, so that the balcony partitions appear light while still guaranteeing privacy. The whole thing was supplemented with yellow external reduit cabinet cladding made of FORMBOARD TOP PINE®.

# Garden Design Elements

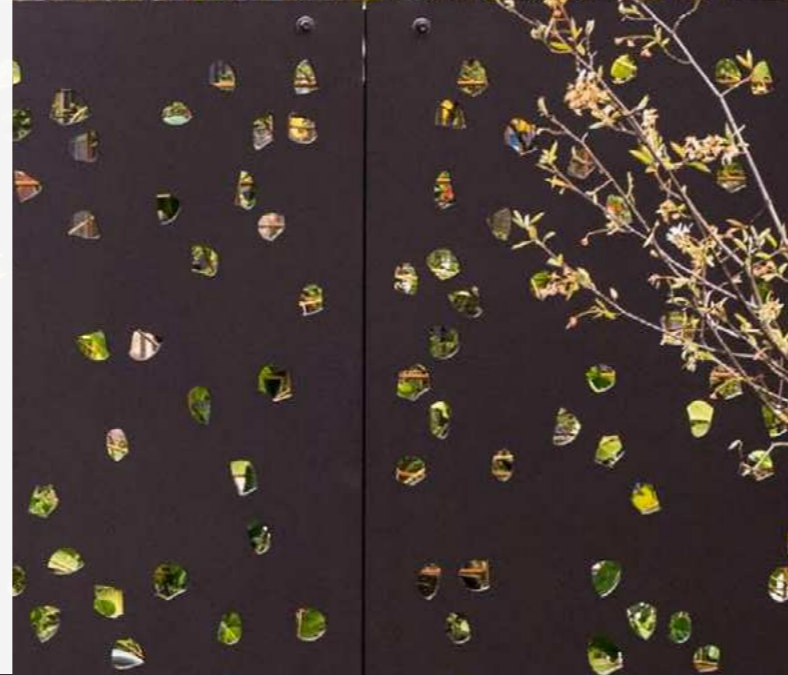
Do you think that a wall or a wire mesh fence does not fit in with your well-kept garden, but you would still like a gentle separation from the neighbouring property?

With the inner densification of cities, the distance between residential units is getting smaller and smaller. We offer you garden design products that will make your garden dreams come true. With CELLON®, over 100 design options and your ideas, you can create a very personal oasis of well-being. By customising the design, the opacity of partitions can be tailored exactly to your needs.

The unbreakable material is also ideal in areas with high wind loads without appearing heavy.



CELLON® design / classic



Technical  
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## Take up Motifs from the Surrounding Area and Integrate them into the Garden Privacy Screens

At the beginning of this project, the garden designer visited Bruag to discuss possibilities for the exterior of this family home. Curved shapes were desired instead of rectangular panels and a perforation that ideally integrates into the wheat fields surrounding the house. After this exchange, the Bruag design team worked out various proposals, which were visualised for the gardener and the client. The basic idea was to create a double-layered garden partition wall with a perforated front and a closed rear panel with LED lighting in the middle. In the end, one of the design templates was implemented with a curved shape, single-layered, so that the perforation could also be seen from the garden seating area.



## Wall & Ceiling Panelling

You are not a fan of bare walls or ceilings and are looking for that certain something for an unforgettable room feeling? So far you have not found any wall and ceiling panelling that exactly meets your design requirements?

With perforated panels made of MDF, CELLON® or OAK PLYWOOD, your room becomes an experience and your creativity can flourish. Whether backlit with LEDs, supplemented with coloured felt or simply transparent, perforated panels help to create a refreshing room atmosphere. We produce panels exactly according to your ideas and help you to create a great room feeling with playful perforated panels.

Your visitors will be delighted and feel right at home in the rooms.

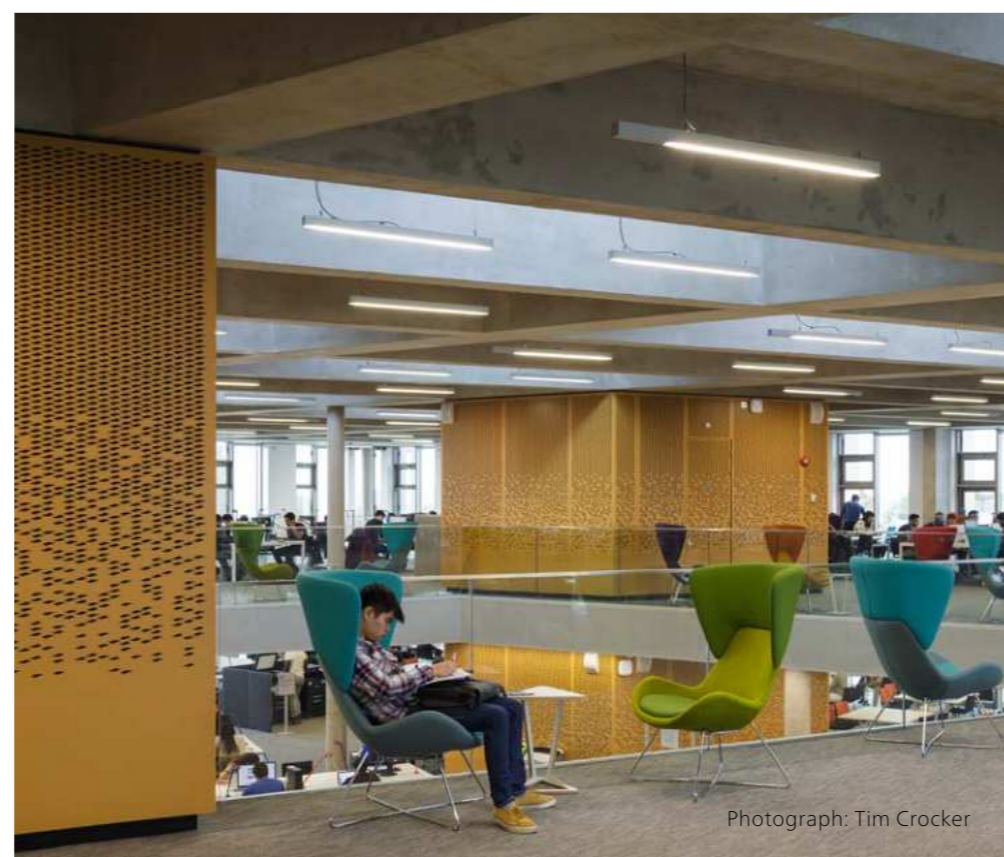
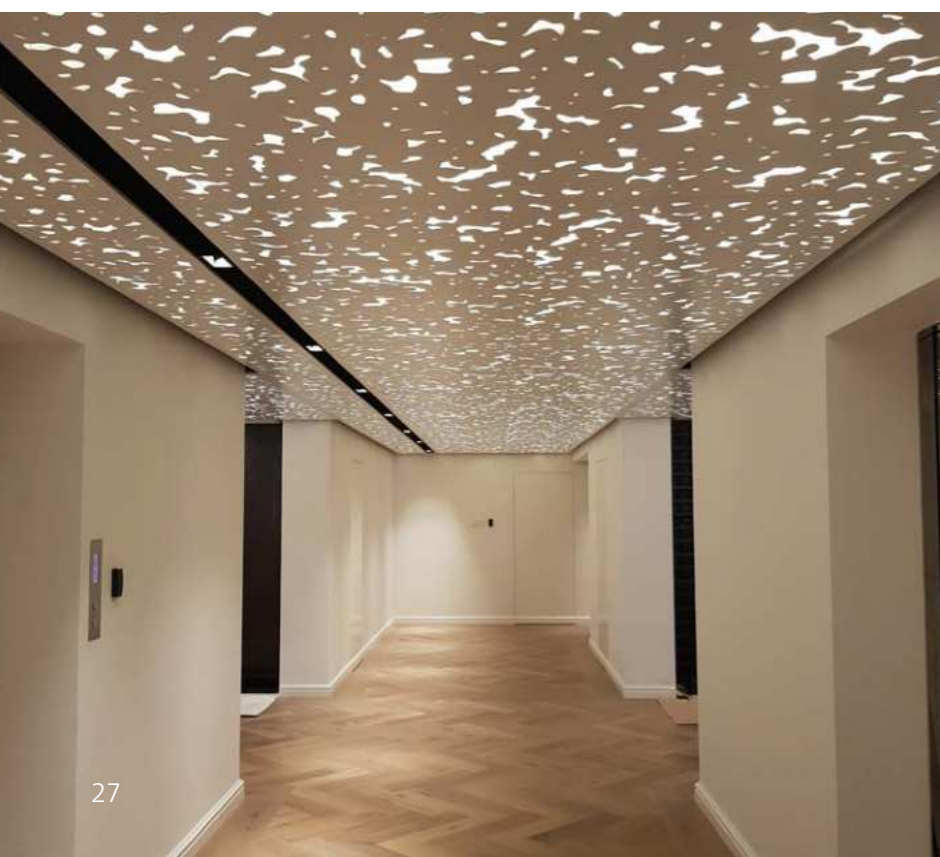


MDF design / classic  
OAK PLYWOOD design / classic  
CELLON® design



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## Wall Panelling Made to Measure - Including Completely Individual Cut-outs

When considering the design of entrance areas, the focus is often on making visitors feel comfortable from the first moment. With these considerations in mind, the planning office of this object saw a very open, light design by Bruag combined with soft backlighting as the ideal solution for the wall cladding. In addition to the complete freedom of design, planners and craftsmen alike also benefit from Bruag's flexible cutting options. This means that any installation-related recesses or cut-outs for lights, loudspeakers or the like can already be taken into account with precision in the cutting of the panel material, as this example impressively shows.

# 10.

## Partition Wall & Dividing Elements

Are you thinking about how to divide a room in a modern way that suits the concept?

We offer you a wide variety of solutions. Whether mobile or permanently installed, the partition walls and room dividers made of MDF, CELLON® or OAK PLYWOOD can be implemented in accordance with the use of the room and your aesthetic ideas.

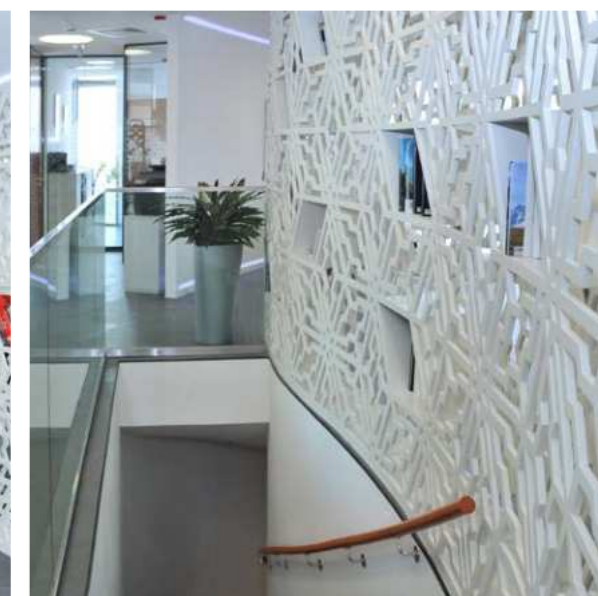
Custom-made to the size you need and implemented in warm, wood-based materials, the elements quickly become eye-catchers.



MDF design / classic  
OAK PLYWOOD design / classic  
CELLON® design



Technical  
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## Curved, Perforated Wall Cladding as a Reference to the Swiss Homeland

The Swiss embassy in Abu Dhabi is like Switzerland: modern and open. To give the premises in a prime location in Abu Dhabi additional character, the architects decided to use MDF from Bruag as double-sided room dividers. The panels are provided with an individual perforation in the form of snow crystals. Our flexibility is evident in this project not only in the implementation of the customised design, but also in the curved shape of the room partition. This was made possible thanks to a specially designed substructure. The connecting plates, which allow the MDF elements to bend, serve as a stability factor and are used as shelves at the same time.

# 11.

## Room Acoustic Systems & Noise-Virus-Catcher®

Is your concentration at work, the quality of your visit to a restaurant or your relaxation time at home suffering from the constant noise pollution?

The urge for clean air and muted tones indoors is greater than ever. With our solutions with or without virus filtering, being together indoors becomes pleasant again.

The solutions are not only beautiful, but also offer very high sound absorption values and can even be implemented in your corporate design with logo.



MDF design  
OAK PLYWOOD design  
CELLON® design

Room acoustics solutions precisely made to measure and in individual design. For a better sense of space – and fewer headaches.



Technical  
Data Sheet



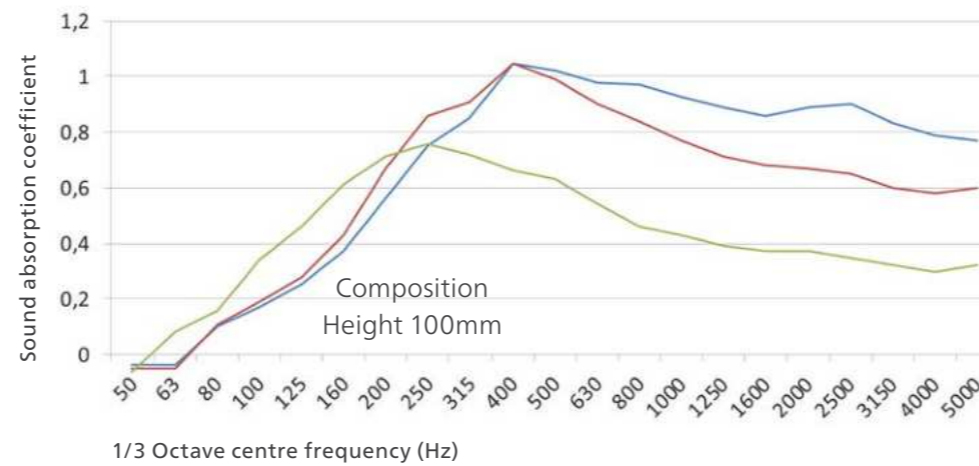
## + Noise-Virus-Catcher® - Design Element, Mobile Room Divider, Sound Absorber and Virus Filter at the Same Time

Acoustics, design and hygiene are ideally combined in this mobile room divider. With the Noise-Virus-Catcher®, the air in open-plan offices is continuously cleaned and freed from viruses, germs and pollen. At the same time, the modern, flexible mobile partition wall ensures perfect room acoustics and aesthetic added value. Developed together with a leading filter producer in the health industry and experienced doctors - for your well-being.



- 1 MDF design
- 2 Felt
- 3 Sound insulation
- 4 Ventilation system
- 5 MDF design
- 6 Sub-frame + Metal feet

### Sound Absorption Values Bruag Acoustic Systems



- 40% open surfaces / KI A<sub>aw</sub>=0.90\_NRC=0.90
- 20% open surfaces / KI C<sub>aw</sub>=0.70\_NRC=0.80
- 8% open surfaces / KI D<sub>aw</sub>=0.40\_NRC=0.55

## The Acoustician's Requirements Implemented with an Open Perforation Area of 58 Percent

The planners of the congress centre in Koblenz approached Bruag with a special request. The large hall, which has very different acoustic requirements depending on the event, had to be clad with elements that had exactly 58 percent open area. The acoustician of the project had calculated this. With a heavy curtain behind the wall cladding, which is closed or open depending on the event, the general conditions can be adapted to the respective event. The architects found it very difficult to find a material that was still stable and affordable despite so much open space. Without further ado, an existing design was adapted by the Bruag architecture team in such a way that it showed the appropriate degree of transparency.

## Stair Railings

Are you wondering whether a staircase can combine functionality and aesthetics and be far more than a means to an end?

A perforated stair railing made of MDF, CELLON® or OAK SPERRY WOOD turns your staircase into the highlight of the room. Regardless of whether it is used as a railing or stair curtain, your staircase becomes a design element and attracts attention.

Thanks to a material thickness of up to 30mm, a depth effect of the perforation is guaranteed. Cutting the panels using laser technology enables you to have your very own design implemented and thus integrate an absolutely unique piece into your construction project.

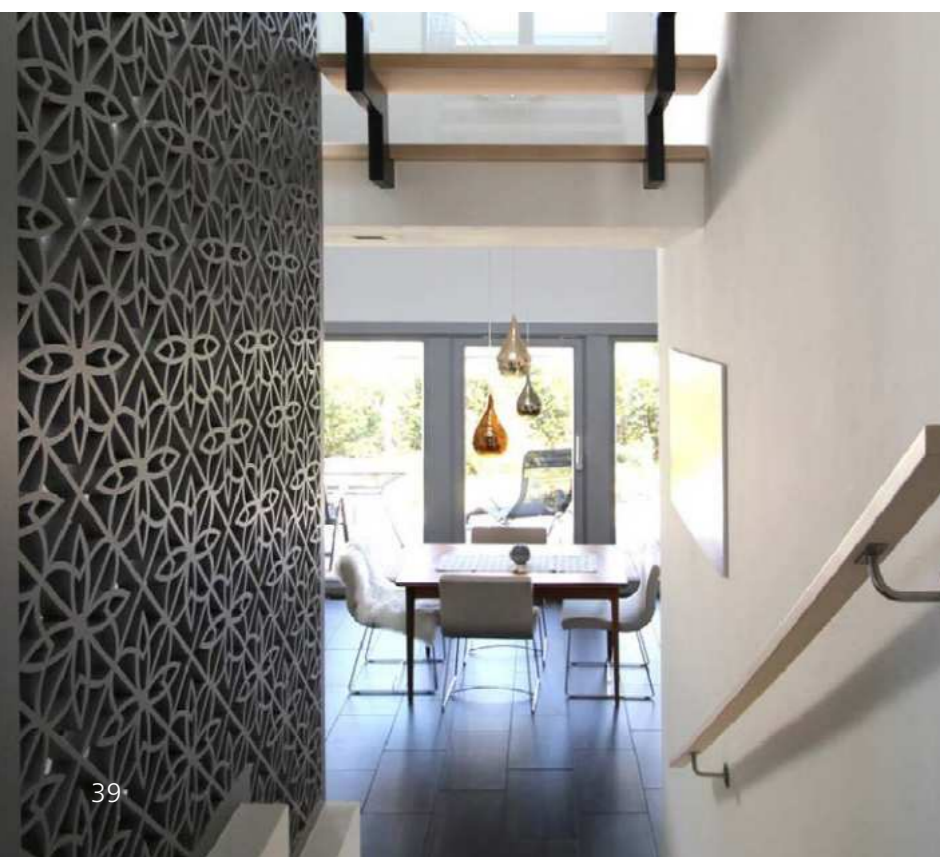


MDF design / classic  
OAK PLYWOOD design / classic  
CELLON® design / classic

Creating the arc between product and environment. A stair railing in the style of St. Gallen embroidery.



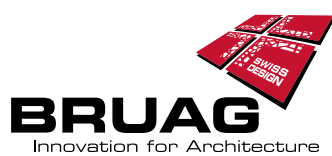
Technical  
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## More Character for a Staircase

There is no second chance for a first impression. After all, stair railings are often the first thing people notice in a house. In the present project, the flexible production possibilities were fully utilized. The continuous perforation over several large panels fits the generosity of the entire room design and the chosen design with a lot of open space creates wonderful light and shadow effects. The contrast of the natural wooden floor with the simple elegance of the white railings is also striking.





Bruag Design Factory AG  
Switzerland

☎ +41 71 414 00 90

✉ info@bruag.ch

🌐 www.bruag.ch