



Perforations and Ornamentations Providing Unheard-of Architectural Flexibility

Interior Applications



BRUAG

Innovation for Architecture



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The days of minimalist architecture are gone definitely. When the ideas of an innovative architect or designer are combined with the latest laser technology, it results in a vast range of design variations that can be used for interior and exterior applications. Design your very own pattern or select one from the standard perforation styles. The main interior applications include room dividers and wall cladding, stair railings and room acoustics. Additionally, Bruag also offers products for exterior use.

These are the four cornerstones of our company philosophy:

Individuality

Maximum flexibility for creative minds – because the best innovations are developed in cooperation with you. Make use of the numerous options in relation to colour, shape and material.

Innovation

We are always searching for new materials and applications to complement our range of products to enable us to respond to any prospective challenges that may cross your path.

State-of-the-Art Technology

We use state-of-the-art machines to produce a high quality product that aligns with your own individual wishes.

Reliability

Working with Bruag, you can trust us to deliver on time. And should you still have any concerns, we will always be there to help you.

Technical and installation details can be found on our homepage or we can deliver them on request by e-mail or post.

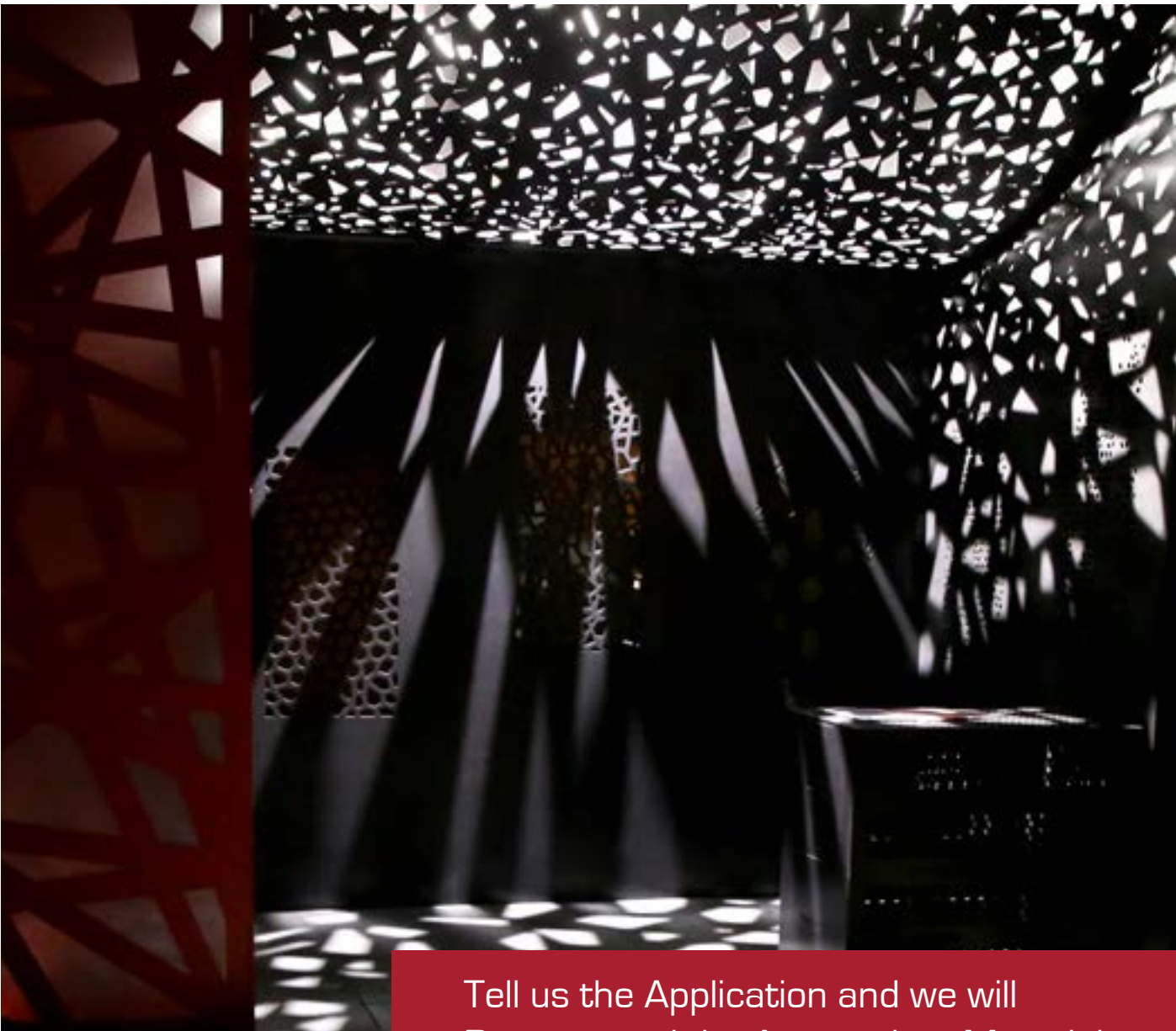
It is our pleasure to be able to share with you numerous interior applications of our products!



Delicate Perforated Elements Made to your Design

Our laser technology offers creative-minded designers maximum flexibility. As can be seen from the item above, from the Hirslanden restaurant, Bruag provides you with the opportunity of introducing extremely delicate panels for different applications. Our customers are regularly thrilled with the degree of detail in our perforations as compared to traditional production techniques such as what is produced by a CNC machine. New interpretations of historic patterns or completely new ornamentations and perforations that have never previously been seen can be produced in almost any dimension using digital input information (dxf, dwg).

In addition to the flexibility we offer regarding the shape of your panel, we also offer a wide range of colours. You have a choice of over 3000 different colours (RAL, NCS S, Bruag Alu). We can also stove enamel the fastener in the same colour, providing a coherent overall appearance.



Tell us the Application and we will
Recommend the Appropriate Material

Materials

	MDF	Plywood	CELLON®	Formboard top pine
Area of use	Interior	Interior	Exterior and Interior	Exterior and Interior
Raw Material	Medium Density Fibreboard	Oak plywood	Compact High-Pressure Laminate board (HPL)	Wooden board with polyurethane bonding (without formaldehyde)
Thickness	10, 19, or 30mm	18mm	6, 8 or 10 mm (other thicknesses available on consultation)	10 or 18mm
Raw Material Maximum Format *	10x2800x2070mm 19x4100x2070mm 30x4100x2070mm	18x3000x1500	3630x1860mm or 3050x1300mm or 2400x1200mm	18x6200x2100mm; 10x6100x2100mm

Bruag panels have virtually unlimited applications. Such a vast range of applications require a healthy choice of raw material. We have four different materials at our disposal: CELLON, Formboard top pine, MDF and Plywood. If you prefer to use a different material, just let us know and we can go through the possibilities with you.

The maximum width for the industrial coating machine is 1300mm. Panels that are over this size can be hand-coated (for an additional charge).

* These formats are merely the maximum size of the respective raw material panel. However, our panels are cut exactly according to your wishes which may be smaller than the raw panel. Additionally, perforations can be done over more than one panel without interruption, which allows you to seamlessly combine panels.

Room Dividers and Wall Cladding

Have you not succeeded in finding a wall cladding that exactly matches your design ideas?

No need to despair. We offer customized wall elements that fit your personal requirements, such that the shapes, perforations and colours are totally individual.

Panels in the Form of Snow Crystals for the Swiss Embassy in the UAE

The architecture of the Swiss Embassy in the United Arab Emirates provides a modern image of the home country. To give additional character to the rooms, the designer decided to use perforated MDF panels as a double-sided room partition. The 16mm thick panels have been cut using a customized pattern, in the form of snow crystals, thereby demonstrating another aspect of Bruag's flexibility: thanks to an appropriate subconstruction, the panels have been curved exactly to the wishes of the customer. The connecting panels which facilitate the curvature not only serve as stabilizers, but can also be used as a bookshelf.

Country / Place:	UAE/Abu Dhabi
Project Name:	Swiss Embassy Abu Dhabi
Material:	MDF, 16mm
Perforation:	Individual Design
Colour:	RAL 9016
Architect / Planner:	EMO Innenarchitektur Langenthal



Perforated Elements Acting as Room Dividers

"My customers wanted a soft partitioning for their hair and nail studio that wouldn't reduce the size of the room or restrict the light", explains architect René Stoos. He designed an intricate pattern which not only serves to divide the room, but also features an intriguing play on pattern. The mobile perforated partition walls can be completely or partially closed and give the room an appropriate, slightly oriental character.

Country / Place:	Switzerland/Brugg
Project Name:	Hair and Nail Studio Brugg
Material:	Formboard top pine, 18mm
Perforation:	50100
Colour:	ASS Alu Silver
Architect / Planner:	Stoos Architekten Brugg



Creating a Refreshing Atmosphere

Using perforated partitions rather than plain walls makes the room seem bigger and more spacious, enabling the sophisticated coffee-lovers of Vienna to enjoy a great atmosphere. This feature is enhanced by the use of mirrors behind the panels.

Country / Place:	Austria/Vienna
Project Name:	cafe+co Vienna
Material:	MDF, 19mm
Perforation:	50402
Colour:	RAL
Architect / Planner:	Derenko Vienna
Photographer:	Wolfgang Spitzer, Design- u. Akustiksysteme



A Flexible System with Ample Opportunity for Customisation

Adding a personal touch to private living areas and public buildings, making offices, restaurants and businesses more attractive. With the partition system of Bruag, this is possible in a very individual way. Flexible regarding size, colour, transparency and shape. Bruag room dividers are available in more than 3'000 possible colours (RAL or NCS) and are produced individually. The elements are coloured and delivered as a system. Functional, practical, aesthetic.



Country / Place: Switzerland/Lipperswil
Project Name: Hotel Golfpanorama Lipperswil
Material: MDF, 19mm
Perforation: 10100
Colour: NCS S 0500-N
Architect / Planner: Architekturbüro Frei + Graf AG Weinfelden
Photographer: Mario Gaccioli Kreuzlingen

Customized Wall Cladding that Enhances the Ambiance of the Room

Bruag offers panels that are highly customizable. Making use of this fact, the architects of the hotel "Golfpanorama" in the Swiss village of Lipperswil used panels that were produced to fit to an environment of nature and, in particular, apple trees. The perforated MDF wall cladding not only fits into the environment because it is highly eco-friendly, but also due to the pattern, it is specially designed to complement nature. The perforation which is reminiscent of an apple tree fits neatly with the concept of a Spa integrated into a rural setting. Even the treatment rooms are named after types of apple. The end result: a room that provides a relaxing ambiance and is, at the same time, highly modern.

Consider having your individual panel produced whether it is the logo of your firm, or something that enhances the atmosphere of your building, we are always happy to discuss whatever you may come up with and produce the exact design you have imagined.



An Open Design that Promotes Fresh Air Supply

The perforated oak plywood panels used in Zurich City Hall are convincing both from a practical and an aesthetic perspective. This particular perforation meant it was possible to have over 50% open surface, allowing the air conditioning to work in a proper and well-camouflaged manner. From an aesthetic perspective, the panel's borderless transition allows it to form an uninterrupted ring around the room. Zurich City Hall is thus a perfect example of what is possible when the individuality of our products has been used to maximum effect.

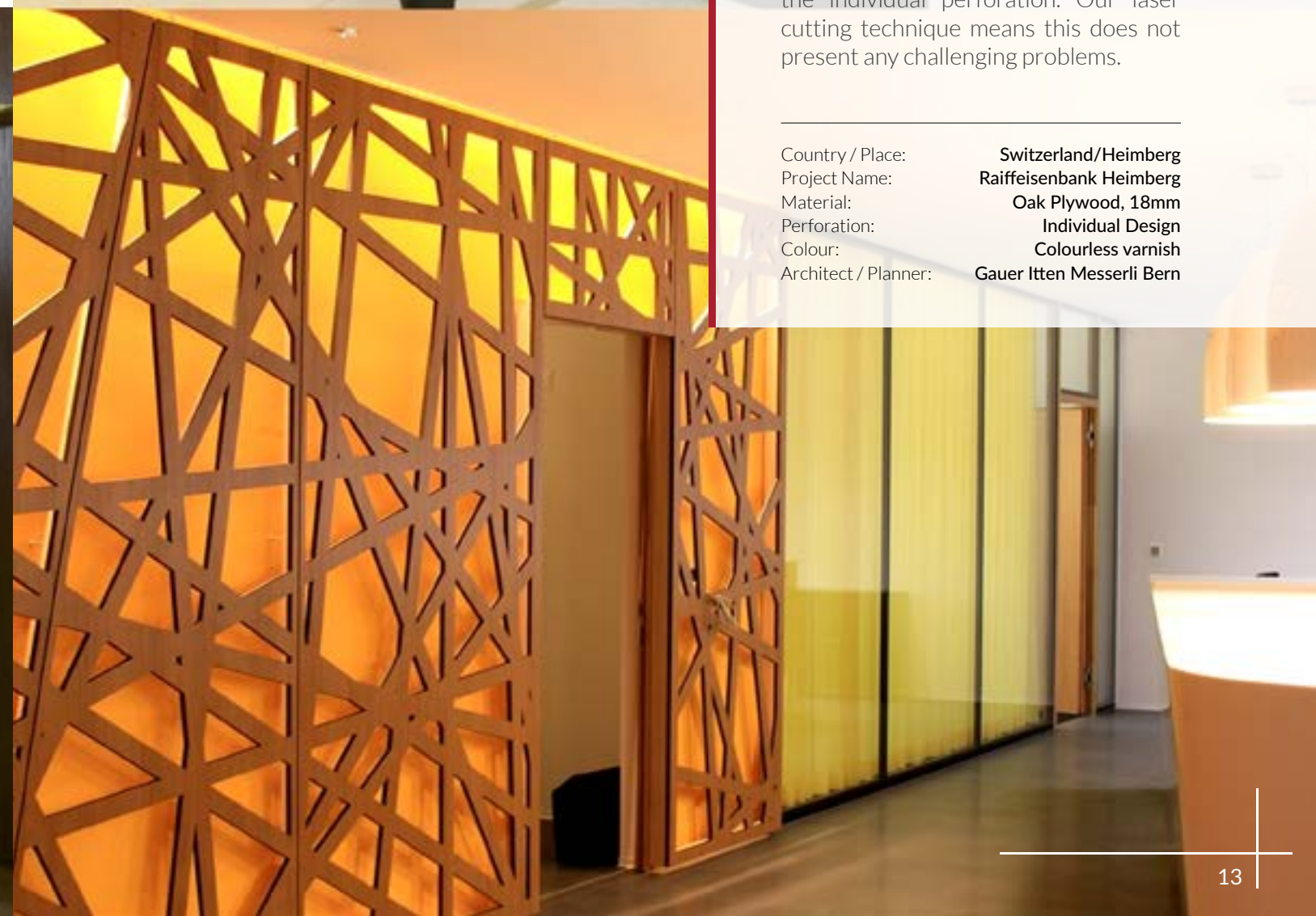
Country / Place:	Switzerland/Zurich
Project Name:	City hall Zurich
Material:	Oak Plywood, 18mm
Perforation:	Individual Design
Colour:	Colourless varnish
Architect / Planner:	Pfister Schiess Tropeano & Partners Architekten AG Zürich



Elegant, Trapezoid-Shaped Panels

Perforated interior elements made out of wood give modern buildings a special touch. The Raiffeisen bank in Heimberg backs this up. Perforated partition walls create an intriguing interplay between light and shadow as well as a distinctive atmosphere. One special feature is that in this case the panels are not rectangular, but cut as trapezoids in order to support the individual perforation. Our laser cutting technique means this does not present any challenging problems.

Country / Place:	Switzerland/Heimberg
Project Name:	Raiffeisenbank Heimberg
Material:	Oak Plywood, 18mm
Perforation:	Individual Design
Colour:	Colourless varnish
Architect / Planner:	Gauer Itten Messerli Bern



Stair Railings

Love at first sight?

A stair railing that attracts attention when you first step into a room – this is what Bruag can do for you.

Stairwells with Character

A banister can also be a highlight. While the interior rooms receive the greatest attention, the design of the stairwell is sometimes forgotten. But in spite of this, they are one of the first things we notice about a building. A Bruag banister allows you to reveal the identity of your house the very moment your guests step in. As with all our products, you have maximum flexibility at your disposal. Your bespoke banister is available in thousands of colours and an almost infinite variety of shapes. There is absolutely no requirement for the stairwell to be rectangular. The panels can therefore be made to match the design of your building with great precision.

Please bear in mind that the laser cutting process may leave the edges of the panel black. If light colours are used, especially for 30mm MDF panels, a slight back might show through. If thick panels are used, a slight recess may be visible.

An Easily-mounted, Customised Balustrade

While the perforated panels produced by Bruag can be used to create totally individual stair railings, a few things still need to be borne in mind when it comes to mounting. While it is usually 30mm MDF panels that are used for banisters, it is possible to use elements that are only 19mm thick if the feature is to be more used as a curtain passing through several floors – which means it can be fixed at several points. 30mm banisters are usually sufficiently stable when screwed into the stair stringer. Depending on the application (e.g. a public building or private home), a post at the bottom and the top of the railing may provide additional stability.

If requested, we deliver not only the panels, but also the corresponding polished aluminium T-sections. These provide additional stability and at the same time form a handrail.





More Than Just Shopping – Tailor-Made Stair Railings

Shopping is either about buying basic goods or indulging in luxury. However, most customers like to be inspired by the surrounding retail space. Due to Bruag being highly customizable, every store can get that special something, a unique atmosphere, evoking enthusiasm for new things or connecting the product and its surroundings. In the shoe store Schneider in the Swiss city of St.Gallen, the individual Bruag stair railings and room dividers use a unique perforation reminiscent of the glorious past of St.Gallen as one of the major textile cities in Europe.

Country / Place:
Project Name:
Material:
Perforation:
Colour:
Architect / Planner:

Switzerland/St. Gallen
Schuhhaus Schneider
CELLON®, 10mm
Individual Customer Design
NCS S 2005-Y50R
Forma Architekten AG St. Gallen





Room Acoustics

I am sorry, what did you say?

This shouldn't happen to you. Customized Bruag Acoustics Solutions unify design, functionality and lighting.

A Room Acoustics System with Effect and Creativity

Rooms that have a modern design are often impressive in their simplicity. But when it comes to using the room it emerges that the acoustics have been sacrificed. The experience in historic rooms is often not much better: the design elements predominate. The system we have developed provides numerous options for every type of room, providing freedom to adapt to different styles. The ceilings and walls are all brought into play when it comes to improving the acoustics, producing positive auditory and visual outcomes. The acoustic results are proven by the German TÜV Institute, which verified the outstanding absorption rates. In contrast to other room acoustics solutions, our system creates an optical highlight. The panels are produced exactly in line with your wishes, and your individual needs (such as holes for speakers or lights) are catered for.

Country / Place:

Switzerland/Lachen

Project Name:

Steakhouse Marina Lachen

Material:

MDF, 19mm

Perforation:

50100

Colour:

RAL 9016

Architect / Planner:

Locher&Partner Meilen

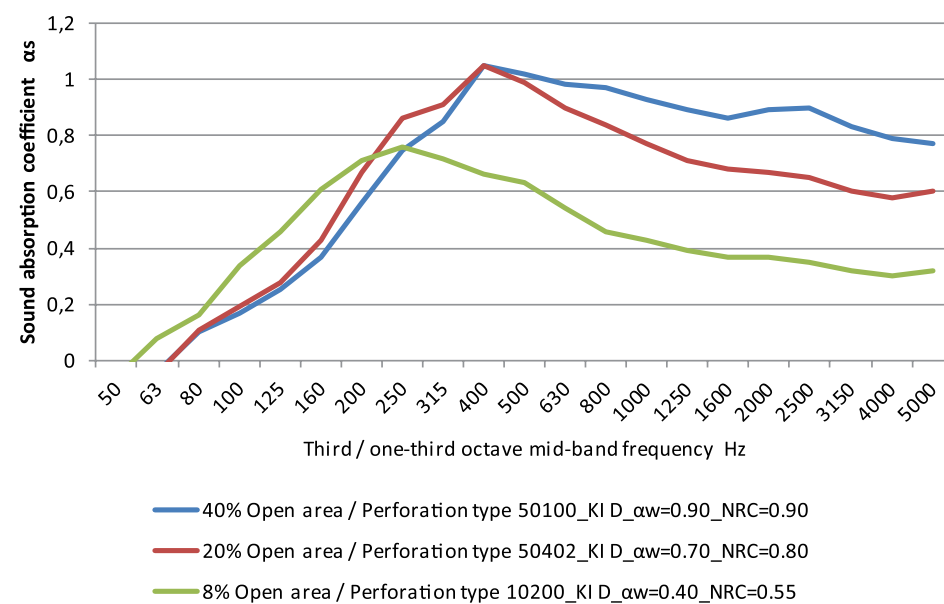
In addition to the included absorbers and metal frames (p.20-23), which constitute complete elements, Bruag offers yet more options that lead to improvements in room acoustics. For example, entire walls or ceilings can be furnished with perforated panels and special acoustic fleece (p.24-27). These can be combined with LED backlighting (p.28-32); or a cooling system can be integrated into the acoustic elements (p.33). We will be glad to work alongside you to develop a system suitable for your project.

Excellent Absorption Rates Confirm the Effect of Bruag's Room Acoustics System

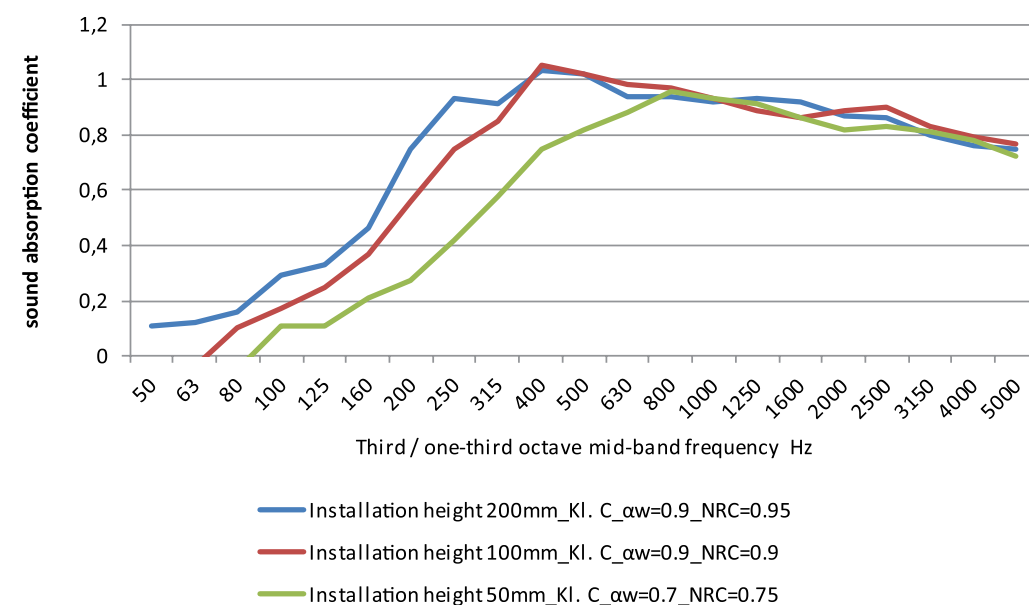
Bruag's ornamental acoustic system consists of a frame, carrier boards containing different types of perforations (i.e. surface patterns) – available in a range of colours – and an absorber element. The basic dimensions of the elements are 1020 x 2040 mm with an overall construction depth of 100 mm. These dimensions can be varied to suit individual projects. Sound tests carried out at the LGA in

Nuremberg demonstrate the results that can be achieved with different types of perforations (i.e. surface patterns). The samples used in the tests had surfaces with varying degrees of openness, set at 8, 20 and 40 percent. The construction depth of the elements varied between 50, 100 and 200 mm with the 100 mm-deep element yielding an excellent comparative value.

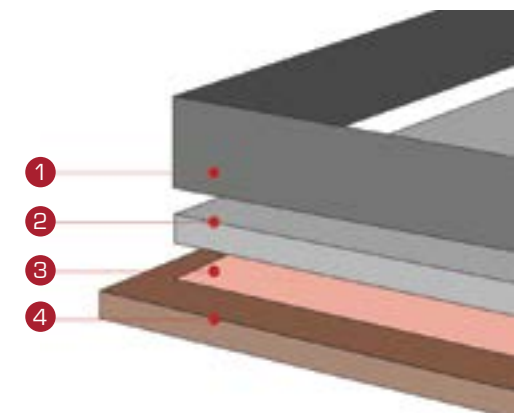
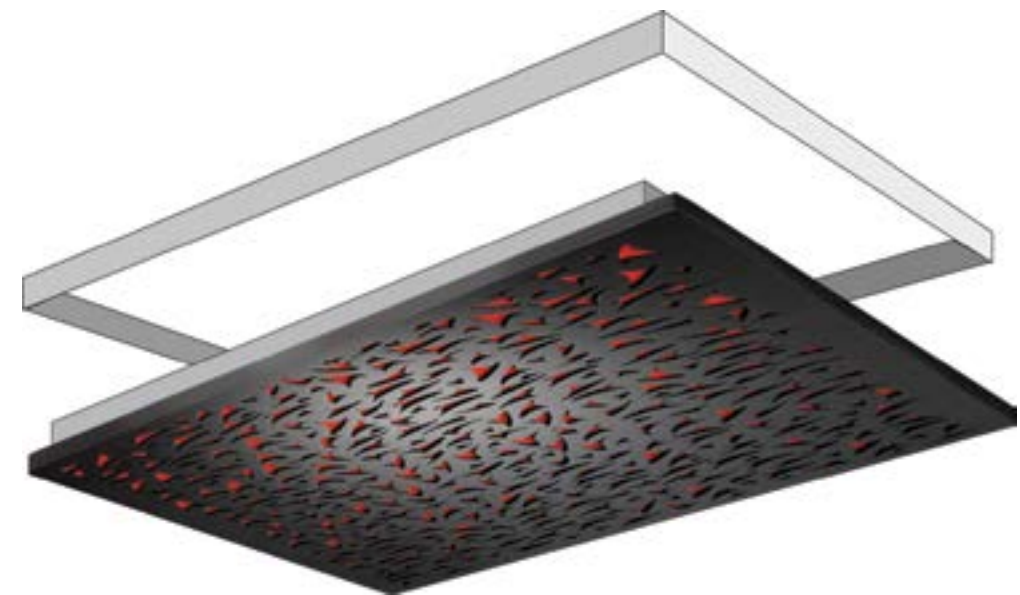
Fixed Installation Height 100mm



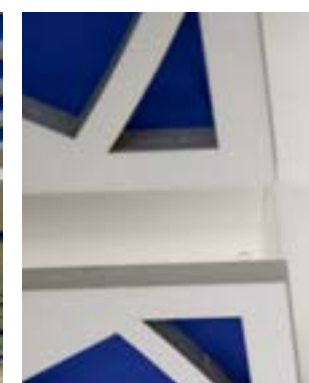
Fixed Open Area 40%



An Acoustics Solution to Delight the Eyes and Ears – and to Suit every Budget



- 1 Installation Frame
- 2 Insulation board
- 3 Textile material
- 4 Carrier Board



The simple metal frame, with its integrated fixing mechanism enhances fast and easy installation. The frame is fixed to walls or ceilings using suitable dowel fixings; the pre-assembled acoustic element is then inserted into the frame. When a click is heard, the panel is perfectly fitted and aligned with the grid. Two fitters can improve the acoustics of a large room in a very short space of time.



Corporate Identity in Tandem with Improved Acoustics

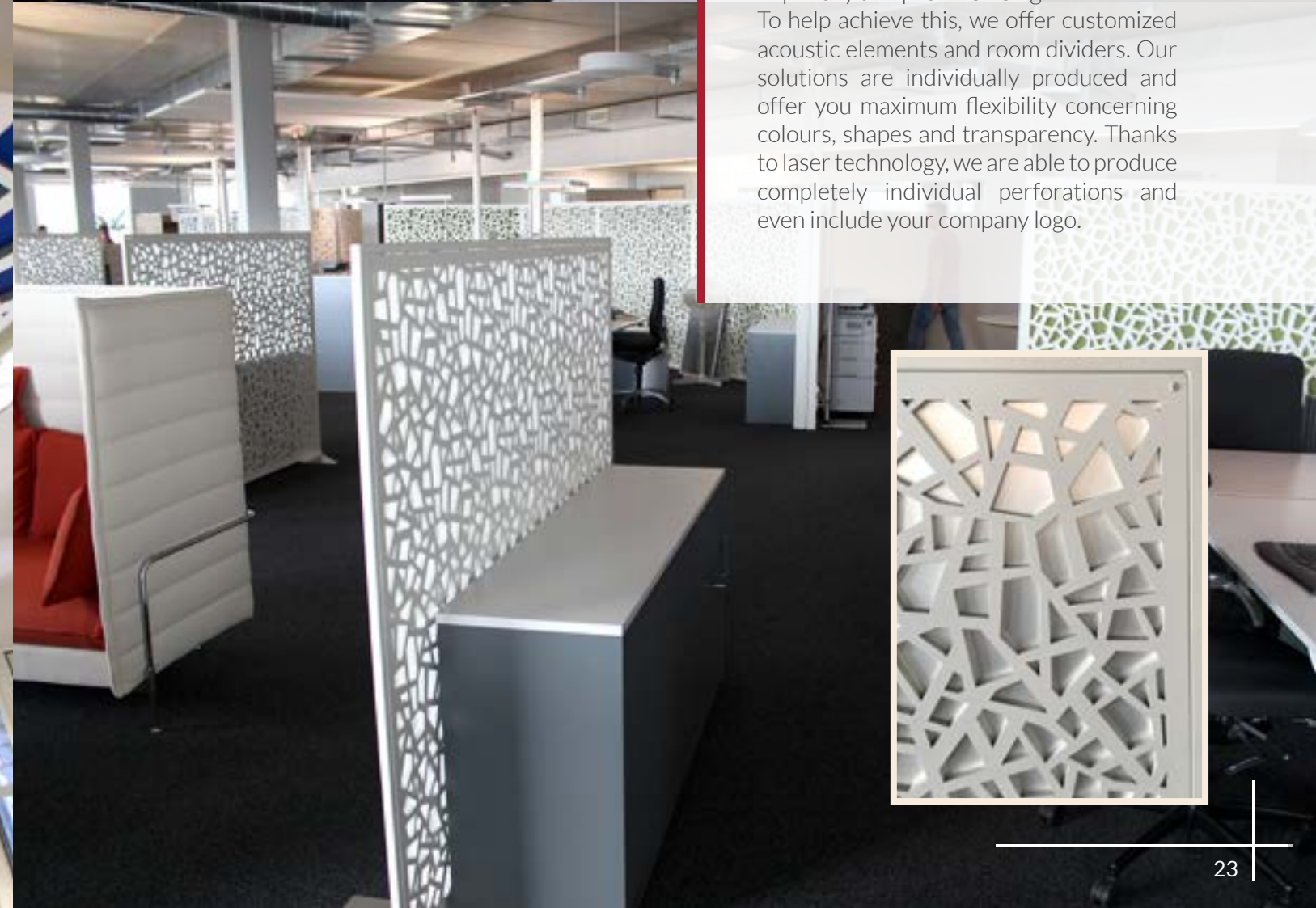
Our fully-customizable perforations provide the opportunity to include letterings or logos into your acoustics system. Bruag's acoustics solution therefore allows you to display your Corporate Identity while simultaneously improving the acoustics and optics of a given room – the ideal solution for restaurants, meeting rooms, receptions or open-plan offices.



Noise Reduction for Open-Plan Offices

Open-plan offices are a trend. Due to this development, demand for products which enable employees to keep a certain degree of privacy and peace is rising.

To help achieve this, we offer customized acoustic elements and room dividers. Our solutions are individually produced and offer you maximum flexibility concerning colours, shapes and transparency. Thanks to laser technology, we are able to produce completely individual perforations and even include your company logo.





Conventionally-installed Acoustics Solutions

The great variety of colours and perforations that can be incorporated into the Bruag Acoustic System likewise accompany the conventionally-installed Acoustic Solutions which we also make available. By 'conventional installation' we mean that no metal frame is used, but rather, the panel is fixed onto a batten.

This solution has been used in a skilful manner in the convention centre located in the German city of Koblenz. Bruag panels and the underlying acoustic construction have enhanced the building. What is particularly remarkable is that although the panels consist of 58% of open space within a 4 x 1 metre format and a continuous perforation, they are still very stable. The perforation continues through all the panels without the presence of any crosspiece. The basic requirements in terms of open space were developed by an acoustic professional. Our laser technology enabled us to follow these requirements, while a heavy curtain has been purposely placed behind the panels to facilitate any adjustments may be required by the specific use to which the hall is put and at any given time.

Country / Place: Germany/Koblenz
Project Name: Convention Centre Koblenz
Material: MDF, 30mm
Perforation: 50100 scaled
Colour: RAL 9016
Architect / Planner: Von Canal Architekten Koblenz



Perforation Density Befitting the Requirements

The fact that every single panel can have a different design enables the planner to adapt the density of the perforation pattern as befits the function of any given location within a room. This means that it is possible, for example, to have a pattern with a more open surface where there are air intakes, and less transparency in other areas of the room.



Using Perforated Wall Claddings to Improve Room Acoustics

Architects Penoyre & Prasad LLC approached the library extension project in Kent with the aim of creating a vibrant contemporary building for study, interaction and exploration. To attain this goal, the architects were seeking creative solutions that would both capture the tradition of the building and also give it a new dynamic look. The perforated panels that have been produced exactly according to the architects' drawings and have been coated in a shade of gold, act as an eye-catcher. It is not only the design that convinces visitors to the library, but also the elements that have been furnished with a special textile and sound-absorbing materials to improve room acoustics.

Country / Place:	Great Britain/Kent
Project Name:	Templeman Library Kent
Material:	CELLON®, 8mm
Perforation:	Individual Design
Colour:	Bruag Alu Gold
Architect / Planner:	Penoyre & Prasad LLP London
Photographer:	Tim Crocker London





Acoustic Ceilings With a Motif Matching the Medical Center Function

The medical Center Karlihof in Malans is the best example for acoustics elements not only being functional but also combining technical aspects with aesthetics and aligning them with the purpose of the building. The most remarkable building in the outskirts of Malans combines state of the art medical treatments with modern infrastructure. CELLON and MDF panels offer and combine sun protection and source of lighting. The team of architects of Ritter Schumacher AG has designed a perforation which is not only unique, but has also a direct connection to the use of the new building as a Medical Center.

The perforations are inspired by filigree muscle cells. "I was surprised how easy it was to implement my drawing as a basis for Bruag to produce the panels and how straightforward the process from initial contact to delivery was", says architect Markus Wolf after the successful opening of the Medical Center. Weather proof CELLON has been used in the outside and was combined with MDF panels in the interior areas. Acoustic textile and absorbers complemented the panels produced by Bruag and the functional aspect of acoustics enhancement to the product.



Country / Place:	Schweiz/Malans
Project Name:	Medizinisches Center Karlihof Malans
Material:	CELLON®, 10mm (Exterior); Bruag Acoustics System with 19mm MDF (Interior)
Perforation:	Individual Customer Design
Colour:	Bruag Alu Brushed Messing (Exterior), NCS S 1002-Y50R (Interior)
Architect / Planner:	Ritter Schumacher AG Chur (Switzerland)

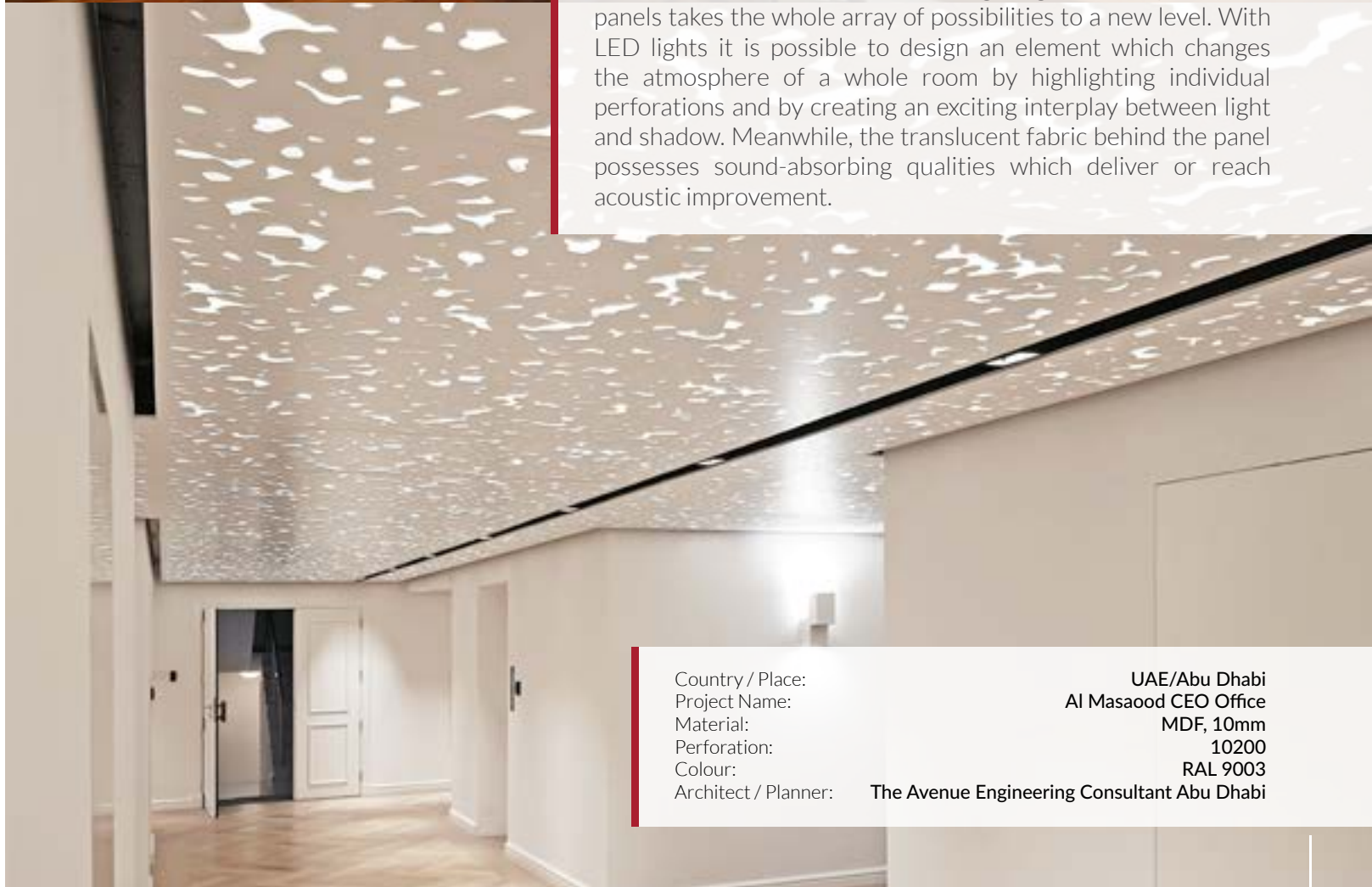


Country / Place:	Switzerland/St. Gallen
Project Name:	Handchirurgie-Praxis
Material:	MDF, 19mm
Perforation:	40200
Colour:	NCS S 3005-Y20R
Architect / Planner:	Architektur Gross AG, St. Gallen
Photographer:	Christoph Hoigné



Multifunctional Systems: Design, Acoustics and Light All Combined

Acoustic solutions can form optical highlights. Bruag's conventional acoustic solutions have already demonstrated this, but the combination of LED backlighting and our perforated panels takes the whole array of possibilities to a new level. With LED lights it is possible to design an element which changes the atmosphere of a whole room by highlighting individual perforations and by creating an exciting interplay between light and shadow. Meanwhile, the translucent fabric behind the panel possesses sound-absorbing qualities which deliver or reach acoustic improvement.



Country / Place:	UAE/Abu Dhabi
Project Name:	Al Masood CEO Office
Material:	MDF, 10mm
Perforation:	10200
Colour:	RAL 9003
Architect / Planner:	The Avenue Engineering Consultant Abu Dhabi

Perforated Acoustics Elements Meet LED Backlighting

Modern architecture tends to prefer smooth and 'hard' surfaces. While concrete, glass and solid wood can look very attractive, the application of these materials on their own can result in poor room acoustics. The main determiner of the quality of room acoustics is the sound reverberation time. Long reverberation times are perceived as uncomfortable and undesirable. This effect is particularly pronounced in offices and public rooms.

Adding even more variety, combining Bruag acoustics solutions with LED backlighting permits the effect of the elements to be easily changed. In this way, the ambience of a room can be adapted to a given event, and take on a completely different feel.

Country / Place:
Project Name:
Material:
Perforation:
Colour:
Architect / Planner:

Switzerland/Wil SG
Club l'étage Wil
MDF, 19mm
50310
Colourless varnish
Hälg AG Arnegg





Indirectly Illuminated Perforated Panels for a Unique Vibe

It has an ambitious goal: to follow in the footsteps of hip metropolis areas; it is expected that the Box Park will become Dubai's new lifestyle hub. It's a fascinating mix of in-vogue stores, trendy restaurants and bars, providing space for relaxation and enjoyment. Guests entering the complex will feel a club-like atmosphere. Bronze-coloured wall panels with a delicate pattern and matching indirect LED lighting contribute to the unique vibe of the place. In addition, the panels have been equipped with a sound-absorbing, translucent diaphragm.

Country / Place:
Project Name:
Material:
Perforation:
Colour:
Architect / Planner:

UAE/Dubai
Dome Theatre Boxpark, Dubai
CELLON®, 6mm
10100
Bruag Alu Bronze
Bond Interiors Dubai

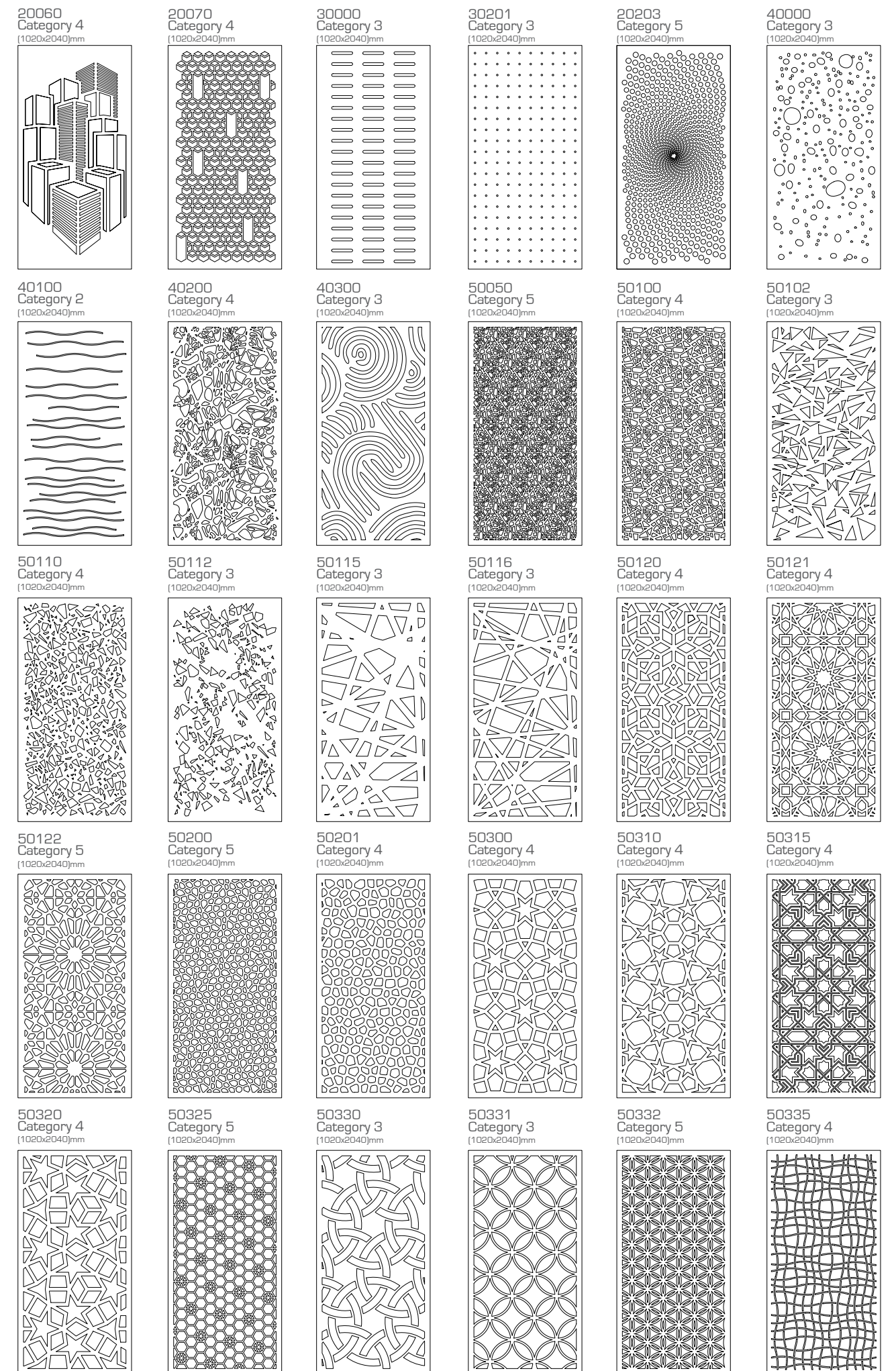
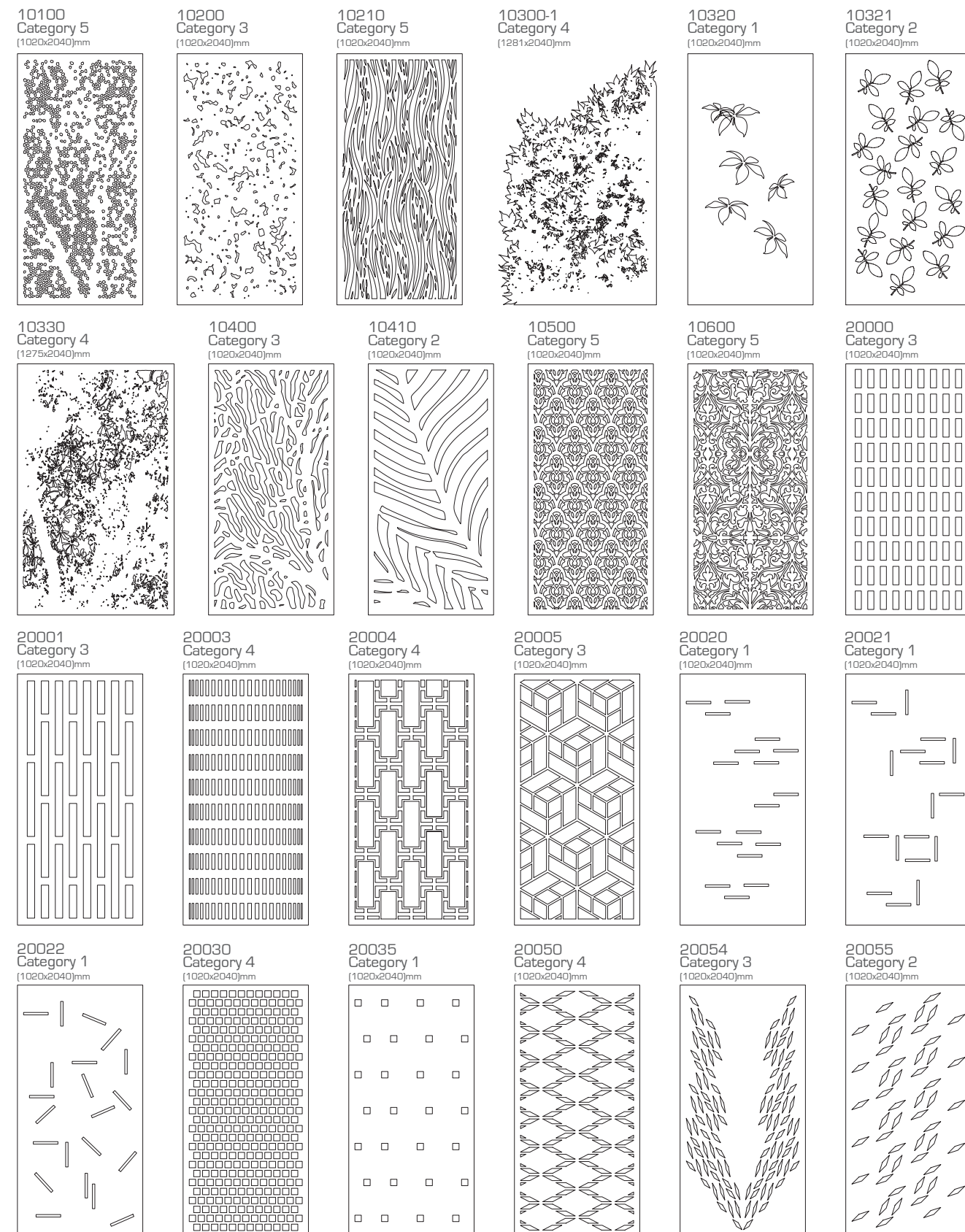


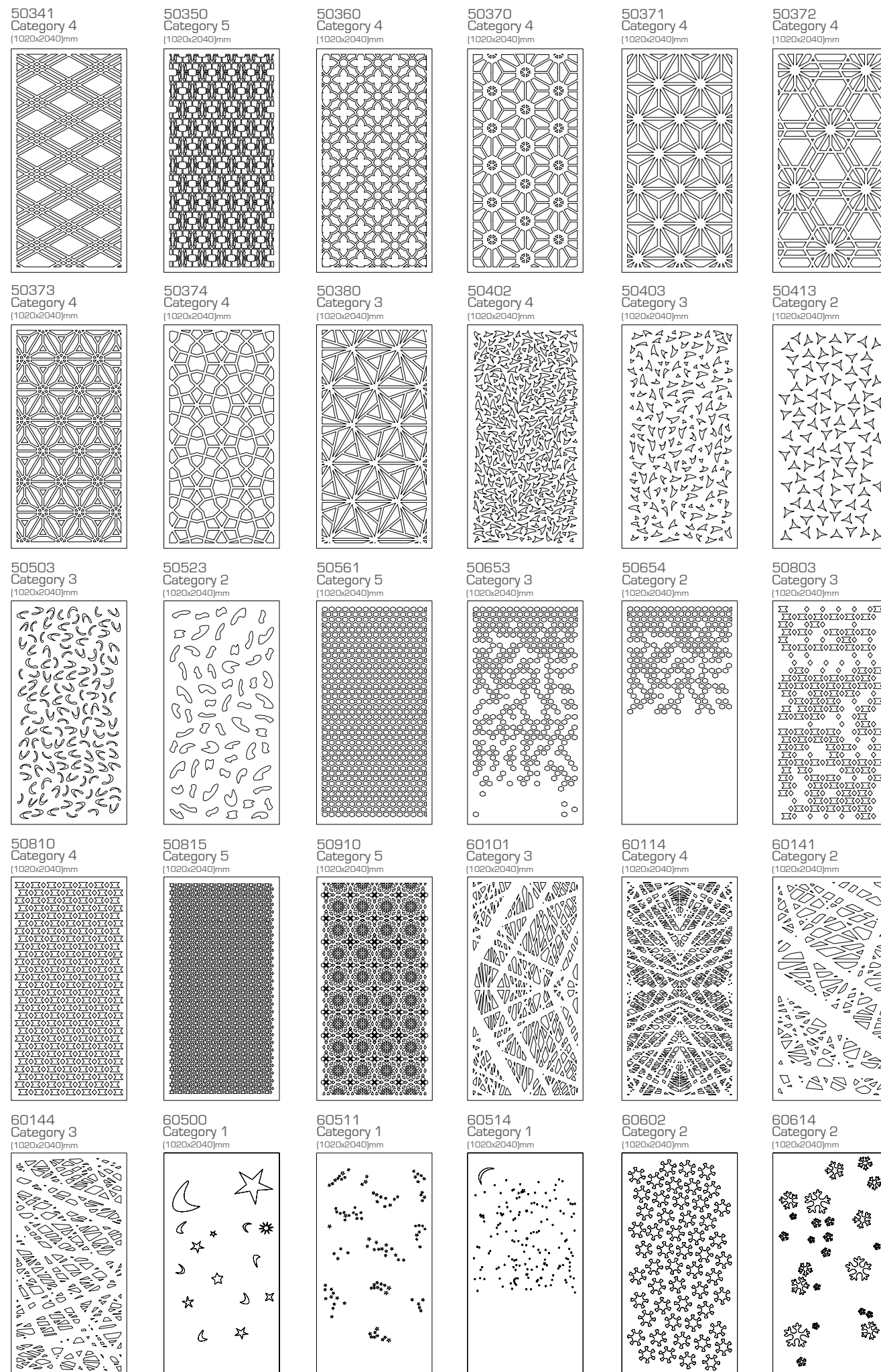
Acoustics Elements with a Cooling Effect

In addition to the optimization of rooms in terms of design and acoustics, Bruag also provides a system that cools rooms down. Just contact us for more details.

Patterns that may Provide Inspiration

The following merely constitute a list of perforations that already exist (more can be seen at www.bruag.ch). You can either select one of our designs or create your own perforated pattern. We use DXF/DWG drawings as the basis for our work. The patterns are precisely adapted to the panel sizes you require. Should you wish, you can also choose to have a frame surrounding the panel which is devoid of perforations, as it is also possible to have the pattern running through several panels uninterrupted. The panels do not have to be rectangular but can be cut according to any shape you require.





Perforated Cladding



Exterior Applications

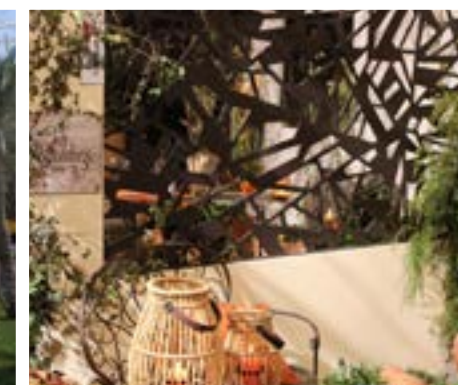
Bruag also offers products for exterior applications. Do not hesitate to contact us for the respective brochure or general information.



Balcony Balustrades



Back-Ventilated Facade



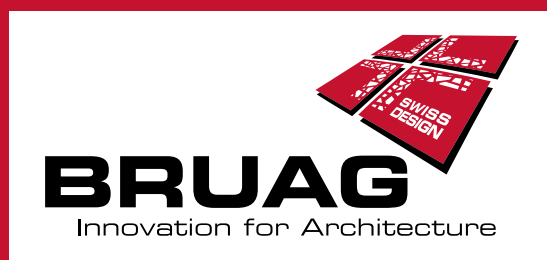
Garden Applications



Balcony Acoustics

For further information and pictures, please visit

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