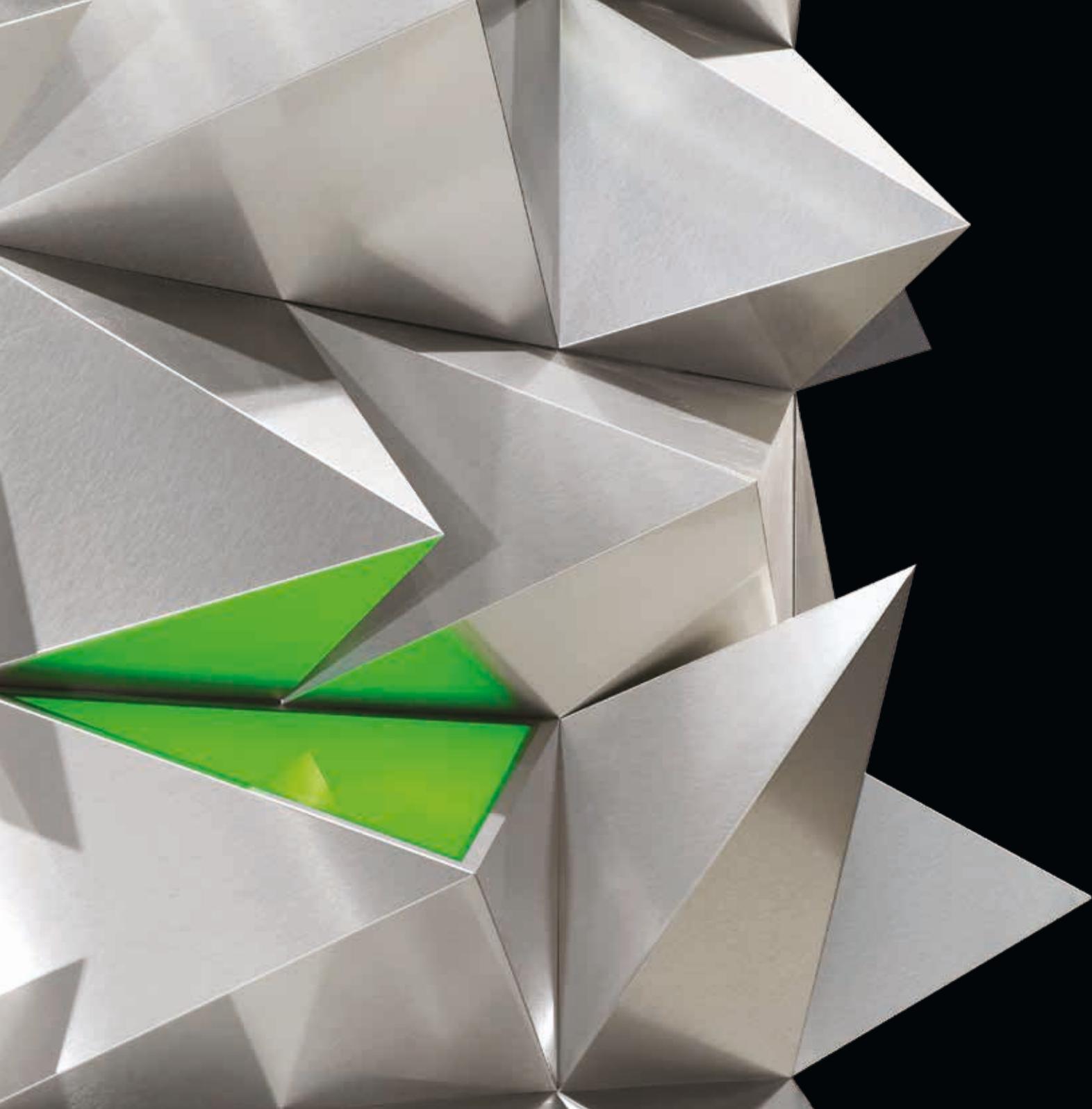


DIBOND®



3A
COMPOSITES

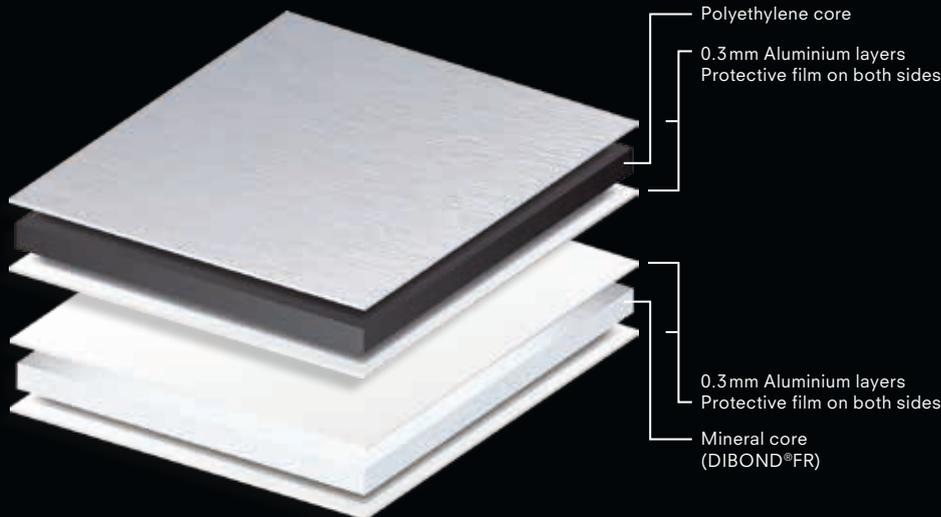


DIBOND®

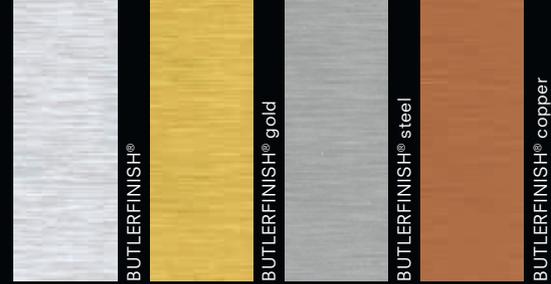
...MADE IN GERMANY by 3A Composites.
DIBOND®, produced at our Singen plant since 1992, has been optimised especially for the display market. Originally developed as a product for the advertising and signage markets, over the years DIBOND® has built up a major market share in other application fields and taken on a new product orientation. High-quality, decorative DIBOND® surfaces are increasingly the material of choice in the areas of product and furniture design, shopfitting, interior and store design as well as for trade fair and exhibitions.

3A COMPOSITES continually enhances the DIBOND® product portfolio! For us, it is very important that the design of our surfaces not only serves aesthetic purposes, but that our panels also comply with all technical expectations. So, alongside form, colour and functionality, the quality of our products and excellent processing properties play a particularly important part. In this brochure, we would like to offer you an overview of the DIBOND® product options we produce especially for design applications.

Quality meets Design – get inspired!



BUTLERFINISH®

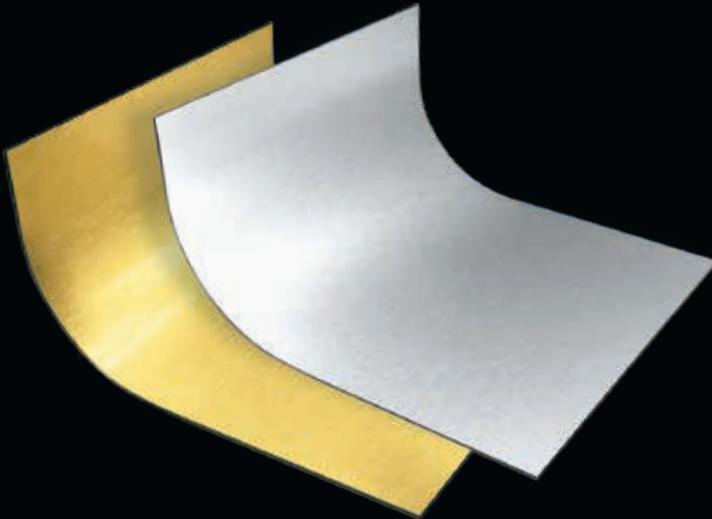


A special process creates the unique brushed appearance of BUTLERFINISH® surfaces. By running the cover plate through rollers, the surface is embossed and given a brushed aluminium effect before being finished with a clear lacquer. The distinctive and exclusive brushed aluminium effect is in high demand for applications in areas such as store design, furniture construction, high-grade POS / POP applications and as a substrate for advertising applications. Whether for interior or exterior use, flat or three-dimensionally shaped - its wide-range of processing options, such as routing, folding, bending and roll-bending, allow creative designs to be implemented effectively and aesthetically.

The brushed aluminium effect is also available in a selection of colours: gold, stainless steel and copper.

At a glance:

- High-quality, brushed effect
- Excellent printing results
- Optimum processing parameters
- Interior and exterior applications



BUTLERFINISH® is available in:

Front: BUTLERFINISH®, Reverse: mill finish

Width	1250			1500		
Length	2500	3050	4050	2500	3050	4050
Thickness						
2	■	■	■	■	■	■
3	■	■	■	■	■	■
4	■	■	■	■	■	■

Dimensions are in mm

DIBOND®eloxal

Anodised 10 µm

DIBOND®eloxal surfaces are substantially harder and, therefore, more scratch-resistant than other DIBOND® surfaces thanks to a 10 µm-thick anodised coating. Due to its robustness, DIBOND®eloxal caters for all applications requiring not only particular durability but also aesthetic elegance. The authentic glistening matt of the surfaces' metal effect offers a high-class, sophisticated appearance, particularly in interior applications. This explains why DIBOND®eloxal is especially popular for decorative surfaces in shop, furniture and trade fair applications, for product promotions at POS, as well as for counters and displays.

DIBOND®eloxal can be processed in the same way as standard DIBOND® versions, with the exception of routing and folding techniques.

At a glance:

- Anodised surfaces on each side (protective oxide coating)
- Abrasion proof and scratch resistant
- Largely dirt-resistant, for example finger prints
- Ideally suited to screen-printing
- Suitable for interior applications



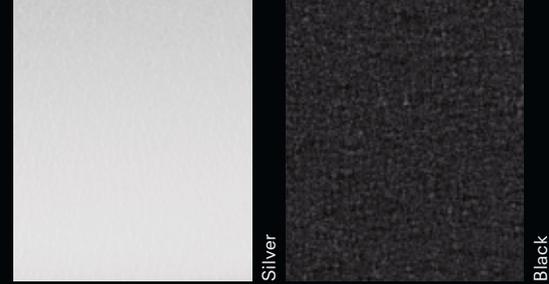
DIBOND® with an anodic coating thickness of 10 µm is available in:

Front: anodized 10µm, Reverse: anodized 10µm (aluminium look)

Width	1 500	
Length	3 100	4 100
Thickness		
2	■	■
3	■	■
4	■	■
6	■	■

Dimensions are in mm

DIBOND®structure

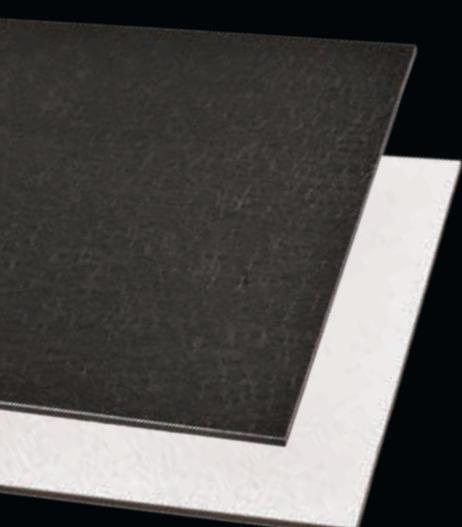


DIBOND®structure has a distinctive look. A look achieved by a special coating system which gives the panel a tangible, textured surface, and which is also largely dirt-resistant. With black or silver surfaces to choose from, DIBOND®structure ensures that there are vivid highlights, especially as eye-catchers, for selected details or on a larger scale, for applications in the fields of shop fitting, wall cladding, interior DIBOND®structure ensures high quality products are displayed to their best advantage.

DIBOND®structure can be processed in the same way as standard versions of DIBOND®, that means it is exceptionally well-suited to processing techniques such as sawing, cutting, routing, folding, 3-dimensional forming, etc. Due to its surface structure, DIBOND®structure is not suitable for printing and laminating, and there are also different parameters for gluing and fixing that result from the surface structure. But, when it comes to laser engraving, the black surface is particularly suitable and an excellent choice.

At a glance:

- Distinctive structure due to special coating system
- Special texture and aesthetics
- Suitable for interior applications



DIBOND®structure is available in:

Front: silver, Reverse: black

Width	1500	
Length	3050	4050
Thickness		
2	■	■
3	■	■
4	■	■

Dimensions are in mm

DIBOND®FR

FR

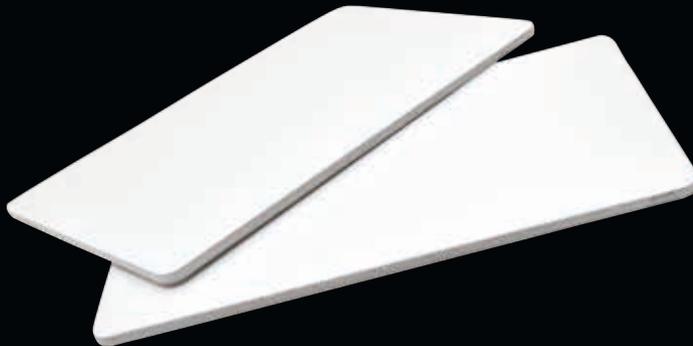
The public sector, in particular, often requires stricter fire prevention measures. Both the mineral core used in DIBOND®FR and its aluminium cover layers make key contributions to the impressive fire classification class B - s1, d0 according to European standards. DIBOND®FR achieves this classification without the addition of halogenated fire retardants, with the result that there is no undue risk of exposure to toxic agents.

DIBOND®FR can be used in a variety of applications where stringent fire prevention regulations are in place: airports, exhibition halls, shopping malls, in public buildings, in shopfitting and for interior cladding as well as displays and signage.

DIBOND®FR can be processed in exactly the same way as standard DIBOND® sheets (with the exception of hot air welding) and it is also suitable for three-dimensional applications.

At a glance:

- Fire classification class B - s1, d0 according to EN 13501-1
- Mineral core without halogenated fire retardants – no undue risk of exposure to toxic agents.
- Suitable for DIBOND® processing options (except for hot air welding)
- Excellent processing results, including bending and routing technology



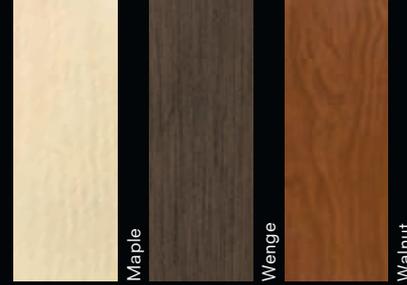
DIBOND®FR is available in:

Front: platinum white, Reverse: platinum white.
Other surfaces on request.

Width	1 500	
Length	3 050	4 050
Thickness		
2	■	■
3	■	■
4	■	■

Dimensions are in mm

DIBOND®decor



DIBOND®decor is the name for a range of aluminium composite panels featuring a variety of wood effect finishes. DIBOND®decor is used in the fields of shopfitting and store design, but also for model building, exhibition stands, for POS displays or advertising – in fact, wherever there is a need for a combination of elegant wood effect and creative “wood untypical” shaping. Compared to genuine wood, DIBOND®decor is dimensionally stable, not sensitive to humidity and changes of temperature and, therefore, can be used in long-term external applications. In addition, another advantage is that DIBOND®decor does not require repainting, sanding or retouching. Direct to substrate screen and digital printing options mean DIBOND®decor is also ideal for advertising purposes. Creating three-dimensional designs is easy because all standard processing methods for other DIBOND® products, such as roll-bending, routing and folding and edge bending as well as cutting, can also be used with

DIBOND®decor. DIBOND®decor easy bending properties, for example, for circular forms, pillar covers or furniture manufacture provide a decisive advantage over genuine wood or wood-veneered chipboard panels.

A practical aspect: when cladding pillars, DIBOND®decor can be routed in advance, transported flat and shaped appropriately on site – using simple, manual means and without tools.

At a glance:

- Temperature resistance from -50 °C up to + 80 °C and absolute humidity resistance
- Lightweight in comparison with real wood saves effort and costs for handling, transporting and installing
- Suitable for direct – to – substrate screen and digital printing (without pre-treatment)
- Easy bending for curved and wave shapes
- Minimal maintenance costs (no need to repaint)



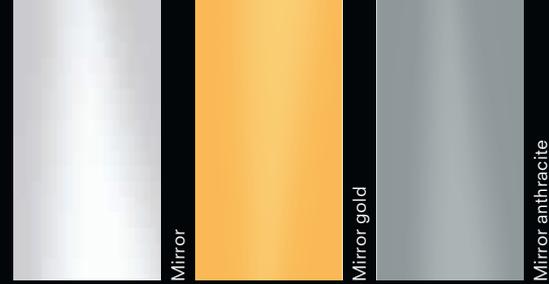
DIBOND®decor is available in:

Front: decor, Reverse: mill finish

Width	1500
Length	3050
Thickness	
2	■
3	■
4	■

Dimensions are in mm

DIBOND®mirror



Reflective DIBOND® surfaces have specular reflection properties similar to those of a conventional glass mirror – but they are unbreakable and the panels are only weigh about half as much.

DIBOND®mirror creates more light, space and transparency in interiors and it is an appealing material option for interior design in spaces which appear small or cramped (shops, hotels, bars and other leisure facilities). It is also ideal for trade fair design and for applications in public spaces (for instance sport stadiums) where safety takes precedence. Since screen-printing and direct digital printing or laser-engraving are all possible with DIBOND®mirror, it is also an ideal substrate for advertising messages. DIBOND®mirror offers almost all the same processing qualities as standard DIBOND®, with the exception of some folding or bending options.

DIBOND®mirror compares favourably to plastic mirror panels because the surface of the mirror does not flake off when cut to size. Another important feature is that DIBOND®mirror is less sensitive to mechanical constraints and much safer and easier to mount than glass, which has a its high risk of breakage, or mirror products made of acrylic, which can warp at fixture points.

At a glance:

- Reflective properties similar to a conventional glass mirror
- Lightweight and non-breakable: handling, transport and installation advantages
- Mirror surface does not flake off during cutting process
- Less sensitive to pressure than glass or acrylic i.e. problem-free mounting without warping
- Suitable for screen or digital printing
- Different product versions for internal and external uses



DIBOND®mirror is available in:

Front: mirror, Reverse: mill finish

Width	1250		
Length	2500	3050	4050
Thickness			
3	■	■	■
4	■	■	■

Dimensions are in mm

DIBOND®digital

Digital

DIBOND®digital is the first aluminium composite material especially for direct to substrate digital printing on flatbed printers. An optimised lacquer system guarantees best possible ink adhesion for UV-curing and solvent based inks. The combination of optimal ink adhesion and the extreme flatness of panel surfaces mean that printing fine lines and small-scale fonts are possible as are increased printing speeds. Numerous print trials in cooperation with famous printing machine manufacturers have always resulted in perfect print results and the impressive classification, GT 0 in cross hatch tests. The sheet's minimal thickness variation allows for a very small clearance between panel and the print heads. DIBOND®digital is UV-resistant and temperature resistant up to 80 °C, meaning the sheet is not only suitable for external applications but also the ideal printing substrate for badly ventilated display windows. This explains why DIBOND®digital

is a particularly popular choice, both in internal and external applications, for advertising boards and high-class advertising campaign signage, for exhibitions and event marketing.

Unlike standard DIBOND®, DIBOND®digital comes with 0.2 mm aluminium layers, making it ideal for flat applications. For panels which are going to be processed into three-dimensional signs after printing, (e.g. using the routing and folding system), we recommend standard versions of DIBOND®. Otherwise DIBOND®digital can be processed in the same ways as standard DIBOND® sheets.

At a glance:

- 0.2 mm aluminium cover layers
- Optimised lacquer system guaranteeing best possible ink adhesion and allowing for high-speed printing
- UV- and weather-resistant
- Perfect printing results – Cross Hatch Test = GT 0
- Extremely flat, smooth, uniform surfaces and good dimensional stability



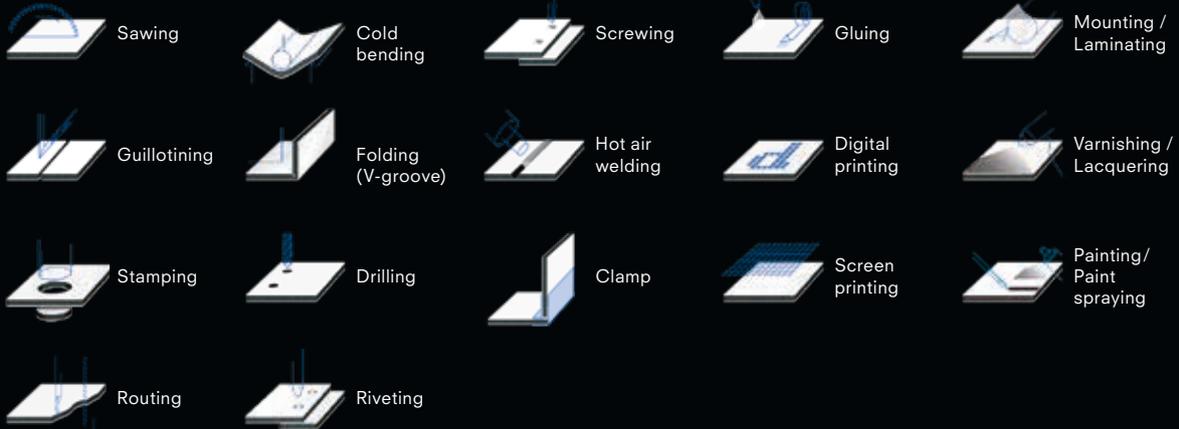
DIBOND®digital is available in:

Front: white, Reverse: white

Width	1250	1500
Length	2500	3050
Thickness		
2	■	■
3	■	■

Dimensions are in mm

PROCESSING



Please note: The processing methods presented here apply in principle to the complete DIBOND® range. Some surfaces, however, may be exceptions, and we draw your attention to this fact in the relevant product information. We recommend reading our processing brochure prior to processing materials. In addition, we would like to point out that the standard dimension formats shown here are ex works. As usual, customized sizes are available from your DIBOND® distributor.

Should you have any specific technical questions, our experts in the applications technology department would be pleased to provide further support.



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