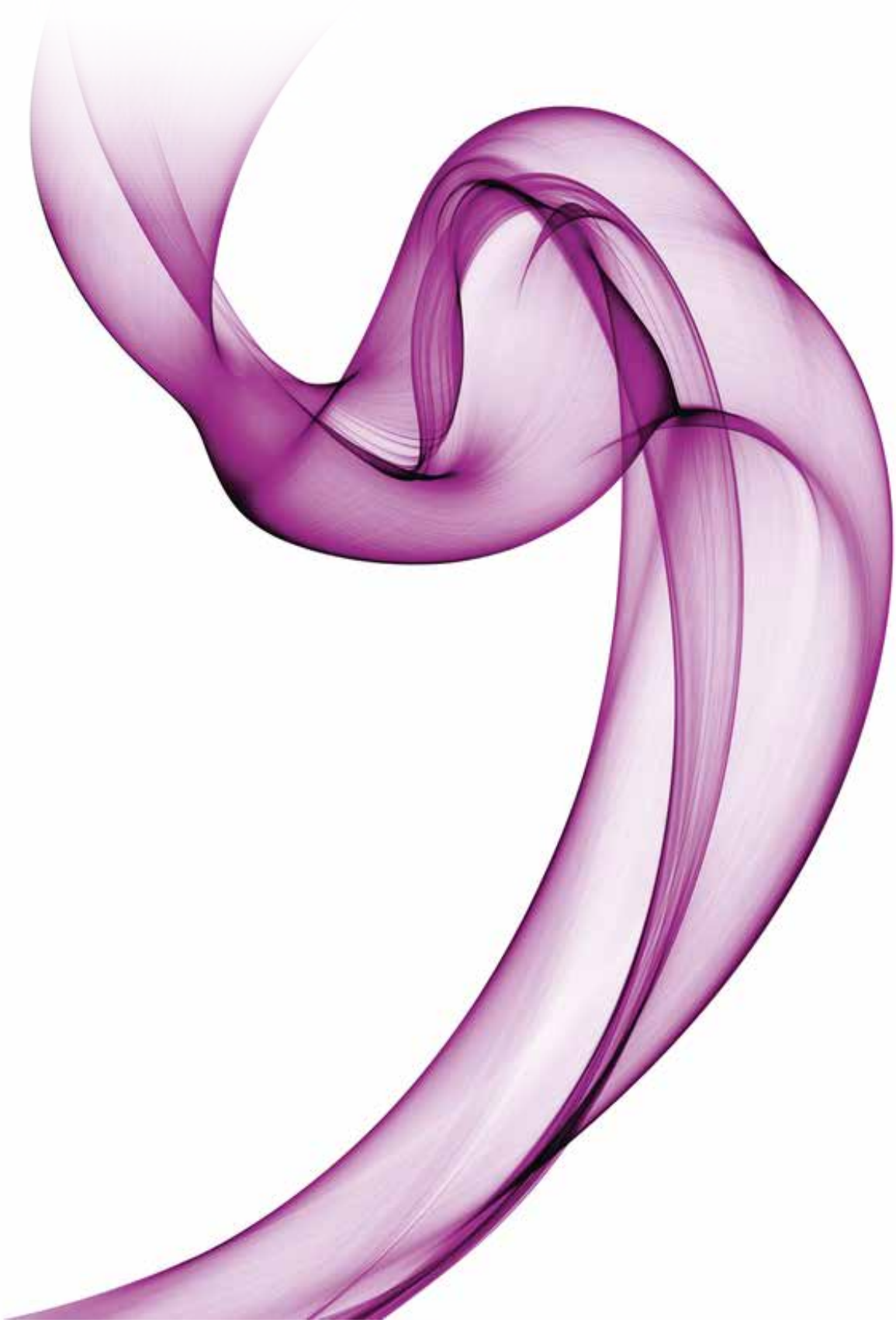
DIBOND®

QUALITY MEETS DESIGN.

THE ORIGINAL ALUMINIUM COMPOSITE SHEET FROM 3A COMPOSITES



3A COMPOSITES

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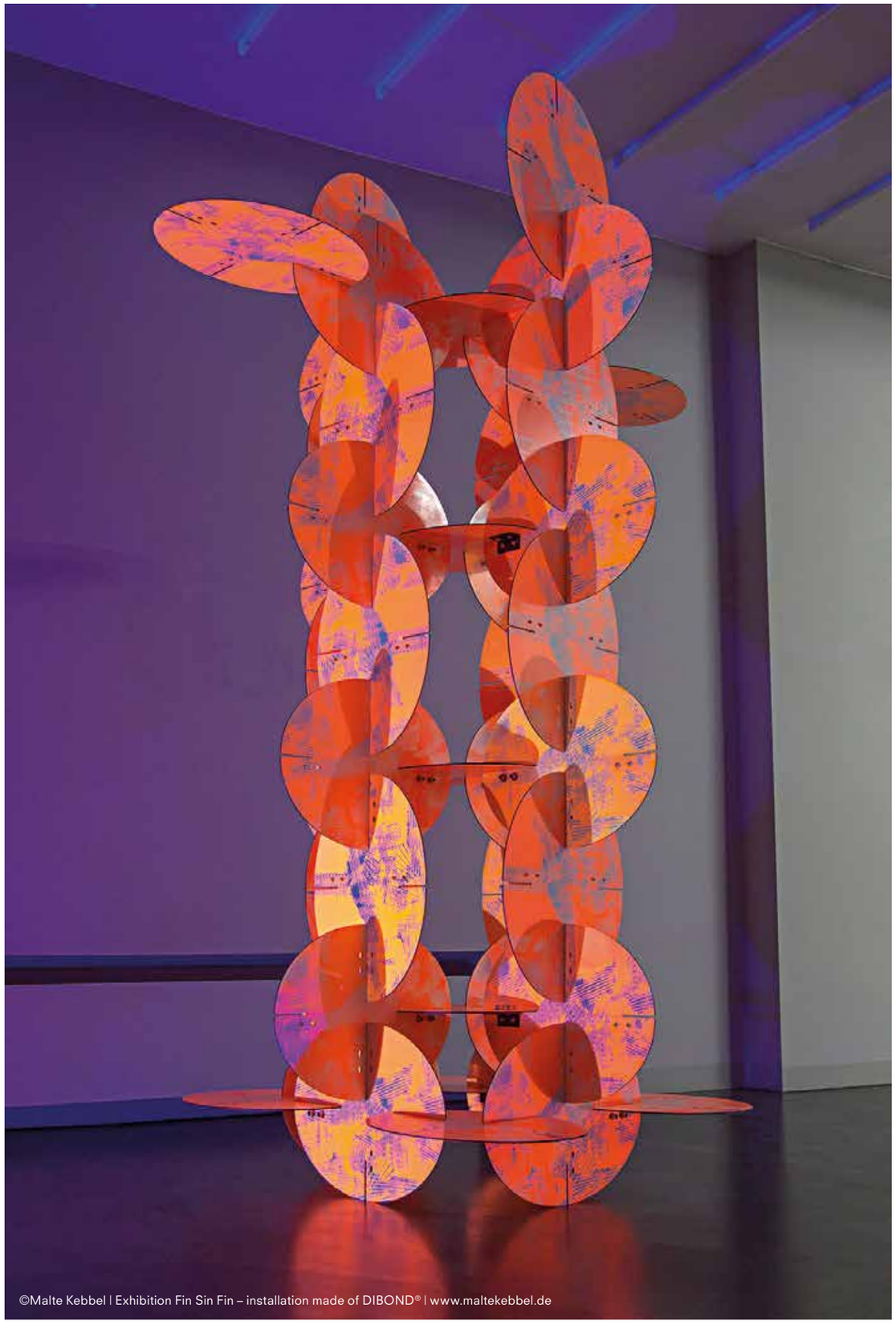


©Malte Kebbel I Exhibition Fin Sin Fin – installation made of DIBOND® I www.maltekebbel.de

DIBOND®

DIBOND® is the original aluminium composite sheet, comprising two 0.3 mm thick aluminium cover layers and a polyethylene or mineral core. It is lightweight – extremely rigid and strong, making it ideal for both indoor and outdoor applications.

DIBOND® is used predominately in the areas of signage, product and furniture design, shopfitting, interior design, shop design, digital printing as well as trade fair and exhibition design. DIBOND® is the perfect material for producing creative ideas due to its wide range of high-quality surfaces, easy processing and long service life.

3A Composites continually enhances the DIBOND® product portfolio! For us, it is very important that our surfaces not only serve 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 key role.

Moreover, sustainable involvement and environmental protection have always been amongst the essential corporate objectives at 3A Composites. The minimisation of risks for man and environment as well as the reduction of environmental pollution through careful and efficient utilisation of resources is part of the corporate philosophy.

Our production site is certified according to DIN EN ISO 14001, which lays down globally recognized requirements for environmental management. In addition, management systems for Quality (DIN EN ISO 9001), Occupational Health and Safety (DIN ISO 45001) and Energy (DIN EN ISO 50001) constitute important corporate objectives. The site is also rated by EcoVadis. EcoVadis is a renowned, independent platform that assesses companies worldwide in the areas of environmental protection, labour and human rights, ethics and sustainable procurement.

At the DIBOND® production site in Singen, Germany, there are permanent measures in place to reduce energy and water consumption, to increase productivity, to save waste and, as a result, to reduce CO_2 emissions significantly. The CO_2 has been successfully reduced by 46% and energy by 30% over the past ten years. In this same period, 60% less waste water and 14% less waste has been generated. Heat recovery measures at our in-house coil coating plant were also implemented in 2021 and will lead to an additional CO_2 reduction of 450t annually.

DIBOND® is a high quality product which goes through extensive quality controls during its production process. The abstention from hazardous processes and substances is one of our highest priorities. All DIBOND® sheets also comply with the requirements of the currently valid version of the REACH & RoHS directives.

Read more about our commitment to sustainability starting on page 10.

DIBOND® – THE ORIGINAL – MADE IN GERMANY!

DIBOND®

ALUMINIUM COMPOSITE PANELS COMPRISING TWO 0.3 MM THICK ALUMINIUM COVER LAYERS AND A POLYETHYLENE CORE

CHARACTERISTICS

- Lightweight – high rigidity
- Very high resistance to weathering and corrosion
- UV-resistant black core
- Weather resistant – applicable with temperatures between -30°C up to +80°C
- Easy to handle – also three-dimensional
- Wide range of colours and formats – up to 2050 mm width
- For interior and exterior applications
- Sustainable material mix – 100% recyclable

©Designliga office for visual communication and interior design

APPLICATIONS

- Architecture & construction
- Urban street furniture
- Equipment, appliances & machine construction
- Automotive
- Boat and shipbuilding
- Caravan construction
- Shopfitting | Trade show stands | Stage design | Studio and office furnishings and fittings
- Interior design
- Medical technology & health care sector
- Advertising structures | hoardings
- Lighting industry
- DIY

©Design & Realisation: S+M Architectes | Photos: Philippe Caumes

PROCESSING

- Printing - direct digital printing
- Printing – screen printing
- Lacquering | Painting | Spraying
- Powder coating
- Lamination
- Cutting – waterjet
- Sawing | Cutting out
- Contour milling
- Punching
- Polishing – milling
- Engraving
- Folding (V-groove) | Cold bending
- Cold rolling | Roll bending
- Gluing
- Hot air welding
- Screwing | Drilling | Riveting

Some product versions may have special processing options which we specify on the following pages.
Moreover our experienced team of engineers at the Technical Department is available to offer help and answer any questions.

TECHNICAL DATA SHEET – DIBOND® STANDARD

THICKNESSES AND WEIGHT					
Panel thickness	mm	2	3	4	6
Thickness of cover layer	mm	0.3			
Weight	[kg/m²]	2.9	3.8	4.7	6.6
TECHNOLOGICAL VALUES					
Section Modulus W	[cm³/m]	0.5	0.8	1.1	1.7
Rigidity E·I	[kNcm²/m]	345	865	1620	3840
Modulus of Elasticity	[N/mm²]	70'000			
Tensile strength of the aluminium cover sheets R_m	[N/mm²]	145 - 185			
Yield strength $R_{p0,2}$ (0,2%)	[N/mm²]	110 - 175			
Elongation A50	%	≥ 3			
CORE					
Polyethylene, type LDPE	g/cm³	0.9			
SURFACE					
Lacquering		Modified polyester coating or mill finish			
Gloss (Initial value)	%	1 - 85			
Hardness (pencil hardness)		HB - F			
ACOUSTICAL PROPERTIES					
Sound Absorption Factor α_s		0.05			
Sound Transmission Loss R_w	dB	23	24	25	26
Loss Factor (d)		0.0048	0.0057	0.0072	0.0102
THERMAL PROPERTIES					
Linear Thermal Expansion		2.4 mm/m at a temperature difference of 100°C			
Thermal Resistance R	m²K/W	0.0047	0.0080	0.0113	0.0180
Thermal Transmission Coefficient U	W/m²K	5.72	5.61	5.50	5.30
Range of Thermal Application	[°C]	-30 up to +80			

Note: These technical data of our products are typical ones for standard DIBOND®.
The actually measured values are subject to production variations.

TECHNICAL DATA SHEET – DIBOND®RE

THICKNESSES AND WEIGHT					
Panel thickness	mm	2	3	4	6
Thickness of cover layer	mm	0.25			
Weight	[kg/m²]	2.8	3.7	4.7	6,6
MATERIALS					
Polyethylene core, Type LDPE, recycled	g/cm³	0.95			
Aluminum cover layers, minimum 90% secondary aluminum	g/cm³	2.7			
Polyester coated surface					
TECHNOLOGICAL VALUES					
Section modulus W	[cm³/m]	0.39	0.63	0.88	1.38
Rigidity E•I	[kNcm²/m]	300	730	1350	3180
Modulus of elasticity	[N/mm²]	70'000			
Tensile strength of the aluminium cover sheets R_m	[N/mm²]	≥ 105			
Yield strength $R_{p0,2}$ (0.2%)	[N/mm²]	≥ 75			
Elongation A50	%	≥ 2			
THERMAL PROPERTIES					
Linear thermal expansion		2.4 mm/m at a temperature difference of 100°C			
Range of thermal application	[°C]	-30 up to +80			

Note: These technical data of our products are typical ones for standard DIBOND®re.
The actually measured values are subject to production variations.

STANDARD COLOURS

DIBOND® offers endless options for individual designs through creative colour schemes. Our colour span ranges from traditional to trendy. Our DIBOND® standard colours are available in different surface combinations:
■ matt/matt ■ gloss/matt ■ gloss/gloss | Gardner Reflectivity: Matt: 25-40% | Gloss: approx. 85%

Platinum white	RAL 9003
Light ivory	RAL 1015
Traffic yellow	RAL 1023
Traffic red	RAL 3020
British green	RAL 6005
Ultramarine blue	RAL 5002
Jet black	RAL 9005
Metallic-aluminium	RAL 9006

SPECIAL COLOURS

Besides the standard DIBOND® colours we have the possibility to provide a wide variety of specific customized colours in our own colour lab. Available in colour options e.g. RAL or PANTONE colour systems or your custom colour, and in a wide range of gloss levels. From low gloss (> 10 GU) to high-gloss (> 80 GU), everything is possible – please just get in touch.
| GU = Gloss Unit

For our DIBOND® colours we guarantee a constantly high quality of colour and colour consistency. The colours printed may vary from the original. To ensure colour matching please ask for a colour sample. To secure colour consistency, the material for each project should be placed on one order.

SUSTAINABILITY

MISSION: TOGETHER. RESPONSIBLE.

We have summarised our commitment to sustainability in our corporate **MISSION: TOGETHER. RESPONSIBLE.** As we also apply and comply with this mission in regard to our products, we have created a classification system for them. The five categories in our **FIVE-DOT-MISSION** system indicate factors with a significant impact on sustainability. Our intention is to offer our partners guidance with their purchasing decision-making and to provide a transparent system. A system which focuses on the use of materials, the carbon footprint, the product life cycle and recycling, a topic of particular relevance for our products. Our FIVE-DOT-MISSION makes an assessment of a product on the basis of the five categories and awards points per category, the product is then assigned to one of the five coloured DOTs. By this means we achieve a transparent, quick valuation logic which we can also use to gauge product innovation and improvement at 3A Composites.

THE FIVE-DOT CATEGORIES ARE:

1. BIOBASED CONTENT

Depending on the product, different raw materials are used to manufacture our panels. In this case, we look at the percentage of renewable raw materials used in our products. Our aim is to increase the percentage whenever possible and appropriate.

2. RECYCLED CONTENT

The industry selects raw materials obtained by means of recycling processes which can be used in the manufacture of new products. At the same time, it is essential to ensure requirements such as fire ratings, processing, functionality and appearance are retained. We work continuously to extend our network of recycling companies and to increase the material recycling rates. This category is where we gauge the proportion of high quality recycled raw material in our products' total material input.

3. CO_2 FOOTPRINT

In this category we monitor the kg CO_2 eq/kg per product which is released into the environment during product manufacture (cradle-to-gate) according to EN 15804+A2 (A1-A3). Using the Helix calculation program from Ecochain Technologies B.V as well as the latest LCA datasets from Ecoinvent or similar databases, we measure the carbon footprint of our products in accordance with ISO 14040 und 14044 for the Life Cycle Analysis (LCA). Information regarding the carbon footprint of a specific product respectively a Life Cycle Assessment (LCA) document is available on request.

4. PRODUCT LIFE CYCLE

The plastic sheets and composite panels we produce are used by our customers for a longer period of time. In contrast to products used in the short term, these longer-term alternatives make an active contribution to saving resources. In this category we show our panels' average service life. Life cycles can range from approximately 1 year to more than 30 years depending on the different materials.

5. RECYCLABILITY

One of the most important aspects of sustainability is contributing to environmental protection by cutting down use of valuable raw materials, conserving resources and avoiding waste. Unlike the second category "recycled content", in this assessment category, we show options for recycling the panels after they have been in use. There are already, for instance, established recycling loops for various paper types and metals. At some production sites, the material can already be returned, so that material for new products can be created. As a company, we came to the conclusion that thermal recycling as a means of energy capture does not seem sustainable enough, so it is not included in our FIVE-DOT classification. Instead, we are actively working with partner companies to establish sustainable and future-oriented recycling solutions for closed-loop recycling management.

As many as 3 points can be achieved in each of the categories presented, totalling a maximum of 15 points. According to the total number of points achieved (1-15), the FIVE-DOT classification is conducted using the following colour gradation.

FIVE DOT MISSION	FIVE DOT MISSION	FIVE DOT MISSION	FIVE DOT MISSION	FIVE DOT MISSION
1 – 4	5 – 6	7 – 8	9 – 10	11 – 15

Transparency is important to us! We will review the product assessment annually to see in which areas the product can be improved.

Join us on our sustainable mission!

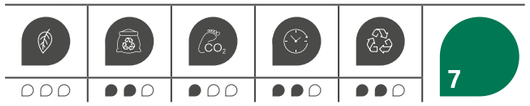
mission
TOGETHER. RESPONSIBLE.

SUSTAINABILITY

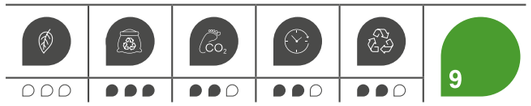
DIBOND® FIVE-DOT-MISSION

DIBOND®, the original aluminium composite panel for the visual communication market, has been assessed in line with the criteria described above. DIBOND® currently achieves a FIVE-DOT classification with a total of 7 respectively 9 points.

DIBOND®



DIBOND®re



RECYCLED CONTENT

We have already completely replaced virgin materials in the core of our DIBOND® panels with recycled LDPE, and this means we are able to make an important contribution to closed-loop recycling. By using recycled core material, approximately 6,700 metric tons of LDPE virgin material can be saved every year. We work with selected European suppliers to source recycled LDPE of a consistently high quality. Continuous quality assurance is an essential part of this process for us. The DIBOND® core material is recycled. In addition, the aluminium used for our cover sheets also contains recycled content and for DIBOND®re, the cover sheets are made entirely from recycled aluminium. Aluminium is one of the materials best suited to recycling because regardless of how often it is recycled, there are no detrimental effects on its material properties. We intend to increase the proportion of recycled aluminium in our cover sheets in the future.

CO_2 FOOTPRINT

As the production of aluminium and the core material polyethylene are energy-intensive, there is embedded fossil carbon in DIBOND®. By using recycled LDPE, the CO_2 footprint has already been significantly reduced. With DIBOND®re, which thanks to a recycled content of over 95% improves the CO_2 footprint by at least 40% compared to conventional aluminium composite materials, we are setting a new benchmark. The footprint can be further optimised through the type of electricity used in aluminium production and the increasing share of secondary aluminium.

PRODUCT LIFE CYCLE

Our high-quality, durable DIBOND® panels are used for long-term indoor and outdoor applications. In terms of weather resistance, the full range of selection criteria advocate the use of DIBOND®. The panels are temperature resistant from -30°C to +80°C, waterproof and UV-resistant. The composite structure of a DIBOND® panel comprises aluminium cover sheets which are particularly corrosion resistant. Depending on where the panel is installed, customers report a service life of up to 20 years.

RECYCLABILITY

DIBOND® is completely recyclable, i.e. both the core material and the aluminium cover sheets are recycled and used to produce new material. There are different methods to separate the material components from the composite. We are the first manufacturer of aluminium composite panels in Europe to have established a recycling system for the return of our aluminium composite materials in Germany in April 2023. Collecting and recycling the material is carried out in cooperation with our strong partners in the AIUIF e.V.. This association of German metal construction companies, system houses and other companies, organizes a closed-loop recycling system to deal with the aluminium used in the window, door and façade sectors. Initially, the option of returning our aluminium composite panels will start in Germany and will soon be extended to include other European countries. If you are interested in collaborating with us, please get in touch with us.

Draw inspiration from our wide variety of DIBOND® panels shown on the following pages and enjoy the endless, creative applications they offer.

SPECIALTIES

The great variety of DIBOND® surfaces is reflected not only in numerous standard and special colours but also in a wide range of special surfaces and versions – our "specialties". Lightweight, strong and easy to shape and process an ideal material for a wide range of applications – DIBOND® combines so many convincing features.

Spaces for presentations, consultations, service and sales: DIBOND® turns them into exciting settings with distinctive flair. Whether it is in furniture design, as wall or ceiling cladding, for shelving systems construction, or for counters, bars and kitchens, DIBOND® is so versatile when it comes to processing and fixing that there is almost unlimited scope for creativity.

High-quality, aesthetic DIBOND® surfaces create the right atmosphere for successful customer communication, offering a unique and coherent design which communicates the quality of your brand to customers.

DIBOND® does not only make a positive impact indoors but, thanks to its excellent weather resistance, also in a wide range of outdoor applications. For example: impressive shop fronts, information boards, signposting, pylons and totems for corporate signage or for particularly eye-catching, spectacular advertising campaigns.

Are you still looking for your perfect surface? DIBOND®design can satisfy your individual design needs; and thanks to its mineral core, DIBOND® FR provides you with a flame-retardant aluminium composite panel which makes it ideal for use in areas where stringent fire protection requirements must be met. In addition, DIBOND®re combines proven DIBOND® quality with a strong commitment to sustainability.

Our products DIBOND®butlerfinish, DIBOND®mirror and DIBOND®anodised with clear coated and anodised surface finishes show the natural aluminium metal surface visual appearance.
Thus, slight colour variations can occur from batch to batch, even within one aluminium coil, due to the upstream rolling mill processes. **To ensure best achievable colour consistency, we strongly advise ordering the total material requirement for a project in one order. We recommend installing all panels pointing in the same direction as the arrows marked on the protective film to avoid potential reflection, gloss and colour differences.**

Turn your brightest ideas into reality with DIBOND®!

DIBOND®re

SUSTAINABLE QUALITY – MADE OF MORE THAN 95% RECYCLED CONTENT.

DIBOND®re is the next generation of aluminium composite sheets that combines the proven quality and reliability of DIBOND® with a new level of environmental responsibility. Made from more than 95% recycled aluminium, featuring a recycled core, and an 40% improved CO_2 carbon footprint, DIBOND®re offers outstanding durability and strength while significantly reducing environmental impact.

DIBOND®re is perfectly suited for high-quality printing, signage, shop fitting, exhibition design and visual displays. Its smooth surface ensures vibrant colour reproduction and outstanding print precision, making it an ideal choice for brands and designers who demand excellence along with environmental awareness.

Lightweight yet remarkably rigid, DIBOND®re offers the same versatility, processing options, and creative freedom that have made DIBOND® the industry standard for decades.

CHARACTERISTICS

- Made of more than 95% recycled content
- Combining sustainability commitment with high-quality industry standards
- Proven DIBOND® quality and flexible fabrication
- For interior and exterior applications

PROCESSING

- Printing - direct digital printing
- Printing – screen printing
- Lacquering | Painting | Spraying
- Lamination
- Cutting – waterjet
- Sawing | Cutting out
- Contour milling
- Punching
- Polishing – milling
- Engraving
- Folding (V-groove) | Cold bending
- Cold rolling | Roll bending
- Gluing
- Hot air welding
- Screwing | Drilling | Riveting

APPLICATIONS

- Architecture & construction
- Urban street furniture
- Equipment, appliances & machine construction
- Caravan construction
- Shopfitting | Trade show stands | Stage design | Studio and office furnishings and fittings
- Interior design
- Medical technology & health care sector
- Advertising structures | hoardings
- Lighting industry
- DIY

Platinum white matt

DIBOND®butlerfinish

BRUSHED ALUMINIUM LOOK IN STYLISH, CONTEMPORARY COLOURS.

A special process creates the unique brushed appearance of DIBOND®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 and roll bending, allow creative designs to be implemented effectively and aesthetically.

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

CHARACTERISTICS

- High-quality, brushed surface
- Excellent printing results
- Optimum processing parameters
- For interior and exterior applications

PROCESSING

- Printing - direct digital printing
- Printing – screen printing
- Lacquering | Painting | Spraying
- Lamination
- Cutting – waterjet
- Sawing | Cutting out
- Contour milling
- Punching
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APPLICATIONS

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- Medical technology & health care sector
- Advertising structures/ hoardings
- Lighting industry
- DIY

DIBOND®butlerfinish

DIBOND®butlerfinish steel

DIBOND®butlerfinish anthracite

DIBOND®butlerfinish gold

DIBOND®butlerfinish copper

DIBOND®butlerfinish rosé

DIBOND®structure

STRUCTURED TACTILE SURFACES FOR DAZZLING HIGHLIGHTS.

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 silver, white or black 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 design, bars and counters. DIBOND®structure ensures high quality products are displayed to their best advantage.

DIBOND®structure can be machine processed very easily and can be digitally printed using the direct to substrate method. We recommend pre-testing the adhesion and drying characteristics of the type of ink selected for use. While DIBOND®structure is not suitable for laminating due to its surface structure, the black surface provides excellent laser engraving results .

CHARACTERISTICS

- Distinctive textured surfaces
- Special texture and aesthetics
- Suitable for interior and exterior applications

PROCESSING

- Printing - direct digital printing
- Cutting – waterjet
- Sawing | Cutting out
- Contour milling
- Punching
- Polishing – milling
- Engraving
- Folding (V-groove) | Cold bending
- Cold rolling | Roll bending
- Hot air welding
- Screwing
- Drilling
- Riveting

APPLICATIONS

- Architecture & construction
- Urban street furniture
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- Interior design
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- Advertising structures/ hoardings
- Lighting industry
- DIY

Silver

White

Black

DIBOND®artenara

SUPER-MATTE, SCRATCH-RESISTANT SURFACES IN HARMONIOUS COLOURS.

DIBOND®artenara features scratch-resistant surfaces in four beautifully curated shades that live in perfect harmony – elegant greys and soft natural tones that move from light and pristine to rich and characterful. Each surface unlocks fresh possibilities for interior design, shopfitting, wall cladding, and furniture construction, empowering you to create spaces with refined aesthetics and lasting performance.

We recommend installing all panels pointing in the same direction as the arrows marked on the protective film to avoid potential reflection differences. Panels from different production batches may vary slightly in colour. To ensure colour consistency, we strongly recommend ordering the total material requirement for a project in one order.

CHARACTERISTICS

- High-quality, super-matte surfaces
- Scratch-resistant surfaces for demanding environments
- Optimum processing parameters
- Suitable for indoor and exterior applications

PROCESSING

- Cutting – waterjet
- Sawing | Cutting out
- Contour milling
- Punching
- Polishing – milling
- Engraving
- Folding (V-groove) | Cold bending
- Cold rolling | Roll bending
- Hot air welding
- Screwing | Drilling | Riveting

APPLICATIONS

- Architecture & construction
- Urban street furniture
- Equipment, appliances & machine construction
- Automotive
- Boat and shipbuilding
- Caravan construction
- Shopfitting | Trade show stands | Stage design | Studio and office furnishings and fittings
- Interior design
- Medical technology & health care sector
- Advertising structures | hoardings
- Lighting industry
- DIY

396 Grey White

398 Ivory Brown

390 Anthracite Grey

397 Beige Grey

DIBOND®mirror

REFLECTIVE SURFACES FOR MORE LIGHT, SPACE AND TRANSPARENCY.

Reflective DIBOND® surfaces have specular reflection properties similar to those of a conventional glass mirror – but they are unbreakable and the panels offer a weight reduction of up to 50%. 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.

As direct digital printing or laser engraving are all possible with DIBOND®mirror, it is also an ideal substrate for advertising messages. Prior to printing, we recommend pre-testing the adhesion and drying characteristics of the type of ink selected for use.

DIBOND®mirror offers almost all the same processing qualities as standard DIBOND®, with the exception of some folding or bending options. DIBOND®mirror is easier to cut than other reflective materials (the surface of the mirror does not flake off), is easier to mill to shape and to machine mount.

Standard DIBOND®mirror is also available in a special variant for exterior applications. The gold and anthracite colour variants are for indoor use.

CHARACTERISTICS

- 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
- Different product versions for internal and external uses

APPLICATIONS

- Urban street furniture
- Equipment, appliances & machine construction
- Boat and shipbuilding
- Caravan construction
- Shopfitting | trade show stands | stage design | studio and office furnishings and fittings
- Interior design
- Advertising structures/ hoardings
- Lighting industry
- DIY

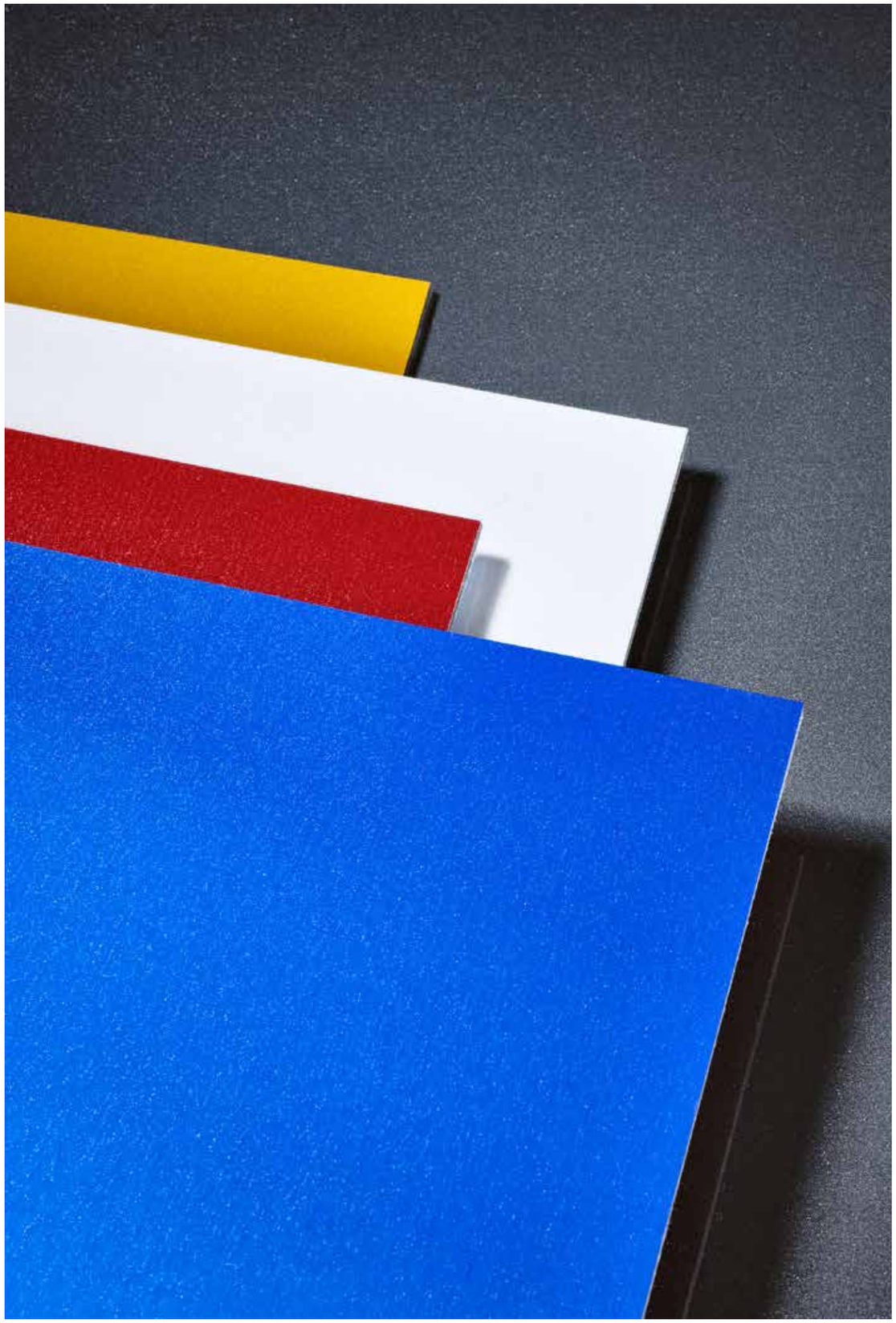
PROCESSING

- Printing - direct digital printing
- Printing – screen printing
- Lacquering | Painting | Spraying
- Lamination
- Cutting – waterjet
- Sawing | Cutting out
- Contour milling
- Punching
- Polishing – milling
- Engraving
- Cold rolling | Roll bending
- Gluing
- Hot air welding
- Screwing
- Drilling
- Riveting

Mirror (interior/exterior)

Mirror gold (interior)

Mirror anthracite (interior)



DIBOND®metallics

HIGH-GLOSS, METALLIC SURFACES FOR UNIQUE HIGHLIGHTS IN RETAIL.

Displaying a product or brand to its best advantage in a store or retail setting calls for distinctive materials. The DIBOND®metallics color series offers shop fitters & designers fresh creative options. The shimmering effect featured in the exclusive, high-gloss, surfaces in five coordinating colours, radiant yellow, sparkling red, royal blue, sophisticated anthracite and glamorous white-silver, is impressive. DIBOND®metallics can create an appealing, experiential, and luxurious environment. Whether as part of a shop window advertising campaign, as a POS display promoting high-quality products, or to craft highlights in shop fitting and trade fair construction – the creative scope is infinite.

DIBOND®metallics can be processed in the same way as the standard version of DIBOND® and can be used for a wide range of applications both indoors and outdoors.

CHARACTERISTICS

- High-gloss surfaces
- Glossy metallic effect
- For interior and exterior applications

PROCESSING

- Printing - direct digital printing
- Printing – screen printing
- Lacquering | Painting | Spraying
- Lamination
- Cutting – waterjet
- Sawing | Cutting out
- Contour milling
- Punching
- Polishing – milling
- Engraving
- Folding (V-groove) | Cold bending
- Cold rolling | Roll bending
- Gluing
- Hot air welding
- Screwing | Drilling | Riveting

APPLICATIONS

- Architecture & construction
- Urban street furniture
- Equipment, appliances & machine construction
- Boat and shipbuilding
- Caravan construction
- Shopfitting | trade show stands | stage design | studio and office furnishings and fittings
- Interior design
- Medical technology & health care sector
- Advertising structures/ hoardings
- Lighting industry
- DIY

Yellow gloss

Red gloss

Blue gloss

Anthracite gloss

White-silver gloss

DIBOND®decor

ELEGANT WOOD LOOKS FOR CREATIVE DESIGN.

DIBOND®decor stands 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 furniture construction, exhibition stands, for POS displays or advertising – in fact, wherever there is a need for a combination of elegant wood effect and "wood untypical" shaping. Compared to real 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 processing methods for standard DIBOND® products, such as roll bending, contour milling, routing and folding as well as cutting, can also be done with DIBOND®decor. The easy bending properties, for example, for circular forms, pillar covers or furniture construction provide a decisive advantage over real 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.

DIBOND®decor is available in the colours walnut, wenge and maple.

CHARACTERISTICS

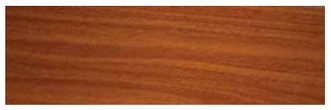
- Temperature resistance from -50°C up to +80°C and absolute humidity resistance
- Lightweight in comparison with real wood saves effort and costs for handling, transporting and installing
- Suitable for direct-to-substrate screen and digital printing (without pre-treatment)
- Easy bending for curved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

APPLICATIONS

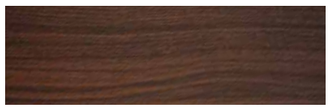
- Architecture & construction
- Urban street furniture
- Equipment, appliances & machine construction
- Boat and shipbuilding
- Caravan construction
- Shopfitting | trade show stands | stage design | studio and office furnishings and fittings
- Interior design
- Medical technology & health care sector
- Advertising structures/ hoardings
- Lighting industry
- DIY

PROCESSING

- Printing - direct digital printing
- Printing – screen printing
- Lacquering | Painting | Spraying
- Lamination
- Cutting – waterjet
- Sawing | Cutting out
- Contour milling
- Punching
- Polishing – milling
- Engraving
- Folding (V-groove) | Cold bending
- Cold rolling | Roll bending
- Hot air welding
- Screwing | Drilling | Riveting

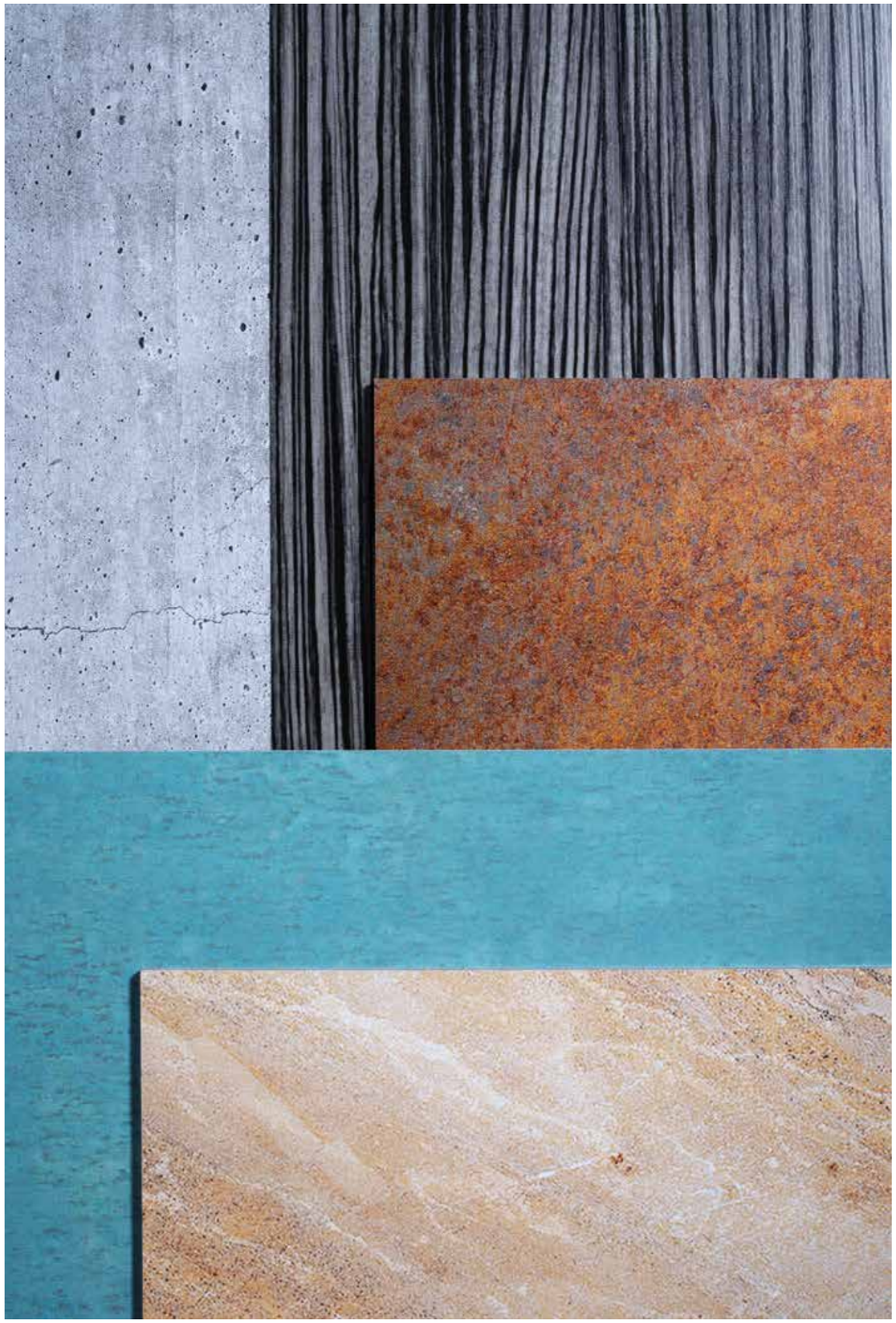


Walnut



Wenge

Maple



DIBOND®design

SETTING CREATIVE ACCENTS.

Set creative accents with DIBOND®design.

You have the possibility to choose designs from our existing decor collection to achieve remarkable effects. This inspirational collection includes Wood, Concrete, Metal and Stone surfaces. Wood-effect surfaces are also available with an haptic lacquer. Whether used extensively or selectively, for applications such as petrol stations, shopfronts, shopfitting, interior design or for your special Corporate Design Project – DIBOND®design decors accentuate indoor and outdoor applications. The 3D effect and depth of colour as well as the possibility to create metallic effects provide an additional scope of design.

Another advantage is that there is no repetition of the decor up to 5 metres. Combined with the extraordinary formability (e.g. folding, bending) of DIBOND®, unlimited possibilities arise to express your unique style. The use of high quality lacquer systems guarantees a long-term durability.

We will be pleased to assist you in realising your projects.

CHARACTERISTICS

- Individual decor-surfaces
- Planning and design freedom
- Light, high bending stiffness, outstanding flatness
- Use of premium-quality lacquer systems
- Guaranteed durability (also in exterior applications)
- Easy processing with standard tools and procedures
- No application of adhesive films or additional treatment of the surface necessary

PROCESSING

- Lacquering | Painting | Spraying
- Lamination
- Cutting – waterjet
- Sawing | Cutting out
- Contour milling
- Punching
- Polishing – milling
- Folding (V-groove) | Cold bending
- Cold rolling | Roll bending
- Gluing
- Hot air welding
- Screwing
- Drilling
- Riveting

APPLICATIONS

- Architecture & construction
- Urban street furniture
- Equipment, appliances & machine construction
- Boat and shipbuilding
- Caravan construction
- Shopfitting | trade show stands | stage design | studio and office furnishings and fittings
- Interior design
- Medical technology & health care sector
- Advertising structures/ hoardings
- Lighting industry
- DIY

Decor collection

DIBOND®digital

OPTIMISED LACQUER SYSTEM ESPECIALLY FOR DIRECT TO SUBSTRATE DIGITAL PRINTING.

DIBOND®digital has been developed specifically for direct digital printing on flatbed printers. The optimised coating system combined with the extremely smooth and flat surfaces offered by DIBOND®digital mean that even very fine lines and the smallest fonts can be printed at high speeds. What is more, DIBOND®digital guarantees the best possible adhesion for UV curable and solvent-based inks as well as for latex and UV-LED inks.

The specially optimised coating system used in the DIBOND®digital LX version makes it an ideal print substrate for latex and UV-LED inks. Featuring improved scratch resistance, the surface coating in conjunction with latex and UV-LED ink systems ensures weatherproof prints and reproduces brilliant colours at the same time.

DIBOND®digital LX is produced with two different standard surfaces: a coating suited to latex and UV-LED inks on the front; to PUR lacquer for conventional UV inks on the back. Double-sided DIBOND®digital LX is available on request.

Both DIBOND®digital versions have undergone numerous print tests, in cooperation with well-known manufacturers of digital printing machines, achieving perfect print quality and first-class results in the cross-cut test. Due to the panel's excellent flatness and minimal variation in thickness, a very small standoff distance between the print heads and the substrate is possible.

DIBOND®digital, unlike other familiar DIBOND® versions, features 0.2 mm thick aluminium covering sheets, which are ideal for flat applications. In addition, DIBOND®digital is UV stable and temperature-resistant up to 80°C. This makes the panel suitable for both indoor and outdoor applications as a substrate for printed advertising boards, top-quality advertising campaign signage, trade fair structures and even as a decorative printed items for shop window displays.

CHARACTERISTICS

- 0.2 mm aluminium cover layers
- Optimised lacquer system guaranteeing best possible ink adhesion and allowing for high-speed printing
- UV- and weather-resistant
- Precise, high-definition printing results
- Extremely flat, smooth, uniform surface and good dimensional stability

PROCESSING

- Printing - direct digital printing
- Printing – screen printing
- Lacquering | Painting | Spraying
- Lamination
- Cutting – waterjet
- Sawing | Cutting out
- Contour milling
- Punching
- Polishing – milling
- Engraving
- Cold rolling | Roll bending
- Gluing
- Hot air welding
- Screwing
- Drilling
- Riveting

APPLICATIONS

- Architecture & construction
- Urban street furniture
- Equipment, appliances & machine construction
- Boat and shipbuilding
- Caravan construction
- Shopfitting | trade show stands | stage design | studio and office furnishings and fittings
- Interior design
- Advertising structures/ hoardings
- DIY

White

DIBOND®anodised

MATT SURFACE WITH ENHANCED SCRATCH AND ABRASION RESISTANCE.

DIBOND®anodised surfaces are substantially harder and, therefore, more scratch and abrasion resistant than other DIBOND® surfaces thanks to a 10 µm-thick anodised coating. Due to its robustness, DIBOND®anodised 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®anodised 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®anodised can be processed in the same way as standard DIBOND® versions, with the exception of routing and folding techniques.

CHARACTERISTICS

- Anodised surfaces on each side
- Hard and abrasion resistant
- Largely dirt-resistant
- Ideally suited for screen-printing
- Suitable for interior applications

PROCESSING

- Lamination
- Cutting – waterjet
- Sawing | Cutting out
- Contour milling
- Punching
- Polishing – milling
- Cold rolling | Roll bending
- Hot air welding
- Screwing
- Drilling
- Riveting

APPLICATIONS

- Urban street furniture
- Equipment, appliances & machine construction
- Boat and shipbuilding
- Caravan construction
- Shopfitting | trade show stands | stage design | studio and office furnishings and fittings
- Interior design
- Medical technology & health care sector
- Advertising structures/ hoardings
- Lighting industry
- DIY

Anodised

DIBOND® FR

MINERAL CORE FOR APPLICATIONS WITH MORE STRINGENT FIRE SAFETY REQUIREMENTS

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 fire classification class B-s1, d0 according to European standards EN 13501. DIBOND® FR achieves this classification without the addition of halogenated fire retardants. 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.

The standard version of DIBOND® FR is available with a platinum white matt surface on both sides. On request, both the full-range of standard and special colours and our "specialties" are available with a mineral core.

DIBOND® FR is also available in 2050 mm width. The "flame retardant" version can be delivered in widths up to 2050 mm in the familiar DIBOND® standard colours and in matt/matt and matt/gloss surface combinations. For special colours, please get in touch.

CHARACTERISTICS

- Fire classification class B-s1, d0 according to EN 13501
- Mineral core without halogenated fire retardants
- Suitable for known DIBOND® processing options (except for hot air welding)
- Excellent processing results, including routing and folding technique
- Suitable for interior and exterior applications

APPLICATIONS

- Architecture & construction
- Automotive
- Boat and shipbuilding
- Caravan construction
- Shopfitting | trade show stands | stage design | studio and office furnishings and fittings
- Interior design
- Advertising structures/ hoardings
- DIY

PROCESSING

- Printing - direct digital printing
- Printing – screen printing
- Lacquering | Painting | Spraying
- Lamination
- Cutting – waterjet
- Sawing | Cutting out
- Contour milling
- Punching
- Polishing – milling
- Engraving
- Folding (V-groove) | Cold bending
- Cold rolling | Roll bending
- Gluing
- Screwing
- Drilling
- Riveting

Platinum white

Standard and special colours | Specialties

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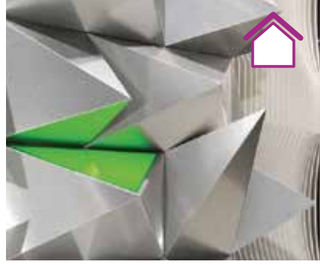

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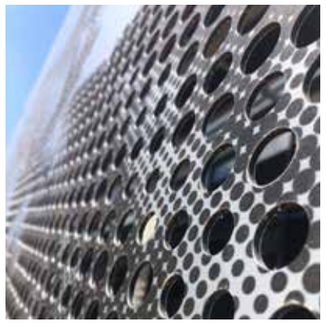
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