



PRODUCT GUIDE

100% PAPER – 100% RECYCLABLE – FSC®-CERTIFIED.

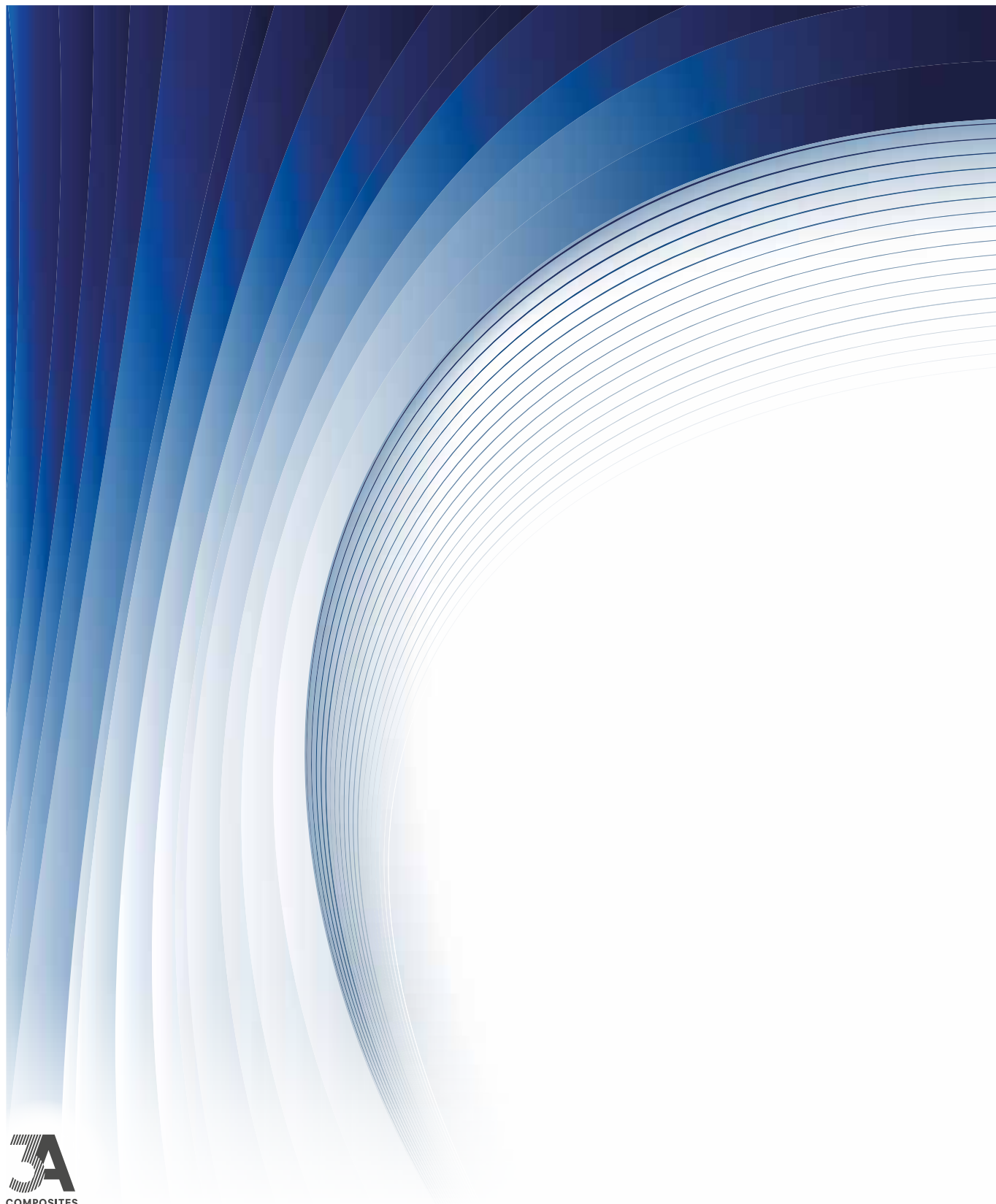




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DISPA®

DISPA® are innovative paper boards for screen and digital printing. They are made of FSC®-certified paper (FSC® C127595) and are fully recyclable. Thanks to a non-directional core structure, DISPA® paper boards offer not only an optimal level of flatness and excellent dimensional stability, they are also lightweight. One of the board's major advantages over corrugated board is the visual surface quality.

The unique structure of DISPA® offers outstanding properties. The boards are an ideal printing substrate and well suited to die cutting or processing with cutting plotters. They are the perfect solution for indoor promotion campaigns, ceiling-mounted suspended signs, display stands and POS/POP applications. As a paper product, they can be easily and inexpensively disposed of as waste paper through the national waste paper collection systems.

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 in Osnabrück, Germany is certified to ISO 14001, the standard defining internationally recognised requirements for environmental management. In addition, we have a linkage of the management systems for quality (ISO 9001), health and safety (ISO 45001) and energy management (ISO 50001) for many years.

The site has also gone through all the stages for FSC®-certification (GFA-COC-002828). The production process, audited by FSC®, ensures that only FSC®-certified paper is used in the production of our DISPA® boards and that non-certified paper is not included. For the production of DISPA® we solely use FSC®-certified paper. The FSC® label stands for a continuous tracking process. It is a clear indicator that the paper comes from responsibly managed forests or from other controlled sources. The forest management is in compliance with social, economic and environmental requirements.

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.

Ongoing efforts to reduce CO₂ emissions by scaling back energy and water consumption, increasing productivity and avoiding waste are being made at the DISPA® production site. CO₂ emissions and energy consumption have been successfully reduced by more than 50% since 2014. In this same period, 45% less waste has been generated. We have been using electricity from 100% certified hydropower for several years.

DISPA® paper boards are subject to the highest quality standards and stringent monitoring during production. Our top priority is to ensure that DISPA® paper boards do not contain any hazardous substances.

Read more about our commitment to sustainability starting on page 8.

[DISPA® – 100% PAPER – 100% RECYCLABLE – FSC®-CERTIFIED.](#)

CHARACTERISTICS

- 100% paper
- 100% recyclable – simple and inexpensive disposal as waste paper
- FSC®-certified (FSC® C127595)
- Unique paper core – thanks to a non-directional core structure, DISPA® paper boards offer not only an optimal level of flatness and excellent dimensional stability, they are also lightweight.
- One of the board’s major advantages over the corrugated board is the visual surface quality
- Outstanding printing results
- Easy options for processing

APPLICATION

- Displays (POS/POP)
- Signage | Lettering
- Shop design | Shop window decoration
- Interior design | Furniture
- Partitions | Cladding
- Exhibition design and construction
- Model making
- Short term promotional campaigns

PROCESSING

- Printing (direct digital/screen)
- Lacquering | Painting | Spray painting
- Lamination
- Cutting (cutter/CNC/waterjet)
- Punching
- Creating grooves | Embossing
- Folding (V-groove) | Cold bending
- Gluing
- Drilling



Some product versions may have restricted processing options.
For more details on the processing of DISPA®, please contact our technical team.

PRODUCTS	DISPA®		DISPA®re		DISPA®canvas	
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DIMENSIONS AND WEIGHT							
Thickness		mm	2.4	3.8	5	3.8	3.8
Weight per unit area	EN 29073-1	g/m²	640	840	870	1005	775
Sheet sizes		mm	as per delivery programme				
Sheet width tolerance		mm	± 5				
Sheet length tolerance		mm	± 5				
Sheet thickness tolerance		mm	± 0.4				
Weight per unit area tolerance		%	± 5				
Tolerance in right angle		mm/m	± 1				
CORE							
Embossed paper			white		grey		white
SURFACE							
Layers			brilliant white, coated paper		white, coated paper		embossed, coated paper
Colour value	CIELAB		L*=94 a*=+0.5 b*=1.5		L*=88.4 a*=+0.07 b*=0.21		L*=92 a*=+0.5 b*=-0.3
Smoothness	ISO 5627	Bekk S	51		41		–
TECHNOLOGICAL VALUES							
Bending strength	EN 310	N/mm²	5.0	4.0	2.7	4.3	3.0
pH-value (Neutral = 7)	ISO 6588		9.0			8.0	9.0

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

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:



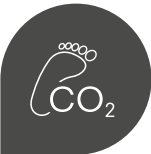
1. BIOBASED CONTENT

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. CO₂ FOOTPRINT

In this category we monitor the kg CO₂ 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 available 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.



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. We have set ourselves the goal of achieving 80% of our sales with products which achieve a rating of ≥ 7 points in the FIVE-DOT classification by 2028.

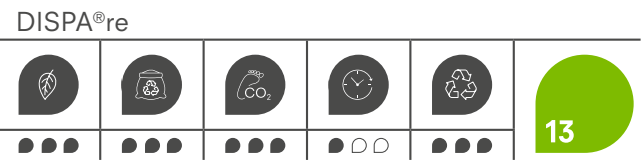
Join us on our sustainable mission!



SUSTAINABILITY

DISPA® FIVE-DOT-MISSION

DISPA®, the innovative paper boards made of FSC®-certified paper, have been assessed in line with the criteria described above. DISPA® and DISPA®canvas currently achieve a FIVE-DOT classification with a total of 10 points, DISPA®re achieves 13 points.



BIOBASED CONTENT
Our DISPA® boards are made from 100% FSC®-certified paper which means they are made from renewable raw materials. FSC®-certification ensures that the wood required for paper production comes from sustainable, environmentally sound and responsible forest management or from other controlled sources.

RECYCLED CONTENT
The core as well as the cover layers of our DISPA®re sheets are made of FSC®-certified recycled paper.

CO₂ FOOTPRINT
DISPA® paper boards consist of renewable raw materials. The use of paper as the sole component of the paper board means that the carbon footprint is very small.

PRODUCT LIFE CYCLE
DISPA® is ideally suited as a solution for short- and medium-term seasonal advertising and signage indoors.

RECYCLABILITY
All DISPA® paper boards are fully recyclable, i.e. the paper is returned to the recycling loop and hence used to produce new recycled paper. An established, closed-loop recycling system already exists for this purpose. The entire DISPA® product family can be easily and inexpensively disposed of as waste paper through the national waste paper collection systems.





DISPA®

THE CLASSIC – IN THREE DIFFERENT THICKNESSES.

DISPA® is a multi-layer paper board, available in three different thicknesses: 2.4 mm (3-layer), 3.8 mm (5-layer) and 5 mm (5-layer). The embossed paper core ensures a high-level of rigidity and flatness. DISPA® is made of FSC®-certified paper and can be completely recycled. The sheets convince with brilliant white and smooth surfaces, which are perfect for digital printing. Screen printing is also possible on the 2.4 mm and 3.8 mm thick sheets with high quality results. With DISPA® you can reach amazing printing results.

CHARACTERISTICS

- Thickness 2.4 mm (3-layer), 3.8 mm (5-layer) and 5 mm (5-layer)
- Brilliant white with a smooth surface
- Amazing printing results

PROCESSING

- Printing (direct digital/screen)
- Lacquering | Painting | Spray painting
- Lamination
- Cutting (cutter/CNC/waterjet)
- Punching
- Creating grooves | Embossing
- Folding (V-groove) | Cold bending
- Gluing
- Drilling

APPLICATION

- Displays (POS/POP)
- Signage | Lettering
- Shop design | Shop window decoration
- Interior design | Furniture
- Exhibition design and construction
- Model making
- Short term promotional campaigns



White



DISPA[®]re

CORE AND COVER LAYERS MADE OF RECYCLED PAPER.

DISPA[®]re is a multi-layer paper board, available in the thickness 3.8 mm (5-layer) which features smooth, white surfaces. The embossed paper core, already well-known in DISPA[®], ensures the board is exceptionally rigid and outstandingly flat. In the production of DISPA[®]re, we use only FSC[®]-certified recycled paper for both the covering layers and the core. The boards are fully recyclable and can be easily and inexpensively disposed of as waste paper through the national waste paper collection systems. Point-of-Sale displays, hanging signage in a supermarket or shop, seasonal indoor advertising campaigns - there is virtually no limit to your creativity.

CHARACTERISTICS

- Thickness 3.8 mm (5-layer)
- Smooth and white surface
- Cover layers and core made of recycled paper

PROCESSING

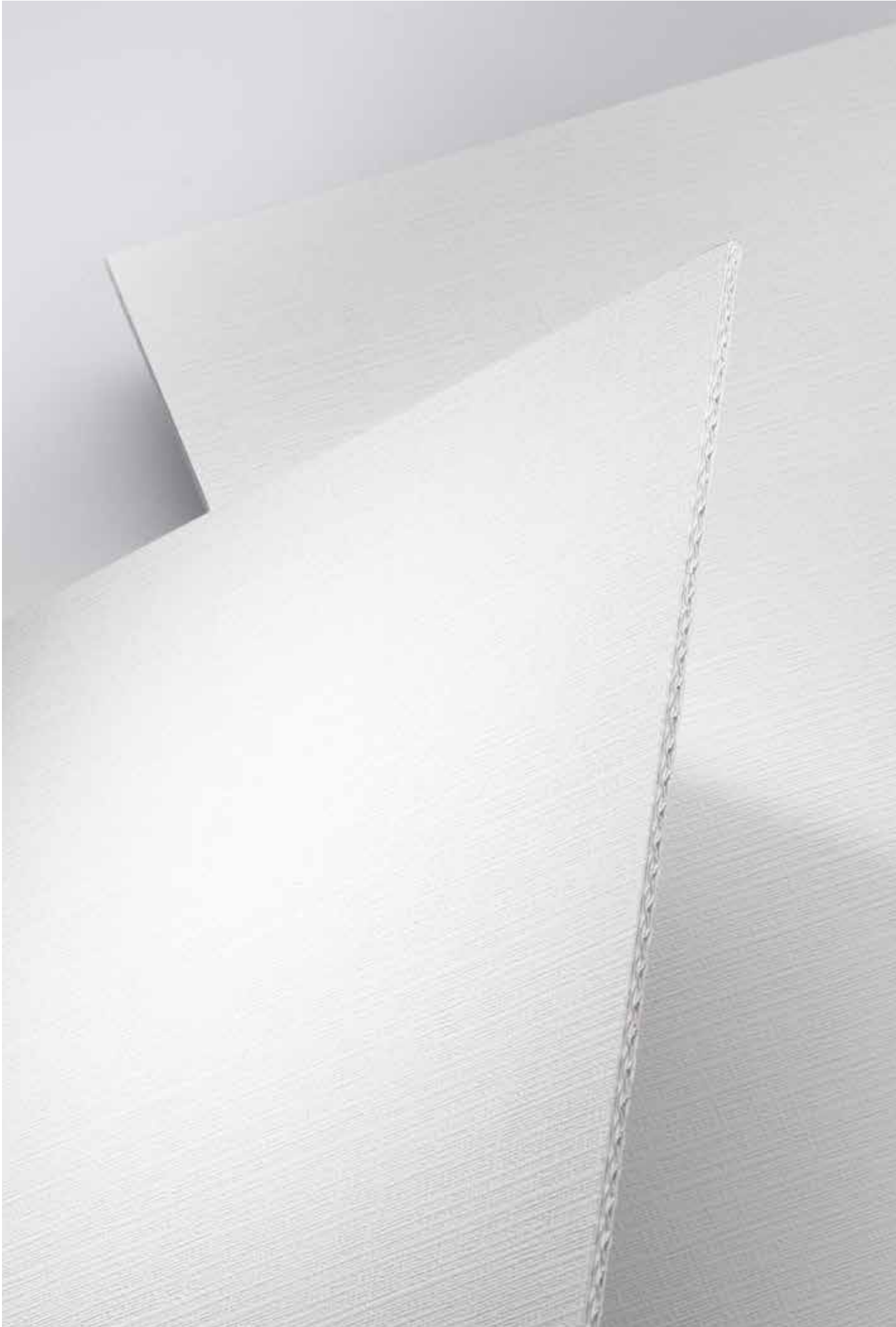
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- Gluing
- Drilling

APPLICATION

- Displays (POS/POP)
- Signage | Lettering
- Shop design | Shop window decoration
- Interior design | Furniture
- Exhibition design and construction
- Model making
- Short term promotional campaigns



White



DISPA[®]canvas

WITH CANVAS TEXTURE – FOR SPECIAL VISUAL EFFECTS.

DISPA[®]canvas is a multi-layer paper board, available in thickness 3.8 mm (5-layer). The sheets featuring high-quality covering layers on both sides in "canvas" look. The 5-layer premium board with embossed core ensures a high-level of rigidity and flatness. DISPA[®]canvas is made of FSC[®]-certified paper and is fully recyclable. Thanks to the canvas texture, impressive visual effects can be realised.

CHARACTERISTICS

- Thickness 3.8 mm (5-layer)
- Canvas texture
- For special visual effects

PROCESSING

- Printing (direct digital)
- Lacquering | Painting | Spray painting
- Cutting (cutter/CNC/waterjet)
- Punching
- Creating grooves | Embossing
- Folding (V-groove) | Cold bending
- Gluing
- Drilling

APPLICATION

- Displays (POS/POP)
- Signage | Lettering
- Shop design | Shop window decoration
- Interior design | Furniture
- Exhibition design and construction
- Model making
- Short term promotional campaigns



White

