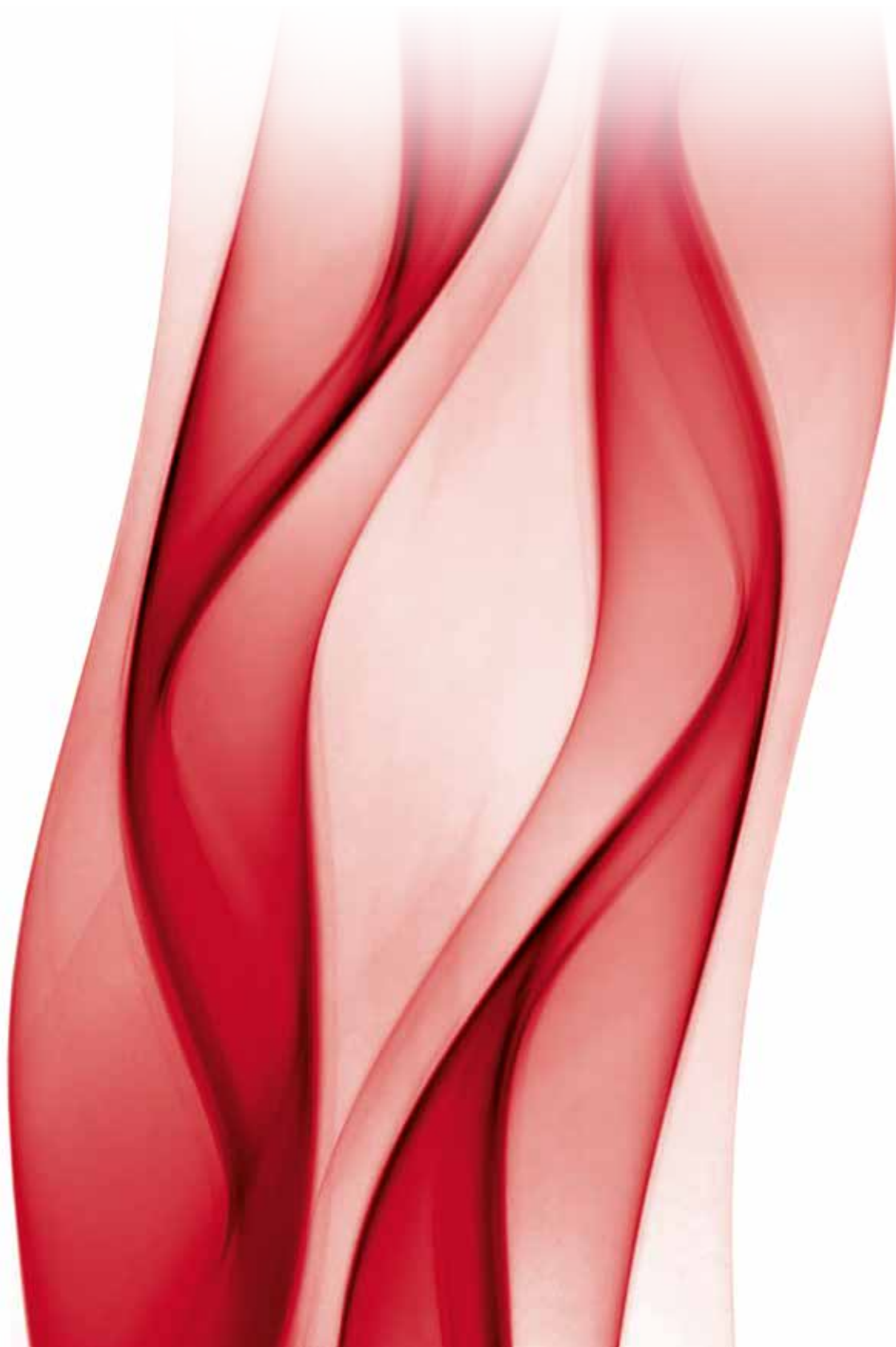


FOAMALITE®

PRODUCT GUIDE

WIDE RANGE OF HIGH-QUALITY, LIGHTWEIGHT EXPANDED RIGID PVC SHEET MATERIALS FOR INDOOR AND OUTDOOR USE.





Signpost – chain store John Lewis & Partners, Kingston-Surrey, UK | Inserts made of FOAMALITE® premium, thickness 3 mm
Design: Whybrow Wayfinding | Manufacturer: Kamset

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Lettering made of FOAMALITE® xpress, thickness 19 mm.
 Manufacturer: Igepa Cartacell DOO, Serbia | Customer: PROIZVODI OD KLIRITA d.o.o

FOAMALITE®

FOAMALITE® expanded rigid PVC sheets are ideally suitable for applications in the field of visual communications. Used as a print substrate or as a creative, coloured or co-extruded sheet, FOAMALITE® always delivers what it promises.

FOAMALITE® premium makes the perfect display board for exhibition booths, POS/POP displays or even signage as it is lightweight and also offers excellent dimensional stability.

Thanks to its smooth, white, flat surface, **FOAMALITE® xpress** is the ideal choice for outstanding printing results.

FOAMALITE® color offers a choice of nine different colour tones. The solid, vibrant colours of the expanded rigid sheets offer optimum colour fidelity.

FOAMALITE® plus is a co-extruded expanded rigid PVC sheet consisting of high-quality white cover layers and a black recycled core. The hard, smooth, bright white surfaces provide extra scratch resistance and rigidity in comparison with common expanded rigid PVC sheets.

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 Loch Gowna, Ireland is certified to DIN EN ISO 9001, the standard defining internationally recognised requirements for quality management systems.

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

FOAMALITE® – WIDE RANGE OF HIGH-QUALITY, LIGHTWEIGHT EXPANDED RIGID PVC SHEET MATERIALS FOR INDOOR AND OUTDOOR USE.

FOAMALITE®

WIDE RANGE OF HIGH-QUALITY, LIGHTWEIGHT EXPANDED RIGID PVC SHEET MATERIALS FOR INDOOR AND OUTDOOR USE.

CHARACTERISTICS

- Excellent surface properties
- Suitable for both indoor and outdoor use
- Easy to handle
- Widest range of thicknesses, sheet sizes and colours

APPLICATION

- Displays (POS/POP)
- Signage | Lettering
- Corporate Identity
- Shop design | Shop window decoration
- Interior design | Furniture
- Partitions | Cladding
- Exhibition design and construction
- Model making
- Short term promotional campaigns
- Food contact approved
- Construction business

PROCESSING

- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Cutting | Die cutting | Plotting
- Contour milling | Water jet cutting
- Shearing | Sawing | Punching
- Gluing
- Drilling | Riveting | Screwing
- Folding (V-groove) | Cold bending
- Hot bending
- Thermoforming
- Roll bending | Round bending



PRODUCT			FOAMALITE® premium		FOAMALITE® x-press		FOAMALITE® color		FOAMALITE® plus	
Panel thickness (mm)			1 – 3	4 – 19	2 – 3	4 – 10	19	2 – 5	10	3 – 10
Apparent density (nominal)	ISO 1183	kg/m ³	700	500	450	400	500	400	410	500–600
Tensile strength	ISO 527-2	MPa	16	8	10	7	8	8	7	–
E-Modulus (in tension)	ISO 527-2	MPa	800	500	600	400	500	600	400	–
Flexural strength	ISO 178	MPa	22	18	18	16	18	15	16	–
E-Modulus (in flexure)	ISO 178	MPa	1100	650	750	500	650	700	600	–
Surface hardness	ISO 7619	Shore D	44	40	>32	>32	>40	26	32	37
Max. service temperature		°C	55		55		55		55	
Coefficient of linear expansion	ISO 11359	mm/(m·K)	0,07		0,07		0,07		0,07	
Water absorption (23°C – 24 h)	ISO 62	%	<1		<1		<1		<1	
Behaviour in fire	EN 13501		C-s3, d0 (1–10 mm)		C-s3, d0 (2–10 mm)		–	C-s3, d0 (3–10 mm)		–
	NF P 92-507		M1 (1–10 mm)		M1 (2–10 mm)			M1 (3–10 mm)		M1 (5 and 10 mm)
	BS 476, Part 7		Class 1 (3–19 mm)		Class 1 (10 mm)			–		–
	UNI 9177		Classe Uno (1–19 mm)		Classe Uno (2–10 mm)			–		–

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

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.

SUSTAINABILITY

MISSION: TOGETHER. RESPONSIBLE.

Sustainability is at the core of everything we do. Our corporate ecological commitment is summed up by the **MISSION: TOGETHER. RESPONSIBLE.** As we also apply and comply with this mission in regard to our products, we have created a classification system. The five different categories in our **FIVE-DOT-MISSION** system indicate the factors with the greatest 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 CO₂ content, the product life cycle and, of course, recycling, a topic of particular relevance for our products. Our FIVE-DOT-MISSION makes an assessment of a product on the basis of 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 recycled raw materials for use in the manufacture of new products which also fulfil requirements such as fire ratings, processing prerequisites and customer expectations in terms of functionality and appearance. This category is where we gauge the proportion of high quality recycled raw material in our products' total material input.

3. FOSSIL CO₂ BOUND IN THE MATERIAL
This category shows the weight of fossil CO₂ embedded in our panels. Differences here are principally due to the raw material type and origin, the density, the composition and the proportion of recycled content.

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. Material properties result in disparities, so life cycles range from <1 year to even >30 years.

5. RECYCLABILITY
One of the most important aspects of sustainability is contributing to environmental protection by saving valuable raw materials 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 paper and metals. At some production sites, the material can already be returned, so that material for new panels can be created from it. As a company, we came to the conclusion that thermal recycling 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 a closed-loop, sustainable and future-oriented recycling economy.

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.



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 the majority of our sales with products which achieve a rating of ≥ 7 points in the FIVE-DOT classification by 2030.

Join us on our sustainable mission!

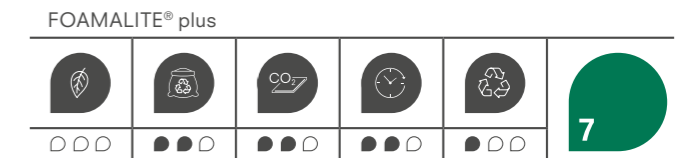
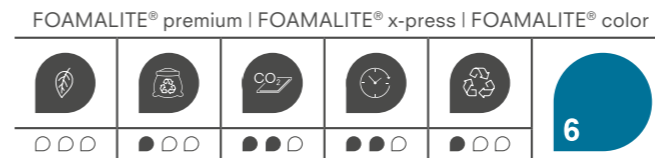


Restaurant Chelsea Garden, UK | Wall cladding made of FOAMALITE® color black

SUSTAINABILITY

FOAMALITE® FIVE-DOT-MISSION

FOAMALITE®, the expanded rigid PVC sheets ideally suitable for applications in the field of visual communication, have been assessed in line with the criteria described above. The products currently achieve a FIVE-DOT classification with a total of 6 respectively 7 points.



RECYCLED CONTENT
 We are already recovering and reusing our own production waste to create new material in the manufacture of FOAMALITE® sheets, and we aim to continue increasing the proportion of recycled content in the future:

Our range already includes FOAMALITE® plus, a panel which features high-quality white cover sheets and has a particularly high recycled content due to its black recycled core.

All raw materials used in our FOAMALITE® sheets comply with the requirements in the current version of the European Union's Chemicals Regulation (REACH). In particular, FOAMALITE® sheets are free of any of the substances listed in the current version of the ECHA Candidate List of Substances of Very High Concern (SVHC).

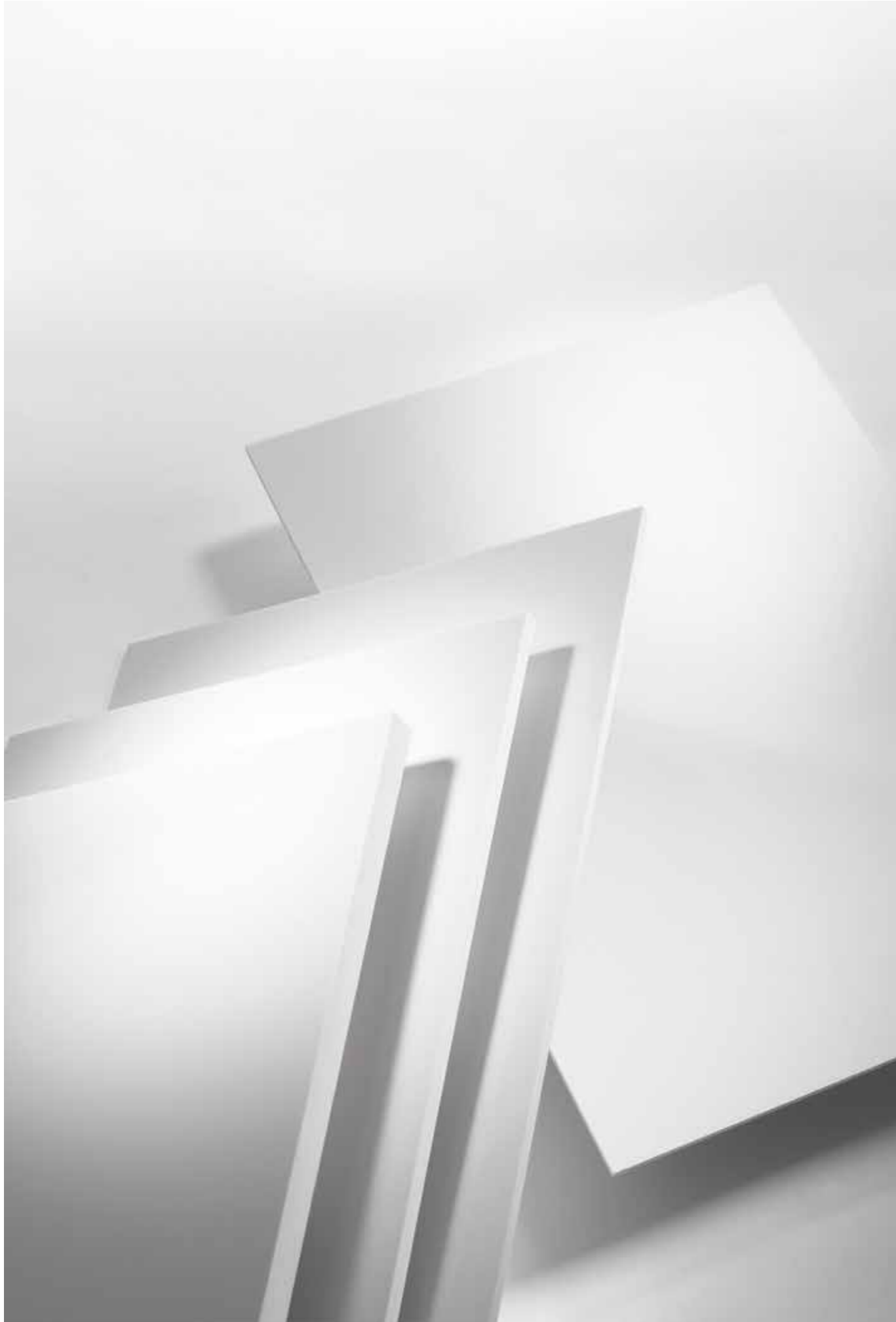
FOSSIL CO₂ BOUND IN THE MATERIAL
 FOAMALITE® sheets offer advantages in terms of weight and, at the same time, a high degree of stability due to their unique foamed structure. As fewer resources are required for its manufacture, the material has a lower carbon footprint.

PRODUCT LIFE CYCLE
 Our FOAMALITE® sheets are made of PVC, a very robust and durable synthetic material which with excellent long-term properties. The material is also known for its "difficult to ignite" rating, its strong resistance to chemicals and outstanding resistance to weathering.

FOAMALITE® premium is used, in particular, for very long-term applications in the visual communication and interior design sectors. FOAMALITE® x-press and FOAMALITE® plus are high quality plastic sheets for medium-term indoor and outdoor purposes in the printing and signage sectors. FOAMALITE® color offers a wide variety of colours and is a real eye-catcher for medium-term shop and design uses.

RECYCLABILITY
 The whole FOAMALITE® product family can be sorted into individual types for recycling and reuse. We are committed to processing our production waste within the company and using it again to manufacture new products.

Draw inspiration from our wide variety of FOAMALITE® sheets shown on the following pages.



FOAMALITE® premium

THE VERSATILE SHEET FOR ALL DISPLAY APPLICATIONS.

FOAMALITE® premium is a superior quality, extremely versatile expanded rigid PVC sheet. The combination of lightweight and extremely good dimensional stability makes it the perfect display board for all structural applications.

Thanks to the fine cell structure and smooth surface finish FOAMALITE® premium is the preferred choice of sign makers, exhibition contractors and professional printers. The improved surface hardness ensures reliable performance and excellent results. The robust surfaces and high durability make it also suitable for interior and exterior applications.

FOAMALITE® premium can be fabricated mechanically as well as thermoformed to an extent for three-dimensional applications.

FOAMALITE® premium offers the widest range of thicknesses (1 – 19 mm) and sheet sizes. The fire behavior is according to: > DIN EN 13501-1: C-s3, d0 (1 – 10 mm).

Application areas:

Signage and display panels | POS/POP displays | Screen printed panels | Digitally printed displays | Exhibition stands | Shop fitting | Wall cladding & partitioning | Interior design

CHARACTERISTICS

- Universal sheet for all display applications
- High dimensional stability
- Smooth surface finish with high surface hardness
- Easy processing
- Wide range of sheet sizes and thicknesses

PROCESSING

- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Cutting | Die cutting | Plotting
- Contour milling
- Water jet cutting
- Shearing | Sawing | Punching
- Gluing
- Drilling | Riveting | Screwing
- Folding (V-groove) | Cold bending
- Hot bending
- Thermoforming
- Roll bending | Round bending

APPLICATION

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



White



FOAMALITE® x-press

THE PREFERRED CHOICE OF PRINTERS.

FOAMALITE® x-press is a light-weight and easy to use expanded rigid PVC sheet. Its white, smooth and uniform surfaces make it the material of choice for outstanding printing results. Thanks to its degree of whiteness, FOAMALITE® x-press ensures a very high fidelity of colours. FOAMALITE® x-press sheets feature blemish-free surfaces with a consistently regular roughness that have been specifically designed for impeccable adhesion of UV curing inks.

FOAMALITE® x-press has a good dimensional stability and is suited for flat applications. FOAMALITE® x-press can be printed on directly without any pre-treatment required. It is supplied as standard with PE-protective film on one side. The protective film can be removed cleanly.

The fire behavior is according to: DIN EN 13501-1: C-s3, d0 (2 – 10 mm).

CHARACTERISTICS

- Smooth white surface for excellent printing results
- “Ready to use”
- Optimal ink adhesion and colour fastness
- Good dimensional accuracy of the sheets
- Suitable for flat applications

APPLICATION

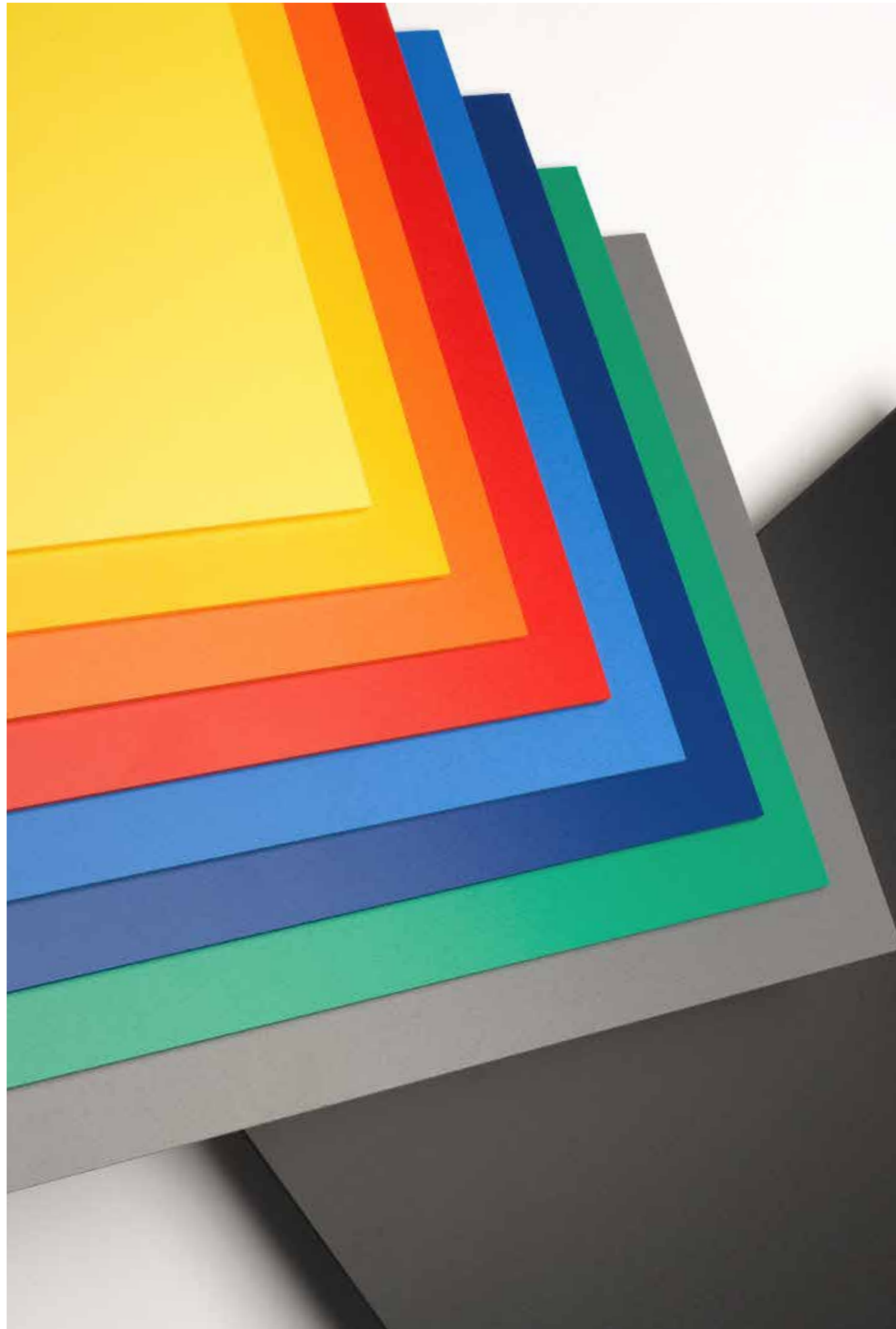
- Signage | Lettering
- Exhibition design and construction
- Model making
- Short term promotional campaigns

PROCESSING

- Digital printing | Screen printing
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- Gluing
- Drilling | Screwing



White



FOAMALITE® color

CREATIVE SHEET IN VIVID COLOURS.

FOAMALITE® color rounds off the FOAMALITE® product family with a selection of nine striking colours. The solid, vibrant colours of the rigid foam sheets offer optimum colour fidelity and a high degree of rigidity. FOAMALITE® color provides designers the best possible colour options for a wide variety of solutions in the field of visual communications. FOAMALITE® color is ideal for enhancing the impact of all advertising with vivid colours. FOAMALITE® color sheets are suitable for both indoor and seasonal outdoor use.

A simple, mechanical processing using standard tools for processing wood and plastics is possible. The fire behavior is according to: DIN EN 13501-1: C-s3, d0 (3 – 10 mm).

CHARACTERISTICS

- Nine vivid colour shades
- Uniform solid coloured material
- Maximum colour consistency throughout the entire sheet

PROCESSING

- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Cutting | Die cutting | Plotting
- Contour milling
- Sawing | Punching
- Gluing
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APPLICATION

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- Short term promotional campaigns



Light yellow



Red



Green



Dark yellow



Light blue



Grey



Orange



Dark blue



Black



FOAMALITE® plus

THE EXPANDED RIGID PVC SHEET WITH A RECYCLED CORE.

FOAMALITE® plus is a co-extruded expanded rigid PVC sheet, consisting of high quality white surface layers and a black recycled core. As a result the entire sheet has a particular high recycling ratio.

Co-extrusion of core and surface layers ensure FOAMALITE® plus is stronger and more rigid in comparison with common expanded rigid PVC sheets. The hard, smooth, bright white surfaces provide extra scratch resistance and rigidity.

FOAMALITE® plus is ideal for numerous interior and exterior signage and printing applications due to the higher density of the sheet and the flat outer surfaces. In addition, FOAMALITE® plus can also be used for decorative engravings (black graphics in a white area).

CHARACTERISTICS

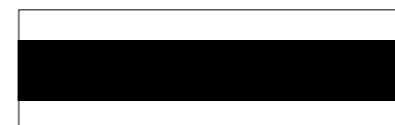
- Flat, bright white surface
- Stronger and better rigidity in comparison with common expanded rigid PVC sheets
- Recycled core

PROCESSING

- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Cutting | Die cutting | Plotting
- Contour milling | Water jet cutting
- Sawing
- Gluing
- Drilling | Screwing
- Folding (V-groove) | Cold bending

APPLICATION

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



White cover skins, black recycled core



Interior design for the "Cappuccino" coffee shop chain, Woodlands Mall, Pretoria, South Africa
Partition walls and cladding made of FOAMALITE® color black



RHS CHELSEA
GARDEN PRODUCT
OF THE YEAR 2020

F I N A L I S T





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