KAPA®

3A COMPOSITES

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KAPA®

MAKING LIGHT WORK OF CREATIVITY

KAPA® has been the ultimate thin lightweight polyurethane-core foam board for more than 40 years. The lightweight foam boards are produced at the 3A Composites site in Osnabrück. The KAPA® boards are a perfectly tailored range with different covering layers, designed to suit the whole scope of indoor sign and display applications. The applications range from a printing and advertising substrate to model making material.

The one and only KAPA®. Unparalleled versatility:

- Display - POS/POP
- Stand design- exhibitions
- Model making
- Direct digital printing
- Screen printing

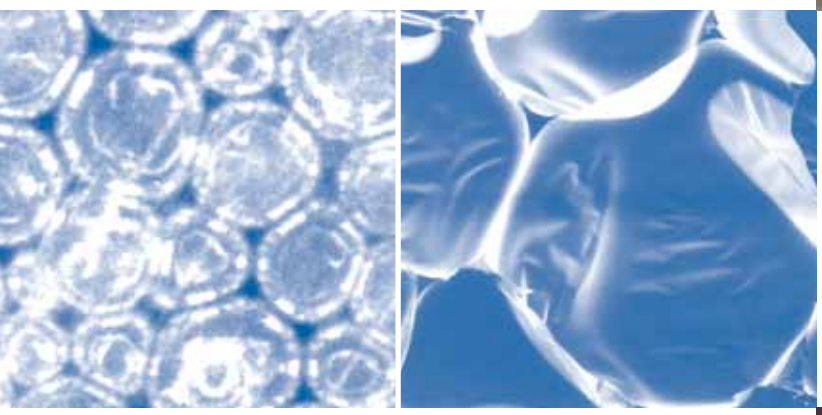
To make sure that you always get the best out of our KAPA® lightweight foam boards, KAPA® specialists have compiled a list of important processing instructions based on day-to-day practical experience. You can find them alongside the product and application overview in this brochure. The instructions provide a simple introduction to the subject for some people, and they provide others with a basis for further developing their own processes and techniques.

At this point, we would like to express our gratitude to all the companies who kindly gave us permission to publish their pictures of different KAPA® applications.

KAPA®

UNPARALLELED DEVELOPMENT, MATERIAL AND PRODUCTION

Innovative surfaces and formats: exclusive production know how and precision in the manufacturing process: the consistently high quality of KAPA® means that it stands out from the crowd, and that you as designer and user can depend on it. And its profile is second to none. Even experienced fabricators are impressed by the striking qualities of KAPA®. Our classic 5 mm thick KAPA®line weighs a mere 4 000 g in the maxi-format of 2.030 x 3.050 mm (or 6,2 m²). The product's minimal weight is as astonishing as is its innovative technology: the heart of the sandwich construction of all KAPA® foam boards - the polyurethane foam core, where millions of tiny, air-filled bubbles are linked in a honeycomb structure. We connect this foam core with the two covering layers in a continuous in-line production process. The result: a composite board of an exactly defined thickness – and a lightweight par excellence.



The principle of stability, copied from nature: the linked honeycomb structure of KAPA® polyurethane hard foam core seen under a microscope.

The board's strength is across its whole surface, mainly thanks to polyurethane foam's special properties. Minimal weight and high levels of stiffness at the same time – in combination with the stable covering layers means KAPA® is unchallenged in shape and pressure stability.
The technology used in expanding the KAPA® foam boards's core in between the two covering layers is unique world-wide.

KAPA®

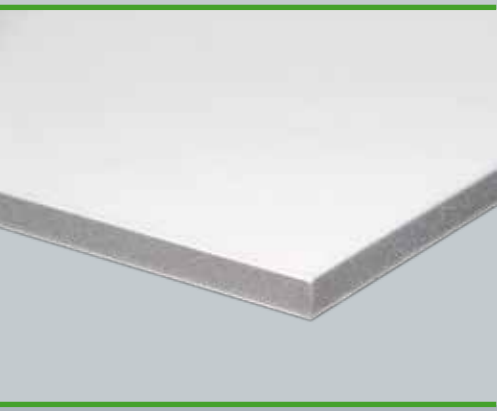
OVERVIEW OF THE KAPA® RANGE

KAPA line

Lightweight board with pigmented chromo-substitute carton-sheet covering layers

- Classic board for decorative applications, screen printing and punching / die cutting
- Ideal base for all creative artwork
- Modelling and presentation board

Thickness (mm)	3	5	10	15	20
Formats (mm)					
500 x 700	40	24	12		
1000 x 700	40	24	12	8	
1000 x 1400	40	24	12	8	
3000 x 1400		18	12	8	6
3050 x 1530		16	8		
3050 x 2030		16	8		

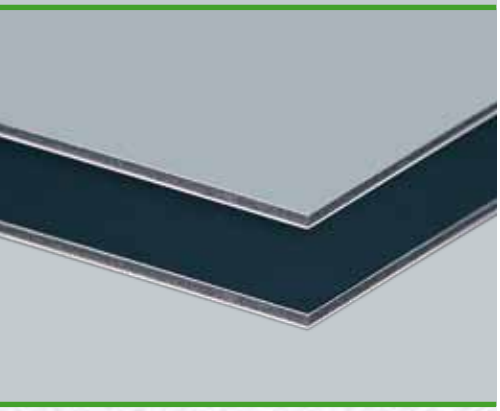


KAPA plast

Lightweight board with plastic-coated cellucarton covering layers (primer-finished)

- Premium substrate for direct digital inkjet and screen printing
- Ideal base board for all artwork
- Modelling and presentation sheet
- Board for precision sawing of 3D logos and lettering

Thickness (mm)	3	5	10	15
Formats (mm)				
1000 x 700	40	24	12	
1000 x 1400	40	24	12	
3000 x 1400		18	12	8
3050 x 1530		16	8	
3050 x 2030		16	8	



KAPA color

Lightweight board with coloured plastic-coated cellucarton covering layers (bi-colour versions)

- Ideal base for all creative work
- Modelling and presentation sheet

Thickness (mm)	3	5		
Formats (mm)				
500 x 700	40	24	24	24
1000 x 700		24	24	24
1000 x 1400		24	24	24

KAPA tex

Lightweight foam board with high-grade textured covering layers in “canvas look" on both sides. Textured surface with latex-impregnated paper and a primer finish

- Premium substrate for direct digital printing
- High-grade substrate for large format advertising images
- Board in canvas finish for advertising displays at POS
- Ideal board for retail signage
- Reproduction of arts

Thickness (mm)	5	10
Formats (mm)		
1000 x 700	24	
3000 x 1400	18	12

KAPA®

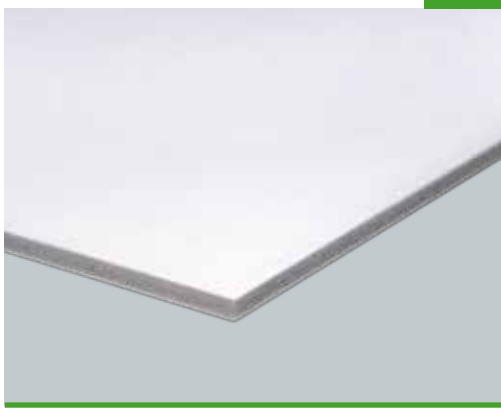
OVERVIEW OF THE KAPA® RANGE

KAPA® mount

Thickness (mm)	3	5	10
Formats (mm)			
1000 x 700	40	24	12
1000 x 1400	40	24	12
3000 x 1400		18	12
3050 x 1530		16	8

Lightweight mounting board with chromo-substitute carton-sheet covering layers, aluminium-reinforced
(Fire classification as per DIN 4102 B2/EN 13501-1: E, BS476 class 1)

- High quality mounting board for digital printing and large format photographs
- Fill-in panel for exhibition and display systems

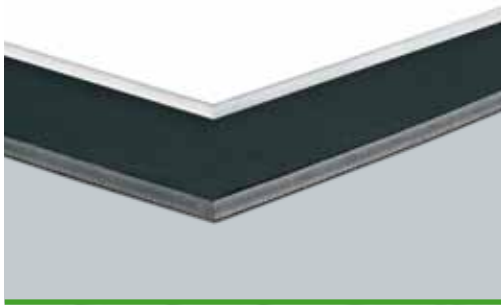


KAPA® graph

Thickness (mm)	3	5	
Formats (mm)			
500 x 700	40	24	24
1000 x 700	40	24	24
1000 x 1400	40	24	24

Lightweight foam board with full-colour core and brilliant white or black cellucarton covering layers on both sides (black: ph neutral)

- Designer board for all creative applications
- Modelling and presentation sheet
- High-grade passe-partout board



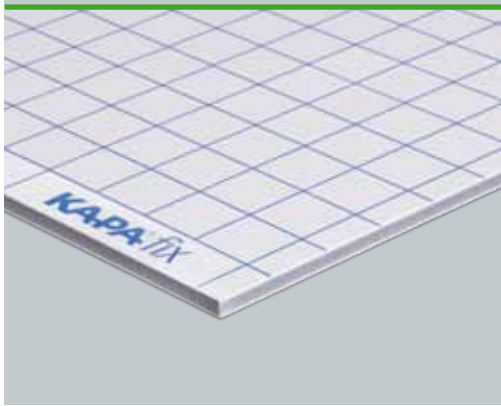
KAPA® fix

Thickness (mm)	3	5	10	5	10
Formats (mm)		fix-1		fix-2	
1000 x 700	40	24	12	24	12
1000 x 1400	40	24	12	24	12
3000 x 1400		18	12	18	12
3050 x 1530		16	8		

Self-adhesive rapid action mounting board with aluminium-reinforced, chromo-substitute carton-sheet covering layers
(Fire classification as per DIN 4102 B2/EN 13501-1: E, BS476 class 1)

fix-1: one side self-adhesive
fix-2: both sides self-adhesive

- Ready-to-mount base for digital printing and large format photos
- Base board for applications (textiles/films etc.)
- Fill-in board for exhibition and display systems



24 Number of boards in a box | canvas | bi-colour | black | grey | white

ENVIRONMENTAL ASPECTS

KAPA® BANKS ON SUSTAINABILITY AND ENVIRONMENTAL PROTECTION

Sustainability and environmentally sound practices when using resources: topics of ever increasing importance in the fields of advertising and visual communication. Nowadays, a product's environmental impact and the sustainability of its manufacturing and recycling are essential criteria when choosing a product. Exacting environmental protection – as well as active commitment to social and economic issues are the values put into practice at our company every day.

Environmental protection as an integrative component of sustainability management at 3A Composites

Sustainable commitment to environmental protection has long been a fundamental corporate objective at 3A Composites. The minimisation of risks for man and environment, as well as reducing environmental pollution by careful and efficient utilisation of resources is part of our corporate philosophy. 3A Composites is aware of its responsibility and is committed to sustainability on all three levels of sustainable action: ecological, social and economic.

Environmental management systems

Our KAPA® production site has been certified in accordance with DIN ISO 14001, which establishes globally recognised environmental regulations for management systems. We have been able to anchor environmentally appropriate behaviour in the company, based on uniform processes and structures. The ISO certification is also a significant criterion in the selection of our suppliers. An important objective for us is strong linkage of management systems for quality (DIN ISO 9001), environmental protection (DIN ISO 14001) and occupational safety (OHSAS 18001). These measures ensure environmental tasks are even stronger integrated in the operative process .

Substances

The debate about hazardous substances has become increasingly intense in recent years. Currently, the step-by-step introduction of the REACH regulation is undertaking a comprehensive restructuring of European chemical policy. The new regulation's main aim is to protect human health and the environment. The raw materials used by 3A Composites do not harm either man or environment in accordance with the REACH regulation.

KAPA® - certified covering layers

For our KAPA® range of products we only use papers with a SFI, PEFC and/or FSC certification, which comprises the preservation and improvement of the ecological, social and economic functions of forestry operations. All pulp papers that we utilise are low-chlorine and oxygen bleached. There are no additives in the majority of papers.

Waste prevention and recycling

We believe an environmentally friendly production phase is of utmost importance and pay particular attention to the efficient input of resources and waste prevention. Recycling raw materials during the production process as well as re-using of production waste have been common practice at our production sites for years. We use the best alternative: collected production waste of KAPA® lightweight foam boards is recycled as part of an energy generating concept.

Grow with responsibility!

Ethical behaviour towards man and our environment is a fundamental requirement for business enterprises. We take our responsibility seriously!

GENERAL INFORMATION

PLEASE NOTE BEFORE WORKING WITH KAPA®

Packaging
After being cut to size, all KAPA® boards are carefully packed in special corrugated cardboard boxes. The boxes are marked with detailed instructions on proper handling of the materials – in particular with regard to the edges, which can be damaged if they hit the ground or are dropped.
To open the boxes, please cut along the marked lines with a knife and pay special attention to the specified cutting depth in order to prevent damage to the boards. We recommend taking the boards out one at a time (so less pressure is applied to board surfaces and edges) with the packaging either in a vertical or horizontal position.

Storage
KAPA® boards should always be protected from the cold, stored in a dry place and laid as flat as possible on an suitably sized support. Acclimatise the boards to ambient temperature before printing, we recommend 24 hours prior to processing. This is particularly important for sensitive direct printing and mounting applications.

Transportation
Carrying small format KAPA® boxes is easy. However, in the interests of safety, we recommend that two people always move or stack large format boxes. You can also use the specially designed transport aids, either integrated in the boxes or available as accessories. The punched-out handles, reinforced by inserts at the head ends allows a smoothly horizontal transportation of the material. A special carrier handle has been developed for vertical carrying: the handles are simply fitted and locked into special punch holes. For more details, please contact us or your dealer. When transporting with a forklift truck, always set the forks wide apart and be extra careful when passing through gates and doorways.

Unpacking boards
Extreme care should always be taken when opening boxes. Always ensure your hands are clean, during unpacking as well as during later processing. The best solution is to wear simple white cotton gloves. This helps to avoid any grip marks and prevents the board surfaces being soiled by grease and dirt particles.

Disposing of off-cuts
KAPA® board off-cuts can be disposed of in normal household waste. We recycle polyurethane hard foam production waste in a thermal recycling plant.

DISPLAY - POS/POP

BRANDS IN THE SPOTLIGHT

KAPA® is always an eye-catcher whatever the application: for spectacular, xx-large POS/POP displays or for signage and sophisticated 3-D presentations. The on-site handling is fast, lightweight and simple: easy cutting, processing, affixing and transporting. Then, in addition, you have a wide choice of surfaces! Meaning you can present your products creatively and implement brand-new marketing promotions swiftly. Make your POS into an attractive Point of Communication for your brand message – with KAPA®!

FOR THESE APPLICATIONS WE RECOMMEND

- **KAPA®line**
- **KAPA®plast**
- **KAPA®fix**
- **KAPA®tex**

1

2

3

4

5

6

7

1 Coca Cola logo waterjet cut KAPA®plast

2 Instore decoration with counter made of KAPA® for the brand DIOR created by: Kohlschein GmbH & Co. KG

3 Advertising campaign at Copenhagen Airport laminated on KAPA®fix-2

4 Instore decoration with a supporting structure of KAPA® for "The One" perfume by Dolce & Gabbana created by: Kohlschein GmbH & Co. KG

5 Presentation walls made of KAPA® created by: Kohlschein GmbH & Co. KG

6 Transportable display stand of KAPA® for sales promotion at POS created by: Kohlschein GmbH & Co. KG

7 Deichmann store interior - digital images printed directly on to KAPA®plast created by Simpson Group, UK

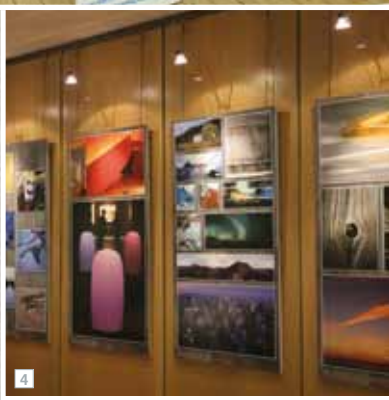
STAND DESIGN - EXHIBITIONS

A CONCEPT TAKING SHAPE

Impressive imagery, exciting settings, extravagant ambience... KAPA® is a multi-faceted partner for technical implementation of trade fair and exhibition concepts. KAPA®fix and KAPA®mount can be used as a fill-in panel for exhibition and display systems or as a high quality mounting plate for exceptional signage and printing at the exhibition stand. The aluminium stabilization in their covering layers and fire classification, are safety factors that you can really count on.

FOR THESE APPLICATIONS WE RECOMMEND

- **KAPA®plast**
- **KAPA®color**
- **KAPA®mount**
- **KAPA®fix**
- **KAPA®tex**



1 Presentation of a European open competitive bidding at Architekturzentrum in Vienna for the architecture platform wonderland – mounted on KAPA®

2 Antalis Norway: Photographic exhibition "icons of the 60's" (Rockheim museum, photgraphs by Robert Meyer) mounted on KAPA®

3 Temporary interior decoration made of KAPA®, design shop on the occasion of the 50th anniversary of FAKD created by: Marc Flick

4 Exhibition FotoFacta 2007/ Team 2000, Osnabrück, laminated on KAPA®fix

5 Kohlschein GmbH & Co KG exhibition stand (photokina 2010) made of KAPA®plast

MODEL MAKING

VISIONS TRANSFORMED INTO REALITY

Architecture and design development are extraordinarily impressed by the supreme aesthetic qualities of KAPA®. Not only as a base board for presentation systems, where the various surfaces or bi-colour effect of the covering layers create splendid contrasts. Super light-weight KAPA®, which can be shaped into 3-D, is simply the ideal material for visualising spectacular designs, from the absolutely diminutive to the very largest. Truly fascinating!

FOR THESE APPLICATIONS WE RECOMMEND

- **KAPA®line**
- **KAPA®plast**
- **KAPA®graph**
- **KAPA®color**

1 Exhibition "Adventure Aerospace. Departure into the Universe" in the State Museum for Technique and Work in Mannheim. Created by: Marc Flick and Paulo Gotta, www.marcflick.com

2 Carrera track made of KAPA®, Model Expo in Helsinki 2006

3 Model view "Landscape and garden architecture", University of Applied Sciences Osnabrück

4 Model view made of KAPA® "Living in a tower", raumlaborberlin 2006

GOOD TO KNOW

USEFUL ADDRESSES

You can expect that extra something from the market leader in the lightweight foam boards industry: A great sample-box and sample-board service, download of all technical data-sheets, and technical application engineers for individual consultation.

How do you use the materials we make? Do you have requests or suggestions? We place great emphasis on the dialogue between the manufacturer and the user. Because some previously unknown application might just be the stimulus for innovative ideas, which we can use together.

Make the most of our advice service: we make it easy to get started in the versatile processing world of KAPA®. You can contact our service centre at: **www.kapa.eu**

When we cannot help you further, we are happy to refer you to specialists, with whom we have often worked for many years. We highly value this network of contacts, and not only in terms of shared and in-house R&D. These contacts are one more vital facet of our service approach: an approach from which you can also benefit.

Biedermann GmbH – products for art work
www.biedermanngmbh.de

GUHDO – woodworking machinery
www.guhdo.com

LEUCO Ledermann GmbH
Woodworking machinery
www.leuco.com

HOLZHER-Reich Spezialmaschinen GmbH
Panel saw (horizontal)
www.holzher.de

Schelling Anlagenbau GmbH
Panel saw (horizontal)
www.schelling.com

Striebig AG – panel saw (vertical)
www.striebig.com

KEENCUT LIMITED – manual cutting machines
www.keencut.com

Logan Graphic Products Inc.
cutting equipment for artists
www.logangraphic.com

Martor-KG – specialist knives
www.martor.com

ZÜND Systemtechnik AG
CNC-cutting tables
www.zund.com

EskoArtwork – CNC cutting tables
www.esko.com

DIRECT DIGITAL PRINTING

BIG TIME INNOVATION AND FASCINATION

Bigger, faster, brighter!
In advertising and visual communication, as substrate for signage, photo campaigns and decorative applications: If large-format, attractive images are what you need, then KAPA® lightweight foam boards provide the ideal substrate for your direct digital printing.
Direct printing substrates have to satisfy far more requirements today: the steady increase in the number of innovative flat bed printers, the triumph of large format printing (LFP), and the short lifetime of images have triggered a growth in demand for new extra wide format boards. Our foam boards mean you are flexible when using up-to-date digital printing techniques and truly efficient when using printing machines and substrates.

So, we have added 2-metre wide KAPA®plast and KAPA®line to the 3A Composites digitally printable materials and surfaces range. Providing the best possible conditions for more cost effective printing.

KAPA® 2 metre – the mega-measure of all things
Innovation in extra large-format. KAPA®plast, the premium foam board for direct digital printing, passes the most exacting quality tests with flying colours even in its 3.050 x 2.030 extra large-format. Its edges are clean-cut and smooth, the level of its dimensional stability and flatness is excellent - essential factors for optimal printing. KAPA®plast is a specialist! High-quality and lightweight, with plastic-coated cellucarton covering layers which guarantee an excellent printing surface. An important factor for direct digital printing: the substrate's surface tension. It is provided by the primer finish which ensures excellent ink adhesion and finely graded print images when using UV curing or solvent-based inks.
The high heat-resistance of the composite material – up to 120°C for short periods – guarantees consistent optimal flatness at all times. There is even no impact of high temperature UV lamps.
Fascinating colours with KAPA®plast: images of every kind are reproduced without colour distortion due to the extraordinary whiteness of the surface. The slightly glossy finish ensures high colour contrast, for brilliance and intensity, and that means your printing hits the big time.

KAPA®tex, star of the screen
KAPA®tex is the new cast member in the line-up of digital printing substrates. This lightweight board comes in a "canvas look" and, as the name implies, it feels and looks like canvas. The structured latex-impregnated paper with a primer finish makes it the optimal base for fine graduation in colours. What is more, the three-dimensional effect adds visual depth to your images and print.
Of course, this new KAPA® development combines all the advantages of a sandwich construction – it is lightweight, rigid and easy to handle. Its characteristics make it an ideal printing substrate for photo campaigns and retail signage, for decorative applications or for reproducing painted artwork.

SCREEN PRINTING

SPOT ON AND BRILLIANT

Especially, KAPA®line and KAPA®plast have demonstrated their qualities as optimal substrates for screen printing. Large format processing, higher print speeds and shorter drying times: the KAPA® range copes with all these requirements.

Screen printing specialists appreciate the excellent dimensional stability and flatness offered by KAPA® boards, and the scope KAPA® offers to produce brilliant print results. Screen printing – or digital printing – combined with punching and fretting leads to original creations and ensures images make a maximum impact. Thanks to the polyurethane core material, you can print with UV curing or solvent-based inks on the whole range of boards. Even in the hot air drying after the printing process, no blocking will occur where other materials might struggle with. Neither the board nor the print is in any way impaired by high temperatures in the drying tunnel or solvent-based paints. So, full points for KAPA® in screen printing.

TIPS FOR EVEN BETTER PRINTING RESULTS

- To ensure optimal functioning, we recommend that you have your print machines regularly maintained to the manufacturer's instructions.
- Acclimatise the boards to ambient temperature before printing, especially when they have been stored at low temperatures. We recommend 24 hours prior to processing.
- Avoid fluctuating humidity or environments which are too dry (this can lead to a dangerous build-up of static).
- Use the optimised print profile for the surface in question.
- Use inks recommended by the machine manufacturer for rigid substrates (Rigid inks). Using other inks can result in inferior ink adhesion.
- We recommend wearing white cotton gloves to avoid any grip marks (fingerprints) and prevent grease and dirt soiling the surfaces.
- Clear the board surface with ionised air prior to printing and always apply any available measures to reduce static build-up.
- When printing onto KAPA®plast, a high UV intensity can be employed for rapid ink curing without any problems.
- Ink adhesion can be tested reliably only after 24 to 48 hours due to post-curing (cross hatch test DIN EN ISO 2409)

LAMINATION

STRONG BACKING

Film lamination: our specialists for this purpose are KAPA®fix and KAPA®mount. Their main role is as film and photo-mounting advertising media, as their excellent flatness and dimensional stability are a major asset in this context. Conventional large-format photos, digital prints, posters, plans, cards, maps... from the smallest to the largest, all of them can be optimally mounted onto this base.

APPLICATION TIP

KAPA®fix, with its self-adhesive cover layer, is ideal for quick and easy cold mounting either by hand or with a machine.

- To laminate, pull back a few centimetres of the release film from the board and fold back with a sharp crease.
- Lay the image to be mounted on the film-backed board and push it over the leading edge. At this point, the image does not adhere to the board because it is lying on the backing film.
- Fix the image to be mounted onto the exposed area of the adhesive.
- Working from the middle out towards the edges, smooth out pressing down on the exposed adhesive. Then slowly and gradually remove the backing film from the adhesive and mount the image with a lamination machine. Alternatively, use a hand-roller or a soft cloth to apply pressure to the adhesive.

KAPA®mount foam boards, with aluminium-reinforced covering layers and fire classification, offers professional quality results in the area of machine cold laminating, and wet laminating also with solvent-based adhesives. Please note: all non-adhesive materials must first be mounted with single or double-sided adhesive film.

CUTTING / FRETTING

CRUMB-FREE!

No Crumbling! Smooth edges! Cutting and fretting KAPA® is an altogether clean and tidy procedure due to the non-crumbling polyurethane hard foam core between the covering layers. Exact contours can be achieved in all our foam boards by using a knife held in an upright position and at an accurate angle to the board. Do not forget sharp blades guarantee clean-cut edges.

One-off jobs with simple contours can be quickly and easily cut from all KAPA® boards using a utility knife.
It is easy to make small production lots with more intricate contours using a jigsaw. Please ensure you use a special blade for soft materials.
When identical results are paramount – in longer production runs, an oscillating knife or waterjet with CNC routing are the best choice.
Filigree and intricate three-dimensional lettering and logos, uniform in quality and shape, can be produced from KAPA® using this technique, which best suits fine contours.
Please note that polyurethane is heat-resistant and cannot be cut using thermal methods. The use of guillotine type cutters is not recommended due to the risk of material deformation. Laser cutters should not be used due to the fire risk.

FORMING STRUCTURES

FROM A COMPOSITE BOARD TO SUPPORTING PILLARS

In no time at all, a flat KAPA® board is no longer only flat. In just a few steps, it becomes a three-dimensional form. Classical pillars in a lightweight construction, a robust stand comprising a simple box shape, individually formed decorative cubes, shelves and decorative steps... practical small works of art, quickly and simply made.

And it is so easy:
Thin boards – up to 5 mm - can be folded using the edge of the table.

KAPA® boards between 5 and 15 mm thick can be cut with a V-groove knife (mitre trimmer). First make grooves in the board and then bend along these lines.
When required apply glue along the mitred cuts to strengthen the edges.

Shaping, positioning, laying, stacking - the finished items are refreshingly easy to handle.
They have the big advantage of being light: they can be easily moved to wherever they are needed and can even be hung from the ceiling without problems – there is absolutely no weight problem!

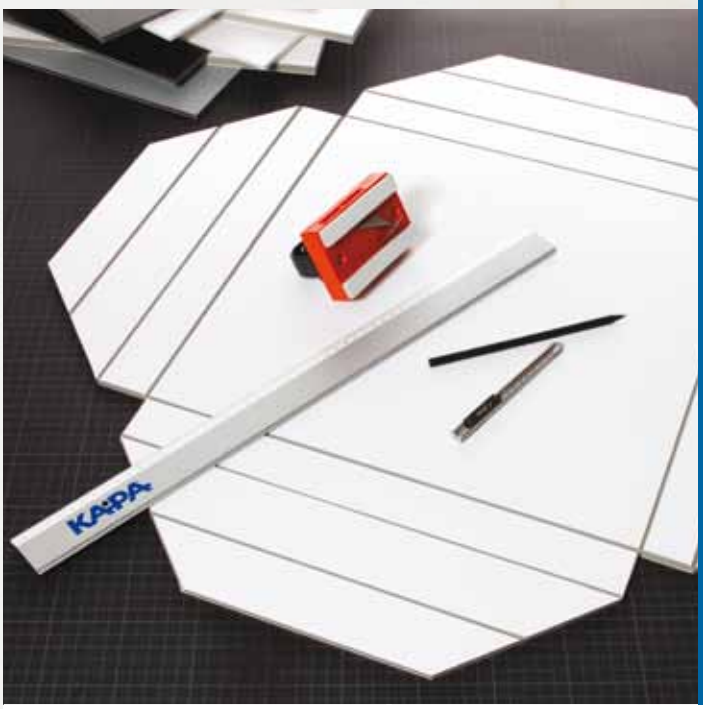
3 DIMENSIONAL

IN SHAPE AND APPEARANCE

The range of things that can be made from KAPA® lightweight board never ceases to surprise. A composite panel that can act as a backing for photos or prints and be a feather-light frame to display the picture at the same time.

To really make the most of your works of art, the new KAPA®tex surface is the ideal choice. The covering layers can be digitally printed or painted, and its structure feels and looks like a canvas. This "canvas look" lends the subject extra visual depth. With the three-dimensional frame added: the exhibit is finished – 3-D in shape and appearance.

The frame can be produced mechanically (CNC 45° V-groove cut) as well as manually.
Let us show you how we make the frame – in a few simple steps. All you need is: a pencil, a ruler, a cutter and a V-groove knife (mitre trimmer).



THE KAPA® PICTURE FRAME: DO IT YOURSELF IN A FEW STEPS

- First take a rectangular KAPA® board
- Make the first groove parallel to the edge of the board
- Cut out the square section outside the intersection of the grooves
- Make two parallel grooves on the other three sides
- Distance between the 1st and 2nd groove: depth of the frame (distance from the wall)
- Distance between the 2nd and 3rd groove: thickness of the frame (stability)

- Distance between the 3rd groove and the edge of the board should not exceed the distance between 1st and 2nd groove minus the thickness of the board (fixing)
- Cut off the outer corner between the 2nd cut and the exterior edge at a 45° angle
- Fold along the grooves and glue together
- Follow the same procedure for the 3 other sides – finished!

PUNCHING / DIE CUTTING

IN PRETTY GOOD SHAPE

KAPA® boards can be processed and transformed into a wide variety of shapes and original objects on all standard die cutting presses.
Each KAPA® board features different properties depending on the covering layers.
KAPA®line and KAPA®graph are the most suitable for punching but, KAPA®plast and KAPA®color, both made of the same materials, can also be successfully punched. KAPA®fix and KAPA®mount are only suitable to a certain extent as they have aluminium reinforced cover layers.

We recommend using punching dies with fine teeth to achieve a clean vertical cut, although straight steel rule dies can be used, irrespective of board thickness. Please do not forget: lay chipboard or elastomer under the KAPA® board so that the teeth of the punching die can sink into it.

Please note: punching dies should always have a full-size foam rubber underlay; so that the pressure caused by the punching is evenly distributed.

KAPA® boards should be protected from the cold, stored in a dry place and laid as flat as possible on a suitably sized support. Acclimatise the boards to ambient temperature before printing. We recommend 24 hours prior to processing.

Interested in our comprehensive processing instructions about punching? Just get in touch.

CONNECTIONS

INTELLIGENT DESIGN AND LIGHTWEIGHT CONSTRUCTION

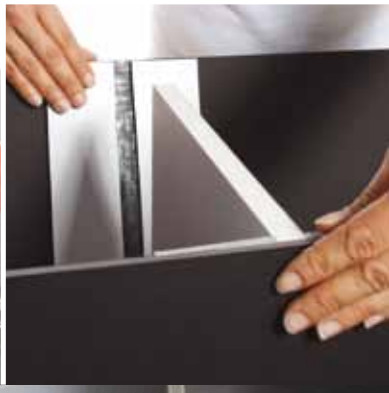
That is also KAPA®: clever design solutions, created in no time at all! Because our lightweight foam boards can be easily connected by glueing or slotting them together.

Particularly in the display market, KAPA® means you can be remarkably flexible.
Decorative applications and presentation systems can be assembled by slotting parts into each other and disassembled, without the need for tools. The use of simple structural connections can give your posters, three-dimensional displays and large decorative elements, all made of KAPA® lightweight boards, excellent stability for free standing and hanging applications. A practical example: a modular, lattice shelving system. KAPA® ensures you stay well-positioned. The boards' low weight means you keep all options open and can swiftly reposition your shelving to suit your needs.

Is something more permanent called for? Well, in that case: permanent glued connections can provide high levels of stability wherever required, for example in large scale KAPA® applications such as stage design. The edges of KAPA® mounted digital print, large format photo segments and KAPA® direct print segments can be quickly and securely joined, and given additional reinforcement by gluing off-cut strips on to the reverse side.

You have a choice between several adhesive techniques. KAPA® boards can be glued using solvent-based contact adhesive, hot-melt glue guns or fixed using strips of double-sided soft-foam adhesive tape.

KAPA® makes ideas visible! Architects and designers value lightweight foam boards for model making so that they can visualise their designs.
KAPA® looks good in a wide range of modelling techniques. Glueing KAPA® to form 3-D layered-models is particularly quick and easy, and its contours are convincing.



DECORATIVE TECHNIQUES

CREATIVE DREAMS COME TRUE

It always starts with an idea. And in no time at all, even the most exacting design concepts can become reality - using materials from the KAPA® lightweight programme. There are endless options for every design purpose, and the polyurethane foam core is unbeatable for every type of processing. For instance, when it comes to saving time and money, the trouble-free use of solvent-based inks, glues and adhesives is a big plus. There is so much scope for creativity! There are a multitude of design possibilities but we will confine ourselves here to some of the more standard decorative and model building techniques. There are no hard and fast rules about which board or technique best suits these applications.

But we would like to draw your attention to the special covering layers characteristics:

KAPA®line is ideal as a base board for all direct-application paint techniques.

KAPA®plast has best results in film applications.

KAPA®fix is our self-adhesive board, suitable for all fast mounting tasks in the graphic-decorative field.

KAPA®color has practical bi-colour cover layers and is the creative designers' and architects' choice for presentations (grey/black base option).

KAPA®graph it is inspiring thinks to its bright white or black matt-velvet covering layers and its white or black through-coloured foam core. It is in demand as an aesthetically pleasing design surface, as a stable model base board or as material for architect's models.

KAPA®tex is the optimal base for fine graduation in colour paintings. The canvas surface adds visual depth to your works of art.

FRAMES AND AFFIXING

STYLISH PRESENTATIONS

Suspended from the ceiling, invisibly fixed to the wall, chic in a passe-partout... you have the best possible options for displaying your KAPA® work of art even better.

A needle and a piece of nylon thread is often all you require so that displays and mobiles made of KAPA® can hang freely. In principle, any KAPA® lightweight board can be fixed in place using needles, nails or screws.

Our special solution: KAPA® metal hangers, available from your KAPA® dealer, have a small barbed hook to press into the board. Invisible adhesive joints using foam adhesive tape or a hook strip prove excellent for more sophisticated presentation solutions. Interesting depth effects can be achieved quickly and inexpensively with KAPA® board off-cuts as spacers.

Heat-activated adhesive edge strips, clip profiles and framing profiles can be cut to size to protect painted or laminated KAPA® board edges. For more sophisticated framing jobs, specialist traders offer a wide range of attractive plastic and metal profiles. Or you can decide to make a robust passe-partout out of KAPA®graph, available in a choice of brilliant white or black, matt-velvet surfaces. The sandwich construction also ensures fast clean cutting using all standard techniques. KAPA® passe-partouts provide your photographs, graphics and print items with ideal support, enhanced visual appeal and an attractive contrasting frame. The white or black through-coloured foam core means surface and core harmonise.

TIP: Hard white PVC KAPA® clip and connection profiles (available in U, H and W sections for 5 and 10 mm board thickness) provide not only perfect edge protection but offer the option of connecting KAPA® segments together, either in a row or as flexible, folding wall displays.

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