



2021-2022 CMF TRENDS

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Automotive

Realized by



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Let's bring your creative vision to life.

At Covestro, we co-create with designers, blending aesthetics and functionality into material-based experiences that can surprise and delight consumers. Collaboration is at the heart of our business model – we value our partners and work closely with them to develop customized, finely-tuned solutions.

A global service at your fingertips.

Our team offers world-class color development, drawing on diverse backgrounds and experience across a wide range of industries to optimize the impact of CMF on consumers. With a network of Color & Design Centers connected across the globe, we're ready to support your design process no matter where you are located.

Inspiration for strategic innovation.

This trend brochure shows how key themes for 2021-2022 can be translated into purposeful CMF strategy and design. We are constantly pushing the boundaries on what can be achieved with our high-quality, tunable polycarbonate and hope to inspire designers by providing a glimpse of the possibilities.

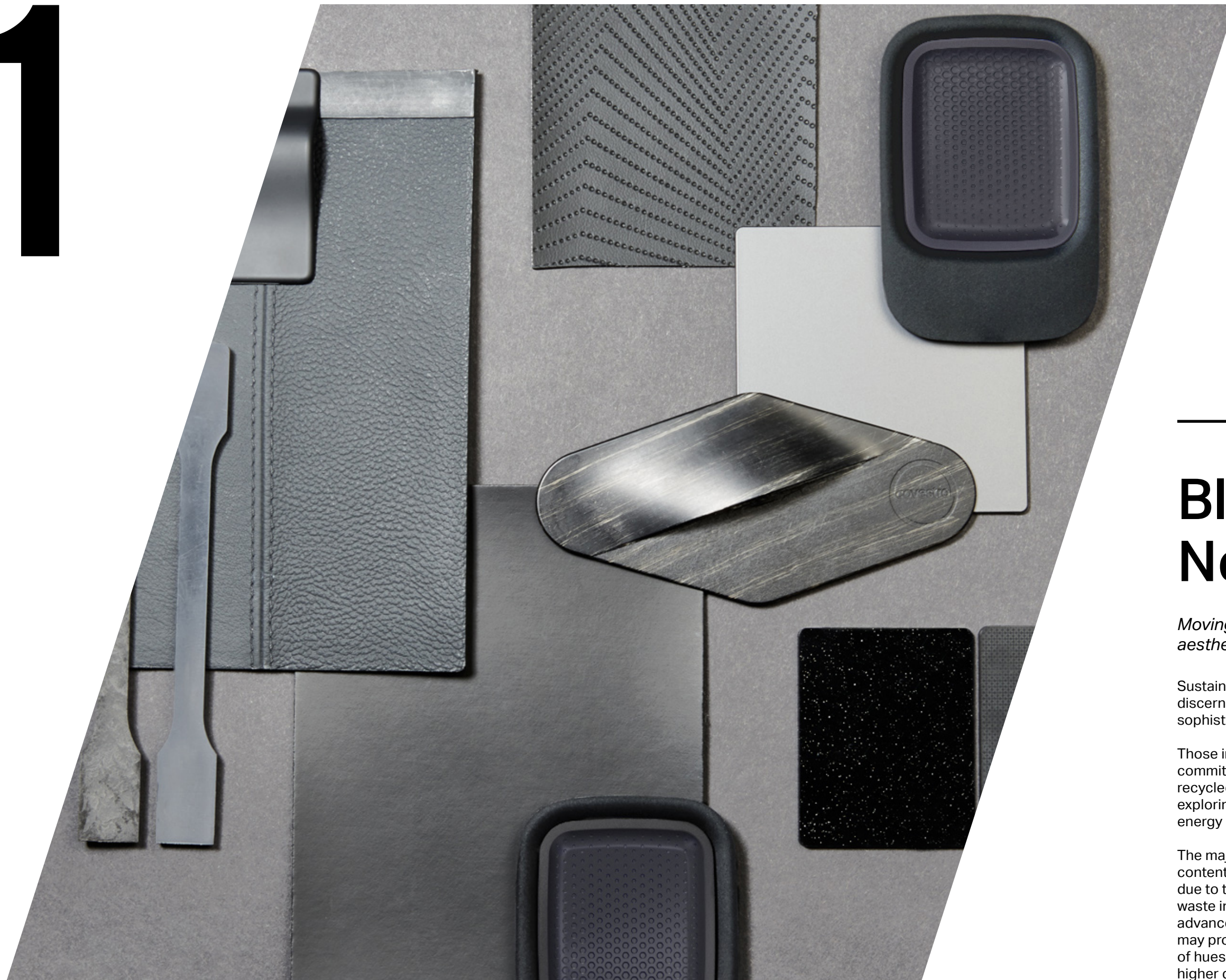
We have a team of in-house designers who will help you better engage consumers through world-class CMF design by leveraging the visual, tactile, haptic, mechanical, aesthetic and functional properties of polycarbonate.

We're ready to help you make your designs a reality, from concept to mass-production.

**Ready to shape the future with CMF?
Let's do this!**

INTRODUCTION

01



Black is the New Green

Moving beyond the traditional aesthetics of sustainability

Sustainable consumerism is on the rise, with discerning users' expectations becoming more sophisticated over time.

Those in the automotive industry are making commitments to increase the amount of recycled plastics used in their products whilst exploring other avenues such as reducing energy consumption and carbon footprints.

The majority of advanced plastics with recycled content have been produced in black or grey, due to the mixed recycling of post-consumer waste in different colors. Technological advances in mechanical and chemical recycling may provide new opportunities for a wider range of hues, but have also resulted in finer and higher quality finishes for these dark shades.



CMF Palette

Black is a classic color for car interiors and exteriors alike, but subtle details can create a significant visual difference.

Consider experimenting with varying shades of grey or different finishes for a tonal effect across interior panels, seating shells and dashboards.

Textured patterns create subtle visual and haptic interest for touchpoints such as the dashboard and individual controls, combined with large seamless displays for a sleek effect.

Material Properties

- High-gloss piano black available to highlight key features in contrast with matte finishes
- Precise color-creation or printing to achieve specific shades as desired
- Bespoke patterns can be laser-etched to provide further sensorial details
- Additional coatings can also be applied for greater scratch and maximum UV resistance



Piano Black

Solid Base
Gloss Front / Matt Back

RAL 000 15 00

BAYBLEND® T85XF



Blueberry

Solid Insert
Pattern Front / Gloss Back

RAL 280 20 20

MAKROLON® Ai 2497



Black Is The New Green



02



Geometric Detail

Intricate interplay of pattern and personality

Consumers see goods, services and experiences as extensions of themselves, using these to express their individual perspectives and personality traits. The development of mass customization in manufacturing continues to provide opportunities for users to select and edit as they wish.

Geometric patterns are particularly favored in automotive contexts, providing an additional level of detail in terms of visuals, tactility or even sound attenuation. They can be used boldly for dramatic interplay of light, shadows and reflection, or as fine lines across a smooth surface for a personal touch.

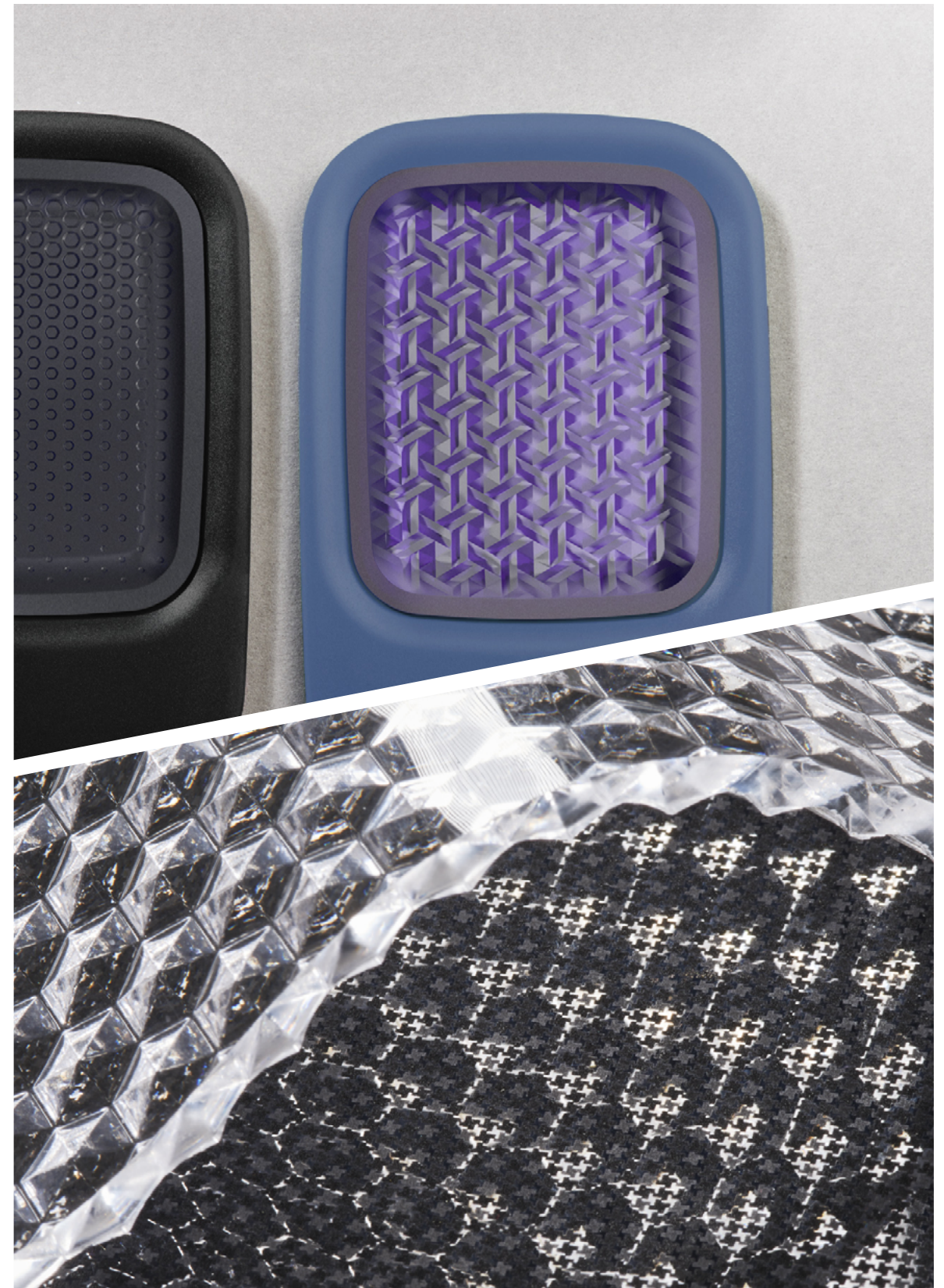


CMF Palette

Cutout patterns can be layered with color and light to create glow effects for internal interfaces, headlights or other lighting fixtures.

Consider applying laser-etched shapes in gradients for visual enhancement without affecting visibility, such as on glazing elements e.g. on side windows, or roofs.

These can also be combined with translucent, smoky blues and greys for greater depth in decorative elements, casting shifting reflections and shadows as light filters through parts during the day.



Material Properties

- High-precision patterns can be applied as subtle edge detail on large polycarbonate panels
- Glass-like optical clarity allows for high visibility, however various levels of translucency can also be achieved
- Color-creation is also available to achieve exact shades for specific layering and lighting effects



Blue Quartz

Transparent Base
Matt Front / Matt Back

RAL 260 40 45

MAKROLON® Ai 2417

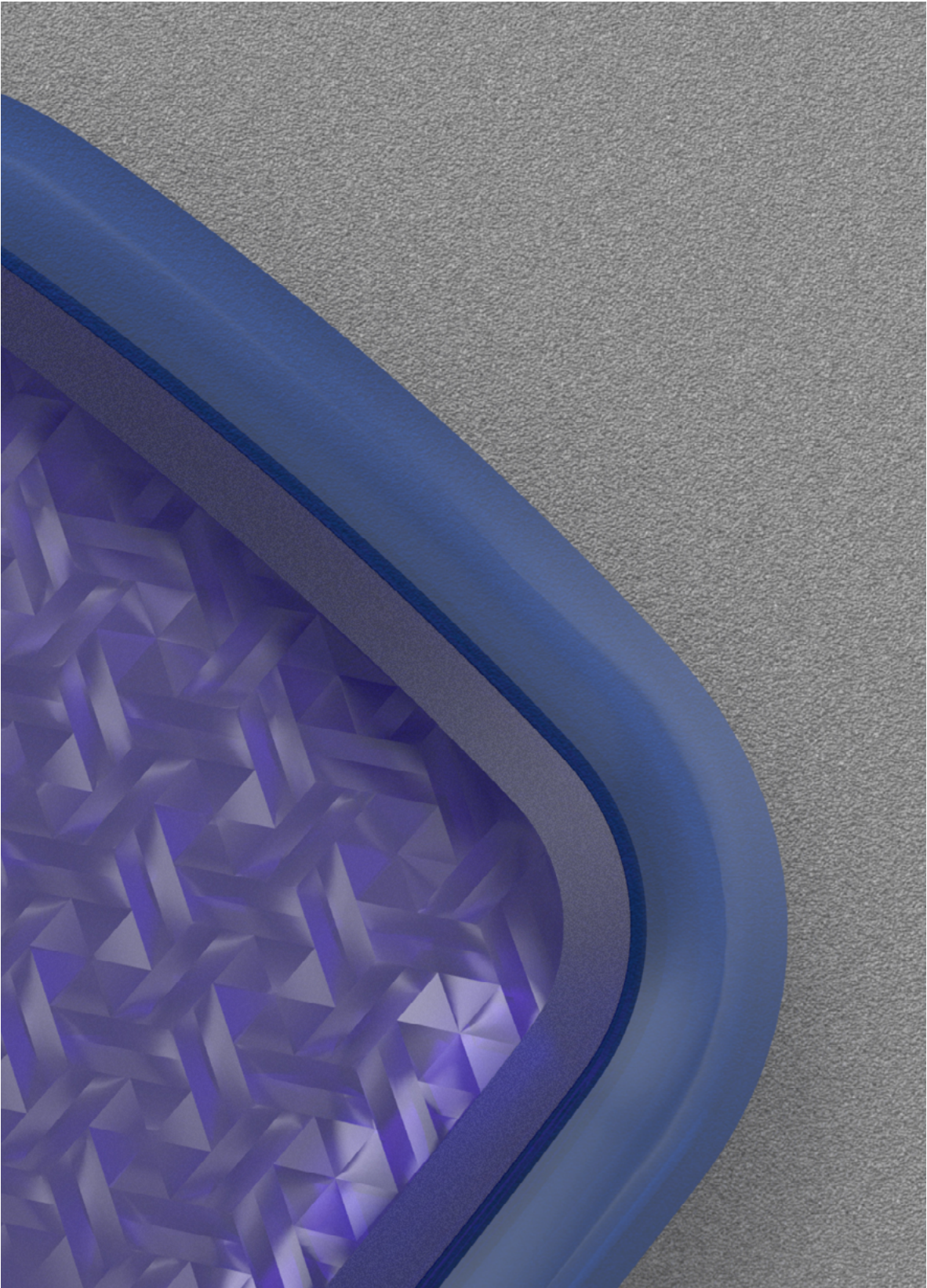


Grape Jam

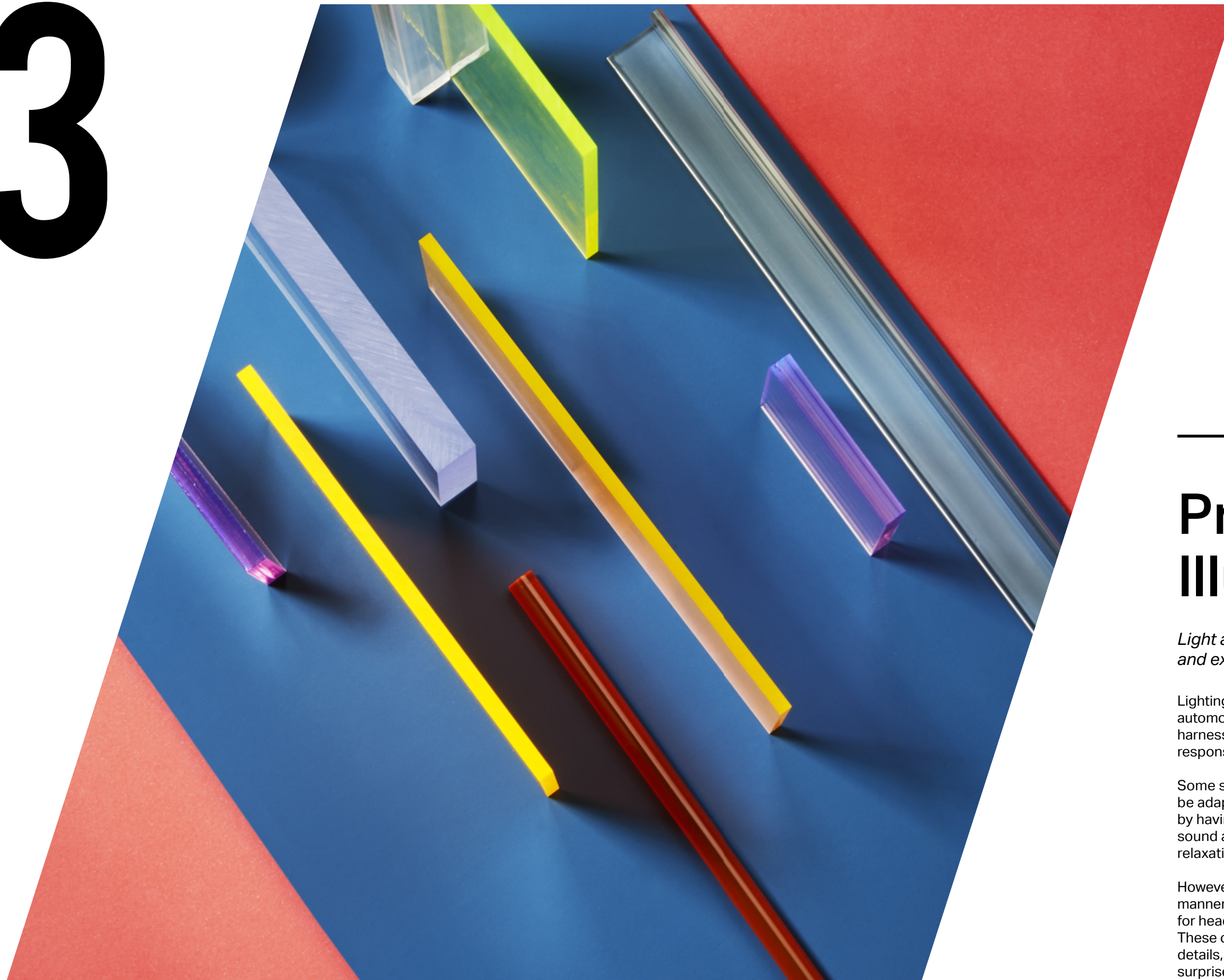
Transparent Insert
Pattern Front / Matt Back

RAL 300 30 30

MAKROLON® Ai 2417



03



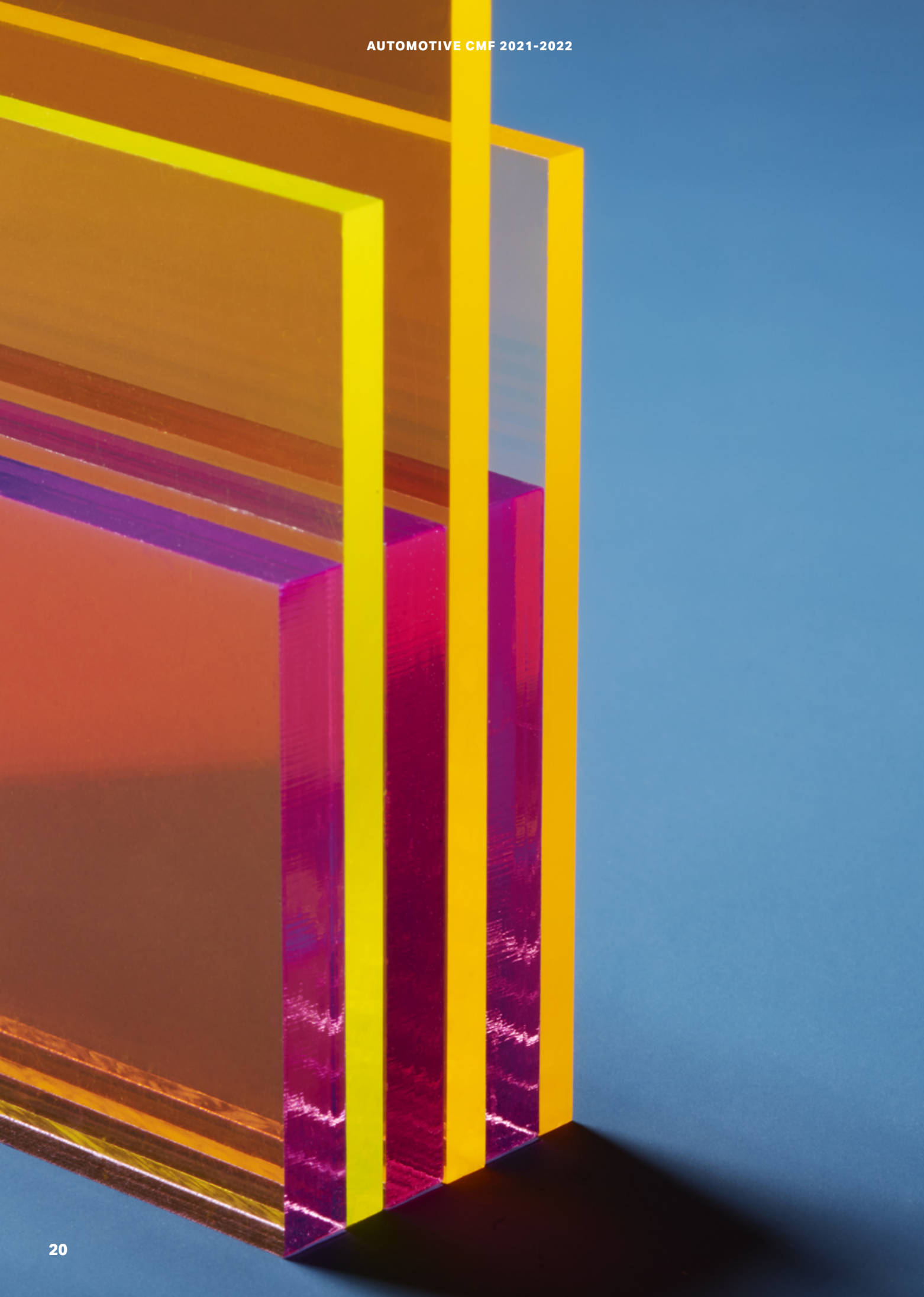
Precise Illumination

Light as a material for communication and expression

Lighting has been a key area of exploration in automotive interior concepts, with designers harnessing it as a form of visual expression, response or to create ambient environments.

Some systems allow automotive interiors to be adapted for individual or group activities by having various settings for light, color, sound and even scent, to enhance well-being, relaxation or concentration.

However, light can also be harnessed in a similar manner, such as when switching on the engine, for headlight displays or points of interaction. These can be integrated with other sensory details, such as haptic feedback, to delight and surprise consumers.

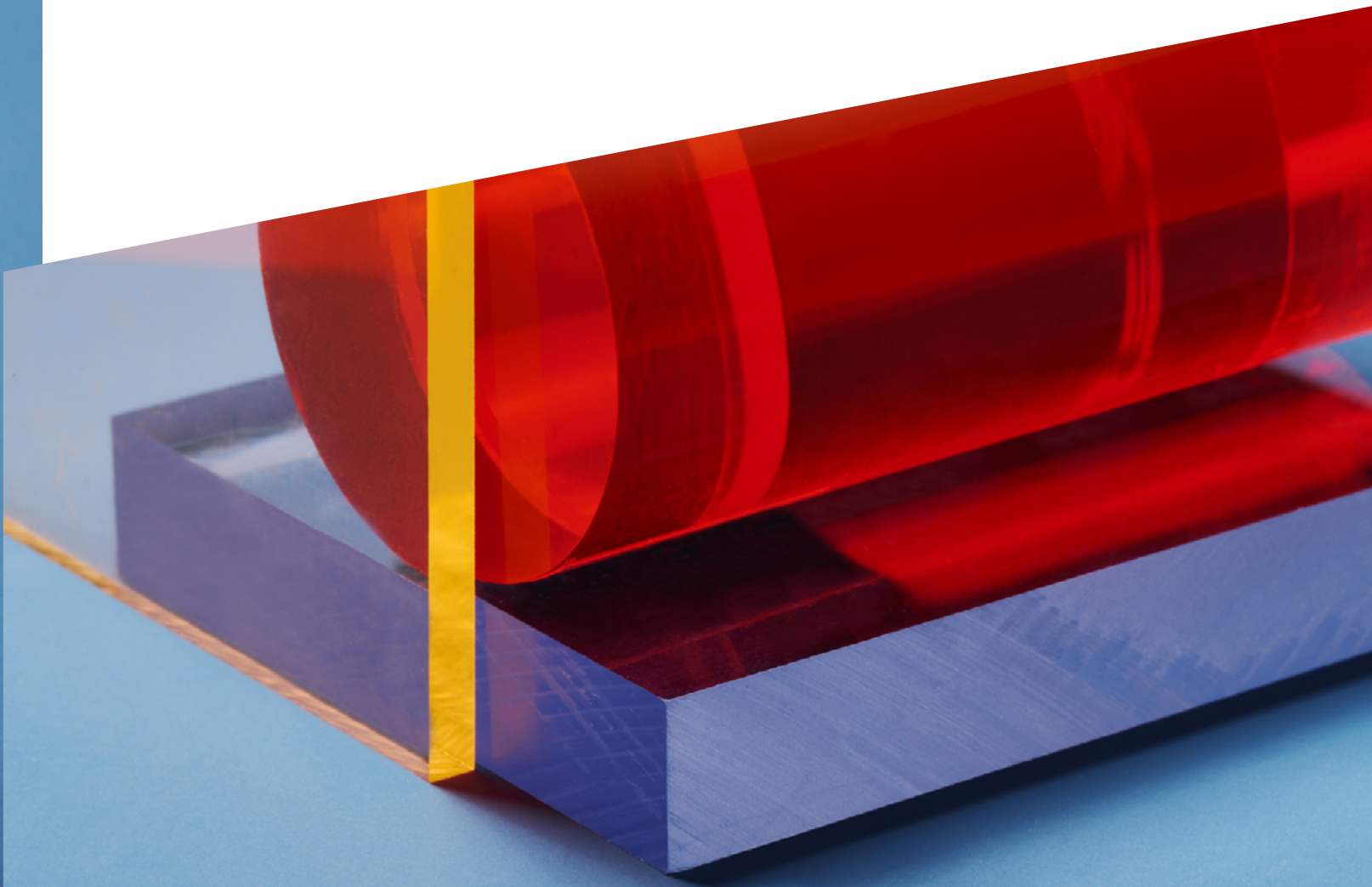


CMF Palette

Unique lighting effects can be achieved by varying levels of transparency, utilizing different finishes and LED arrangements.

Panels can be arranged in custom patterns for distinctive external lighting fixtures, such as headlights and taillights. High-clarity transparent touchpoints can be crafted to glow and change color when pressed, reflecting the hues within on the surrounding surfaces.

Consider combining function and lighting to create an immersive, emotionally engaging environment. This can be achieved using large seamless displays, such as backlit flooring.



Material Properties

- Light guides offer glass-like transparency with high optical clarity and light-transmission properties
- Bespoke patterns can be laser-etched with precision for greater visual impact
- 3D-edge-lit technology is also available for even light distribution along panel edges
- Impact and scratch resistance provide durability and longevity for both rigid plastics and films



Translucent

Translucent Base
Matt Front / Matt Back

RAL 9003

MAKROLON® Ai 2457



Clear

Transparent Insert
Pattern Front / Matt Back

MAKROLON® Ai 2417



04



Essence of Nature

Relax, recharge and reconnect with the natural world

Nature can be a soothing, nourishing source of escape and comfort for consumers leading busy lives, who are often surrounded by a myriad of technologies and devices.

Eco-conscious consumerism has also led a push for materials with a natural aesthetic. Wood grain, stone, woven linen and other textures provide a rich tapestry of organic detail.

In this scenario, the car interior performs a dual function: it acts as a protective, comforting cocoon from a hi-tech everyday existence, whilst echoing the verdant greenery that can be found in unspoiled, natural landscapes outside.



CMF Palette

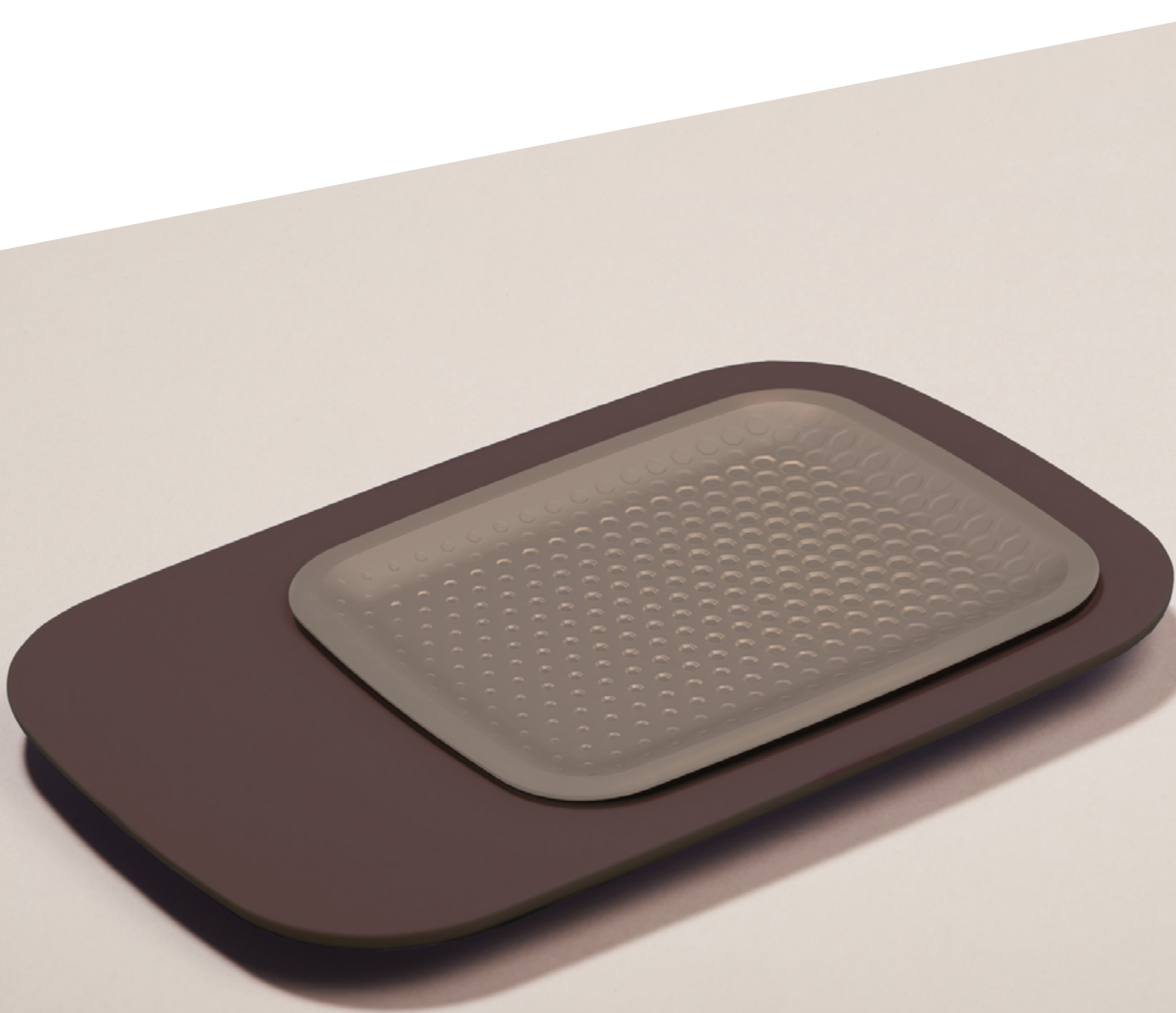
Dusky, earthy shades of green or brown can be used in combination with one another for a monochromatic color scheme.

Consider using natural textures such as wood grain to highlight key features and touchpoints such as console dials, door handles and individual controls.

Textiles with a natural look and feel can also be added to the palette for soft contrast.

Material Properties

- Precise color reproduction brings nature to life without compromising on performance qualities
- Graphic printing of organic textures is available for bespoke flooring
- Embedding natural materials such as stone can also be explored to create unique surfaces
- Large, seamless glazing panels with high optical clarity allow passengers to observe the natural scenery



Cognac

Solid Base
Matt Front / Gloss Back

RAL 020 30 10
BAYBLEND® W85XB



Macaroon

Translucent Insert
Pattern Front / Matt Back

RAL 050 80 10
MAKROLON® Ai 2457



English Ivy

Solid Base
Matt Front / Gloss Back

RAL 160 30 30
BAYBLEND® T85XF



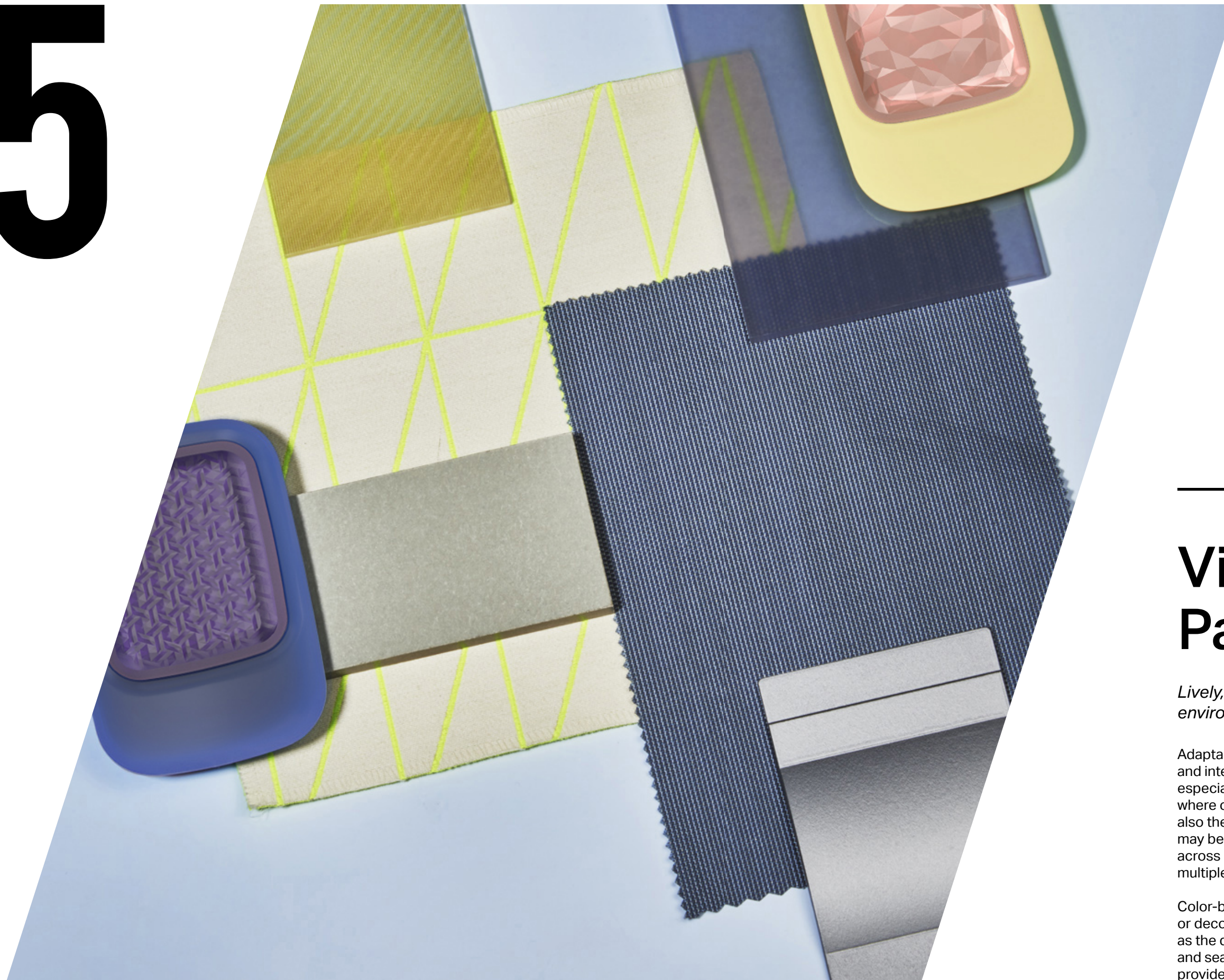
Greener Pastures

Transparent Insert
Pattern Front / Gloss Back

RAL 160 30 40
MAKROLON® Ai 2417



05



Vibrant Pastels

Lively, versatile palettes for adaptive environments

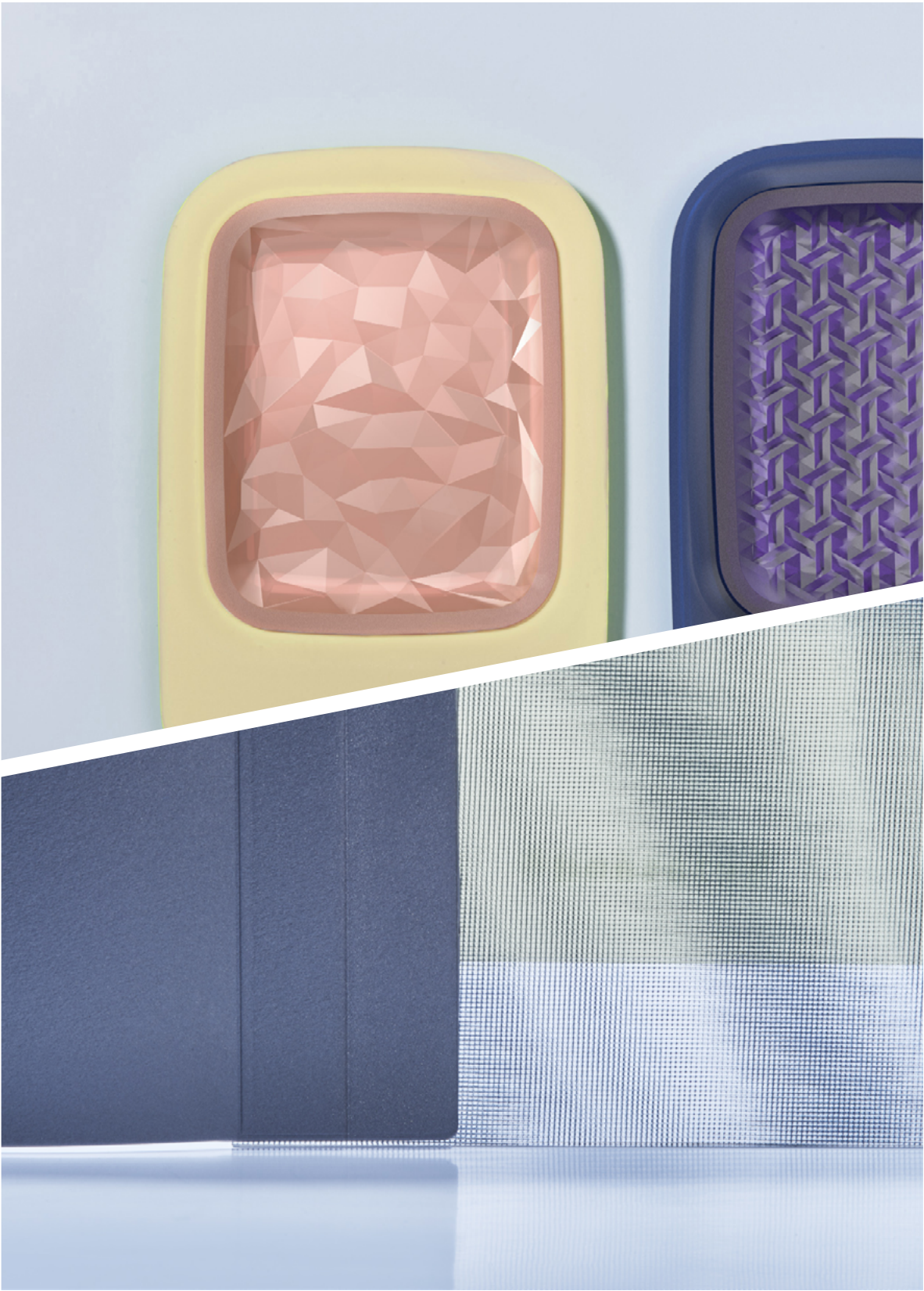
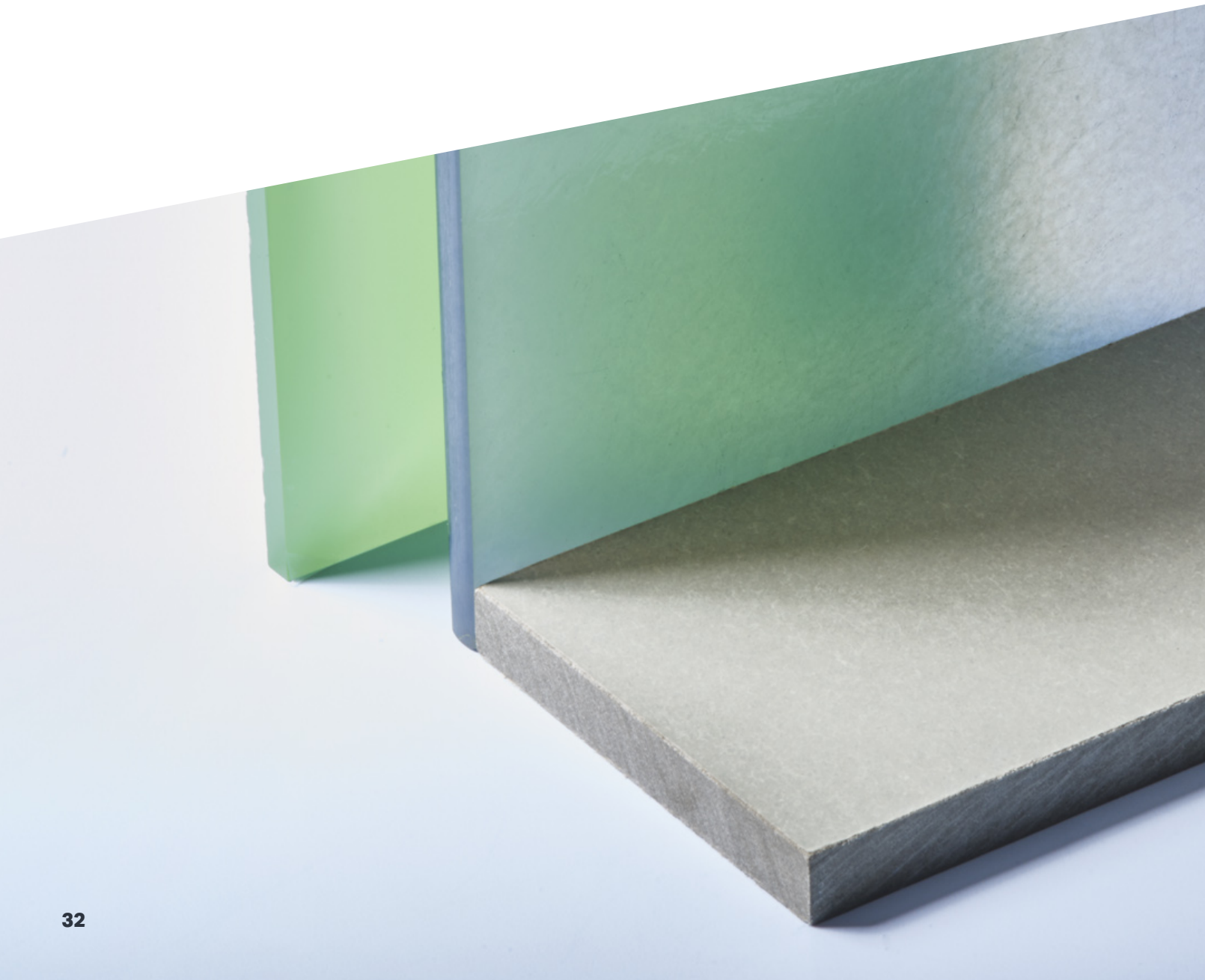
Adaptability is key for consumers as lifestyles and interiors become more flexible. This is especially relevant for autonomous vehicles, where cars are not only a mode of transport, but also the destination. Automotive design elements may be required to cater to an individual's needs across different use scenarios, as well as that of multiple individuals.

Color-blocking can be introduced for functional or decorative purposes across large areas, such as the dashboard, central console, door panels and seating shells. Hues are soft and gentle, yet provide a sense of warmth and personality.

CMF Palette

Consider incorporating deep greys for calming contrasts with light pastels on points of interaction, such as the steering wheel, overhead panels, or individual controls.

Translucent textures can also be layered on top of a base color, to create interior panels with depth. This can be applied to arm rests, head rests, seating shells, or storage compartments to create a tranquil, relaxing environment for the user.



Material Properties

- Seamless curved panels can be screen-printed with colors, textures or patterns as desired
- Impact and scratch resistance ensure durability and longevity even with frequent use
- Electrochromic (switch view) technology can also be applied to transparent panels, turning these translucent or opaque when privacy is desired



Lemon Verbena

Solid Base
Matt Front / Gloss Back

RAL 095 90 30

BAYBLEND® T85XF



Rosewater

Transparent Insert
Pattern Front / Matt Back

RAL 010 70 20

MAKROLON® Ai 2417





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German Design Council



GERMAN DESIGN COUNCIL
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德国品牌设计委员会国际委员

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