ASPIRATION

Covestro CMF Design Trends 2025+ Edition

Electronics & Electrical

At Covestro, we co-create Color Material Finish (CMF) 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. We add value through aesthetic, functional and circular design.

We have a team of in-house designers and colorists who will help you better engage consumers through world class CMF design by leveraging the optical, 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.

Global Color & Design (CMF) **CMF-Design@covestro.com**

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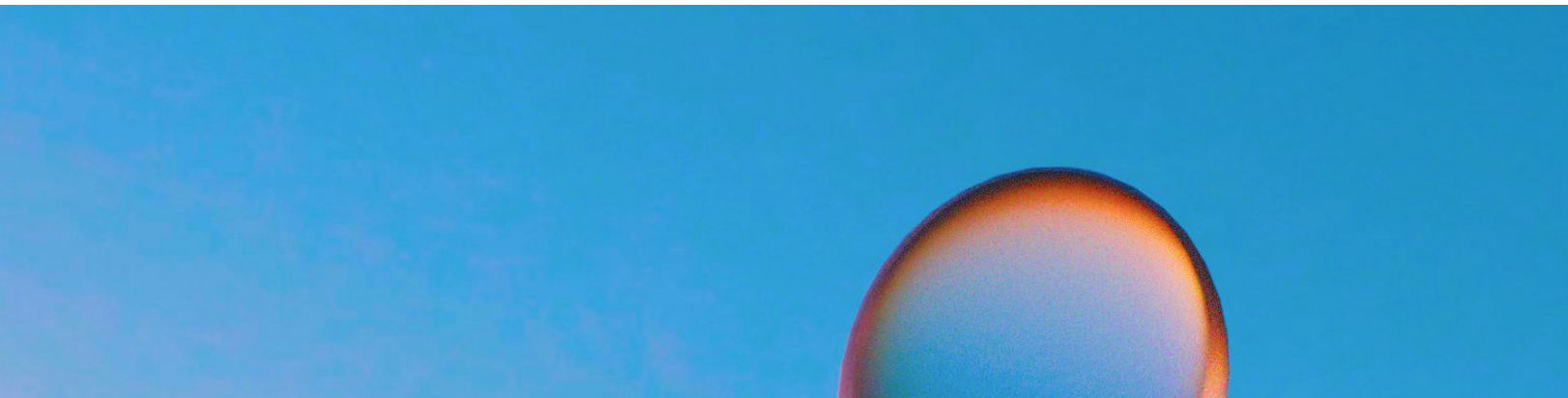

Rapid technological advancements and urban intensification[1] have initiated a re-examination of the underpinnings of modern society, with more and more individuals choosing to downshift and seek meaning elsewhere.

The application of artificial intelligence has significantly streamlined both work and personal lives, but even greater possibilities await as we integrate it with a wider range of functionalities and emotions.

New combinations of software and hardware, lightweight, scalable digital devices, and immersive spaces promise to liberate the workplaces of the future from all constraints, empowering us to navigate freely between natural, interpersonal, and virtual spaces and realize our wildest creative dreams.

New community models that are comfortable, flexible, and interactive not only fulfill our most basic needs but also open up new possibilities for collaborative endeavors. They bring more convenience and greater autonomy, while demonstrating consideration and respect for the individual.

We may set out to conquer the wilderness, or we may, like those who have chosen to live off the grid and seek out sustainable, low-cost living solutions, retreat into it. After all, living responsibly and sustainably to minimize the impact on the environment is the first step towards a greener future for us all.

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[1] Urban intensification refers to the process of increasing land use efficiency and density within existing urban areas through various measures, thereby concentrating population and economic activities.

1

AI Squad

Large language models[1] and generative artificial intelligence[2] have exploded onto the scene, thrusting this new technology into our work and everyday lives. As it moves from the laboratory into daily life, a deeper connection between humans and machines must be built if we are to forge *greater understanding, trust, and cooperation*. When asked what role AI plays at work and in the home, GPT-4 replied that it is our *"partner."*

In the workplace, AI has been charged with repetitive tasks like gathering information and organizing data but can also assist in creative tasks like copywriting and image editing, *freeing people up to focus on higher value analytical work*. Service industry AI can *handle mechanical customer service processes even to the point of human interaction requiring emotional intelligence*. This efficient working partner, develloped through machine learning, will revolutionize the productivity landscape and help organizations address various challenges.

AI in the home is taking on the role of a home assistant. According to a recent poll[3], 75% of respondents say "please" and "thank you" to their AI assistants, indicative of a desire to establish a more intimate emotional bond with AI. Proactive AI assistants can *integrates IoT information flows, provides customized recommendations, and interacts with humans through virtual characters or subtle natural language processing*. Communication covering all age groups makes the identity of "companion" more diverse: For Generation Alpha, AI-

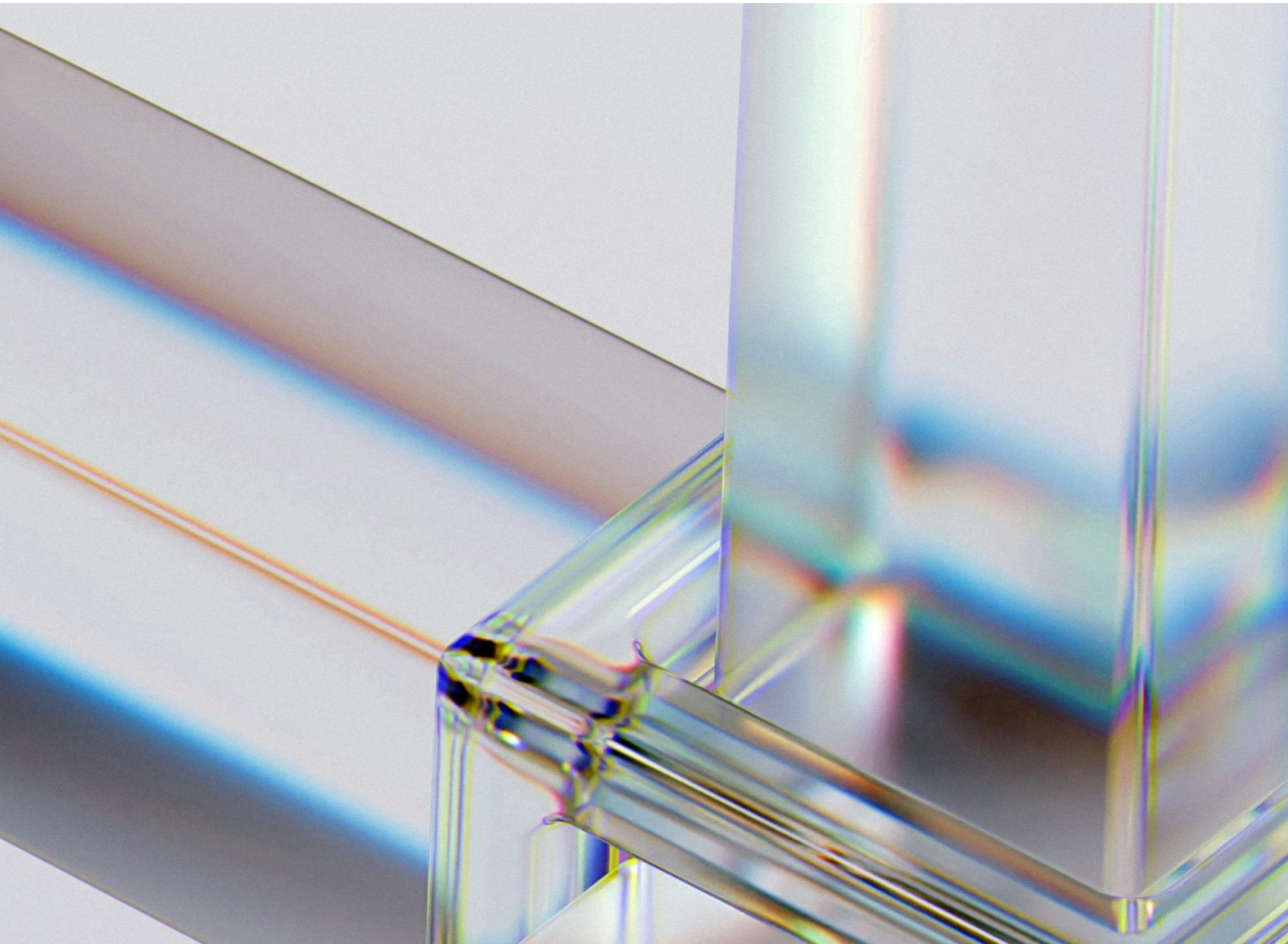
powered education covers classroom learning, smart toys, and interest development; for the elderly, AI provides health monitoring, and support for health and emotional care.

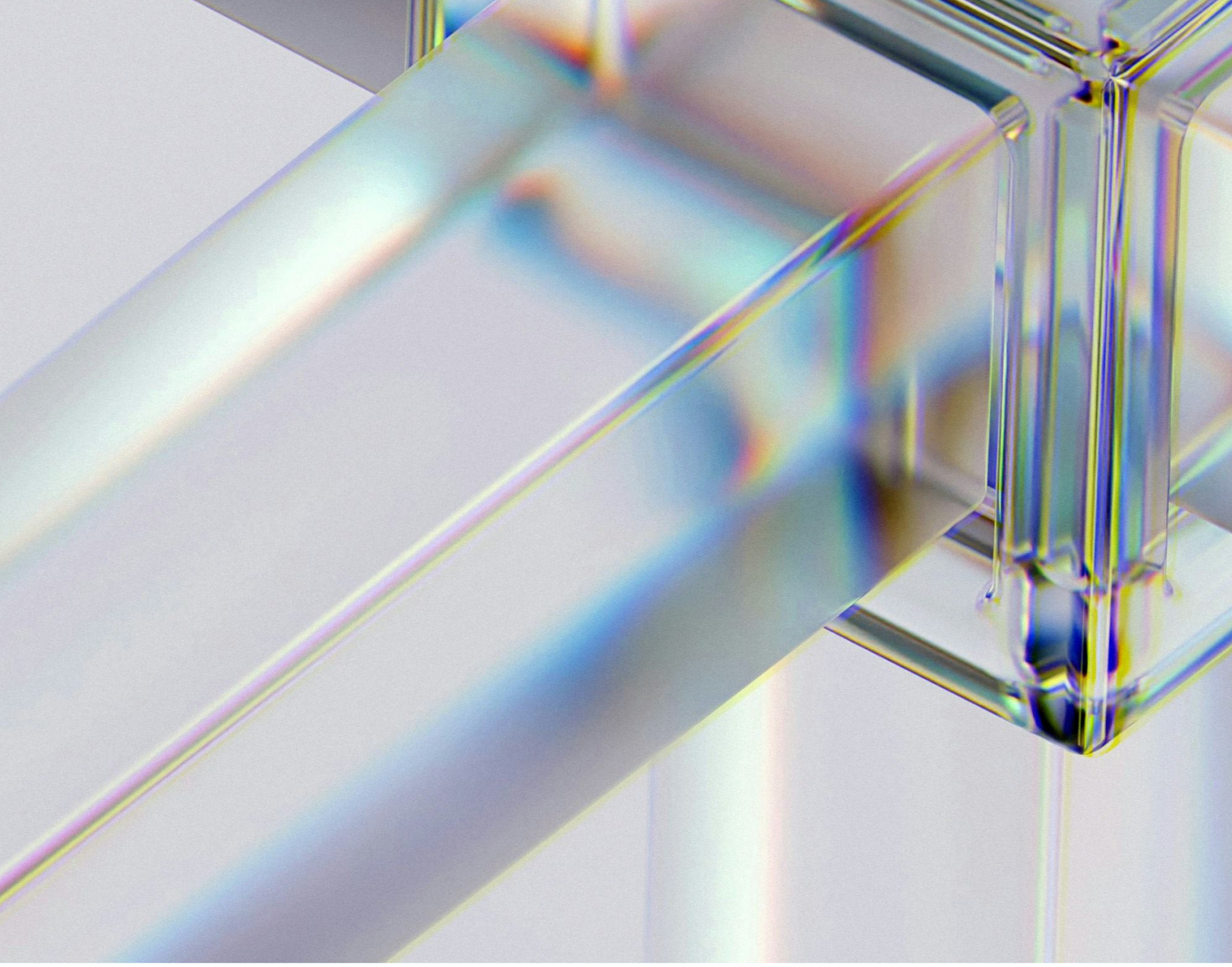
Th italicized text on this page was generated with the assistance of GPT 3.5.

[1] Large language models are large-scale deep learning or machine learning models that can be tweaked throughout the training process to reflect the complex relationships present in input data.

[2] Generative AI refers to models that study large amounts of text, image, and audio data among others for the purpose of learning to generate completely new content of a similar nature.

[3] Andriod Central, 2021.





CMF

Pure white is a staple of electronic product design for the way it bridges the gap between the emerging technology and the physical products with a sense of unadulterated originality that is also gentle and familiar. A transparent texture adds to the lightness sought by smart devices, and the colors shine under the high-gloss finish, integrating complex technology into users' lives in a way that is intuitive and welcoming. e

Makrolon® polycarbonate is a tough, lightweight, transparent thermoplastic resin resistant to impact even at low temperatures. It is highly stable, easily molded, and resistant to heat with a glass transition temperature of 148ºC. Makrolon® 2407 is a transparent, high-flow PC grade with good mechanical properties, and is widely used in electronics and electrical products, as well as in lighting and various other industries. Bayblend® PC blends exhibit outstanding and balanced performance, most notably in low-temperature toughness. It also boasts excellent rigidity, dimensional stability, creep resistance, low moisture absorption, heat resistance, and flame retardancy. Bayblend® FR3005HF is a PC/ABS grade with high flowability and flame retardancy (V0/1.5mm). Exceptional processability means a more robust design for customers with excellent colorability to satisfy the most demanding aesthetic requirements.

Organdie

25EE11 (Base)

Transparent
Gloss Front / Matt Back
Makrolon® 2407 RE

Feather

25EE12 (Insert)

Solid
Gloss Back
Bayblend® FR3005 HF

2

Digital Wandering

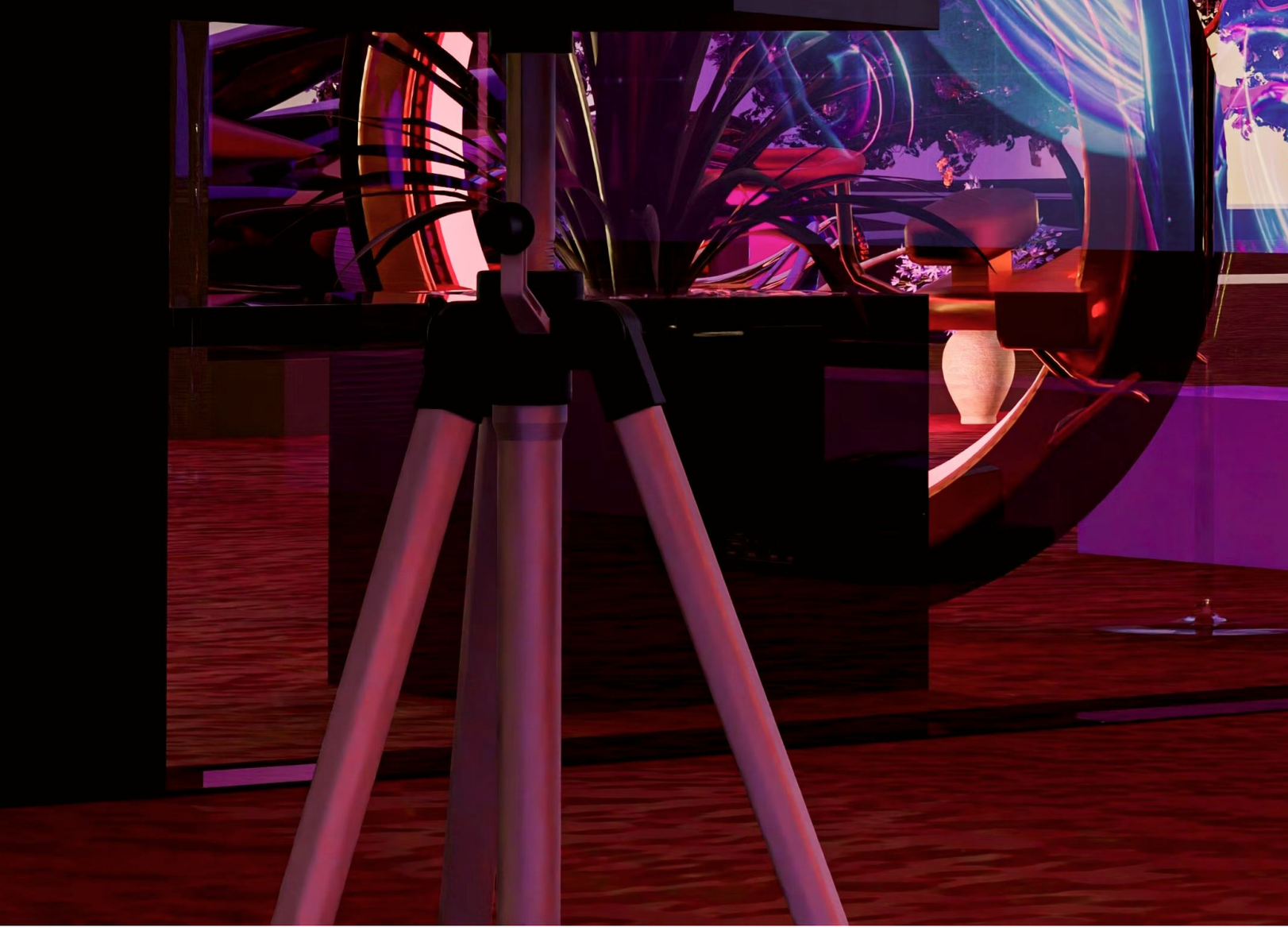
Modern industrial development has shifted the working environments of many from the confines of traditional office space to anywhere with an internet connection. AI technology has taken the new liberty even further, assuming repetitive tasks so that we are free to focus on creativity. The result is an increasing number of individuals choosing to freelance and self-publish and a new definition of working space within a virtual world requiring only that all-important internet connection.

In addition to changing the way we work, digital technology has also changed the way we think about work. Modern people, who prioritize personal growth over material possessions, have shifted their focus from work to self-fulfillment. Money is still necessary, but there is more of a feeling that sitting in a cubicle to earn a stable salary will not bring spiritual fulfillment or allow one to realize one's full potential.

With technology, we can now navigate freely between real and virtual worlds, overturning established concepts of space and pushing the boundaries of creativity: meeting with colleagues without ever leaving the comfort of your own home, free to travel to picturesque locations to create, and sharing ideas with the entire community at the touch of a finger.

The hybrid office has transformed the meaning of productivity and facilitated the integration of diverse living spaces. Immersive technology has gradually been embedded into various office products to provide computing power during work and a comfortable experience in daily life. Multi-functional laptops equipped with better webcams, microphones, and 3D displays replace limitations with a more immersive working experience. Slash workers (people who juggle multiple roles) can multitask more deftly to achieve that delicate work-life balance.

A move towards flexibility in work has led this new generation of office worker to embrace lighter, more scalable portable devices with extended battery life more suited to the agile office of the digital nomad.



CMF

For the digital nomad passion and inspiration are more than mere embellishments to daily life, they are the essential catalysts driving the creative process. High chroma transparent colors massage the senses. Progressions of pink and red convey vitality and a positive attitude. Overlapping transparencies create a richer atmosphere of colorful personality that resonates with the lifestyle of digital nomads who navigate between the virtual and real worlds.

Bayblend® FR3070 R35 contains 35% post-consumer recycled materials, cutting down on the use of fossil raw materials and utilizing plastic waste to benefit a more sustainable circular economy. It is tough and heat resistant, with a Vicat softening point of 105°C (Vicat/B 120) and UL 94 V0/1.2mm certification for flame retardancy ideal for thin-wall designs. The Makrolon® GF9024 is a unique translucent, glass fiber-reinforced flame retardant PC material that satisfies customer demands for high transparency (Ty-80% @ 1mm), high rigidity, and flame retardancy (V0-1.5mm).

Berry

25EEB21 (Base)

Solid
Gloss Front / Matt Back
Bayblend® FR3070 R35

Pomegranate

25EE22 (Insert)

Transparent
Matt Back
Makrolon® GF9024

3

Boundless Community

It is common for millennials to live alone in big cities, spend lots of time commuting, and bear the burden of high rents, making co-living in central urban areas worldwide increasingly attractive. Residents get their own private rooms but share facilities like kitchens and bathrooms.

Co-living blurs the boundaries between friend and family, promoting a hybrid family-style model and repositioning housing as a service. It may, in fact, be the ideal lifestyle for young people to have a loved one close at hand, a friend next door, working and living together. Millennials are increasingly embracing cohabitation and capable of filling the need for intimacy with shallow social relationships. Co-living can be a source of freedom and flexibility, though how to balance "private" with the "communal" may place inclusivity on a collision course with the future design of co-living spaces and furnishings.

Under one roof we live together but seek to retain our independence. The ability to preserve one's privacy within limited space is an essential pre-condition to co-living: shared products must be self-cleaning, easy to assemble, convenient to maintain, and able to protect user information and data privacy. As households take on more inhabitants, a personalized experience can lend that human touch we seek. Shared products can remember user preferences and provide services with the requisite emotional value. A purchase from a vending machine may remind you of warm greetings from the owner of the grocery store downstairs.

Diverse public spaces provide residents with opportunities to interact, inspire one another, and attain a higher quality of life with like-minded individuals. By enabling shared living, the "boundless" public spaces have allowed nomadic individuals not only to meettheir social needs but also to potentially provide each other with spiritual support.

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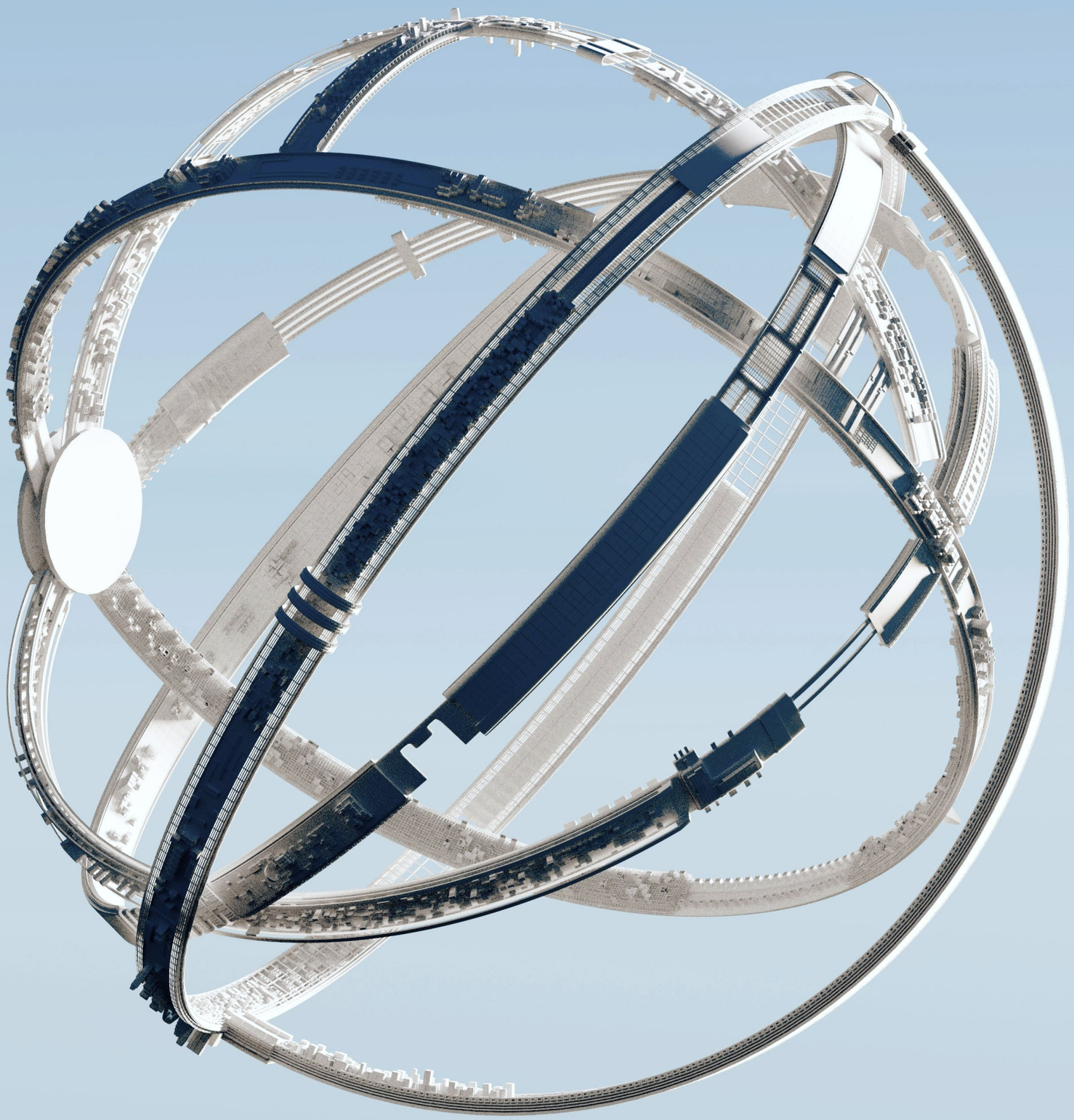

CMF

Modular, compatible products unlock new opportunities for application in co-living model. A warm gray is inclusive and welcoming. A misty blue alleviates anxiety, providing a necessary isolation for individuals striving to maintain a delicate balance between their own private world and the world at large. The unique, translucent, fiberglass-reinforced flame-retardant PC material of Makrolon® GF9024 satisfies the most demanding requirements for transparency (Ty-80% @ 1mm), rigidity, and flame retardancy (V0-1.5mm). The Bayblend® FR3010 R75 is 75% PCR in a grade that balances good mechanical properties, heat resistance, and superior processability. It is used in a wide range of consumer electronics, from network devices, wearables, IoT, and smart appliances to mobile devices.

Foggy Blue

25EE31 (Base)

Transparent
Matt Front / Gloss Back
Makrolon® GF9024

Smoky Gray

25EE32 (Insert)

Solid
Matt Back
Bayblend® FR3010 R75

4

Tech × Nature

With increasing environmental awareness, the pursuit of sustainable living is not just a trend but has become our habit. Cherishing natural resources and protecting nature's gifts have become priorities. More and more individuals today are rethinking their life priorities and proactively changing their mindset to think is there a new way to technical and nature. An increasing number of individuals today are embracing a minimalist lifestyle and are starting to realize that technology and nature are not necessarily opposing ends. Is it possible for the two to work together in a sustainable way?

Innovative spatial ecosystems can bring net-positive energy within reach, making our households more self-sufficient and independent of the national power grid. Stand-alone energy cells can be integrated seamlessly and organically into daily life, combining the aesthetic and the functional. Whether bold or understated, they can imbue our homes with aesthetic enjoyment and responsible, eco-friendly living.

Home is no longer relegated to serving as mere shelters, but also offer broader protection for nature.

CMF

On the road to coexistence with nature, we must learn to balance design aesthetics with practicality and make sustainable living more attractive. The yellow hue is one of endless vitality and the awakening of a greater consciousness of nature. Forest-like green provides a sanctuary for trust and healing, inviting people to take some rest and return to authenticity. Makrolon® FR6020 and Makrolon®FR6005UV are UV-resistant and flame retardant (UL94 V0/1.5mm). Makrolon®FR6020 is good for use outdoors (f1, 5VA) in base and charging stations. Makrolon® FR6020 and Makrolon®FR6005UV open the door to the wider possibilities of aesthetic design, with mechanical performance and flame retardancy to meet increasing demands for functionality & safety.

Oasis

25EE41 (Base)

Solid
Matt Front / Gloss Back
Makrolon® FR6020

Wheat Field

25EE42 (Insert)

Solid
Gloss Back
Makrolon®FR6005UV

Index

P.2

25EE11 Organdie (Base)

Transparent
Gloss Front / Matt Back
Makrolon® 2407 RE

25EE12 Feather (Insert)

Solid
Gloss Back
RAL 270 90 05
Bayblend® FR3005 HF

P.5

25EE21 Berry (Base)

Solid, Pearl
Gloss Front / Matt Back
RAL 360 40 35
Bayblend® FR3070 R35

25EE22 Pomegranate (Insert)

Transparent
Matt Back
RAL 020 30 48
Makrolon® GF9024

P.8

25EE31 Foggy Blue (Base)

Transparent
Matt Front / Gloss Back

P.11

25EE41 Oasis (Base)

Solid
Matt Front / Gloss Back

RAL 250 85 15
Makrolon® GF9024

RAL 140 40 30
Makrolon® FR6020

25EE42 Smoky Gray (Insert)

Solid
Matt Back
RAL 000 85 00
Bayblend® FR3010 R75

25EE42 Wheat Field (Insert)

Solid
Gloss Back
RAL 095 85 50
Makrolon®FR6005UV

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