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2022 CORKLLECTION

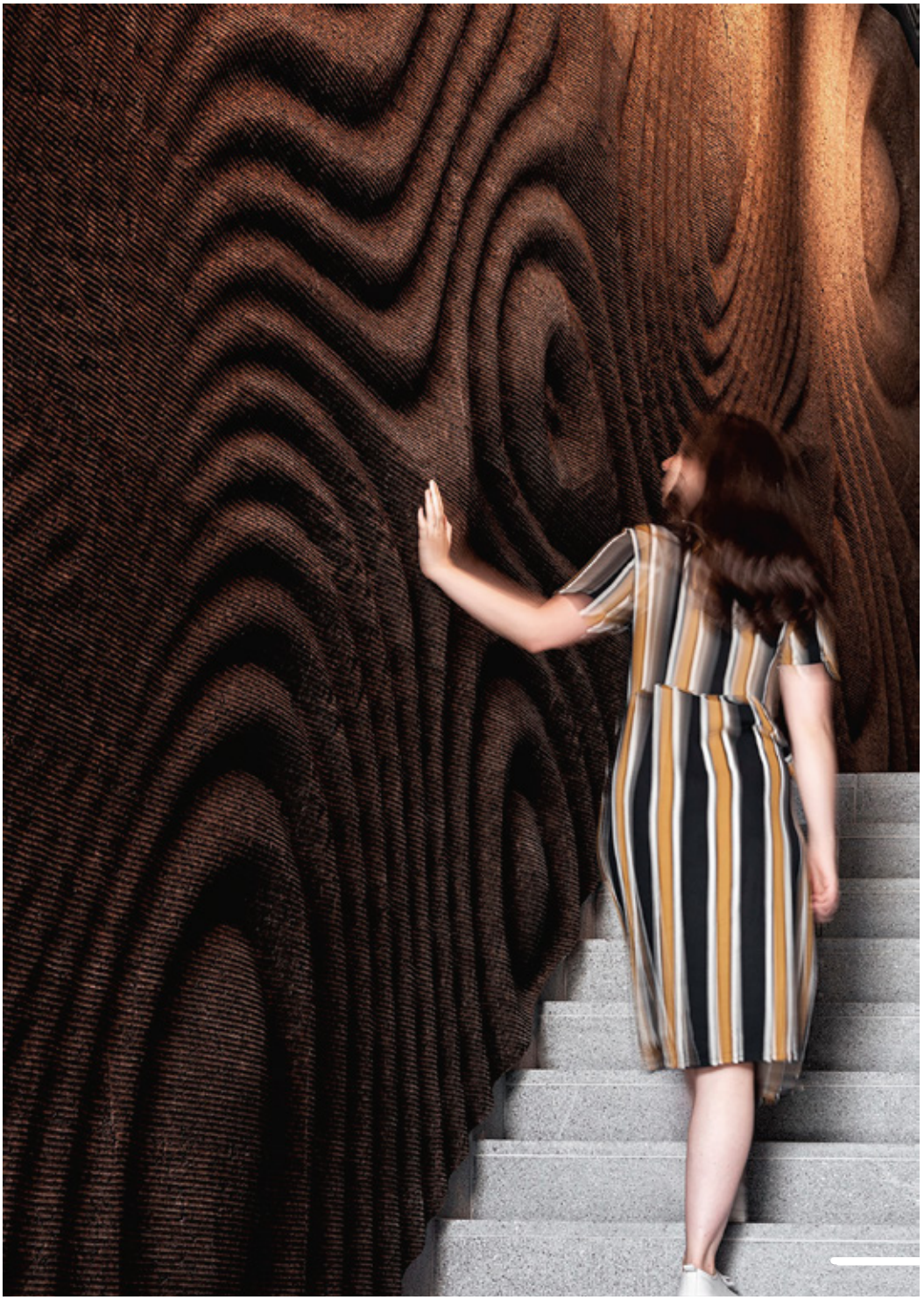
GENERATIVE CORK EXPERIENCES

Creativity, technology, sustainability, and human emotions in seamless dialogue.

Creativity Generates Creativity

“ Cork has the ability of evoking memories. Its smell, for instance, someone said it resembled the smell of their primary school’s walls”, recalls Paulo. “It generates comfort, and lets energy flow. It lets homes breathe, improving the well-being inside.” But there is room for this noble material to grow outside too. That will be the challenge for [illegible] next generation: “I think the future will be insulating with art, which also applies to the exterior of buildings. We have some work done in Portugal with cork replacing stone or wood and, ultimately, giving spaces a modern design that can be chosen according to the taste of each owner.”

Paulo Estrada CEO



CORKBIOMORPH designed by at WOW Museum, Vila Nova de Gaia Porto_Portugal

GENERATIVE CORK EXPERIENCES.

brand of cork solutions that explores the symbiosis between an ecological low-tech material and high-tech manufacturing processes. Creativity, technology, sustainability, and human emotions in seamless dialogue. The 100% natural and sustainable expanded cork agglomerate is transformed through computational algorithms based on generative design, with strong inspiration in biology, mathematics, and geometry. The development of our cork panels explores industrial digital manufacturing processes, opening up a new spectrum of possibilities, generating new formal aesthetics. This creative system not only optimizes the thermal and acoustic properties of cork but also adds artistic value, providing multiple emotions and sensations to those who contemplate it.

Green Product Award Winner 2016

GERMAN DESIGN AWARD SPECIAL 2017

reddot design award

Having established a market presence over years of professional activity, and always using cork as a raw material for creating its products, works daily to develop new innovation processes for its business area. When testing our products, there's always one thing that we keep in mind: to provide natural and ecological market solutions.

productive process is both sustainable and energetically self-sufficient in 95% of its needs when using its own biomass. Apart from being a business, we define sustainability, we care for the environment and about providing solutions for our clients' lives and those of future generations by marketing a highly sustainable product. complies with all the environmental standards and is even a certified business in terms of cork recycling.

objective since the beginning of its existence as a productive enterprise has been to expand its business in different areas. We want to be the best and to innovate constantly. We are ready to accept the challenges set by architects, engineers, designers, builders and business owners.

" Spirit of experimentation. I believe that it is truly important to merge creativity research and technology into a process. I usually call it creative technology. The key point is always to find the perfect balance between these principles. "

Le Brimet (Creative Director)

GENERATIVE DESIGN MEETS A SUPER MATERIAL

CORK . SUSTAINABILITY

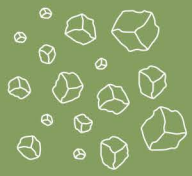
Only the cork of the branches (falca) is used for the manufacture of cork granules. These are block clusters in an autoclave, a process that's 100% natural, without the use of additives.
This technology
consists of injecting water vapor through pellets that will expand and agglomerate with the resin of the cork itself. This "cooking" also gives the resulting cork a dark color, like chocolate. During the production of the steam, biomass is used, which is obtained in milling and cleaning the falca, and that's what makes it a truly ecological production and without waste, with a 95% energy self-sufficiency.
This super-material, cork, offers a huge range of advantages, because, in addition to being an excellent thermal and acoustic insulator and as well as having anti-vibration properties, it's also a CO2 sink, playing a key role in the environment.

EXPANDED BLACK CORK

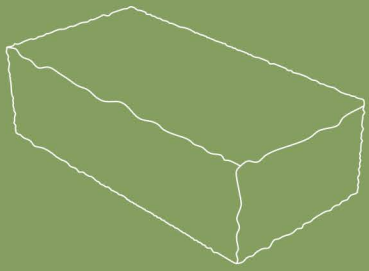
GENERATIVE DESIGN . DIGITAL PROCESS

The digital process is one of the most important elements of DNA. Adopting computational design strategies, the brand explores algorithmic scripts inspired by nature, as well as mathematics, geometry, and biomimetics, through parametric systems. With this process, it's now possible to produce a huge range of different variations of a pattern, adapting it to any size or form.

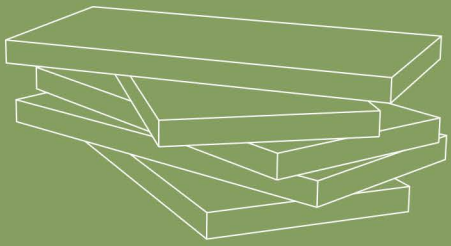
1. BRANCHES (FALCA)



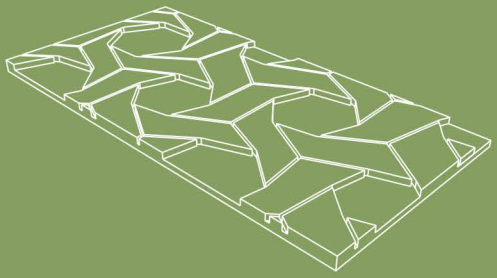
2. CORK GRANULES



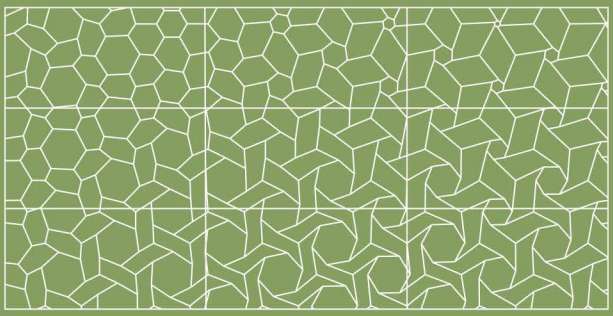
3.CORK BLOCK CLUSTER



4.CORK PANELS



5. PANELS (CNC MILLED)



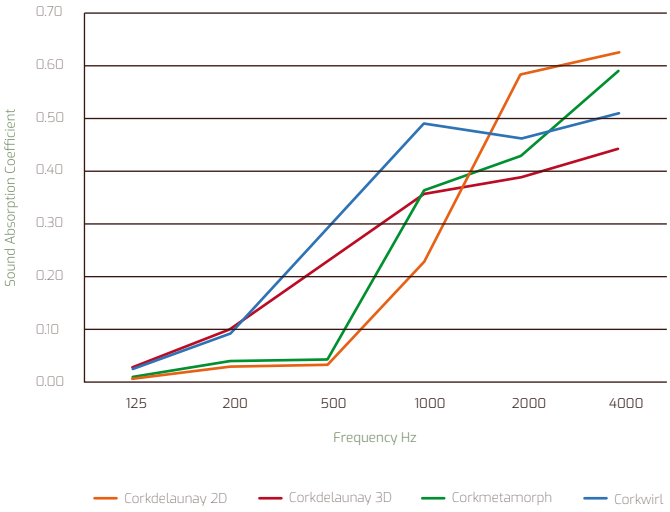
6.GENERATIVE WALLS-DYNAMIC PATTERNS

TECHNICAL DETAILS . PROPERTIES

Made in Portugal
100% natural, ecological, 100% recyclable
95% energy self-sufficiency production
Hypoallergenic properties
Water and weather resistant
Preservation and respect for trees
Misuse can cause product deterioration
Digital fabrication - CNC milling machine
Cork color changes with exposure to sunlight (UV)
Cork's scent is natural and non-toxic, it disappears with time.

ACOUSTIC DETAIIS . SOUND

This graph shows the absorption coefficient of our cork panels of different thicknesses, at any given audio frequency.
Our products reduce sound reflections, making it a great sound absorber. A perfect solution for residential buildings, restaurants, hotels, and offices.



CORKLLECTION

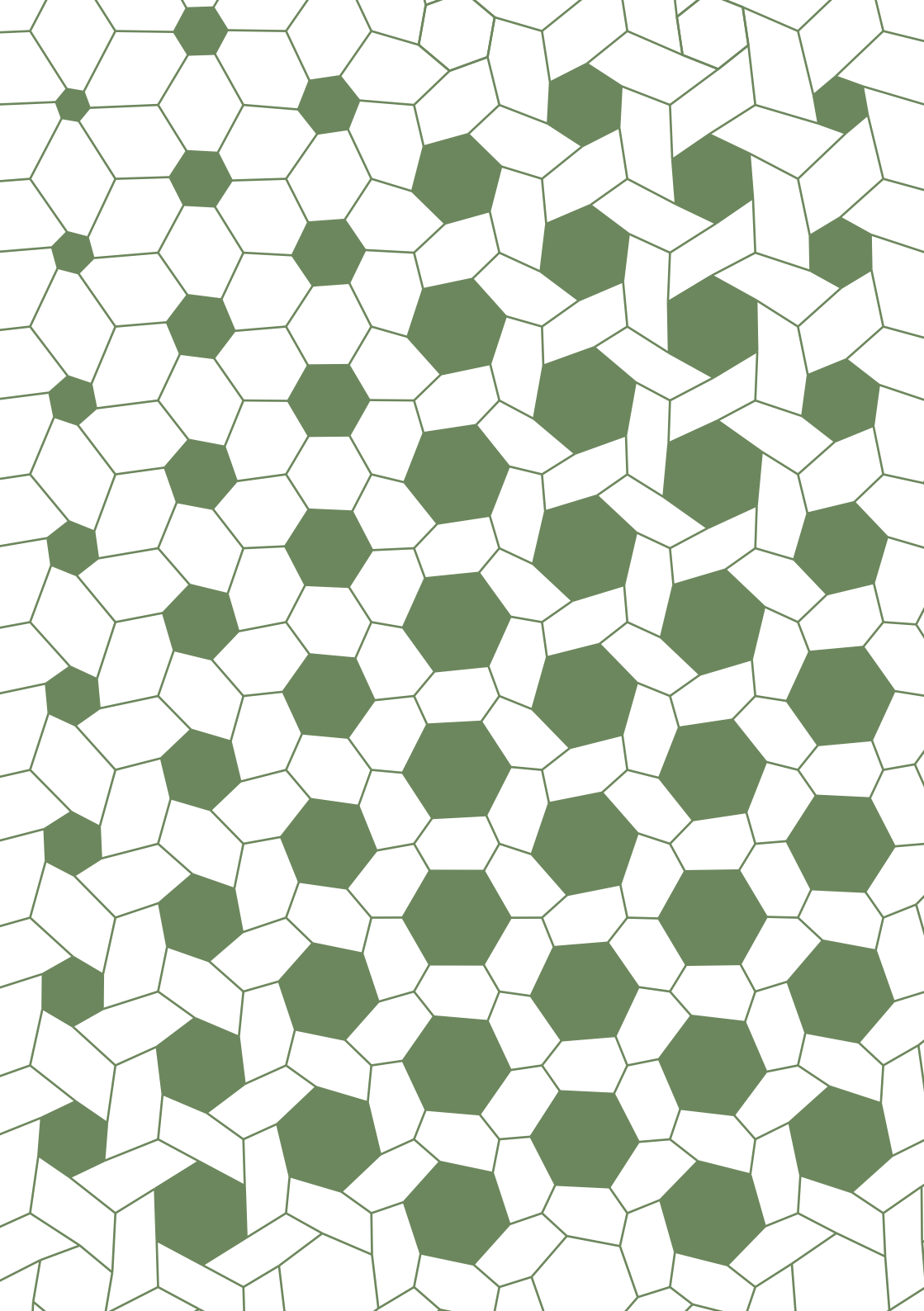
2022

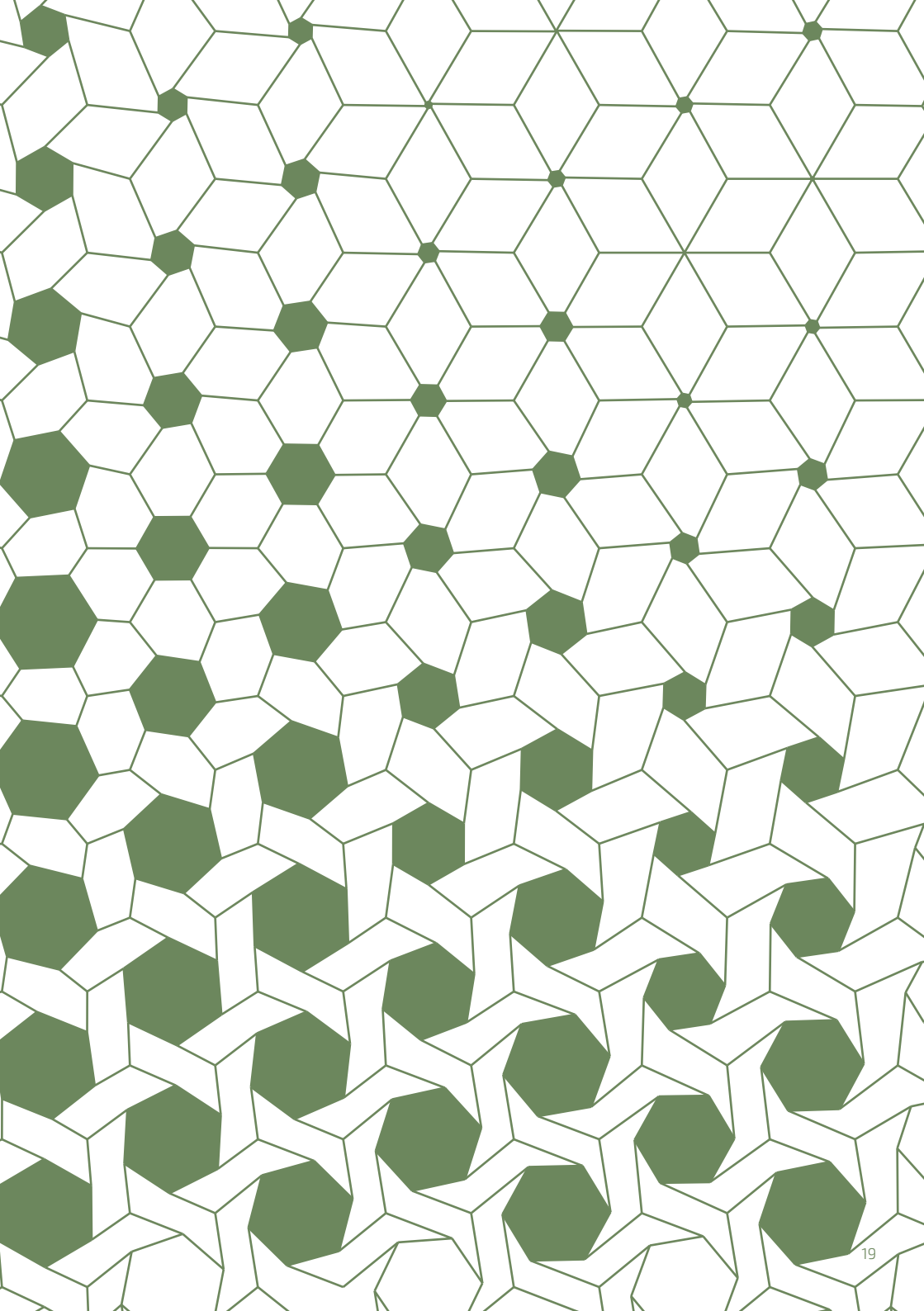
100x100x3 cm

CORKMETAMORPH

CORKPATTERNS

Corkmetamorph explores the mathematical and geometric art of M.C. Escher through generative design and parametric systems. It can be characterized as a visual metamorphosis of lines and hexagons of different sizes, that in turn create a dynamic and progressive pattern in the cork texture. From the digital world to a physical environment, this pattern can adapt to any wall. This is an evolutive and dynamic cork panel, not just with unique aesthetics but also with great acoustic properties.





100x100x3 cm

CORKFLOW

CORKPATTERNS

What would the graphical representation of a magnetic force field or the movement of fluid elements through space be like? Corkflow tries to record those natural phenomena through winding, curved lines articulated with circumferences of different diameters. It's a generative pattern that can be adapted to any surface and size, with various densities and compositions.

100x100x2 cm

CORKDELAUNAY 2D

CORKPATTERNS

In the universe of Mathematics and Geometry, a Delaunay triangulation is a pattern based on different triangles and constituted by a group of points. The Corkdelaunay2D recreates a topographical analysis of a Delaunay 3D surface, which generates an abstract and labyrinthine aesthetic.

100x100x3 cm

CORWIRL 2D

CORKPATTERNS

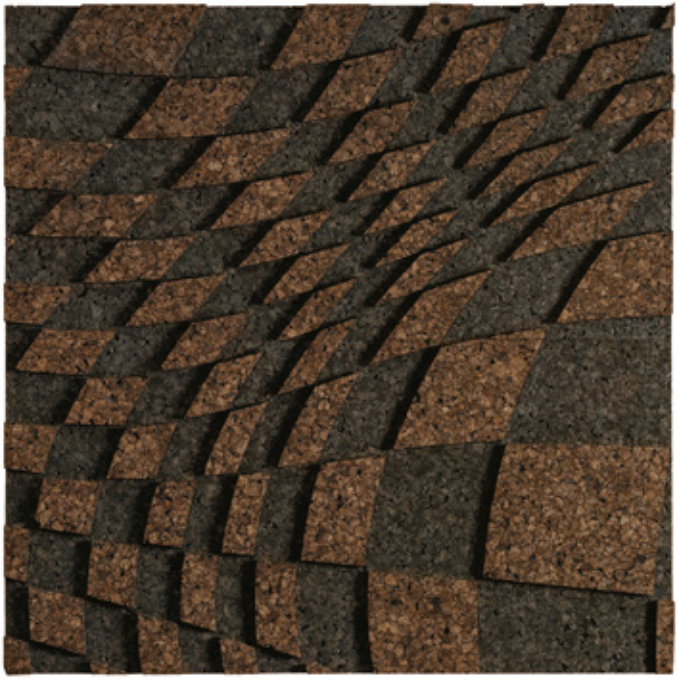
Corkwirl2D is a generative pattern inspired by nature and biomimetic systems. The twirl movement generates organic and fluid shapes. A perfect symbiosis between movement, form, and texture. In this two-dimensional version, we create organic curves that create optical illusions.

100x100x3 cm

CORKICE 2D

CORKPATTERNS

In dynamically generating the geometric lines, the rules essentially dictate that any polygon is bisected into two parts. The generative variation for this pattern consists of changing the resulting shape from two shapes into many shapes to create a triangle. To create visual effects on the cork surface, multiple parallel and perpendicular lines were created, in accordance with the lines of the geometries.

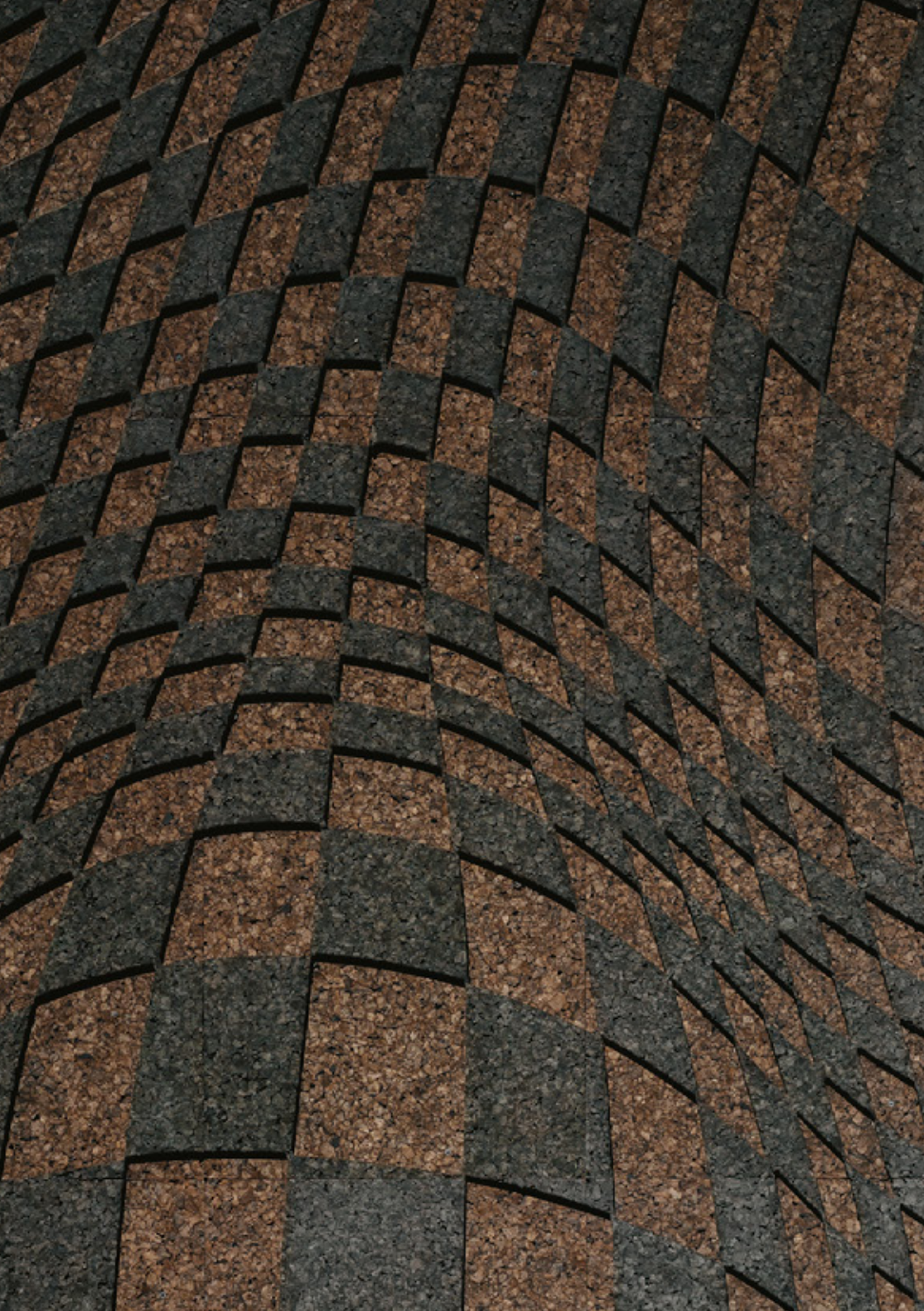


100x100x3 cm

CORKOPTICAL

CORKPATTERNS

The Corkoptical panel plays with visual illusion and form perception. Inspired by the optical art of Victor Vasarely and Bridget Riley, this magic pattern foments visual play between 2D and 3D worlds. It's a complex geometric grid deformation that creates a set of new spatial perspectives.



U. 50X44X3 cm

CORKTRIFIELD

CORKTILES

Corktrifield is a panel inspired by organic and mathematical vectors. This triangular pattern can be assembled in a regular or irregular way. The match can be concentric or non-concentric. With a striking visual effect, it's a perfect solution for shops and restaurants.

U. 42.5x49x3

Corkhexran is a hexagonal cork module based on a co-creation strategy (DIT - do it together). It is multivisual, in that it is possible to rotate several times and the match will be always perfect. A unique example of a random creative process. Give it a try!

U.49 X 28 X 3 |6|9 cm

CORKUNIT

CORKTILES

A Corkunit panel is an example of a geometric and abstract topographical surface formed by a single cork module with different thicknesses. The input is a hexagonal grid, the output is a game of multiple levels. It is easy to assemble and is great acoustic insulation.

U. 22X10X1 |2|3 cm

CORKARC

CORKTILES

From a triangular grid to an organic panel. The same element with different thicknesses generates an irregular topography. Corkarc is a great example of simplexity: simple forms that generate complex structures. Easily assembled and with strong aesthetics, it is also a good solution for acoustic insulation.

100x43x3 cm

CORKUBE

CORKTILES

The Corkube panel represents a different approach to traditional hexagonal grids. Playing with shadows with embossing strategies, this pattern creates an irregular geometric tessellation with several configurations: horizontal, vertical or diagonal.

U. 50x50x2|20 cm

CORKBOARD

CORKTILES

The Board wall is at the border between space and object. First, it is a flat acoustic panel based on a diamond pattern. Some of the modules can be changed in order to become a board, from 2D to 3D, just a smooth volume in the same black cork material. A delicate place to exhibit objects.

Design by Toni Grilo

U. 50x50x2 cm

CORKBLACK ON WHITE

CORKTILES

The CorkBlack on White panel is about contrast and revelation. This is a double skin of black and white cork: carving graphic lines on the first layer, the lighter color appears to be playing with shadows. Just two tiles offer infinite possibilities of designs for the wall.

Design by Toni Grilo

U. 20X10X12|7 cm

CORKLEE

CORKBRICKS

Corklee, a generative 2D and 3D system with a zero-waste strategy. Two different modules are the input to generate the whole panel. It's the exploration of the geometric world of Paul Klee through digital processes. Simple forms that generate complex patterns. With easy and random assembly, it also has valuable acoustic properties.

U. 30x13x6 cm

CORKTRIANGLE

CORKBRICKS

Corktriangle panel is a topographic 3D pattern made with triangular cork modules. It´s possible to achieve multiple regular and irregular configurations. Made with a zero-waste strategy in mind, it is very simple to put together, it is also a perfect solution for acoustic insulation.

“ WE ARE EMBRACING THE UNKNOWN TO ACHIEVE THE UNEXPECTED .”

Le Brimet (Creative Director)

100x100x4.5cm

CORKMETABALL

CORKGREENS

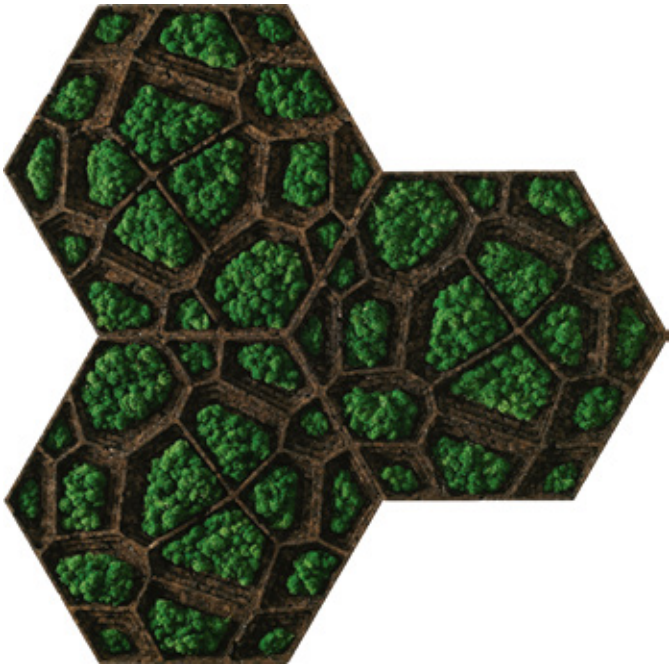
Metaballs are, in computer graphics, organic-looking n-dimensional objects. For this pattern, we follow its topological curves to generate planar terrains that explore different curve densities. The green lichens cover the empty spaces between the dynamic lines, creating an organic and natural atmosphere.

100x100x10 cm

CORKNATURE

CORKGREENS

Corknature is a disruptive pattern that combines cork and naturally preserved plants, with strong flexibility, plasticity and natural vigor without any maintenance. To create the cork structure we adopted a generative system which converts procedural images (bitmaps) into three-dimensional surfaces. The green plants are included on the cork in an evolutive way inspired by digital principles of attraction/dispersion. A perfect example of a biomimetic and biological approach.

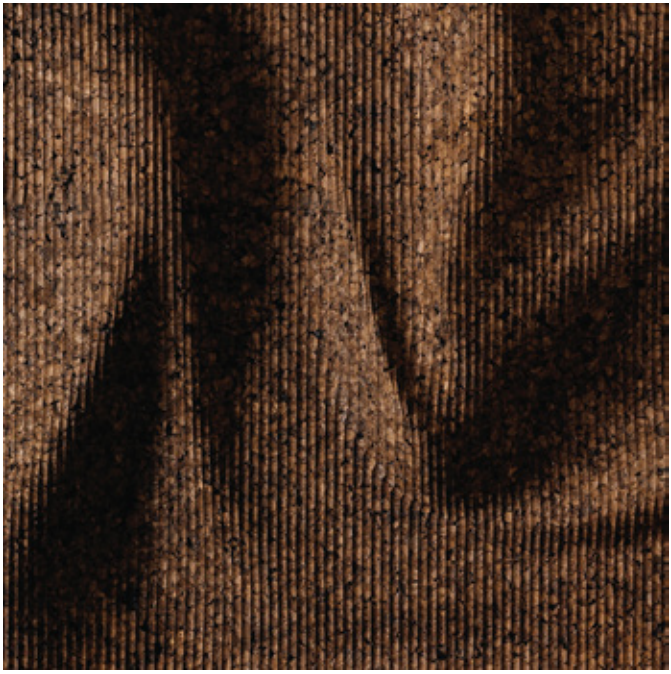


U.45x45x4.5cm

CORKVOR

CORKGREEN

Corkvor is a generative pattern based on a Voronoi diagram, the partitioning of a plane into regions based on the distance to points in a specific subset of the plane. This principle creates a set of topologic voids, a perfect hub for green lichens. The hexagonal shape allows each module to combine in different ways, getting different variations and aesthetics.



100X100X10 cm

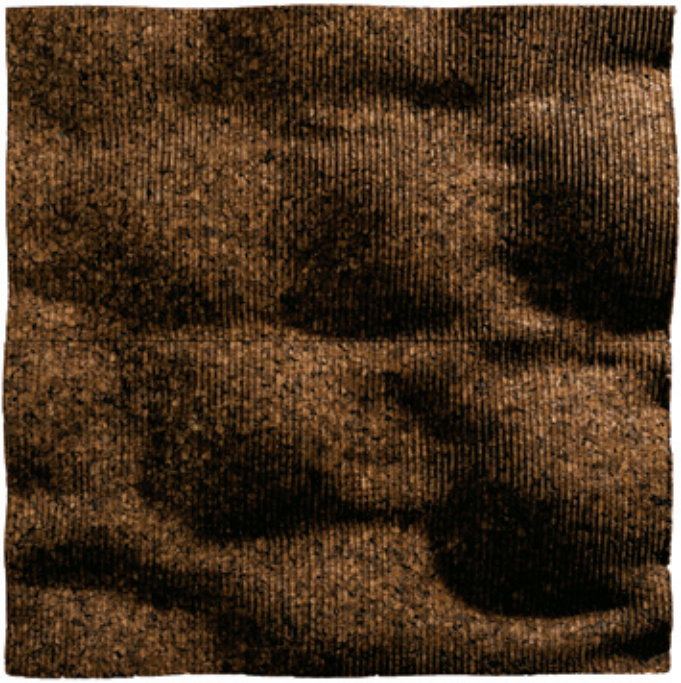
CORKWIRL

CORKMORPHS

Corkwirl, a generative pattern inspired by nature and biomimetic systems. The twirl movement generates organic and fluid shapes. A perfect symbiosis between movement, form and texture.

“ Merging this super material with incredible technology, we can achieve infinite possibilities that correspond to our future needs of sustainability and uniqueness. Respecting the environment and creating unrepeatable generative patterns for exclusive places. ”

Mafalda Estrada

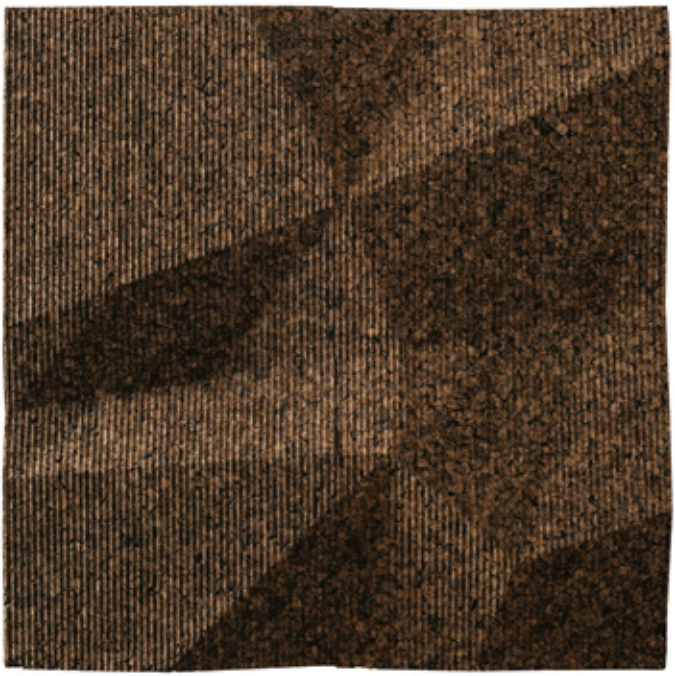


100x100x10 cm

CORKBIO

CORKMORPHS

Inspired by the organic evolving of nature, the corkbio pattern is a geometric metaphor of biomimetic organisms. It's a three-dimensional representation of a mathematical base that reproduces the phenomena connected to surface erosion caused by elements of nature, such as water and wind. The pattern can be adapted to any surface, and can acquire multiple variations.



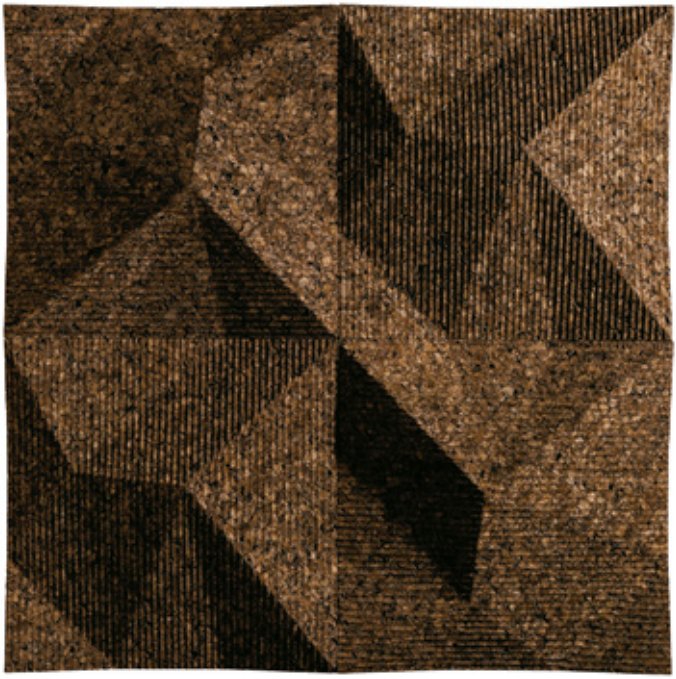
100x100x10 cm

CORKTESS

CORKMORPHS

Corktess explores the algorithmic creation of complex geometries on planar surfaces. This cork panel was inspired by origami paper structures, that create different topologies with dynamic movements and minimalist aesthetics.


vazios



U- 50x50x10 cm

CORKDELAUNAY 3D

CORKMORPHS

The Corkdelaunay 3D pattern is a three-dimensional version of a delaunay 2D script. Flat lines give way to an irregular topographical surface made up of triangles of different sizes. It´s a vibrant model that explores the many aesthetic particularities of digital fabrication. The bold design allows for multiple configurations and a great versatility, generating a play between light and shadow.

100x100x10 cm

CORKBIOMORPH

CORKMORPHS

Corkbiomorph is a perfect example of panel solutions. Inspired by nature and biomimetic structures, this product can be either modular or custom-made fit a specific wall, exploiting parametric systems. It is also valuable for its acoustic insulation.

CORKBIOMORPH designed by : .. at WOW Museum, Vila Nova de Gaia Porto_Portugal

100x100x10cm

CORKVECTORS

CORKMORPHS

Corkvectors, the matrix between biomimetic principles and geometric structures. An algorithm that explores the fantastic game of light and shadows, in coexistence.

A plethora of human senses. Cork as a connector between nature and people.

100x100x10cm

CORKICE
CORKMORPHS

Corkice is a generative pattern inspired by a recursive system based on simple rules that form complex lines. A shape grammar that explores the transformation of a triangle into multiple iterations with different scales, positions, and rotations.

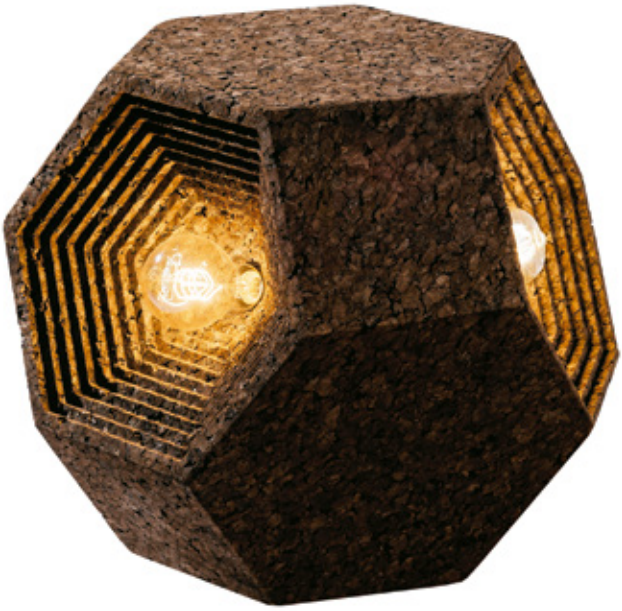
Following the generative flow of geometry patterns through human senses. Gestures of serenity, touching the multiples textures of nature reinterpreted by human creativity.

U. 50x50x47 cm

CORKAHEDRON

CORkWALLS

Corkahedron is a modular and multifunctional product inspired by geometric polyhedrons that generate different combinations and spaces. This is pure creativity taking shape without screws or glue. It's easy to create stools, coffee tables, and freestanding walls. A perfect solution for restaurants, office spaces, hotels, and schools.



U. 50x50x47 cm

CORKAHEDRON TRILIGHT

CORkITECHS

Experience high-quality white and coloured light that offers you endless possibilities. Create your own ambience! Control your lights from your smartphone or tablet using bluetooth.

TONI GRILO . DESIGNER

Designer and Art Director, Toni Grilo was born in France in 1979. Trained at the École Boulle in Paris, in 2001 he moved to Portugal to find his roots. He discovered a country rich in industry, with a strong tradition of arts and crafts and thus became captivated with the beauty of industrial processes and materials.
After various collaborations, he founded his first agency, Objections, with the designer Elder Monteiro, but opens his own studio in 2008, designing objects, furniture and scenography.