



Freund
MATERIAL FÜR IDEEN

presents



GENCORA
THE NEXT GENERATION

INSTALLATION MANUAL

GENCORDAK

THE NEXT GENERATION

SUSTAINABILITY AS
AS A WAY OF LIVING,
THINKING AND ACTING.

GENCORK

THE SUPER BRAND

GENCORK is a brand of cork covering solutions that explores the symbiosis between a low-tech material and high-tech processes. The 100% natural and sustainable expanded cork agglomerate is transformed through generative design algorithms and advanced digital fabrication processes, expressing a new formal aesthetics. This creative and disruptive system not only optimizes cork's thermal and acoustic properties but also adds artistic value to traditional walls.

CORK

100% NATURAL

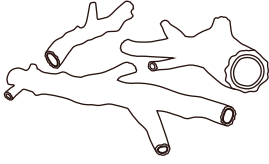
It is only used cork of the branches (falca) for the manufacture of cork granules. These are block clusters in an autoclave, a process that's 100% natural, without the use of additives. This technology, developed by Sofalca, consists of injecting water steam through pellets that will expand and agglomerate 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 antivibration, it's also a CO2 sink, playing a key role in the environment.

GENERATIVE DESIGN.

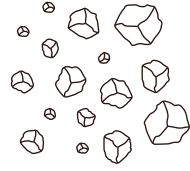
DIGITAL PROCESS

The digital process is one of the most important elements of GENCORK's 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.

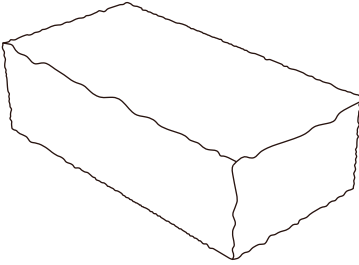
THE PRODUCTION PROCESS



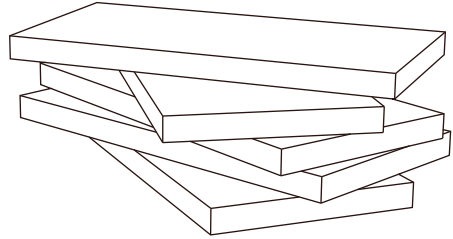
1. BRANCHES (FALCA)



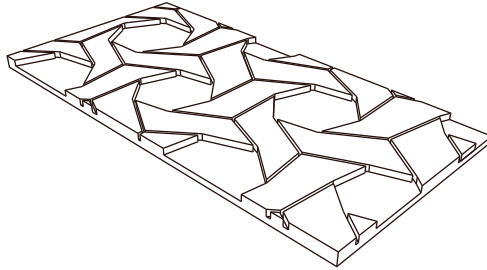
2. CORK GRANULES



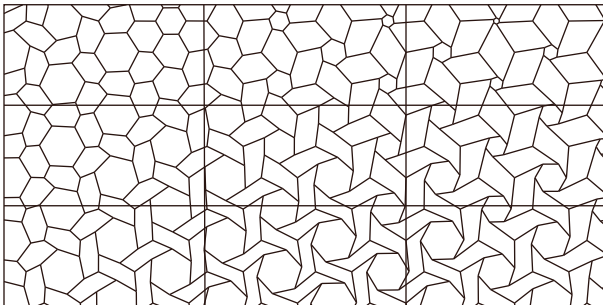
3. BLOCK CLUSTER



4. CORK PANELS



5. GENCORK PANELS (CNC MILLING)



6. GENERATIVE WALLS | DYNAMIC PATTERNS

TECHNICAL DETAILS

Made in Portugal

100% natural, ecological, 100% recyclable

95% energy self-sufficient 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.

THERMAL INSULATION DETAILS

Thermal conductivity coefficient_ 0,40 W/mK

Values of Thermal Insulation (R e m² k/W and K in W/m²k) 50mm

R = 1.250 ; W = 0.800

Density_ 140 Kgs / m³

Fire Class_E

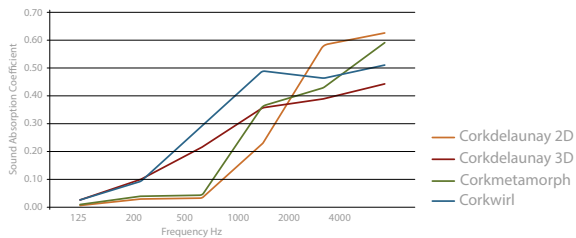
SOUND ABSORPTION DETAILS

This graph shows the absorption coefficient of our cork panels with different thickness, 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.

Results in accordance with ISO 11654:1997

$\alpha_w = 0.45$



INDOOR AIR EMISSIONS



CONGRATULATIONS!!

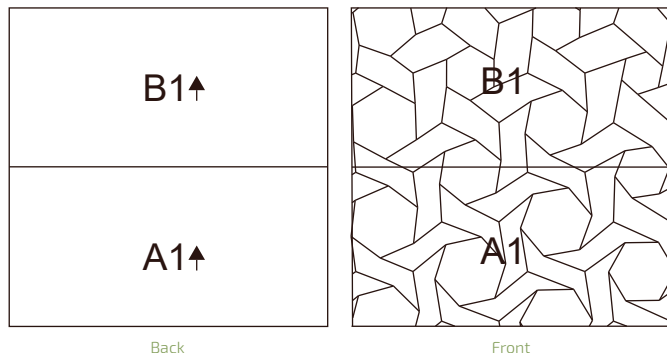
You just got a GENCORK Wall. Now it's time to assemble it. We will help.

Before you start assembling your wall, you need to know that GENCORK boards are 100% natural, where the cork glues every grain together naturally. Be careful when assembling because GENCORK boards are fragile, especially around the edges and where the board has less thickness.

ASSEMBLY | STEP 01

1. Start by getting your GENCORK wall out of the boxes, taking care when doing so;*
2. Every GENCORK board is marked on the back. Follow the chess board pattern scheme to assemble your wall. You will find it's really easy;
3. The supporting wall must be well cleaned and free of any residues that may keep the glue from adhering properly. Make sure the supporting wall is square and free of any imperfections, so that it does not affect the pattern;

*Assemble your wall ASAP after delivery. Due to the characteristics of this 100% natural material, some deformation may occur, if the wall is stored for too long. If this happens, carefully lay the slabs, one by one on a flat surface and let them rest for a few days so they get back to form.



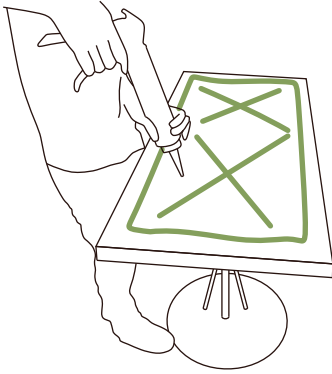
Back

Front

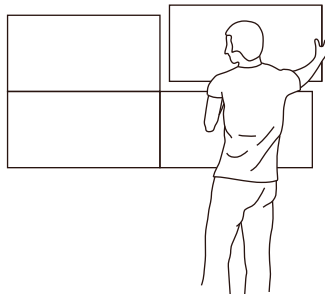
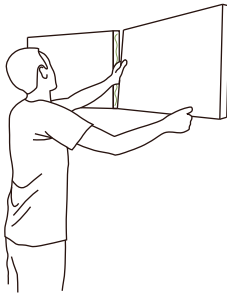
Arrow indicates top of the GENCORK board

ASSEMBLY | STEP 02

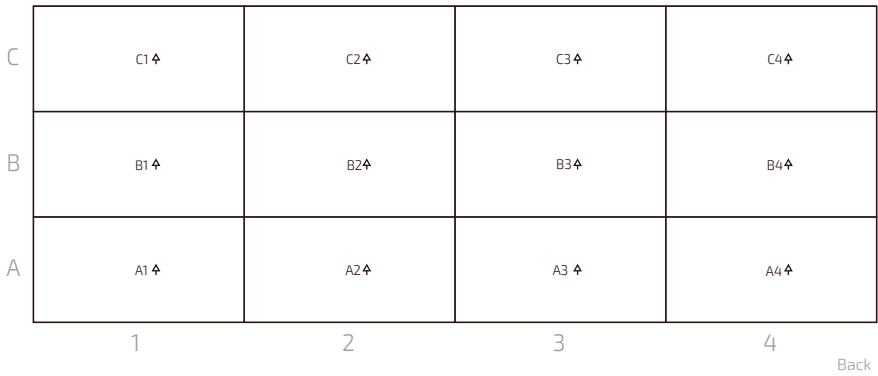
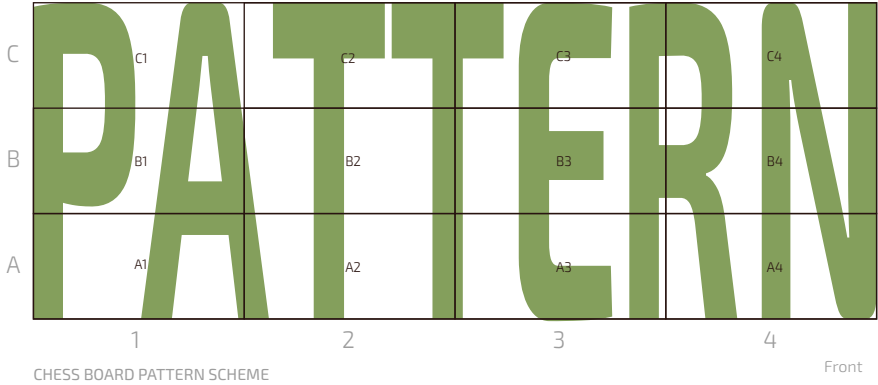
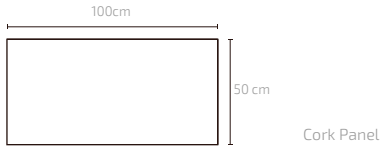
4. Use any universal construction adhesive on the back of the board as shown, and apply it directly onto the wall;
5. If the supporting wall is made of wood or drywall, you can fasten the GENCORK boards to it using screws;
6. To trim a GENCORK board, use a X-Acto knife, or even basic woodworking tools (Ex: band saw/jigsaw);
7. To get invisible seams, apply a dab of wood glue on the edges, and press them together when applying to the supporting wall. Repeat this step until your GENCORK wall is complete!



Glue
Universal construction adhesive



Wall
Make it seamless with wood glue between the seams

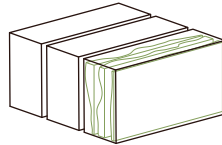


MAINTENANCE

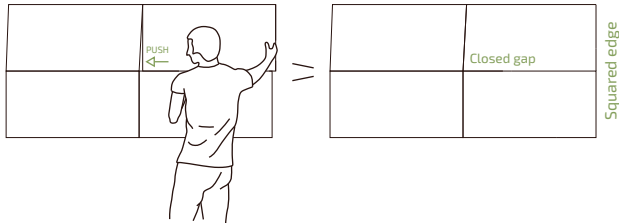
Gencork walls are very low maintenance. Use a feather duster from time to time to keep it clean. Avoid impacts with the wall. If a cork grain gets loose, use wood glue to put it back in place

Tips & Tricks for a perfect wall

1. In all situations, have the card boxes with the Gencork boards standing as shown in the image below. This protects the pattern from damage



2. Always start by marking a horizontal leveled line, 1.5 m from the ground;
3. Start applying the Gencork boards, referencing this line. This means that at eye level the boards will be perfectly square;
4. Due to the nature of the 100% natural cork, the squareness of the boards might start to get lost, the further away you are from the reference line. This is really easy to fix since the boards are pliable, and can be forced to squareness, by pushing in the desired direction



5. If necessary, apply black screws into two adjacent Gencork boards. This helps closing gaps in the higher spots of the pattern, forcing the cork into place



6. In case of a piece/granule of cork breaks from the Gencork board, don't panic, just put it back in its place with a dab of wood glue, and you'll never notice it.



Overview Designs



CORKMETAMORPH
CORKPATTERNS
100cm x 50cm x 3cm
[per m²]



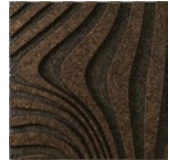
CORKOPTICAL
CORKPATTERNS
100cm x 50cm x 3cm
[per m²]



CORKFLOW
CORKPATTERNS
100cm x 50cm x 3cm
[per m²]



CORKDELAUNAY2D
CORKPATTERNS
50cm x 50cm x 2cm
[per m²]



CORKWIRL 2D
CORKPATTERNS
100cm x 50cm x 3cm
[per m²]



CORKTESS
CORKMORPHS
100cm x 50cm x 10cm
[per m²]



CORKBIO
CORKMORPHS
100cm x 50cm x 10cm
[per m²]



CORKWIRL
CORKMORPHS
100cm x 50cm x 10cm
[per m²]



CORKDELAUNAY3D
CORKMORPHS
50cm x 50cm x 10cm
[per m²]



CORKBIOMORPH
CORKMORPHS
100cm x 50cm x 10cm
[per m²]



CORKUBE
CORKTILES
100cm x 43cm x 3cm
[2 units]



CORKBLACK ON WHITE
CORKTILES
50cm x 50cm x 2cm
[4 units]



CORKBOARD
CORKTILES
50cm x 50cm x 2/20cm
[4 units]



CORKUNIT
CORKTILES
U. 49cm x 28cm x 3(6)9cm
[9 units]



CORKHEXRAN
CORKTILES
U. 45cm x 52cm x 3cm
[7 units]



CORKARC
CORKTILES
22cm x 10cm x 1(2)3cm
[60 units]



CORKTRIFIELD
CORKTILES
U. 50cm x 44cm x 3cm
[6 units]



CORKLEE
CORKBRICKS
U. 20cm x 10cm x 12(7)7cm
[50 units]



CORKTRIANGLE
CORKBRICKS
U. 30cm x 13cm x 6cm
[34 units]



CORKAHEDRON
CORKWALLS
U. 50cm x 50cm x 47cm



CORKAHEDRON TRILIGHT
CORKITECHS
50cm x 50cm x 47cm
[no light bulbs]



Freund
M A T E R I A L F Ü R I D E E N

presents

GENCORA

THE NEXT GENERATION

by



SOFALCA

Cofinanciada por:





Telefon: +49 (0)30 30 69 23 - 0
E-Mail: office@freundgmbh.com
Website: www.freundgmbh.com

Freund GmbH • Zweigbüro Berlin • Goerzallee 299 • 14167 Berlin • Germany