Amorim

The Future is our Present

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AMORIM

Index

Editorial

Many companies around the world specialize in a single raw material that underpins their economic activity. But few explore a raw material that is as fascinating as Cork, and even fewer have positioned themselves as the world leader in their sector.

Amorim is the world's largest exporter of cork. While deeply aware of the long history underpinning its success, the company has its sights set firmly on the future, reinventing itself and striving for continuous innovation, constantly seeking new directions.

Divided into two different sections – Themes and Projects – this book reveals the vast universe of the application of cork, as well as Amorim's extraordinary capabilities, in a fascinating journey through the most diverse areas of contemporary society.

We once used to think that cork was only suitable for flooring and wall solutions, as an insulator or to seal one of the world's favorite beverages – wine. However, we're now amazed to find it being used in surfboards, spaceships, shoes, high-speed trains, furniture, and in innovative and cutting-edge architecture and design projects.

In these pages you will discover Amorim's true nature at the outset of the 21st Century – highlighting the company's origins, current outlook and plans for the future.

It is a kaleidoscopic and vibrant representation of an energetic and dynamic company, reaching out to a global panorama of influential protagonists in the world economy.

The beating heart of Cork

An interview with António Rios de Amorim

Amorim is a company with a long history. When was it founded and how?

The company was set up in 1870 by my great-grandfather, who was 54 years old at the time. He had married a 27 year-old lady and together they had 9 children. Working as a farmer was certainly not the best way to feed and clothe such a large family. So, driven by what we would today call an entrepreneurial spirit, he decided to start supplying cork stoppers to the Port wine industry. Two years later, in order to expand its business, the company moved to new premises, where the company's head offices are still located today. It was clearly a way to launch a business that, in the future, could be passed on to the expanding family.

At that time, what made the company stand out from the competition?

A strong will to succeed, determination to ensure long-term sustainability and a strong belief that cork was a unique product. Amorim was also supplying a product to one of Portugal's best-loved industries – the Port wine trade.

Those were the main factors that differentiated the company right from the beginning. Over time, the Amorim family has also been able to pass on sophisticated cork-processing skills to its workers, which has enabled the company to stand out from competitors in the cork business.

The company has enjoyed tremendous evolution: it is now positioned as the largest cork producer and distributor in the world. Can you identify some of the key moments in this evolution?

With a history spanning 140 years, it's difficult to pinpoint every key moment. But I believe that 1922 was a crucial year. It was probably the first moment after the First World War that the family's second generation decided to create a much bigger company. A branch of the Amorim family launched cork production operations in Rio de Janeiro and São Paulo, and my grandfather decided to supply these industrial operations in Brazil. By so doing, he created a very important platform for the company's expansion. This also launched the foundations for a very unique international culture in the Amorim Group.

Another key moment occurred in 1935, when the company decided to expand its acquisition of cork from beyond the Douro Valley to the Alentejo and Ribatejo regions. The company also thereby began to build visibility in other Portuguese regions, where the country's most important cork oak forests were located. This expansion was triggered by strong growth and by so doing we also secured an important foothold in areas with the highest production levels of the raw material.

Another crucial moment was the impact of the third generation of the Amorim family, from the 1960s onwards. This was certainly the key turning point in the company's history, because the business has never ceased growing since then. 1963 was a landmark year, because the company expanded beyond the cork stopper business into other applications. Composite cork, cork rubber, footwear, furniture, transportation and aerospace applications all have their roots in this key turning point in the company's history. Following significant growth of the Amorim Group companies in the 1970s and 1980s, the company had its initial public offering on the Lisbon stock exchange in 1988.

Why was this so important? Because it provided key financing for the major international expansion that the company recorded in the 1990s and has continued in the new millennium. During the first decade of the 21st Century, Amorim also took the crucial decision to launch the largest R&D effort in the history of its cork stopper business.

I believe that these are the most important moments in the company's very long history. And all of us working at Amorim today know that we are standing on the shoulders of giants.

And what were the most difficult moments?

There were testing times at the beginning of 2000 when Amorim decided to adopt a completely different view of its core business and embrace innovation as a key differentiating factor. However, Amorim decided to remain a specialist in natural cork, rather than taking what seemed, at the time, to be the easy route. So instead of trying to supply every single market need, Amorim remained steadfast in supplying what we believed were our best products. We remained focused on a natural product, rather than starting to sell plastic-based materials to wineries. I think this was a particularly difficult decision, given the fact that few people back then understood how great a natural material cork really is.

Also, we weren't afraid to bring on board young and highly educated people, who have helped us transform the business over the last 10–15 years. These were people from very different backgrounds and often with their personal and professional experiences shaped in very different industries.

In early 2009, when the subprime and foreign currency crisis was spiralling into completely uncharted territories, we implemented a profound restructuring program in view of the complicated situation. We had to take difficult decisions in order to remain a robust company and adequately prepare for the future.

These were the three most important events and decisions taken in recent years.

But there was another difficult moment, which took place in 2001: to take over from the charismatic leader, Mr. Américo Amorim. The way that we approached this momentous task ended up by creating significant value for the company and its shareholders. It completely changed our corporate governance model and strategic planning process. We now conduct our business activities in a totally different manner, but it has proven to be successful.

How would you define Amorim's corporate culture?

I think we are proud of the company's history, and have a humble attitude. We only go to market after we thoroughly do our homework, but I think that our company has a strong sense of initiative and a lot of ambition.

Being the industry leader is something that must be assumed in a very responsible manner. When you are a leader, you really need to guide and lead the way forward. This also helps to define the commitment, love and passion that people have for working with such a unique raw material as cork.

So, in conclusion, our culture is based on a huge passion for cork with a clear pride in our past and a very strong attitude towards creating an ambitious future for the company.

Can you describe the role of the company's continued investment in Research and Development?

From 2000 onwards, I think innovation has been key to the company's success. We don't only innovate with new products, we also deliver new technologies, new processes and new approaches to conventional processes. This is the result of our research and development and, most importantly, the modernisation that we are bringing to the company.

We have the drive to create new cork applications, to establish cork as a mainstream product in the flooring industry. We also aspire to provide the market with the perfect cork stopper for every single segment of the wine and sparkling wine markets. That is clearly the challenge that we have set for ourselves. In order to respond to these challenges, we must conduct the research that needs to be done. Research and development go hand in hand with innovation. When properly coordinated, the result going forward is further growth.

And, by the way, we are clearly increasing our R&D and Innovation commitment!

How do you define cork, such a special raw material?

I think it's one of the most unique materials that you can find in the planet. From a sustainability point of view, I don't think there's any other product that can match it. It's environmentally friendly, retains large amounts of CO_2 – up to 112 grams per natural cork stopper. It's a regulator of water cycles and biodiversity, and is a real barrier against desertification. And it is truly a renewable product, because we never fell the trees, we just harvest the bark from the tree. And from simple bark, we create such value, by adding and generating so many applications to be used in many other industries. I think it's really unique, special as you said. The more you think about it, the more it makes sense and the more passionate you feel about the product.

The process of harvesting cork from the cork oak trees is something that leaves an impression upon many of our senses. How do you see this process?

I think it's difficult to describe. It's best experienced first hand. Many valuable skills are involved in harvesting cork. There's a lot of respect and passion for the tree and its cork bark. And you really get a unique feeling, in both visual and sensorial terms. When you harvest cork, you release certain absolutely unique aromas. Imagine yourself in the cork forest during harvest time. You'll hear almost exactly the same sounds that were heard by the Romans thousands of years ago, as you see these magnificent oaks turn orange, as a result of the harvesting. The experience is engulfed in a very atmospheric aroma. It's difficult to explain. You have to be there to understand what I mean. It's an incomparable experience.

Combined with the use of new technologies, this industry's main resource is a natural raw material, which in a way is extremely simple and has existed for centuries. How do you see this combination?

I think that the skills required to select, evaluate and purchase the finest cork are very rare and we need very skilled people to do that job. In all other areas we need to have a very reliable process and reliability depends on a delicate combination of human skills and technology. Society is creating increasingly sophisticated technology that is allowing us to be more effective in selecting the finest cork and in scanning cork stoppers, thus ensuring reinforced reliability for the whole process. Today, many of our key processes are conducted using millions and millions of lines of code, with algorithms that are every bit as complex as the hi-tech tasks recently performed at Amorim.

The way to assure quality is through the use of technology. We have been adopting new technologies at an accelerating pace over the last few years and we aim to invest more and more resources in this field in the future. We work to create a very reliable, innovative, and high performing product that will meet consumer expectations. The process involves a combination of several factors, but I think that technology is taking a leading role in that part of the process.

What makes Amorim so competitive?

There are several important factors. First, we are a vertically integrated company. We source our raw material directly from cork producers and manufacture our products inside our own advanced production units. In addition, almost 80% of our sales are channelled via our own distribution company. We stand out from our competitors because we achieve all these tasks in a very cost-efficient, and competitive manner. We're more competitive, more adapted to grow. And I think that we've also successfully introduced improvements faster than our competitors. Japanese techniques such as Kaizen, Five Sygma and others have made our production process very effective. Our entire supply chain has acquired considerable extra effectiveness and therefore competitiveness. Our unique market proximity and passion for the business, establishes Amorim as the market leader. The development of new products that meet consumer expectations has also been a way of building extra market competitiveness and that's basically what we have been trying to do over recent years: introduce new products that reinforce our competitiveness. Amorim is a major player in the cork business but we need to stay one step ahead, otherwise the future won't be so bright. This is clearly something that we must continue to enhance. Having a very solid balance sheet is a result of the effectiveness that I've been describing. It is one of the factors that I believe sets us apart from most of our competitors.

As a Company listed on the stock exchange with an international reach, how do you see your role in Portugal and the rest of the world?

I think that we are a small multinational company in a small business – cork. We had the ambition, shaped by previous generations, to make this very Portuguese product an international material. We aim to use cork in several shapes and forms, products and applications, and thereby demonstrate that a Portuguese product can be profitable and innovative. I think that Portugal can harbour a similar ambition in other industries. Given that we have experience in expanding our activities abroad, we should share that experience with other industries that are only now beginning to look at the international market as a natural way to expand.

It's one thing to export, but quite another to have your own distribution companies established in key consumer markets. That's very different from straightforward exporting. We need to establish a successful export business. But whenever possible, we need to control the points of sale of our products in relevant markets. This proximity to the market allows the company to innovate, improve and understand a multicultural context, and really challenge itself on a permanent basis. If we remain in a restricted geographical area, I don't think we'll ever gain a global outlook.

What are Amorim's main objectives for the next 20 years?

To continue to promote cork as a unique sustainable product. To further consolidate our positioning in the industry's longest-running and most important product – cork stoppers for wines and sparkling wines. I think there's a lot of work that still remains to be done, and there's additional market share that we can gain. As a second target, we can expand the use of cork in flooring construction materials. I think that cork is a unique product – a product that delivers amazing walking comfort, acoustic performance, warmth and insulation. It's a unique product that we need to expand in mainstream flooring markets, as the world's leading flooring underlayment. And I believe that there is a third pillar that we need to develop consistently – new applications of cork as a way of generating additional value for our business. How can cork bring added value to applications that we have never targeted before? This is one of the most important challenges facing the company over the next 20 years.

How do you see the future expansion of cork into hitherto unexplored areas?

I think that every single time that we're able to communicate what cork is, we are creating new friends, new potential customers. I believe if we allow the message of cork to be passed on, we, together with several other people and partners, we are going to create truly innovative cork applications. Aerospace and aeronautics are certainly businesses where we could achieve a great deal more. But also anti-vibration applications for railways, and anti-seismic applications for buildings. These are all areas where there's tremendous potential. Also, probably, cosmetics, sports applications, furniture applications. I think that there's huge potential and certainly a lot more that we'll be developing over the years. We don't even have an inkling of what some of these innovations will become. But we are committed and we have the ambition to create innovation – and that's the most important thing.

In a world where environmental sustainability is a priority, how can this material help us create a better future?

By using more cork, we're helping the planet. The more cork we use, the more cork trees we need to plant. If we buy more cork, there will be more cork oak forests – and these will retain more CO_2, create more jobs, and help build an even more sustainable industry. So I think this is clearly a product that has unique environmental and sustainable attributes and allows us to create a better planet.

What is your favourite object made of cork and why?

The 100% natural cork stopper for very high-end wines is probably the object where I see the greatest value because of the cork's density and uniqueness. In order to obtain such a high-grade cork stopper we need to produce hundreds of thousands of lesser quality stoppers, in order to extract one absolutely perfect piece of cork. I know the labour involved, the skill and the uniqueness of that material.

The other reason is that I'm passionate about very high-end wines, and I love to see a fantastic cork coming out of those magnificent bottles that are produced in the most important wine producing countries.

Of all the physical characteristics of cork which one do you think the company identifies with the most?

The most important characteristic of cork that people relate to is touch. It's incredible to see the attraction that an object made of cork triggers when you place it on a dinner table. People immediately want to reach out for it and touch it. I think that's one of cork prime distinguishing features – its impact on people. It's very tactile. The temperature of cork is very similar to the temperature of the human body. That provides a natural physical attraction for the material itself. In my opinion that is one of the most important experiences that you can have with cork – the three T's: touch, tactility, temperature.

Project

Serpentine Gallery Pavilion

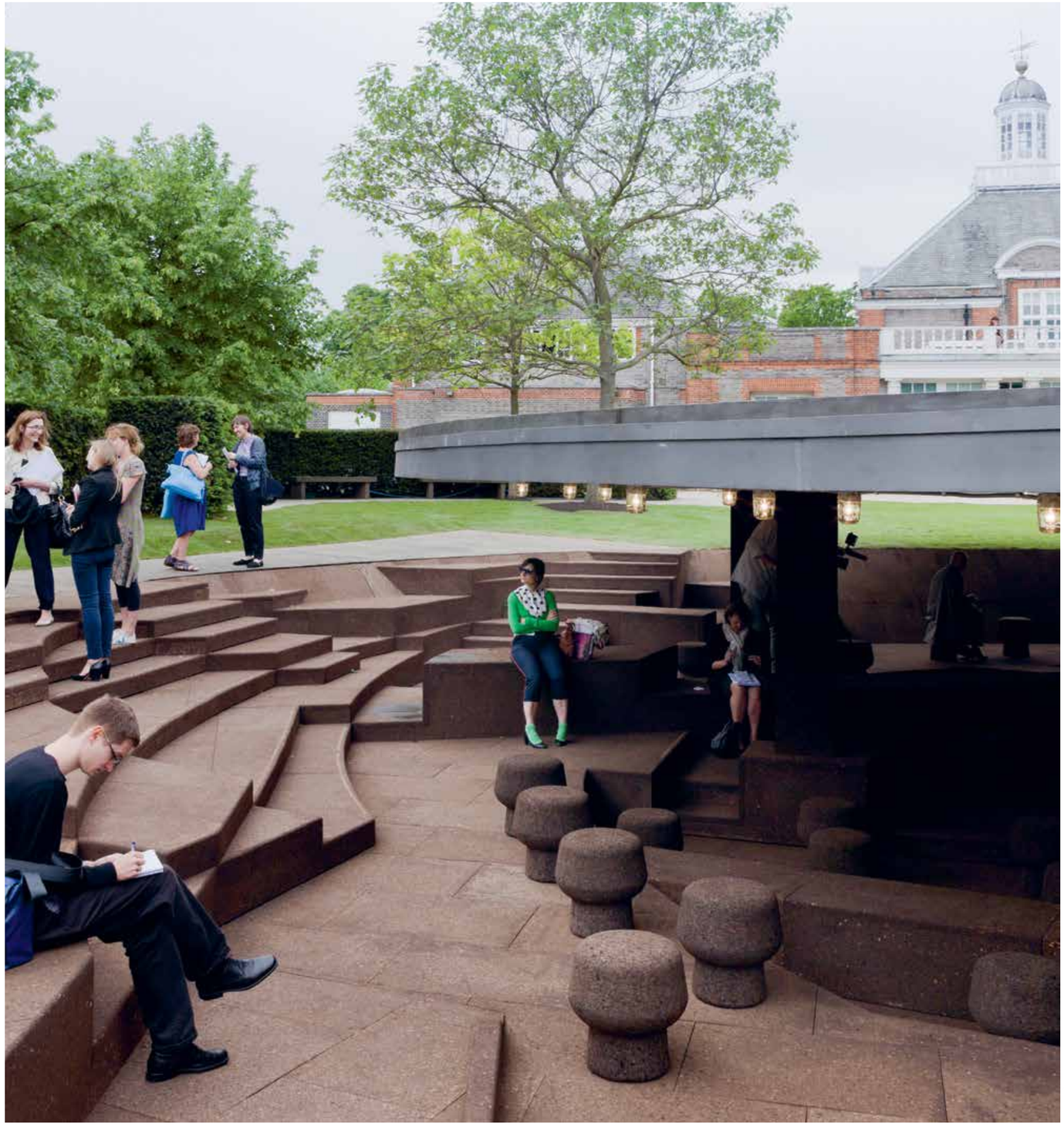
London, United Kingdom

“It was made of cork and the smell was very very evocative. And the soft material, as you walked on it, had a very, very particular sensation. It felt kind of lony, that even thought it was high in to summer, there was a kind of coolness and tranquillity in that darkness and calmness.”

Julia Peyton-Jones, Serpentine Gallery Co-Director

Typology Public intervention; Equipment and furniture
Cork type agglomerated cork + expanded insulation corkboard
Output Currently part of the private collection of Usha and Lakshmi N. Mittal
Participants Herzog & de Meuron (CH), Ai Weiwei (CN)
Date 2012

The Serpentine Gallery Pavilion 2012 was the first collaborative structure built in the UK by Pritzker Prize winning architects Herzog & de Meuron and visual artist Ai Weiwei. Over 80m^3 of cork was used to clad the interior of the circular complex multi-level structure, enhancing the unique qualities of this sustainable material. Under the supervision of the team of architects, Amorim's skilled technicians hand-carved 108 new pieces of furniture created by the authors, made from expanded insulation corkboard – a 100% natural material.
The Serpentine Gallery Pavilion is an annual landmark of the architectural world, an initiative that entails the design of an iconic structure every year, and the 2012 Pavilion was the most visited until that date.



© Iwan Baan

“With cork we use a material that addresses the senses: visual, aural, haptic and olfactory.”

Herzog & de Meuron

© Iwan Baan

© Iwan Baan

“The porosity of cork made it soft enough to be precisely carved, light enough to be easily transported, and irregular enough to visually portray the character of ancient ruins. As we hoped the properties of cork made it ideally suited to the concept. This was because it gave us the ability to pre-form panels and shape elements off site. There were then assembled and finished (and sometimes reshaped when needed) on site without compromising the irregular natural appearance and achieving one overall surface.”

Herzog & de Meuron, Ai Weiwei

Fly

Conquering new heights

The integration of cork in spacecraft and rockets began with the Apollo 11 mission, which took Man to the Moon for the first time. From success to success, it has been used in different aerospace programmes as an excellent thermal insulator, withstanding decades of space travel.

Space exploration

Cork type composite cork
Cork Characteristics impact protection, lightweight, thermal insulator, controlled ablation, dimensional stability

Curiosities In the 1950s approval tests were made by NASA to validate the use of the cork on the nozzle of the Scout rockets (they flew over 100 missions from 1957 to 1994)

Since the beginning of space exploration, Amorim has been the main technology partner of the National Aeronautics and Space Administration (NASA) and European Space Agency (ESA) when thermal insulation solutions are needed.
Nowadays, cork materials are primarily used in three applications in this sector: ETP (External Thermal Protection) on rockets, especially on the nozzle, fairing and transition segments; Heat-shield on front or back shields, on re-entry capsules or space exploration probes; Thermal protection covers on thermally sensible components/elements. An example of the use of cork in rockets is the fairing of the Ariane 5 rocket made by EADS, the ETP on the body of the Vega rocket made by AVIO, or the nozzle of the Falcon rocket made by SpaceX. In addition to these examples, cork has been used extensively in the Space Shuttle programme (1981-2011) and Atlas 5 rockets family. Examples of heat-shields can be found on the Mars Pathfinder (1997); in the ARD, Atmospheric Re-entry Demonstrator (1998); on the Mars exploration Rover (2003); on the Beagle 2 Mission and finally, on the ExoMars' programme.
Successful tests on the use of cork in spacecraft foster new expectations for the future, which include the use of composite cork in an interplanetary programme. A solution that is out of this world.

TPS (Thermal Protection Systems)

Cork type composite cork
Cork Characteristics impact protection, lightweight, thermal insulator, controlled ablation, dimensional stability

Curiosities During plasma testing Amorim TPS has successfully endured temperatures up to 2,000ºC

Space, the final frontier.

Natural thermal and shock insulation properties, as well as ablation resistance, are the basis of the creation of TPS (Thermal Protection Systems) cork composites.

“Free-flight test results on the performance of Cork as a thermal protection material.”

“A series of five flight experiments was conducted aboard the NASA Scout, RAM, and four-stage research vehicles for the purpose of testing lightweight phenolic cork as a thermal protection material.”

in NASA Technical Report

APOLLO
Spacecraft Systems
1960's

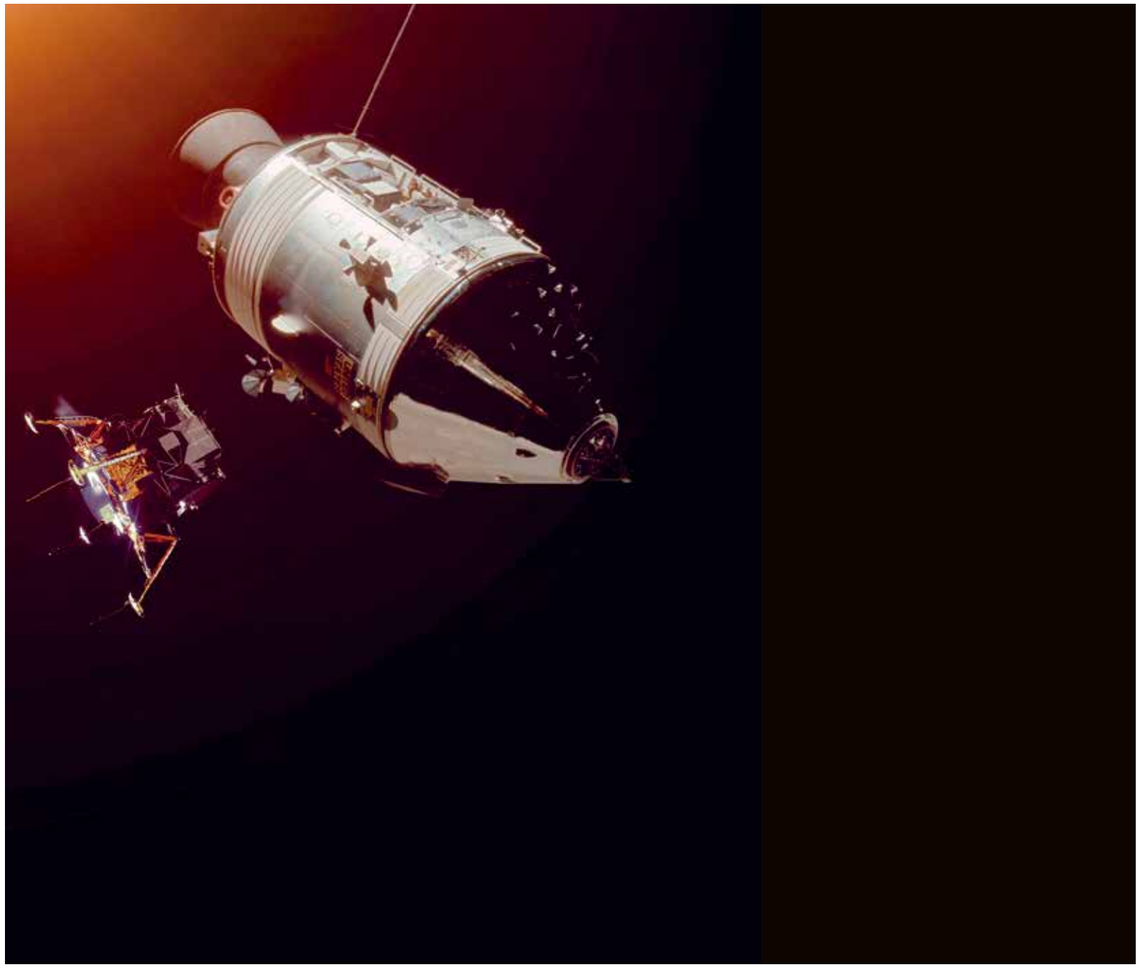
Cork type composite cork
Cork Characteristics impact protection, lightweight, thermal insulator, controlled ablation, dimensional stability

NASA

In the APOLLO missions (1961-1975), the Command Module was the first manned spacecraft to be designed to enter the atmosphere of the earth at lunar-return velocity, which was a major technological challenge. The TPS used consisted of an ablator – a cork based protective cover – bonded to a stainless-steel structure. Made of ablative cork and Teflon-impregnated glass cloth, supported by glass honeycomb in the upper portion, the boost-protective cover safeguards the command module from aerodynamic heating during boosted flight. It also protects the module from heat and soot from the launch escape and Jettison motors of the launch escape system.

"Cork is nature's foam, with unique combination of properties."

in NASA Technical Report

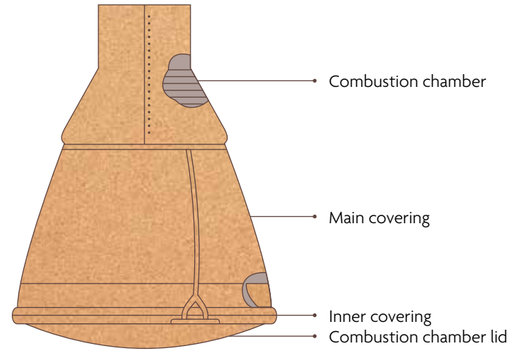


Viking Project
1970's

Cork type composite cork
Cork Characteristics impact protection, lightweight, thermal insulator, controlled ablation, dimensional stability

NASA

In the 1970s, NASA's Viking Project was the first American mission to land a spacecraft safely on the surface of Mars. Bonded to the exterior of the Viking was a lightweight, cork-based ablative material that burned away to protect the lander from the aerodynamic heating (reaching 1,500ºC). The ablator used on the Viking landers was a unique blend of cork, bonded with other materials and a similar technology was used on Mercury and Gemini missions.



Vega
2012

Cork type composite cork
Cork Characteristics impact protection, lightweight, thermal insulator, controlled ablation, dimensional stability

ESA

The Vega is an expendable launch system, launched into space in 2012 by the European Space Agency's (ESA), equipped with technical products manufactured by Amorim.
Vega was built to carry cargo up to 2,5 tonnes and place it in orbit at an altitude of between 300 and 1,500 km. Given its lightweight, cork was placed in the nose cone and other temperature-sensitive areas to prevent the rocket's overheating.

© ESA

Ariane 5
2005

Cork type composite cork
Cork Characteristics impact protection, lightweight, thermal insulator, controlled ablation, dimensional stability

ESA

The Ariane 5 part of the Ariane Rocket family is the workhorse of the European Launch Consortium, an expendable launch system used to deliver payloads into geostationary transfer orbit (GTO) or low Earth orbit (LEO), with its first launch in 2005, having performed 83 launches by the end of 2015, with permissible GTO payload capacity of 9,1 tonnes within its fairing 1m tall and 5m in diameter, where cork is placed for thermal insulation and ablation performance.

IXV

2015

Cork type composite cork
Cork Characteristics impact protection, lightweight, thermal insulator, controlled ablation, dimensional stability

Thales Alenia Space & ESA & VKI & DLR

Ablative Thermal Protection System is part of the Intermediate Experimental Vehicle designed to develop and flight-test the technologies and critical systems for Europe's future autonomous controlled re-entry for return missions from low Earth orbits.

Developments

Cork type composite cork
Cork Characteristics impact protection, lightweight, thermal insulator, controlled ablation, dimensional stability

ESA and Industry Partners

— AEROFAST Project – 7FP – finished.
— ABLAMOD Project – 7FP – finished.
— Cork characterization on Space relevant Properties – finished.
— TPS Project – Design of a crushable TPS for the ERC – ongoing.

Project

Materia

Milan, Italy

All images of the collection by Luís Silva Campos

© Michel Bonvin

Bote
Big-Game

Pino
Daniel Caramelo

Typology Design project
Cork type agglomerated cork
Outputs Development of a design collection of contemporary cork objects
Participants Big-Game (CH), Daniel Caramelo (PT), Fernando Brízio (PT), Filipe Alarcão (PT), Inga Sempé (FR), James Irvine (GB), Keiji Takeuchi (JP), Marco Sousa Santos (PT), Miguel Vieira Baptista (PT), Nendo (JP), Pedrita (PT), Raw Edges (IL/GB)
Curated by experimentadesign
Date 2011 – ongoing

MATERIA is a collection of 24 exclusive design objects, made of cork, launched by Amorim and curated by experimentadesign.
Created by twelve renowned international designers and studios, it aims to raise the profile of cork and conquer new territories and diverse audiences, and was launched at a time when the role and relevance of cork as an ideal material for interior design hadn't yet been fully perceived.
As a result of the most advanced production technologies, this new line of objects are devised for everyday use and benefit from the unmatchable properties of cork.
Featuring several typologies, they fuse innovation, functionality and an empathic take on modern-day lifestyles.

"Experimentation with new materials in design traditionally seeks to break boundaries: cork (...) has become the protagonist in a series of exercises in style by international designers. A living material that mainly features in the craft traditions of the western Mediterranean, cork not only represents one of the most amazing combinations of properties to be found in a natural raw material but also has the extraordinary characteristic of not being replicable."
Maria Cristina Didero,
about MATERIA in Domus magazine

"Cork is perhaps the noblest raw material with which I have ever worked. In addition to the countless properties which distinguish it from any other, the nobility of cork is a result of the time which it takes to come into being, year upon year, as a material. The organic, natural and self-renewing process which originates it is silent and almost imperceptible, following a leisurely and mature rhythm which somehow counterbalances the speed with which we demand everything takes place in today's world. (...) Looking at cork as a designer, I feel it is a material which could be used in countless applications. Its properties open the door to an immense world of ideas for which it would be ideally suited."
Daniel Caramelo

Furo
Senta
Fernando Brízio

© Emanuel Brás

“In the design, I try to use some of cork's more visible features, in particular its elasticity to fix or connect parts to each other. The stool's legs can be attached and detached, allowing the stool to be assembled or taken apart without requiring connecting parts or elements. Cork is a material with unique characteristics.”
Fernando Brízio

© Anders Hviid

Gelo
Filipe Alarcão

Torno
Inga Sempé

“For my first contact with cork, I wanted to create an object which was in some way celebratory, which could provoke a particular action or event, while at the same time demonstrating the physical characteristics of the material – in this case its capacity to retain heat. Instead of concealing the insulation material, I put it in the limelight. I wanted my object to indisputably be a cork object, and to formally reinforce this ideal by creating a semantic link with an archetypal object made of cork. Of all the materials I have worked with, cork is undoubtedly one of the most difficult, but also one of the most challenging.”
Filipe Alarcão,
jointly responsible for the artistic direction of MATERIA

Six
James Irvine

Tipsy
Keiji Takeuchi

© Miro Zagnoli

“The natural spirit of the cork is a perfect starting point: it allows you to explore new forms for everyday needs.”
James Irvine

Lasca
Marco Sousa Santos

Aro
Miguel Vieira Baptista

“During the project, coming into contact with this material for the second time, I sought a more elementary approach, closer to its nature, beginning with a block of agglomerate and sculpting it. Intuitively, the shape of a pebble, naturally formed by nature, seemed to best represent this elementary approach.”
Marco Sousa Santos

“I immediately realized that Tipsy had to be made of cork. Firstly, there's a longstanding relationship between wine and cork, so that the association was inevitable. However, when transported to a design object, cork has a unique natural warmth and a tactile appeal that fascinated me as soon as I went to Portugal to learn about the cork oak forests and this raw material.”
Keiji Takeuchi

Par
Parte
Nendo

“We were taken with cork's lightness and malleability, and created a fruit bowl that is in two pieces, joined together by a magnet. The two halves of the bowl can be connected on different sides, allowing users to change its proportions as and when they like.”
Nendo

“We put cork firmly on the map as a material for the future ... it is natural and sustainable and has extraordinary physical properties. From pastoral pieces of art to space shuttle components, the characteristics of cork allow it to be used in a number of unexpected applications that are waiting to be integrated into our daily lives.”
Pedrita

“Cork's low thermal and electrical conductivity ensures that you can handle the lamps shell in perfect safety. Making things even more interesting is the fact that the shade and its placement can be changed at will, according to your mood, the task you are performing or the ambiance you want to set.”
Raw Edges

Rufo
Pedrita

Pinha
Raw Edges

Sound

Harmonic soundscapes

With 40 million cells per cm^3, each cell enclosed in small compartments, cork provides major sound absorption, plus excellent vibration reduction. From music instruments and recording studios to large building construction, there's a myriad of uses where cork is the best technical solution.

Acoustics

AcoustiCork

Cork type agglomerated cork
Cork Characteristics acoustic and thermal insulation, vibration absorption, resilience, durability

Cork is an exceptional acoustic insulator. It is often used in sound studios, where the requirements for acoustic insulation can be very demanding. In these spaces, it can be used to cover floors, ceilings and walls, buffering the entire room, as a visible solution or covered with other materials.

For general construction, Amorim developed the AcoustiCork range that offers high performance in terms of noise reduction and durability, ensuring the same level throughout the product's lifetime. It is an effective solution for absorbing noise impact and airborne sound and, at the same time, offers excellent anti-vibration and thermal comfort performances. AcoustiCork can be used as floor underlays, with the possibility of being applied with any type of final flooring material, such as tile, wood, carpet, linoleum, screed mortar, etc.

Acoustics

Expanded Insulation Corkboard

Cork type expanded insulation corkboard
Cork Characteristics acoustic and thermal insulation, vibration absorption, resilience, durability

Mainly used as a technical solution and in an invisible way in construction, expanded insulation corkboard offers high performance in acoustic and anti-vibration insulation, as well as in thermal insulation. It can also be exposed as an external solution, or suitable for use in internal and cavity walls; slabs; flat and pitched roofs and radiant floor. It has practically unlimited durability, maintaining all its characteristics throughout the product's working life. Its benefits include the natural characteristics of the product (100% cork), which is also completely recyclable.

© Luís Silva Campos

Music

Rufo, MATERIA by Pedrita

Material agglomerated cork
Cork Characteristics acoustic insulation

Rufo is a 'silent' drum created for children and parents. Designed by the Portuguese studio Pedrita for the MATERIA collection, this musical instrument guarantees entertainment, while keeping a quiet ambiance. It is an alternative that takes advantages of the outstanding acoustic properties of cork introducing a softer soundscape in the shape of a near weightless, smooth-surfaced drum.

Musical instruments

Cork type agglomerated cork
Cork Characteristics impermeable and acoustic insulation

Cork can be an excellent ally for woodwind instruments. Its impermeability is an essential feature, improving musical performances.

Project

Istanbul Design Biennial

Turkey

“As a material that is a feat of natural engineering and immediately gives a sensation of warmth and personality cork perfectly complements the theme of the exhibition – The future is not what it used to be.”

Gregers Tang Thomsen, founder and lead architect of Superpool

Typology Interior design project
Cork type agglomerated cork; expanded insulation corkboard
Outputs 100,000 visitors were in contact with the material
Participants Superpool (TR)
Commissioned by Istanbul Foundation for Culture and Arts (IKSV)
Date 2014

With the support of Amorim, cork became the centrepiece of the 2nd Istanbul Design Biennial, a major international design and architecture event. The exhibition space was greatly enhanced by the use of cork in numerous innovative and creative items (such as lighting and furniture), designed by the Istanbul-based design studio Superpool.

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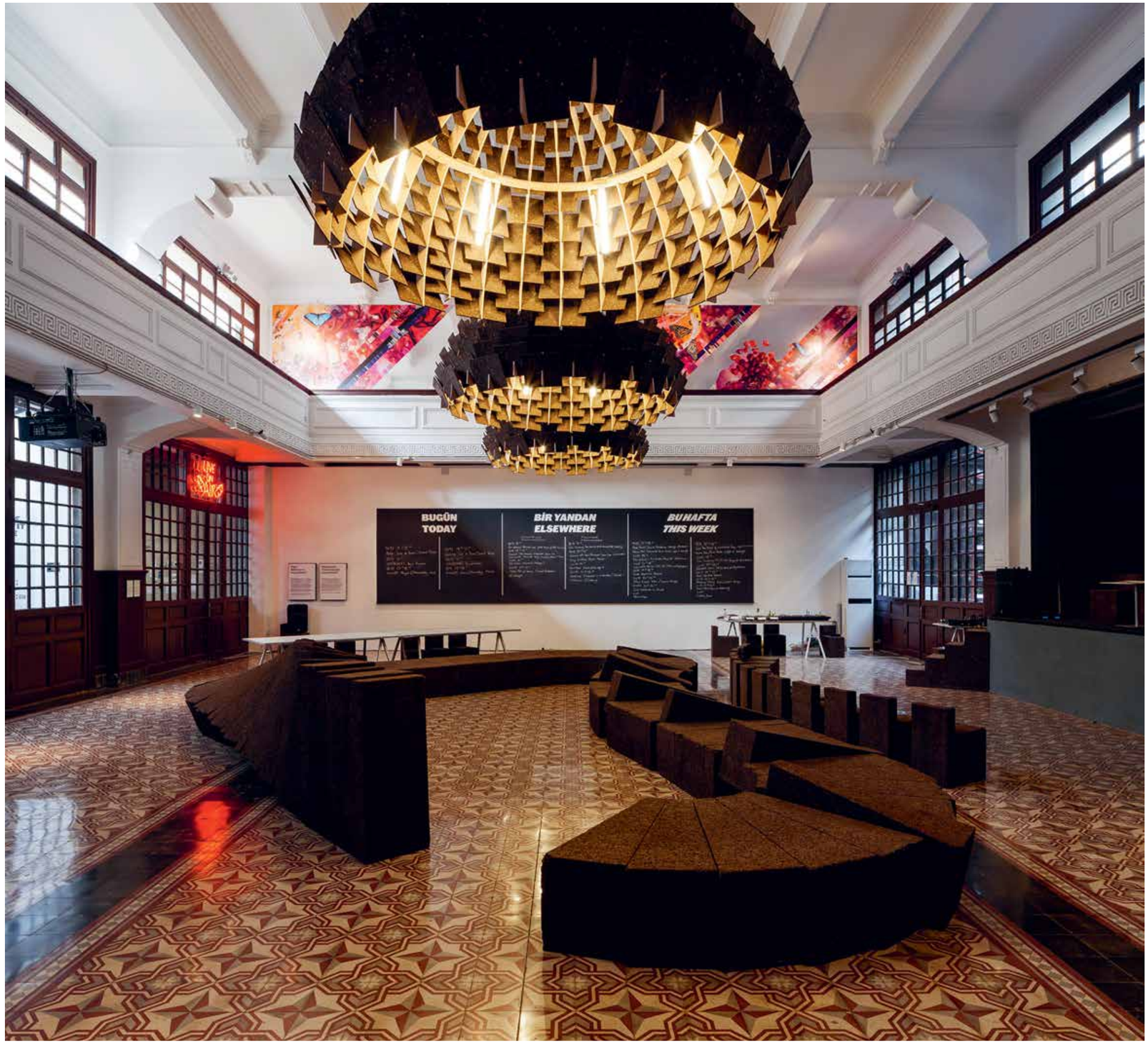


© Sahir Uğur Eren

“For the first time in Turkey cork is used in exhibition design and we are tremendously happy with the results. The warm, welcoming atmosphere of the new material surpasses all visitors and immediately made them feel comfortable. We hope that we have introduced cork in a new light to our design and architecture professionals and will reap the results in the near future.”

Deniz Ova, Director of the Biennial

© Sahir Ugur Eren

Sea

Another habitat for cork

Many maritime zones maintain an historical relationship with cork that goes well beyond its usage in natural cork stoppers. Its waterproofing and ability to float make it a remarkable raw material to be used in shipping as well as in water sports equipment. Amorim's solutions have been broadly used in this field, from buoys to fishing rods, as well as in several nautical sports, such as surfing or stand-up paddle.

Garrett McNamara's Surfboard

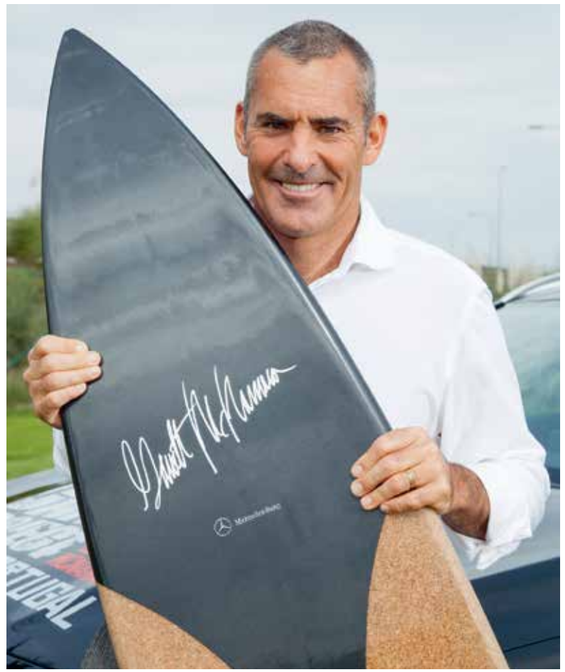
Cork type agglomerated cork
Cork Characteristics impermeability, damping capacity, resistance, flexibility

MBoard Project, a partnership with Mercedes-Benz

Amorim, in partnership with Mercedes-Benz Portugal, is developing surfboards made entirely out of Portuguese cork, intended to enable the Hawaiian surfer Garrett McNamara to tackle the giant waves in Nazaré, one of Portugal's most popular seaside resorts. This partnership was agreed specifically at Garrett McNamara's request, in 2014, and has been in force since then. Garrett McNamara is the current world-record holder for the largest wave ever surfed, and was awarded a Guinness World Record certificate for the feat. MacNamara has surfed the gigantic waves of Nazaré at 62.4 km/hour on a surfboard designed by Mercedes-Benz in 2013.

"As Portugal is the world's largest producer of cork, it makes perfect sense to use this material to produce a high-performance board to ride the legendary waves off the coast of Nazaré. When you are surfing giant waves you need a flexible and impact resistant board that won't break. I believe that these surfboards will be the benchmark in terms of technology for those surfing giant waves."

Garrett McNamara



"The virtues of cork such as its high durability and flexibility make cork surfboards sufficiently strong to withstand the impact of huge waves."

Garrett McNamara

Kayakes

Cork type CoreCork
Cork Characteristics lightweight,
shock resistance, flexibility

High performances are guaranteed, in aquatic water sports competitions, by cork's low weight. Shock, impact and slamming resistance are also other important characteristics. At the 2008 Olympic Games, in Beijing, 20 medals were conquered by athletes that used Nelo kayaks, the Portuguese brand that employs cork in its production. This material is used in the sandwich construction of CoreCork, a thin (below 10mm) and bendable element, easily adaptable in moulding very sharp angles. Cork doesn't rot and provides the lightness and stiffness needed for a racing kayak. Cork was, undoubtedly, also a winner.

Windsurfing boards

Cork type CoreCork
Cork Characteristics lightweight,
shock resistance, flexibility, damping capacity

Mistral has developed a new technology of interior impact absorption for its latest range of wave riding windsurf. CoreCork/PVC sandwich has been selected for this evolution.
By using a piece of CoreCork properly located in the laminate structure, the impact and shear strength resistance is drastically improved.
Known as the "green foam", cork is now recognised as an excellent shock absorber for the landing after high jumps, preventing delamination from the blank and acting as an internal mattress for the rider's heels.
The result is better vibration damping, better comfort for the rider during the surf/jump landing while increasing the life of the board.

Yachts

Cork type agglomerated cork
Cork Characteristics lightweight, acoustic and thermal insulation, fire resistance, environmentally safe, high compression, resilience

Profiting from its intrinsic characteristics, cork is a significant addition to the leisure marine industry today. Applications include the construction of yachts with a multitude of functions, such as cosmetic finishing on floorboards; underlayment on floorboards; substrate of a Teakdeck; core material in composite panels for acoustic insulation in various applications; gaskets for sealing on tank lids and other related components; cork-rubber/plywood composites for acoustic insulation of bulkheads and compartments; pads and strips for vibration mitigation and decoupling.

With the Italian company Bellotti, Amorim has contributed for developing different applications for boats, mainly a lightweight composite panel with a special bio cork core with sound and thermal insulation properties. It is suitable for furniture and bulkheads in boats. Larimar "SG" is a lightweight composite panel with both skins in Okoumé marine plywood (RINA approved) or Exterior Okoumé plywood with a special re-pressed cork with rubber which has good soundproofing and thermal insulating characteristics. This composite panel is especially suitable for projects which require high durability over long periods, exceptionally low weight and specific soundproofing and thermal insulation characteristics.
The re-pressed cork core with rubber, in spite of its low weight, has high soundproofing and thermal insulating characteristics.

**“Initially we used cork as a core material in composite sandwich panels to improve acoustic damping, this is great for ventilation ducts were noise levels can be reduced without restricting the air flow.
On the last few projects we have used cork as a cosmetic finish on our floorboards, great impact resistance combined with non-slip finish is perfect for galley and crew areas on board.
The crew also appreciate this as they don't need to carry a second set of floors for deliveries between Charters. Amorim team also provide great technical support for our ongoing R&D projects.”**

Paul Dumbell, Southern Wind Shipyard (Pty) Ltd.

© Bellotti

Project

London Design Festival

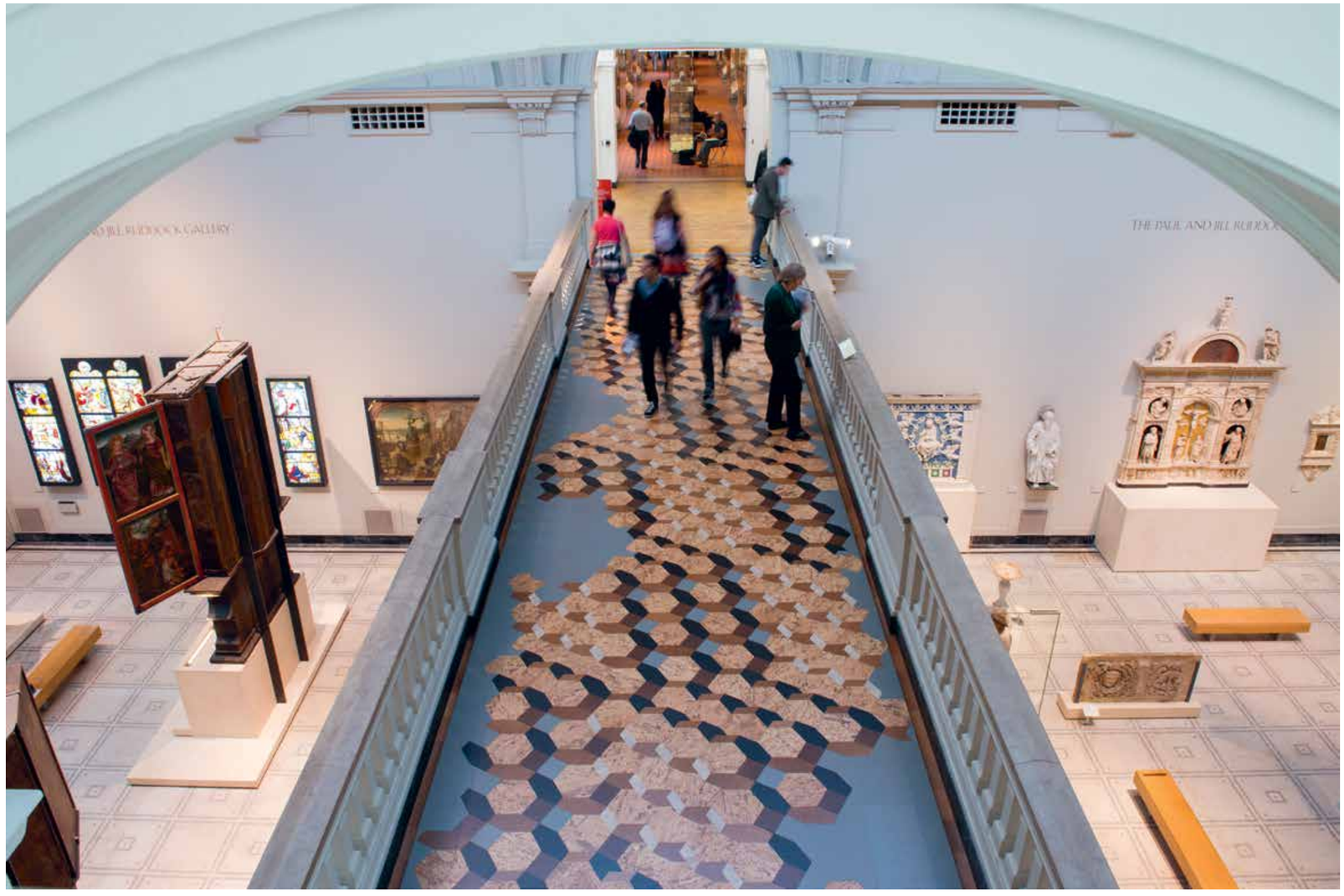
Victoria & Albert (V&A) Museum, London, United Kingdom

“Working with the V&A and architects, FAT has given us the best cork floor I have ever seen.”

Ben Evans, Director at London Design Festival

Typology Interior design project
Cork type Wicanders flooring with different cork visuals
Outputs 110,000 visitors had the opportunity of experiencing the material
Participants FAT (GB)
Commissioned by London Design Festival
Date 2013

For the first time at the London Design Festival, Amorim joined forces with FAT, Fashion Architecture Taste, a London-based practice renowned for its conceptual approach to architecture. This project resulted in a natural cork floor, made of a series of tiles, laid in a repeating *trompe l'œil* geometric pattern, itself based on a scientific diagram of the cellular structure of cork. Displayed on the bridge over the Victoria & Albert Museum Medieval and Renaissance Galleries, this floor helped to open a new perspective on the material, both in terms of visual and tactile properties. Through this project, other intrinsic benefits of cork flooring were experienced, which highlighted its outstanding thermal and acoustic insulation performance and the unmatched comfort provided by the solution.



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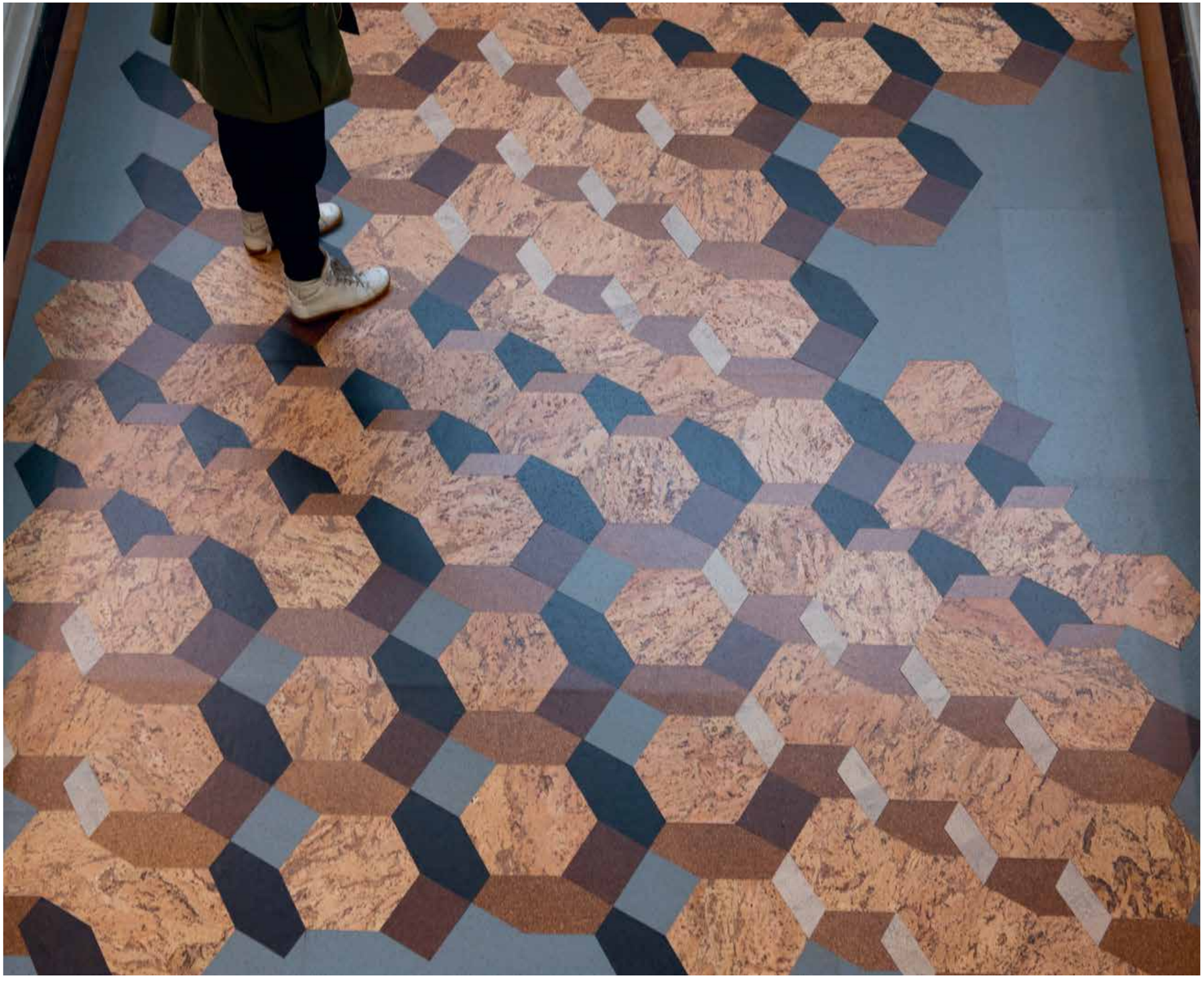

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“It's been a fascinating experience entering Amorim's world of cork. It really is a 21st century material, which has allowed us to work in a very different way. The design also makes use of the strong visual, acoustic and tactile qualities of the material.”

Sean Griffith, Director and co-founder of FAT

Walk

Comforting steps

In Ancient Egypt, cork soles were already used in sandals – a historic testimony to how cork can deliver comfort. Cork's elastic memory – it's the only solid which, when compressed on one side, does not increase in volume on the other – is also a unique selling proposition for the flooring industry. Cork is a natural material that softens impact and protects the human body.

Flooring

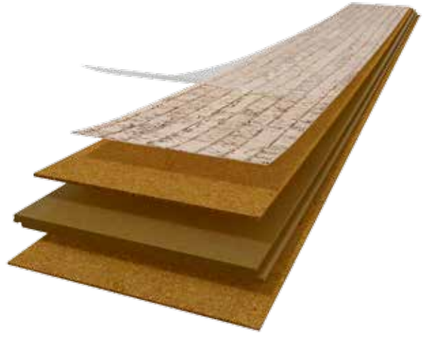
Cork type Wicanders flooring,
agglomerated cork
Cork Characteristics thermal and acoustic
insulation, comfort, body wellness
and impact resistance

Curiosities 10,000,000 square meters
of production capacity

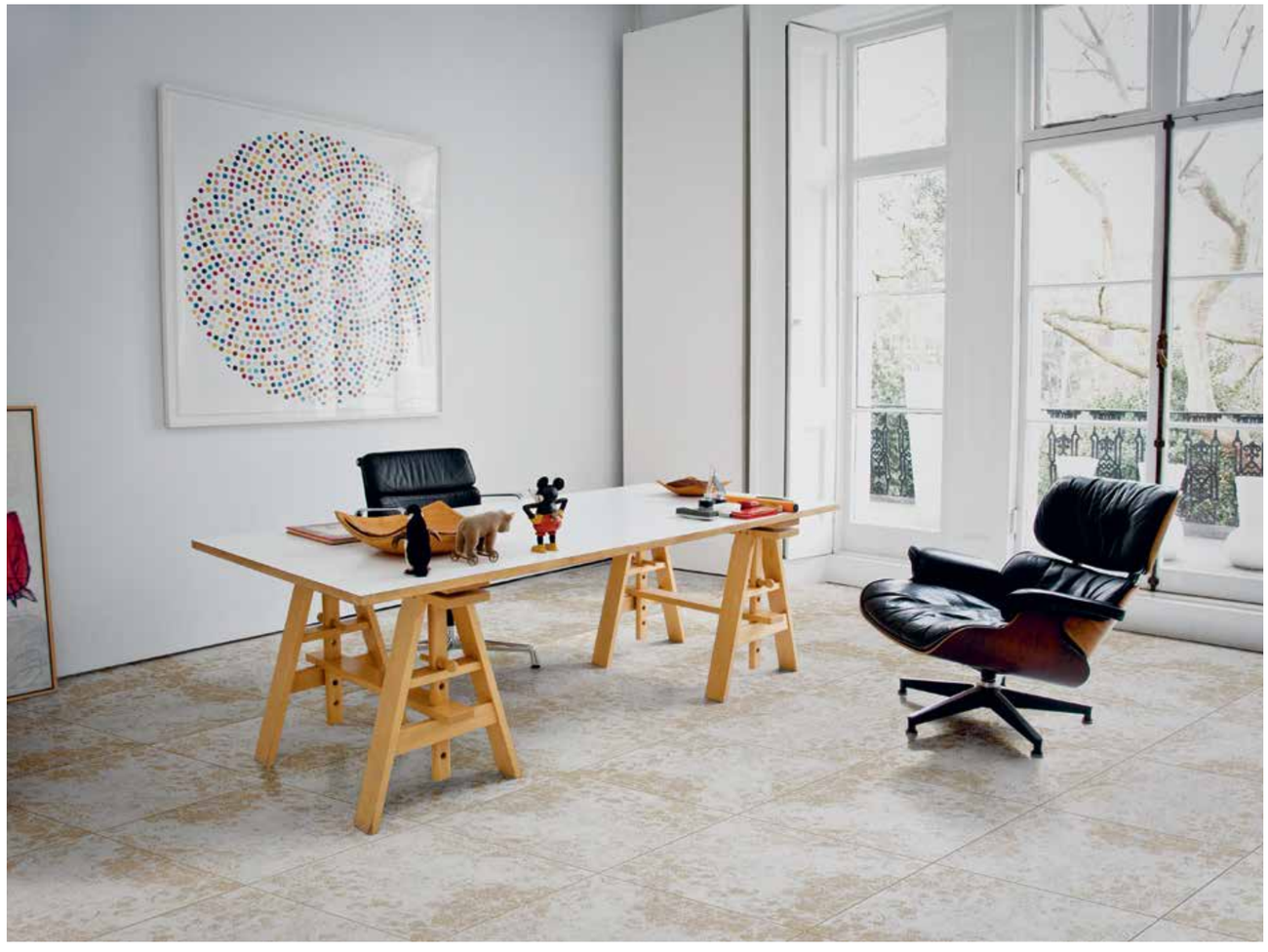
Amorim develops a wide range of floorings, using cork as the differentiating factor that sustains its competitive advantage. As a global leader in the production of cork flooring, Amorim invests in the creation of solutions that ensure an enhanced quality of life for users without harming the environment. In fact, one of its premium brands, Wicanders, is certified with Greenguard Gold Indoor Air Quality, thus guaranteeing healthier indoor air quality.

Over the years, Wicanders has developed floor (and wall coverings) with exclusive properties, due to its innovative Corktech technology. By including cork, Corktech provides 5 main benefits: silence, natural thermal insulation, impact resistance, walking comfort and body wellness. Its uniqueness is based on an engineered multilayer structure, which combines state-of-the-art technology with the exclusive natural properties of cork, thus providing the perfect match between beauty, comfort and durability.

The flooring's performance is supported by a prime quality core layer of cork, which provides superior comfort, noise reduction and warmth and an integrated cork underlay that reinforces thermal and acoustic properties, resulting in a silent environment and important energy cost savings.



Residential – Wicanders, with a wood visual



Residential – Wicanders, with a cork visual

Office lounge – Wicanders, with a wood visual

Six Senses Hotel (Portugal)

The Greenhouse Restaurant (South Africa)

Hydrocork

An amazing step forward in floor technology with all the benefits of cork

Cork type Wicanders flooring, agglomerated cork
Cork Characteristics thermal and acoustic insulation, comfort, body wellness and impact resistance, waterproof

Hydrocork is a notable innovation in the flooring industry. Made up of a low thickness agglomerated cork composite core, this new flooring concept offers all the benefits of natural cork – particularly in terms of thermal and acoustic insulation, walking comfort, impact resistance and body wellness (Corktech technology) – and is now improved with a waterproof warranty, thus avoiding the risk of a possible floor swelling, and is easy to install. With an incredibly low thickness (6mm in total), Hydrocork provides an extremely easy and quick installation. Its revolutionary compression system – PressFit – takes advantage of cork's properties – elasticity, flexibility and compressibility – functioning like a cork stopper, which makes it a suitable choice for renovation projects.

Hartford Public Library

Connecticut, USA

Cork type Wicanders with a cork visual
Cork Characteristics thermal and acoustic insulation, comfort, body wellness and impact resistance

Microsoft Offices

Lisbon, Portugal

Cork type Wicanders with a cork visual
Cork Characteristics thermal and acoustic insulation, comfort, body wellness and impact resistance

Musée d'Art Contemporain de Bordeaux

by Leonor Antunes

Cork type Wicanders with a cork visual
Cork Characteristics thermal and acoustic insulation, comfort, body wellness and impact resistance

In this exhibition at the CAPC Musée d'Art Contemporain de Bordeaux, artist Leonor Antunes highlights the beauty and elegance of handicrafts, revealing the traditions of Portugal, her home country, and her favourite materials: cork, leather, brass and cordage.
Wicanders flooring, manufactured by Amorim, is the star of a brass-inlaid floor covering designed for her solo exhibition. It blends perfectly with the iconic space of the Museum's Central Nave and the sculptures designed by the artist, shedding a new light to the 1,500m² area.
In addition to comfort, this product range highlights the genuine natural look of cork.
The innovative element is the combination of cork and brass, thereby creating a direct connection with the suspended sculptures, made from the same material.

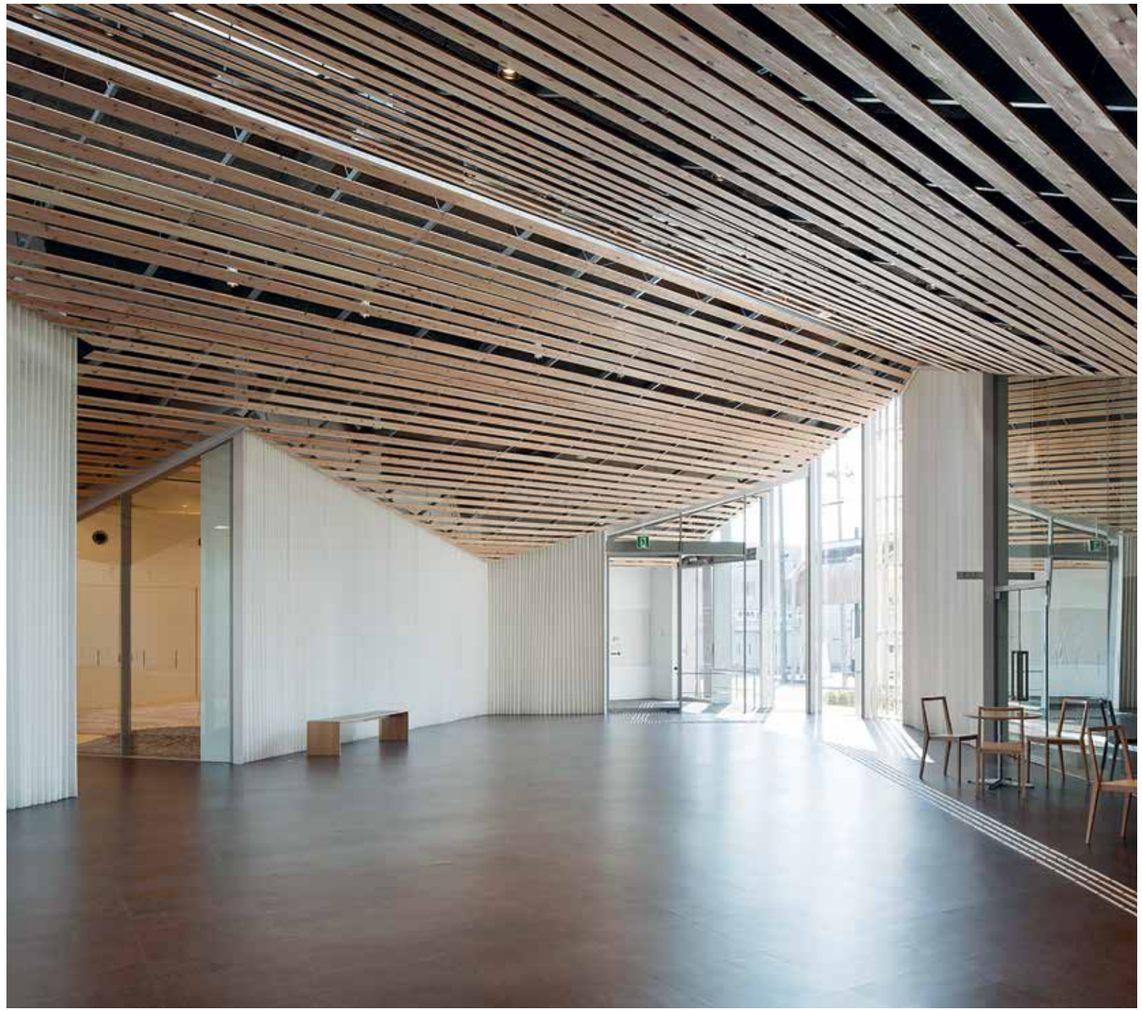
© Nick Ash

Towada Community Center

Tokyo, Japan

by Kengo Kuma

Cork type Wicanders with a dark cork visual
Cork Characteristics thermal and acoustic insulation, comfort, body wellness and impact resistance



© Kenta Hasegawa

Nezu Museum

Tokyo, Japan
by Kengo Kuma

Cork type Wicanders with a dark cork visual
Cork Characteristics thermal and acoustic insulation, comfort, body wellness and impact resistance

One of the most impressive museums in Tokyo, Nezu Museum was built in 1940 and restored in 2009. Kengo Kuma, who led the project, kept the strong presence of nature, successfully blending tradition and modernity in the restoration process. Keeping a 21st century mindset, the museum recovers the tradition of Japanese buildings. At the centre, facing lush gardens, we find a glass hall, framing a new floor covered with 1,600m² of cork. Wicanders flooring was selected by this leading architect. The visual and acoustic tranquillity provided by this distinctive material contributed invaluably to achieve the traditional Japanese concept of harmony.

“The softness of cork can resolve many of society's problems and also give rise to new possibilities for architecture and design.”

Kengo Kuma, architect

Footwear

Cork type composite cork
Cork Characteristics lightweight, warmth, breathability, resilience

From the most specialised orthopaedic models to the trendiest looks, combining visuals, health and comfort, designers and footwear industry are able to reinvent fashion that uses cork. In the sports and outdoors shoes area, Nike and Adidas, as well as Birkenstock, have already surrendered to cork's nature, quality and versatility. Once applied in a shoe, cork ensures that body weight is better distributed, cushions impact, controls temperature and allows the foot to breathe.
Amorim developed Footcork, a brand of cork components for this industry, with a vast range of visual looks and technical options.
The company's portfolio includes distinctive ranges of cork granulates, cork sheets, rolls, mouldable components and rubber cork, which may be used in insoles and orthopaedic shoes, among other possibilities.
All these products are designed to increase walking comfort, reduce foot and leg health problems and improve body posture.

Shoemakers have been aware of Cork's properties for thousands of years. For that purpose, they have been applying the material in different uses of the footwear industry. Today, from sports to streetwear and beachwear, cork is the best choice when comfort, health and durability are demanded, with a unique visual.

High cork platform shoes featured in Vogue magazine in 1937

Contemporary high cork platform shoes

Camper cork shoes
by Jasper Morrison

Cork type cork leather
Cork Characteristics natural, soft touch
A partnership with Camper shoes

Using the appealing look of versatile cork leather, British designer Jasper Morrison developed a cork shoe model for Camper, a well-known international brand that is recognised for the quality and comfort of its unconventional models.
This is a natural product that maintains cork's original appearance, with an extraordinarily soft touch, and it was also presented in the exhibition, Metamorphosis, during EXD'13, the Lisbon design and architecture biennale.

© Pedro Sadio & Maria Rita @thatimage

ASPORTUGUESAS
Egofriendly Footwear

Cork type composite cork
Cork Characteristics lightweight, breathability, durability, resilient

ASPORTUGUESAS is a new brand of summer footwear developed by Amorim Cork Ventures' first startup – EcoChic. It is an innovative concept of cork flip-flops, versatile, sophisticated and "environmentally friendly".
Using cork as the principal raw material, the main characteristics of the ASPORTUGUESAS flip-flops are the innovative design of the sole, a more ergonomic and comfortable strap, greater resistance in the connection between the strap and the sole, and better grip on wet roads.
ASPORTUGUESAS are addressed to men and women who value design and quality of the raw materials – fun, yet sophisticated.
This is a flip-flop that is ideal for the beach, and perfectly adapted to urban settings.

Reebok CrossFit

USA

Cork type composite cork
Cork Characteristics impact absorption, resilience, durability

Amorim's Sports Floor is the worldwide official flooring for the Reebok CrossFit chain of gyms, already installed in over 10 countries. Amorim Sports Flooring solutions are highly resilient, and stand out as a result of the comfort and safety they offer. Applied as final flooring, floors with cork cushion the physical impact of the activity, being ideal for running tracks, fitness and aerobic floors, for example. Gymnasiums, sports centres and stadiums all over the world are using these solutions by Amorim, which effectively meet all the requirements of such venues.

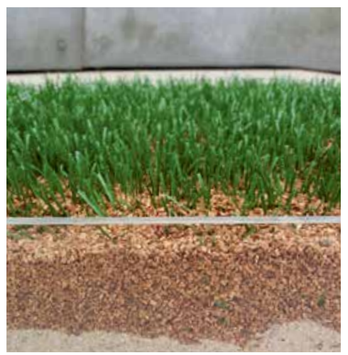
WALK

Football stadiums

Natural Turf

Cork type expanded cork granules
Cork Characteristics thermal efficiency, shock absorption, durability, water savings

In partnership with Natural Grass, Amorim has developed a new solution for natural turf. The innovative technology of AirFibr incorporates cork, natural grass and synthetic microfibers – thus resulting in a sturdier turf, that was already used in the Parc Olympique Lyonnais, the Toulouse Municipal Stadium, the Geffroy Guinch Stadium in Saint-Etienne and the Nouveau Stade in Bordeaux. The expanded cork granules offer higher shock absorption, minimising the player's contact with the pitch. Comparative tests with substrates of traditional solutions reveal clear differences, since playing fields created using AirFibr technology are more "friendly" to players' joints because the cork-enriched turf (replacing conventional turf) reduces impact by 40%. This achievement results from the cork's elastic memory, which is continuously trying to recover its original shape after compression. At the same time, and in comparison with more traditional turf systems, key advantages of AirFibr technology are preservation of the grass and high durability, even during periods of heavy rainfall. This cork solution requires much less irrigation water, which is also an important ecological achievement.



Artificial Turf

Cork type granulated cork, extruded cork composite
Cork Characteristics thermal efficient, shock absorption, durability, water savings

FieldTurf company chose cork, supplied by Amorim, for two different solutions to infill artificial turf: PureFill (granulated cork) and CoolPlay (Extruded Cork Composite). After several tests with other organic infill materials, cork proved to be superior in all major categories related to the environment, safety, performance and durability. Cork benefits the athletes and the field owners. It is a natural infill that is 100% environment friendly, an organic, recyclable and sustainable product, and non-toxic. The ECC is a cost effective component, which eliminates the need of irrigating the artificial field, offering durability, shock absorption, and absorbing far less heat than other alternatives.

Project

Sagrada Familia

Barcelona, Spain

“I have always regarded cork as an excellent material, and have used it in a number of projects designed by myself. Whenever I have used cork the results have been good, and it is also an interesting option from an economic perspective.”

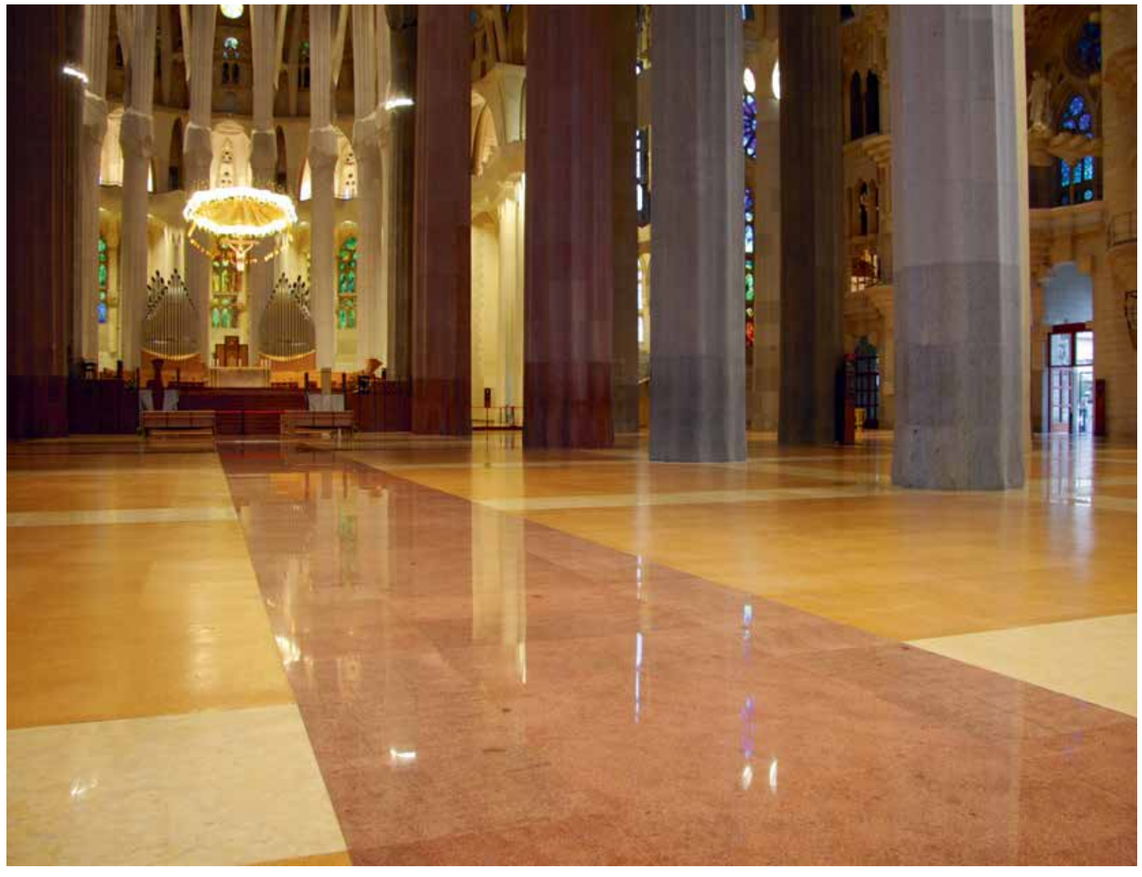
Jordi Bonet i Armengol, architect in charge of Sagrada Familia's construction

Typology Architecture project
Cork type Wicanders with a cork visual
Outputs This application stands as a proof of the best resistance, in a building with 3,5 million visits/year
Participants Jordi Bonet i Armengol (ES)
Date 2011

Antoni Gaudí's Sagrada Familia in Barcelona is today a Unesco World Heritage Site and one of the most highly visited monuments in the world. Designed by Catalan architect Gaudí and globally perceived as his greatest work, this is a Catholic temple of imposing grandiosity and breath-taking architecture. Its construction began in 1882 and is still ongoing, and is expected to be finished in 2026, the centenary year of Gaudí's death. Under the supervision of the architect Jordi Bonet i Armengol, and in perfect harmony with Gaudí's philosophy “Nature is my Master”, a cork floor was chosen for the temple's crypt. 2,000m^2 of Wicanders flooring was used, with a natural cork appearance and a high traffic varnish finish, providing the acoustic absorption, durability and comfort required by this kind of space.

“Nature is my Master.”

Antoni Gaudí



Drink

The world's premium wine closure

Wine and cork are both natural products that have been perfected by Mankind over the ages. In Antiquity, Mediterranean peoples already used cork to seal their amphorae, thus preserving their liquids.
In the 21st century, cork stoppers are perceived worldwide as a hallmark of quality. R&D and Innovation have allowed Amorim to develop a vast portfolio of natural cork stoppers, offering a wide range of high quality options, at different price points.

The world's premium wine closure

While only approximately 25% of the cork harvested will be used for the production of high quality, natural cork stoppers, the industry's most iconic product is critical to the sustainability of the whole cork supply chain, since it generates 70% of the value of all Portuguese cork exports.

As the most trusted name in wine packaging materials, Amorim is perfectly placed to capitalize on growing market demand for cork-sealed wines. Producing more than four billion stoppers annually, Amorim's scale and R&D capabilities are complemented by a direct worldwide presence that enables us to serve over 15,000 wine trade clients across all continents.

Wine

Cork type natural cork stoppers,
technical cork stoppers
Cork Characteristics elastic, compressible,
impermeable to liquids and gases, resistant
and resilient

Curiosities 12 billion cork stoppers produced
worldwide per year

The cork stopper has unique innate qualities
that interact beneficially with wine.
They contribute to developing its character,
giving it authenticity and increasing its value.
The year 1870 marks the beginning of the strong
alliance between Amorim and wine,
which continues to be its core business activity.
With an extensive portfolio providing the ideal
solution for every wine segment, Amorim
is the world leader in this industry, with
an unparalleled worldwide distribution network.

NDtech

For Amorim, defeating TCA*, the omnipresent
but innocuous compound responsible
for sensory deviations in food packaging
products, has been a fundamental priority.
Following a €10 million investment, the company
became the world's first cork producer
to deliver natural cork stoppers to winemakers
with a non-detectable** TCA guarantee.
To achieve this, Amorim uses cutting-edge, rapid
gas-chromatography, proprietary technology
known as NDTech, to deliver the world's ultimate
quality control service for premium cork
stoppers. This state-of-the-art system further
strengthens Amorim's quality control measures
by individually screening cork stoppers
in the production line, thus eliminating the risk
that any 100% natural cork contaminated
with releasable TCA will reach winemakers
and consumers, delivering the world's first natural
cork with a non-detectable TCA guarantee.

* "Trichloroanisole (TCA) is the natural compound that
at higher levels can impart 'musty' flavors and aromas to wines,
other beverages and foods." (www.wineinstitute.org)

** Releasable TCA content at or below 0.5 ng/L
quantification limit

Champagne

Cork type technical cork stoppers
Cork Characteristics elastic, compressible, impermeable to liquids and gases, resistant and resilient

Curiosities: for the first time ever, cork and glass were combined, giving rise to one of the most successful packaging solutions in the history of Mankind

When Dom Pérignon first recognized in cork stoppers all the virtues he sought for his sparkling wines, he was in fact creating the foundations of the cork stoppers industry.
The excellent mechanical behaviour and ease of bottling are fundamental advantages in this Champagne stopper, which comprises agglomerared cork with two natural, high quality cork discs at the end that comes into contact with the wine. With unmatched characteristics, this stopper has acquired a privileged status in the art of sealing the finest champagnes and sparkling wines, achieving the highest levels of physical, chemical and oenological performance.

© CAVA RECAREDO, Marçal Font

Beer and Cider

Cork type technical cork stoppers
Cork Characteristics elastic, compressible, impermeable to liquids and gases, resistant and resilient

Curiosities Trappist monks used cork stoppers in their beers for centuries

Worldwide, premium beer and cider producers have embraced the distinctive qualities of the cork stoppers used in their bottles, securing them with a muselet, just like the finest bottles of sparkling wines and Champagne.
It stands as a technical solution with a natural origin that preserves the identity of the beverage's flavour, adding value, an innovative touch and prestige to the brands. Recently, Carlsberg launched Jacobsen Vintage n.1, the most expensive beer in the world, with an Amorim cork stopper.

Amorim helps preserve 200-year-old Champagne

Baltic Sea, 2010

Between Sweden and Finland, in the Baltic Sea,
a historical find brought to the 21st century
a trove of 200 year-old champagne bottles.
In 2010, Amorim accepted the challenge to help
preserve the delicate Champagne by replacing
the original cork stoppers with new ones.
Using its expertise, the company assured
the success of the complex replacement,
allowing future generations the possibility
of tasting one of the 168 bottles, which were sold
for historically-high prices. When found,
the shipwrecked champagne was "in good condition",
a testimony to the unique ability of cork
to preserve wines and champagnes indefinitely.

"It's exclusive champagne of high class that has been brought up from the depths of the sea."

Richard Juhlin, one of the world's leading champagne experts

Spirits

Cork type cork stopper and capsule
Cork Characteristics elastic, compressible, impermeable to liquids and gases, resistant and resilient

Curiosities Cork has 40 million cells per cm^3, which means that 1 cork stopper has 800 million cells

For the most prestigious beverages, Amorim produces cork stoppers that combine the high technical and environmental performance of natural cork with a distinctive designed capsule. Customisation possibilities include specific logos and shapes, a wide range of materials that may be added (ceramic, glass, wood, stone or metals), or design according to the specifications of each client, allowing colours and moulds to be worked on separately. These capsulated cork stoppers are used for fortified wines such as Port wine, as well as for whisky, brandy, cognac, rum, gin, vodka, among others.

Helix

Cork type technical cork stopper
Cork Characteristics elastic, compressible, impermeable to liquids and gases, resistant and resilient

Curiosities world's first wine cork that dispenses with the need for a corkscrew

Two global leaders in wine packaging, Amorim and O-I, have developed an innovative cork-glass wine packaging solution for the popular premium, fast turnaround still wine segment. The new 'twist to open' concept combines an ergonomically-designed stopper made from cork and a glass bottle with an internal thread finish in the neck, creating a high performing and sophisticated wine packaging solution. Helix combines all the benefits of cork and glass – consumer's preference, quality, sustainability and premium image with user-friendly, re-sealable convenience.

Cork and Amorim

Forest and the Cork oak tree

Cork oak forests occupy an estimated area of 2.2 million hectares in the Western Mediterranean basin, where there are ideal growing conditions for this species, in terms of soil composition, temperature, water and altitude.

With an average lifespan of 200 years, the cork oak tree (*Quercus Suber L.*) provides us with its outer bark – cork – a vegetal tissue composed of an agglomeration of cells filled with a gaseous mixture similar to air. In a context of increasing concern for the environment, it is important to stress that the cork oak is the only type of oak whose bark can regenerate itself after each harvest, leaving the tree unharmed.

Portugal – which transforms more than 50% of the world's natural cork – has been particularly careful to safeguard this valuable resource. In 2011, it was officially designated as Portugal's national tree. In fact, law protects the cork oak tree since the 13th century – ensuring that the species cannot be felled or removed without special authorization.

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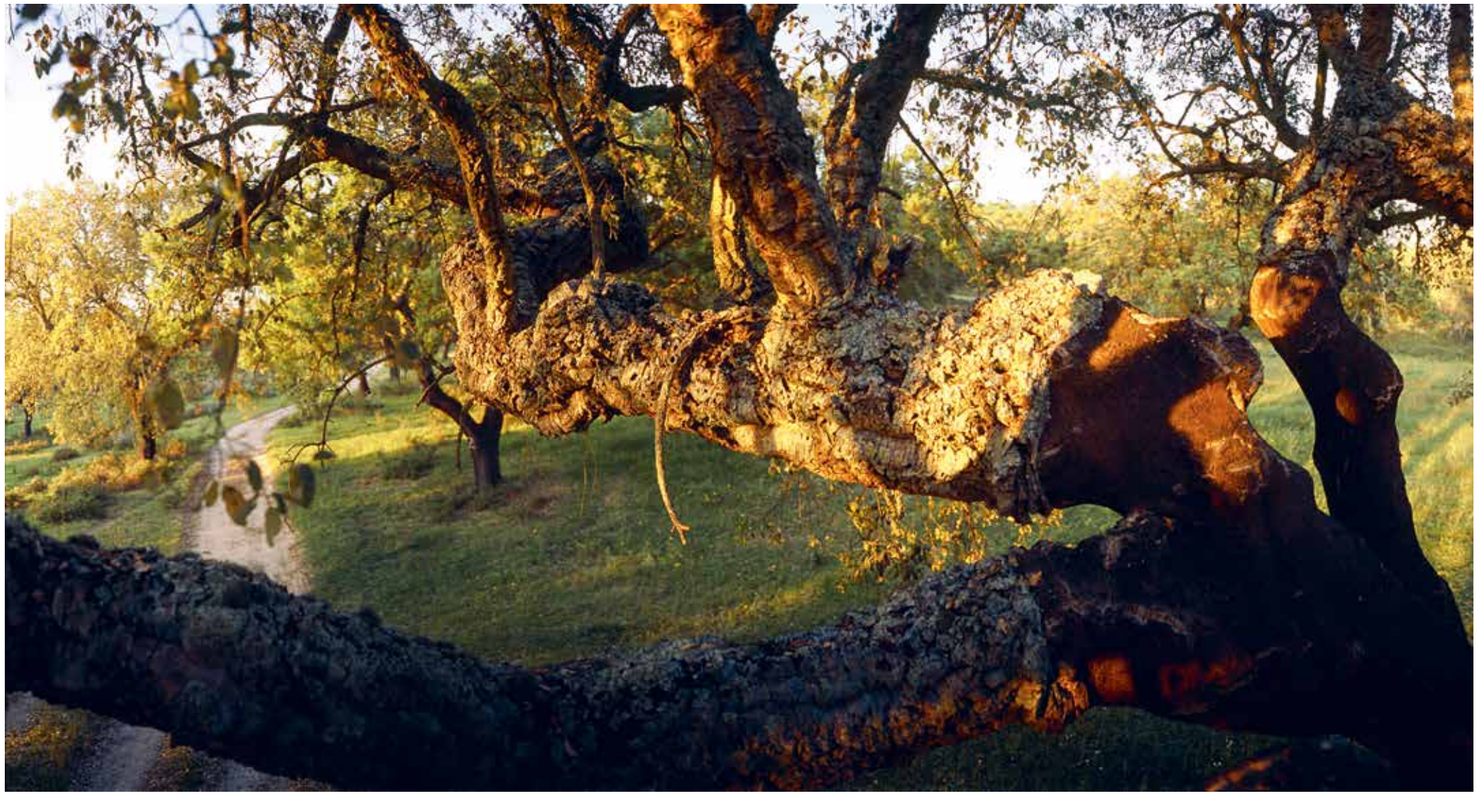

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Cork,
Cork oak harvesting and processes

It takes, on average, 25 years before a cork oak can be harvested for the first time, but during the tree's lifespan, there are certain rules one must obey:
— the first harvesting occurs when the trunk's circumference reaches 70cm, measured at 1.3 metres from the ground;
— after this first operation, the following harvestings are made at intervals of, at least, nine years, always between May and August, when the tree is at its most active phase of growth;
— harvested in sections of 2/3^{rds} of the tree, the bark grows back completely, taking on a smoother texture after each harvest;
— it is only after the 3rd harvest – 43 years – that the cork has achieved the standards of quality required for a natural cork stopper.

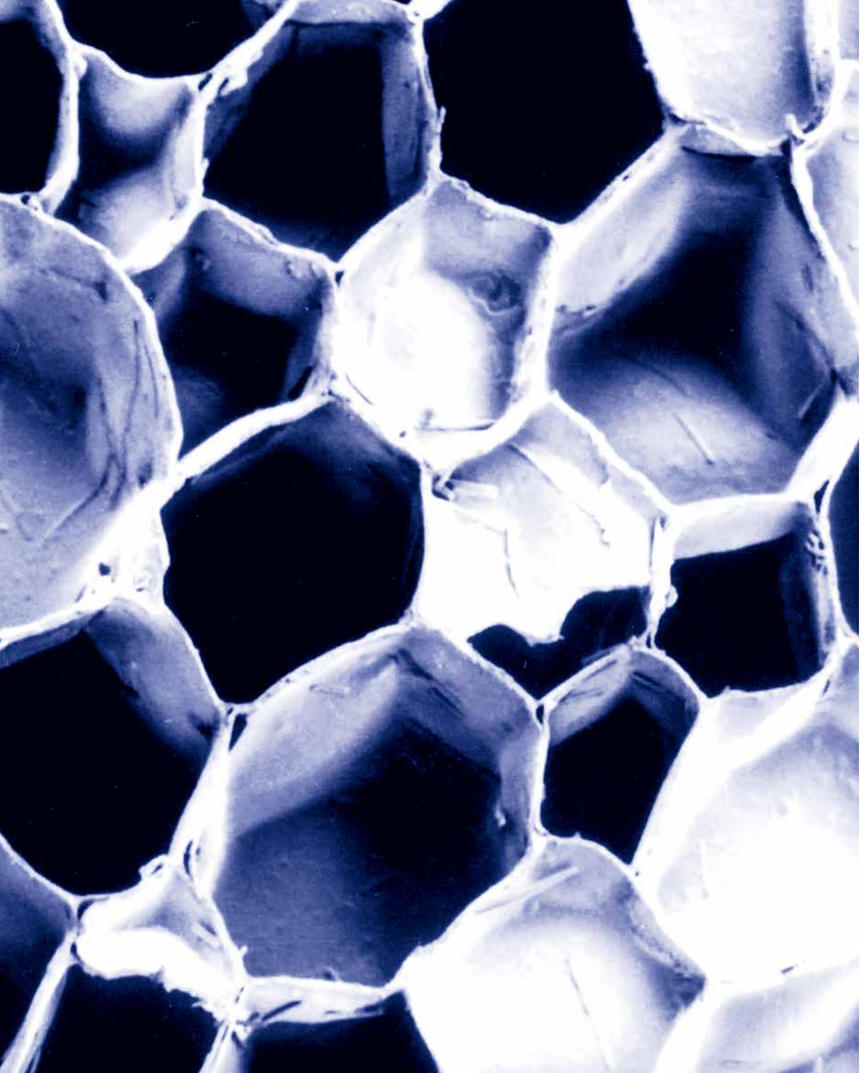
After being harvested and already located on an industrial yard, the cork planks must rest for 6 months for stabilization. The industrial use of cork starts with a boiling operation, in steel closed and filtered tanks, in order to remove organic objects embedded in the pores and enable the cork to reach the ideal moisture content for processing. It is then sorted by thicknesses, which are, in turn, sorted into different qualities, a segmentation to determine the suitability of the cork for different applications.

The cork oak is the only type of oak whose bark can regenerate itself after each harvest, leaving the tree unharmed

With a honeycomb-like structure, cork is nature's own high tech achievement. Including its cell structure – 40 million cells per cm^3 – its unique composition and characteristics cannot be replicated by anything man-made, thus allowing a versatile use in different areas and with many purposes.

100% natural
Acoustic insulator
Fire retardant
Flexible: elastic and compressible
High abrasion resistant
High temperature resistant
Hypoallergenic
Impermeable to liquids and gases
Lightweight
Moisture proof
Recyclable and reusable
Resilient
Shock absorbent
Soft touch
Stable
Thermal effective
Warm feeling

Cells were first discovered in 1665 by the English scientist Robert Hooke. When observing a sliver of cork under a rudimentary microscope, he discovered that it was made up of multifaceted cavities, which he called cells (from the Latin cellula, small room).



Annual cork production by country

Source: FAO (2010)

Spain
61,504 Tons
30.5%

France
5,200 Tons
2.6%

Italy
6,161 Tons
3.1%

Portugal
100,000 Tons
49.6%

Tunisia
6,962 Tons
3.5%

Morocco
11,686 Tons
5.8%

Algeria
9,915 Tons
4.9%

Country area

Production percentage

Cork oak forest area

Algeria	230,000 ha	11%
France	65,228 ha	3%
Italy	64,800 ha	3%
Morocco	383,120 ha	18%
Portugal	736,775 ha	34%
Spain	574,248 ha	27%
Tunisia	85,771 ha	4%

Source: Algeria: EFI (2009), France: IM Liége (2005), Italy: FAO (2005), Morocco: HCEF Marroc (2011), Portugal: IFN (2013), Spain: MARM (2007), Tunisia: Ben Jamaa (2011)

Cork typologies

Natural Cork

Cork used in its most natural way in industry. It is used for manufacturing the highest quality natural cork stoppers, obtained by punching a one-piece cork strip; and is also incorporated in technical cork stoppers, as small discs which interact beneficially with wine.

Granulated Cork

Available in various grain sizes, its density (or mass density) can range from 40 to more than 100 kg/m³. It can also be used by itself in a wide variety of areas: agriculture, construction, environmental protection, energy and in several industrial applications, such as electronic, chemical and engineering applications, among others.

Expanded Insulation Cork

A natural, durable and recyclable product. Its origin is 'falca', a unique type of cork from the upper branches, periodically pruned from the cork oak, which is ground into small granules. These granules, placed into an autoclave and exposed to superheated steam at 350º-370ºC undergo an expansion process and exude their own resin (suberin); the particles are self-bonded without artificial additives to the cork granules. With a dark-brown colour and produced in different grades and densities, expanded insulation cork provides great thermal, acoustic and anti-vibration insulation, to be applied in floors, interior partition walls and many other specific applications.

Composite Cork

Made from granulated cork bound together using different agents, or incorporating other components such as rubber, carbon fiber, plastic, asphalt, cement, gypsum, casein, resins or glues, composite cork allows for the creation of a major diversity of products. In the building industry, the product range offers solutions from housing to major public infrastructures, such as the underlays for flooring to expansion joints. In the transportation industry, cork products provide the highest standards of core structures for panels and flooring in high-speed trains, coaches and metro underground trains. Footwear, fashion and contemporary design objects are other industries where cork composites are being used. As a composite, cork combined with other materials opens an endless range of new applications and possibilities to be integrated and new business areas to develop.

Thoughts and views

Prof. Mohan Munasinghe, Nobel Peace Prize 2007

Sri Lankan physicist, academic and economist with major interest in climate change

"**Amorim is not only a world leader in the cork industry, it's also an outstanding role model for companies everywhere, because of its high quality products and deep commitment to economic, social and environmental sustainability.**

In 1992, when I presented the Sustainomics framework for making development more sustainable at the Earth Summit in Rio de Janeiro, I stressed that governments need to work with key stakeholders in business and civil society to achieve sustainable development. The business trajectories of firms like Amorim provide a good practical example of the inclusive green growth path I described. They prove to the world that business is part of the solution and not the problem – as widely perceived by many environmentalists. Sustainable practices at Amorim will help to achieve key sustainable development goals at the firm level, and contribute to achieving them at the national level, especially SDG12 on sustainable consumption and production.

The cork industry in Portugal has successfully incorporated sustainability into its "Brand" in the eyes of the world. In particular, it is possible to show how Amorim's innovative cork-based products, internal processes, business practices, corporate attitudes, and environmentally and socially responsible behavior, demonstrate commitment to inclusive green growth, through sustainability reporting and the triple bottom line."

Alexander von Vegesack, Domaine de Boisbuchet

German curator and furniture design collector, Founding Director of Vitra Design Museum (until 2011) and Founder and President of CIRECA

"Amorim shows enormous curiosity about other disciplines and cultures and is a great host and supporter of new ideas in a warm human way to encourage friendship and cooperation. The company produces and promotes a product you don't need to whitewash or glorify because it is exactly what consumers, designers, industries and ecologists need today and it's produced in a natural and modest way.

Amorim has developed a wide range of new specialised cork products, and using reliable sources it has explained novel applications to designers and architects. Over the last five years Amorim has donated a generous stock of different cork applications to Boisbuchet for our educational program, which have so far been used by approximately 2,300 young professional designers worldwide. Even though they did not think of cork in the first place none of the designers could resist touching, smelling and using this fascinating natural material."

Peter Sisseck, Pingus

Owner and Oenologist at Pingus Domaine in Spain

"Cork, firstly, is the pride of a wine cellar. When people open a bottle, you are also transmitting an image to consumers. **We have major concern in the cork – it should be high quality because it shows how serious we are with what we're doing.**"

Jasper Morrison, Designer

British product and furniture designer

"It was a pleasure to work with Amorim. I loved my visit to the cork museum and to the factory, where **I was extremely impressed by their 0% waste policy!** I certainly know a lot more about cork now, there are so many things to do with cork I feel I'm just getting started."

Bernard Noblet, Romanée Conti

Chef de cave at Domaine de la Romanée Conti in France

"Romanée Conti is the smallest red-wine appellation, only 1.85 hectares. The cork stopper is a very important element for us. It preserves the wine, and ensures its maturation and ageing in the bottle. So we don't pinch pennies when it comes to stoppers. We are concerned with quality, not price. **For us a durable cork stopper is synonymous with longevity and quality – it is more reliable over time, so we really need top quality cork.** It is good to use something natural, just like our grapes."

Birgit Lohmann, Designboom

German designer founder and editor-in-chief of the online magazine Designboom

"When visiting Amorim, Designboom had the opportunity to witness the cork production processes, from beginning to end. From the cork plantations to the factories that showcase the latest technologies, it was a pleasure to feature in the entire production process in our online magazine.

With its 150-year history, Amorim stays true to the company's traditions while aiming for innovation and sustainability. It's a company that highlights its origins and pays homage to its roots while looking to the future.

Cork has been used for many applications other than cork stoppers for several years now. Amorim is a clear example of a company that has a firm commitment to the versatility of a material and its various applications. Today, we see how cork is being used in interior, fashion and product design, including flooring solutions, surf boards, skirts, and umbrellas and many other applications. Its natural, flexible and sustainable properties make it an ideal material, that also takes into consideration concerns regarding the future of our planet."

Corey Beck, Coppola Winery

President and Director of Winemaking at Francis Ford Coppola Winery, in California

"**We have been using cork from the very beginning.** As Francis is very theatrical and loves the presentation, the moment of opening the bottle is very important. But also the quality, as it is the final seal for something that you worked so hard in the vineyard and for the wine we create. It really is the end of the life of the wine and the beginning of the ageing process. And at the same time it allows a little bit of breathing that goes on for the wine, especially for the bigger red wines. It really ensures that once the wine is in the bottle, it's going to continue to age the way that the winemakers saw it in the cellar during the two years it was kept here."

Sandrine Garbay, Château Yquem

Maître de Chai, responsible for vinification and ageing of the wines at Château Yquem in France

"Working at Yquem for 17 years, we have always used, a priori, cork stoppers for our wines. Cork is particularly important, because it is the final seal for our wines. **And clearly for a top quality wine, such as Yquem, the closure is of utmost importance.**"

© Apcor

Ecology and Sustainability

Cork is an ecological and sustainable material 100% natural, renewable, recyclable and reusable

"Montados", the Portuguese word for the cork oak forests, play an enormous role in the world's ecological balance, particularly in the Mediterranean area. They support a unique and fragile ecology that constitutes a habitat for rare and endangered species. They are the foundation of one of the 35 most important ecosystems in the world for preserving biodiversity – on a par with the Amazon, the African Savanna and Borneo. Over 200 animal species and 135 plant species find ideal conditions for survival in the cork oak forest.

Perfectly adapted to the warm climate and arid soil, cork oak forests protect against erosion and resulting desertification. They are a barrier against fire, due to the low combustion of cork, and play an important role in the regulation of the hydrological cycle. They also provide an essential contribution to the quality of the air that we breathe, by absorbing carbon dioxide, which would otherwise be released into the atmosphere. It is estimated that cork oak forests retain up to 14 million tonnes of CO_2*, per year – a sizeable contribution to reducing greenhouse gas emissions, the main cause of climate change. The ability to retain carbon dioxide is also passed on to manufactured cork products, which continue to ensure this function to absorb CO_2.

Cork oak culture is associated to the world's best paid agricultural activity, besides a wide range of agricultural, forestry, forest grazing, hunting and economic activities. The cork industry is the driving force of this sustainable development, it helps to maintain thousands of jobs and keeps people on the land, in areas prone to desertification.

According to the WWF – World Wild Fund for Nature, over 100,000 people in southern Europe and North Africa directly and indirectly depend on these forests.

As the world leader of this industry, Amorim makes cork viable in a unique manner and thereby fosters preservation of the cork oak forest, an inimitable example of the green economy, which is based on a true balance between economic, social and environmental issues. The constant concern to adopt and reinforce sustainable development practices positions Amorim as one of the most sustainable companies in the world.

Cork oak forest as a very special ecosystem:**

— prevents soil degradation
— increases soil productivity
— regulates the water cycle
— fights desertification
— provides retention and storage of carbon for very long periods of time
— combats climate change
— generates high rates of biodiversity
— creates employment and wealth in the Western Mediterranean Basin

*Source: Lisbon School of Agronomy, 2014

**Mediterranean ecosystems occupy only 1.2% of the Earth's surface

A Circular Economy

Eco-efficient products and processes

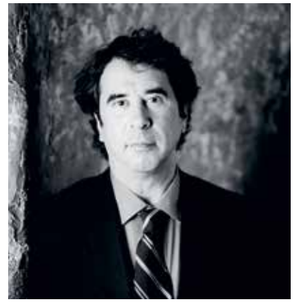
Amorim underpins all its activity by implementing sustainable practices in its operations.
It has implemented an integrated production process, and thereby ensures 100% use of the raw-material as well as reuse of all by-products related to the cork manufacturing process. Even the smallest cork granules or cork with inferior standards of quality are used as an important energy source. At Amorim, over 60% of the energy needs are met through the use of biomass (cork dust) – and in some industrial units, this resource satisfies 93% of their needs – which is a CO_2 neutral source of energy.
With all its qualities and benefits, cork is a faultless ally in environmental preservation and a perfect natural element that can efficiently replace pollutant materials. It's the perfect sustainable raw-material for the 21st century.

International Cork Recycling Programmes

The concept of recycling cork stoppers originated in Portugal, where the Green Cork project was launched in 2008, a partnership between Amorim and the main national environmental association, Quercus. It then spread to other countries, such as Spain, the USA and Canada, France, Italy, the United Kingdom, South Africa and Australia.
After grinding down used cork stoppers, the resulting granules are incorporated into new applications – ranging from coverings, construction products and consumer goods, to any and all uses, except, of course, for cork stoppers.
Recycling, in addition to increasing the reuse of the raw material, enables the life cycle of cork and associated benefits to be extended, in particular their remarkable ability to retain CO_2.
And, although not a single oak is felled during the whole cork production process, some Amorim's recycling programmes, particularly in Portugal, revert to the creation and reforestation of indigenous forests, in particular cork oak forests.

"We can start raising people's consciousness about something as simple and small as the cork stopper in their wine bottle, and getting people to understand that it is almost a metaphor for the kind of decisions we need to make more regularly and widely."

Allen Hershkowitz, Senior Scientist at the Natural Resources Defense Council (NRDC)



Forestry Intervention Project

Led by Amorim, the Forestry Intervention Project contemplates several initiatives in order to assure the sustainable development of cork oak forests and reflects the company's major concern for this natural resource. It is developed in close partnership with forestry producers, research institutions and local authorities, and aims to ensure the maintenance, preservation and enhancement of cork oak forests and guarantee the continuous production of high-quality cork. The programme encompasses a number of important areas and is developed under the following guidelines:

— reduction of the first cycle of cork extraction;
— genetic improvement and vegetative reproduction of the cork oak tree;
— setting a maximum number of cork trees per hectare;
— sequencing the genome of the cork oak tree;
— fighting pests and diseases;
— fertilisation and compatibility of grazing activities.

Various initiatives are currently underway in the Ribatejo/Alentejo regions in Portugal, and in Catalonia, Spain.

Research Technology Innovation

As the result of a significant investment in R&D and innovation, cork is currently used in high-tech applications. Cork is found in compounds for the transport sector; in the construction of dams and airports; in the most complex and demanding products developed for the aerospace industry; top-level sports equipment or benchmark architecture and design works, among many other applications.
This is, however, an ongoing endeavour, with a sheer and absolute focus on improving quality, optimising manufacturing processes and harnessing the latest technology, associated with the exploration of unexpected applications and purposes for cork, in order to upgrade the company's product portfolio. Amorim's innovation strategy is, therefore, intimately linked to quality, product reliability and consistency, following paths such as certification, as a guarantee of process efficiency and competitiveness.

The challenge also involves the development of cork solutions combined with other materials that effectively meet market needs in technical, environmental and social terms. New roads are being drawn, in several directions, such as the development of beauty products and medicines using cork, new components for spacecrafts, completely revolutionary applications or new kind of cork stoppers.

All this process is possible because Amorim works with experts and has established partnerships with universities, scientific units and research institutes, in Portugal and abroad, from the USA to Australia, including various European countries, such as France, Germany or Italy. This method guarantees excellence of knowledge in all project areas and results that are internationally validated.

Amorim's path is strongly marked with successful examples of R&D+I, such as the groundbreaking technology, NDTech – the world's first natural cork with a non-detectable TCA guarantee; Helix, a unique cork-glass packaging combining an easy to open and seal cork stopper with a specific glass bottle, that dispenses with the need for a corkscrew; or Hydrocork, the world's first-ever waterproof cork flooring.

Move

Cork will take us anywhere

Cork's renowned credentials, combined with Amorim's technical capacity and cutting-edge technology, comply in full with the requirements of any transport system of the future. Its advantages include lightness, low energy consumption, durability, resistance to fire and high temperatures and increased comfort. In terms of eco-design, cork also adds value due to its versatility and the environmental benefits associated to its use.

Inspiro

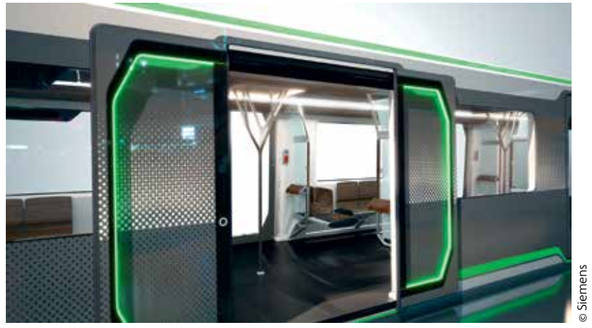
Poland 2012 and Riyadh 2015

Cork type AluCork
Cork Characteristics lightweight, acoustic and thermal insulation, durability

30% weight reduction improves performances and at the same time reduces energy consumption

Inspiro is the surface metro train developed by Siemens, launched in Poland in 2012 and subsequently introduced in the Riyadh metro system. It was designed to be the most modern, efficient and sustainable in its class. With cutting--edge technology and an environment-friendly concept, it combines higher transport capacity with lower energy costs. It is one of the lightest metro trains in the world thanks to a range of efficiency measures including the installation of the innovative AluCork flooring system, by Amorim, which contributes to weight savings of around 30% when compared to traditional models. Cork also improves acoustics and thermal insulation, in addition to being a sustainable and recyclable product – the vehicle is intended to be recycled after a working life of 40 years.

© Siemens



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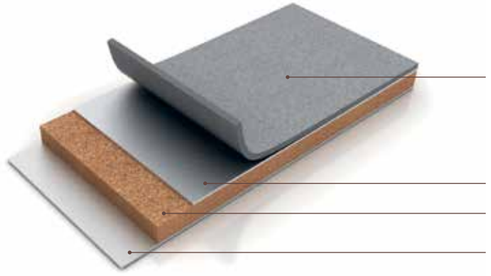

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Alfa Pendular

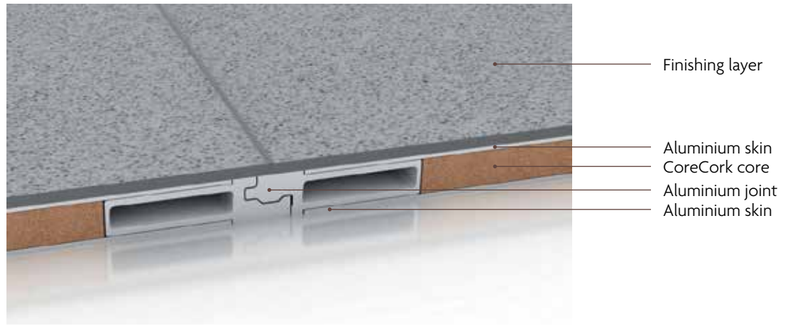
Portugal

Cork type AluCork
Cork Characteristics lightweight, acoustic and thermal insulation, durability

The new generation of Alfa Pendular, the high-speed trains from Portugal, also uses AluCork flooring, from Amorim. Ten trains are being refurbished in order to optimize passenger comfort and safety and increase its energy efficiency. Weighing about 40% less – compared with alternative solutions within the same thicknesses available in the market – the AluCork system makes it possible to reduce energy consumption for this type of high-speed trains, while also providing financial savings.

AluCork is specifically designed to meet the needs of the transport industry, with the added value of being suited to the different structural characteristics, dimensions, and thermal and acoustic insulation requirements of each project, being applied both in floors and walls. It is produced using an innovative technique, which comprises a composite agglomerate of low weight cork, CoreCork, coated with aluminum alloy layers.

© CP



Project

Metamorphosis

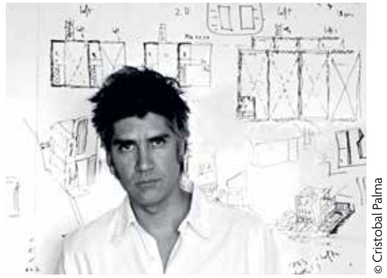
Lisbon, Portugal

Soft Monolits

Alejandro Aravena

Pritzker Prize

“We profited from its high insulation capacity, its low weight and the time captured in its skin. With an increasing global need for energy efficiency, it would be nice to see cork offering its advantages to a broader public.”



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Typology Research; Exhibition; Book
Cork type cork planks; agglomerated cork; cork leather; cork granules; expanded insulation corkboard
Outputs It originated new products and materials, opening the limits for the use of cork within the architecture and design communities
Participants Alejandro Aravena (CL), Álvaro Siza (PT), Amanda Levete (GB), Eduardo Souto de Moura (PT), Herzog & de Meuron (CH), James Irvine (GB), Jasper Morrison (GB), João Luís Carrilho da Graça (PT), Manuel Aires Mateus (PT), Naoto Fukasawa (JP)
Curated by experimentadesign
Date 2011-13

Metamorphosis is the outcome of a research and development project on the unparalleled potential of cork, authored by seven celebrated architects (four of which are Pritzker Prize winners) and three top product designers. The basis for the curatorial concept was the idea of broadening the horizons of this distinctly Portuguese material. It was devised to stimulate the innovative, creative and cutting-edge use of cork as a unique raw material. From pieces of furniture (benches, shelves, ...) to construction materials (such as light concrete with cork granules), a wide range of products was developed. Metamorphosis was presented at one of the core exhibitions of the EXD'13, the Lisbon design and architecture Biennale, and originated a comprehensive book about the whole project.

Stool

Álvaro Siza

Pritzker Prize

“The advantages of using this material in this project were its temperature and the slight flexibility of the stool seat.”

© Peter Guenzel

© Atelier Álvaro Siza

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Cork Kit

Amanda Levete

“Cork kit exploits the characteristic of lightness and find ways of emphasising the tonal range of colour variations without adding natural pigments. The advantage of using this material is that you can have zero wastage, as cork is fully recyclable.”

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Door handle and handrail

Eduardo Souto de Moura

Pritzker Prize

“As well as cork's ecological, insulating and natural attributes, what I like is touching it, so I chose to “redesign” a door handle... to handle. Essentially, it was the touch; and, on top of that, the texture is lovely, compact, consistent, neutral and pleasant. It has a cream tone that works in virtually all environments; it’s not purple, red or canary yellow.”

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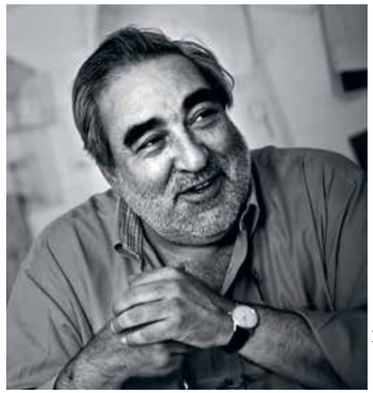

© Leonel de Castro

“Cork is a natural material, with wonderful haptic and olfactory qualities, with the versatility to be carved, cut, shaped and formed, as demonstrated in many historical examples of cork architectural models.”

Elbphilharmonie Hamburg, philharmonic hall, scale 1:20

Herzog & de Meuron

Pritzker Prize

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Stow it

James Irvine

“Cork and sound absorption are a natural match. It doesn’t get much better.”

© Miro Zagnoli

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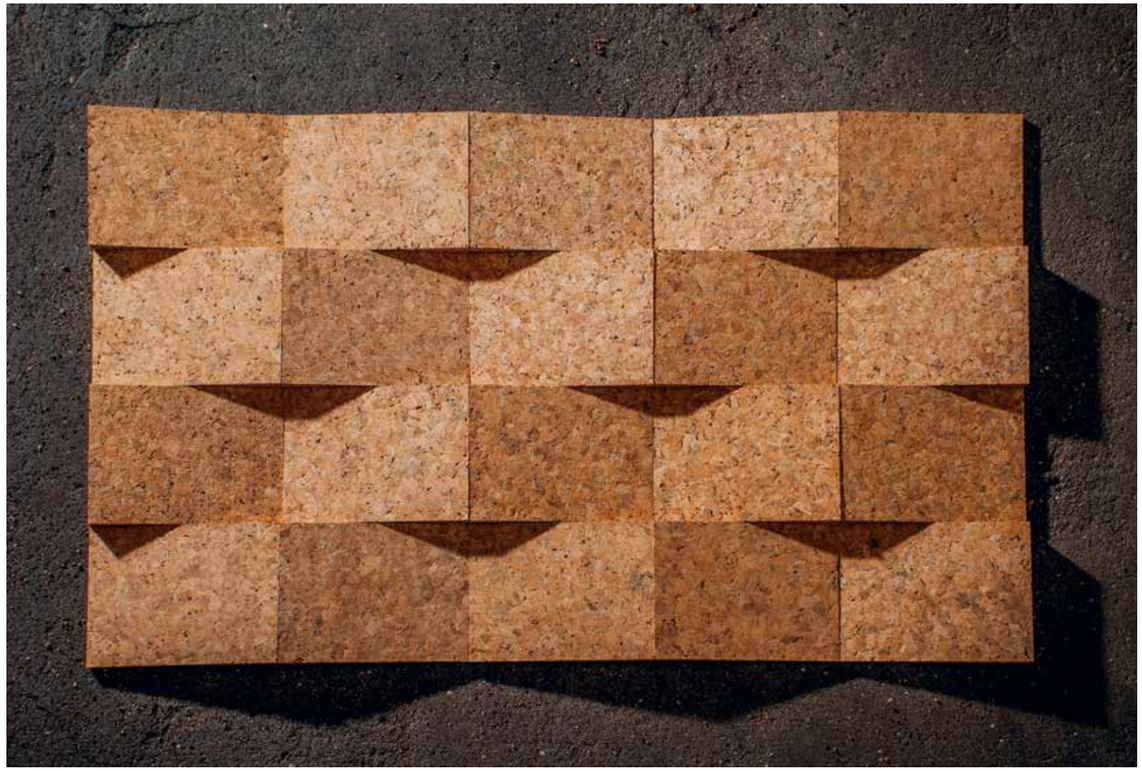
Cork wall tiles

Jasper Morrison



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“I love the character of the material and the contradiction of something so natural and so random being treated as a raw block material, which can be sculpted to any shape.”

The Metamorphosis of Cork into Concrete

João Luís Carrilho da Graça

A light, white concrete obtained from incorporating cork aggregates, this material boasts unique and interesting features, both technically (it is lightweight – can weigh up to eight times less than a standard concrete – and a good insulator) and in its form (it is both very attractive and tactile), where the characteristics of cork are transferred to concrete. Its use for the façades of the Lisbon Cruise Terminal is related to the weight of the building to be constructed in the old Doca do Tabaco (located on the existing stake foundations), which is unable to support the mass of a conventional concrete structure.

© Augusto Brázio

“A light, white concrete obtained from incorporating cork aggregates, this material boasts unique and interesting features, both technically (it is lightweight and a good insulator) and in its form (it is both very attractive and tactile), where the characteristics of cork are transferred to concrete.”

© JLCG + P06

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Cork Space

Manuel Aires Mateus

“Cork, which is a natural material with countless physical attributes, can be very expressive. In addition to its thermal, acoustic and ecological qualities, it communicates something sensory and aesthetic.”

© Aires Mateus

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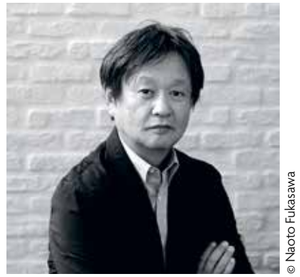
Cork bench

Naoto Fukasawa



© Naoto Fukasawa

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“Cork is known for its natural temperature-regulating properties and it is known to maintain a similar temperature to our own bodies, thus providing a unique connection between us and the product. As a result, this bench offers a very comfortable experience.”

Metamorphosis Exhibition

Jerónimos Monastery, Lisbon, Portugal
8 November – 1 December
EXD'13 No Borders
10 participants
7 countries
12 cork projects presented
33,828 visitors

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Living

Cork at the forefront of modern life

The constant need to develop new and unexpected high added value applications for cork has driven Amorim to challenge designers to incorporate it in innovative and surprising projects. Nowadays, cork is presented by some of the world's furniture leading brands with great success. Cork's appeal is strong and captivating. It is a natural material with wonderful haptic and sound-buffering properties. It delivers a cosy atmosphere in home, offices and even leisure spaces.

Vitra Cork Table
by Ronan & Erwan Bouroullec

Cork type agglomerated cork
Cork Characteristics acoustic insulation, soft touch

Ideal for open areas, as well as shared small workspaces, the Vitra Cork Table creates an enjoyable space for concentration and self-communion, by using one of cork's many remarkable properties: sound absorption. The Cork Table consists of a vast tabletop divided into semi-private workspaces, which are defined by vertical panels that slice up from the ground, through the platform, to form a series of walls between people working at the table. However, by slightly tilting the side panels, the design provides for different perspectives – gaps, for example, allow two people sitting transversally in front of each other to communicate. Otherwise, the individual workstations are encased by side panels, enabling concentrated work, even if people are densely assembled along one single table.

"Thanks to cork, these rather dense workstations become friendly, unfamiliar creatures, that create a pleasant and relaxed environment for intense work."

Ronan & Erwan Bouroullec

© Ronan & Erwan Bouroullec

moooi Corks
by Jasper Morrison

Cork type expanded insulation corkboard
Cork Characteristics 100% natural, flexibility, soft touch

"Corks", designed by Jasper Morrison, is a timeless, soft and comfortable cork stool that can be used as a side table or ottoman. It was conceived for the Dutch brand, moooi, created with expanded insulation cork blocks – a 100% natural product with a typical dark-brown colour.

Design and furniture
by Jader de Almeida

Cork type agglomerated cork
Cork Characteristics natural, flexibility, soft touch

Sollos blends cutting-edge techniques with traditional craftsmanship while adopting eco-friendly practices to safeguard the environment. This collection developed by the Brazilian designer Jader Almeida includes several cork furniture objects, blending a timeless aesthetic with technological expertise. The promising young designer is one of the country's top talents, with a singular approach and a remarkable, tenacious commitment to his craft. This concern results in timeless pieces, recognized for their elegance and novelty.

"The elaborate use of the cork was cause for great surprise, owing to its thermal characteristics, malleability and the perfect symbiosis it creates between the product and user. Indeed, because it is a natural material, it is not only conditioned for a plastic solution, but also for a tactile dimension."

Jader de Almeida

© Jader Almeida

Wallpaper's Handmade exhibition
by Fabien Cappello

Cork type agglomerated cork
(6 different cork references)
Cork Characteristics visuals variety, compressibility, durability and soft touch
Date 2016

Cork was presented at Wallpaper's 2016 Handmade exhibition, in its seventh edition, during Salone del Mobile in Milan. Conceived under the concept of "The Hotel Wallpaper", this edition features an exhibition of specially commissioned objects, furniture, fashion, food, accessories, services and installations, dedicated to the fine art of hostelry and world travel. Cork Lounger, a set of easy chairs and footrest designed by Fabien Cappello and produced by Amorim were presented during the event.

"Cork is such a sensual material. It's very rare that a material have such a rich and beautiful expression while having so many structural and functional properties. I think this first object has a lot of potential to be developed into a range of furniture, stools, benches, tables..."

Fabien Cappello, product and furniture designer

Makers & Bakers
Airbnb, Salone del Mobile
by Keiji Takeuchi

Cork type agglomerated cork
Cork Characteristics soft touch, warmth
Date 2016

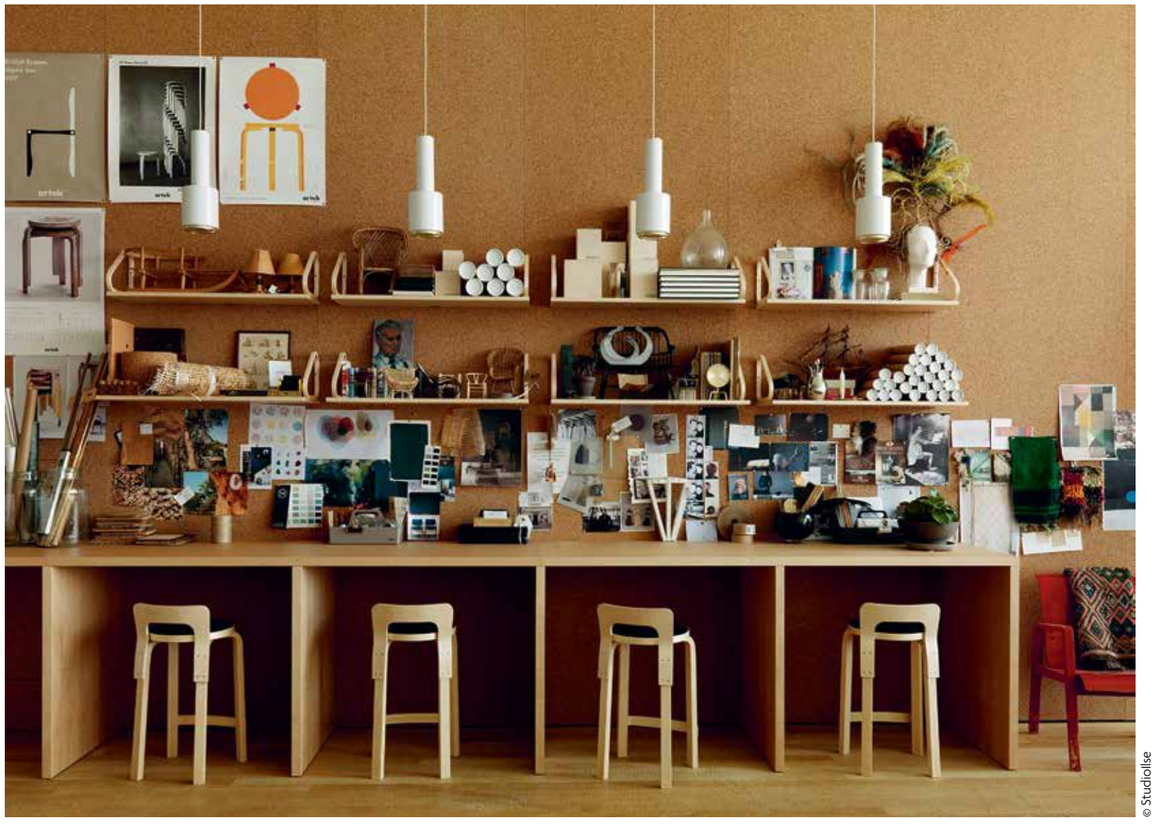
Within the Makers and Bakers initiative, from Airbnb, Japanese designer Keiji Takeuchi conceived Tapas Table, an object inspired by the Spanish food culture. Due to a partnership with Amorim, the table is entirely made out of cork, a soft touch, comfortable and warm material. The word 'tapas' is derived from the Spanish verb *tapar*, 'to cover', and the original tapas were slices of bread placed over wine glasses between sips. As an easy snack, tapas are meant to facilitate and encourage conversation. The table was presented with a set of marble stools, also designed by Takeuchi, a cold material that deeply contrasts with the warmth provided by cork.

VitraHaus Loft for Vitra and Artek

curated by Studioilse

Cork type agglomerated cork
Cork Characteristics soft touch, warmth, elastic memory
Date 2014

VitraHaus Loft is a project launched by Vitra and Artek to transform an area of the VitraHaus, in Weil am Rhein, Germany, into the residence of Harri and Astrid. These are a fictional couple that represents the shared values of the two brands, giving origin to an exhibition with the design curated by Ilse Crawford of Studioilse. With Amorim's support, the London-based studio included some examples of cork solutions in the project, as in the format of a wall-covering.



© Studioilse

Chaise Longue

by Daniel Michalik

Cork type agglomerated cork
Cork Characteristics soft touch, warmth, comfort

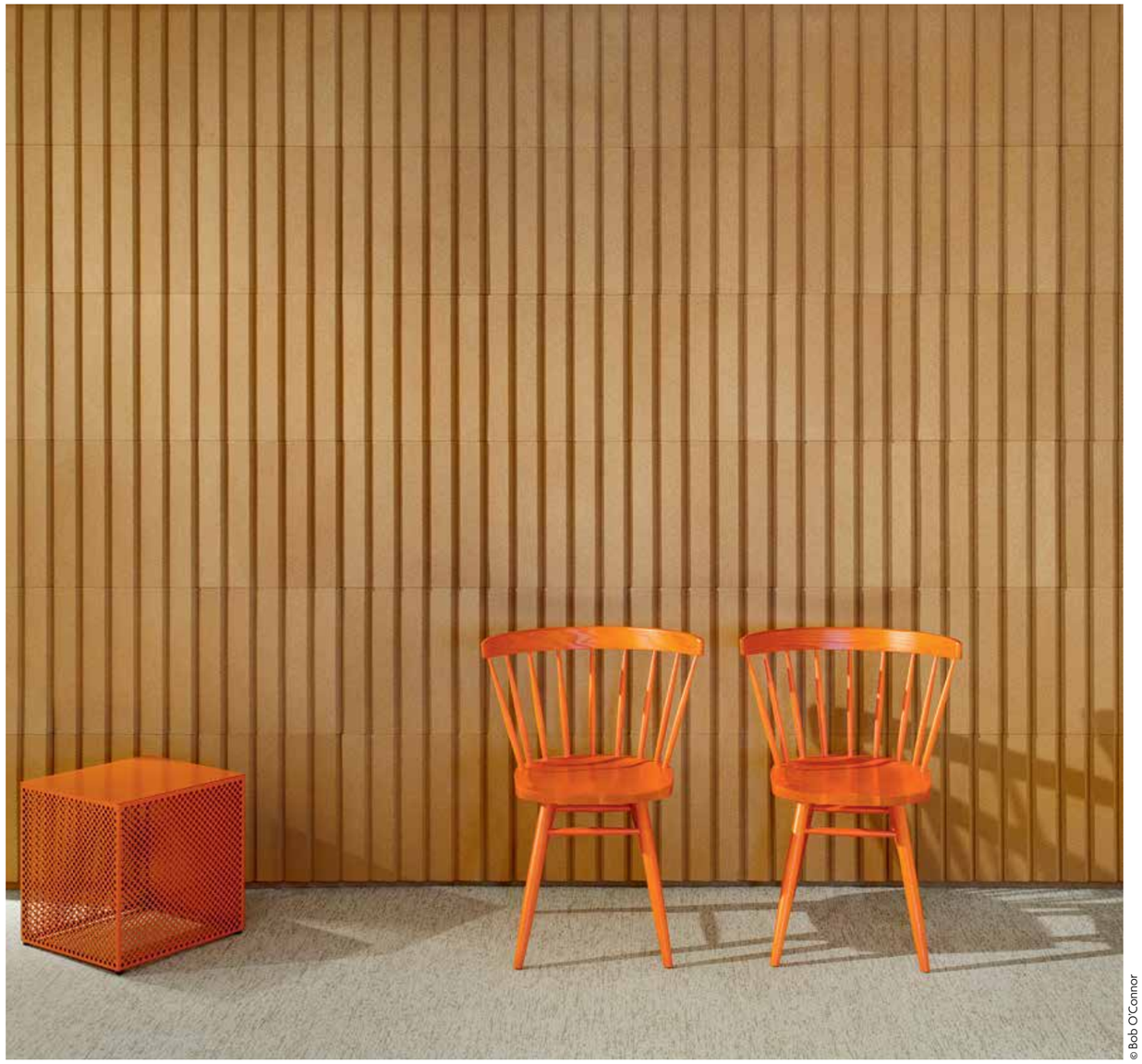
Handmade with recycled cork, this chaise longue was designed by New York based designer Daniel Michalik. It can be used both for indoor or outdoor spaces and, as the author describes, "this full size chaise longue allows for gentle rocking both side to side and front to back, providing a sense of effortless floating."

© Daniel Michalik

Knoll

Cork type agglomerated cork
Cork Characteristics soft touch, warmth, comfort, acoustic and thermal insulation

Amorim is supplying cork for a series of new acoustic tiles developed by famous design brand Knoll, within the Spinneybeck and FilzFelt collections. These collections are based on natural materials that normally have the specific characteristics of being subtle, acoustic, colorful, graphic, textural, dimensional. Some of the products are thought for combining with wool, others are presented as composite cork wall tiles, all for an optimal acoustical absorption.



© Bob O'Connor

© Bob O'Connor

Project

Muji Hut

Tokyo, Japan

“Cork is a material which is certainly worthy of attention in design. Its appeal lies in the combination of its old-world appeal and new-world technical capabilities.”

Jasper Morrison

Typology Architecture project
Cork type expanded insulation corkboard (MDFacade)
Outputs future commercialization
Participants Jasper Morrison (GB)
Commissioned by Muji
Date 2015

Simple country living inspired the design of Jasper Morrison's hut for "a weekend away". Its façade included layers of dark cork, used as a primary exterior material, which in addition to its sustainability characteristics, offers excellent thermal and acoustic insulation. This project exhibited the versatility of cork in a minimal prefab construction, when presented in a temporary installation, during Tokyo Design Week 2015.
Jasper Morrison was joined by the designers Naoto Fukasawa (JP) and Konstantin Grcic (AL). Under the theme “A Rich Life through Minimalism” they presented models of temporary homes where the main requirements included mobility and the combination of elements of traditional Japanese architecture with a more contemporary style.

Extreme

Wrapping nature in technology

Cork performs well under the most extreme conditions and demanding uses. Its unique set of properties makes it a great solution for applications that have to support intense temperatures or extreme climatic demands. Cork is also used in head protection and helmets, not only in sports but also by the armed forces.

Corksorb

Cork type cork granules
Cork Characteristics lightweight, hydrophobic, fast absorption, durability

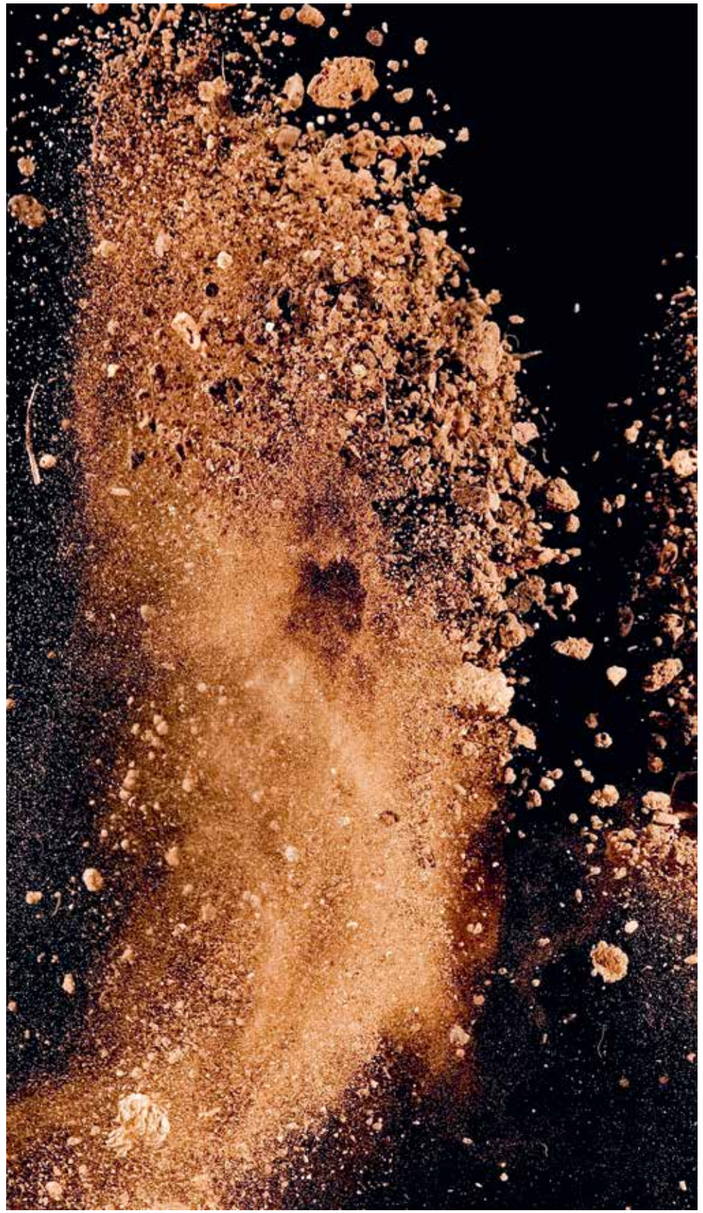
Curiosities winner of several awards such as the Green Project Awards; Innovation for Sustainability Award (EBAEpis); two European Business Awards for the Environment (categories: Product and Business for Biodiversity); National Award for Environmental Innovation and the Cotec-Unicer Product Innovation Award

Cork surprised the world by proving to be extremely efficient in absorbing oil spills, hydrocarbons and organic solvents, either in aquatic or terrestrial environments. Its cells have the ability to absorb oil by capillary action and retain it. With this in mind, Amorim developed CorkSorb, an innovative range of cork-based absorbents which are hydrophobic – cork absorbs oils and solvents almost instantly, but does not absorb water. Given their excellent floatation and oil retention capacity, these products are recommended for use in water environments and suitable for ATEX areas.

Movies' Special Effects

Cork type cork granules, expanded cork regranulate
Cork Characteristics lightweight, soft touch

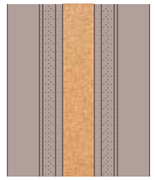
Blasts, debris falling, particles flying after impact. Cork granules are used in special effects scenes to simulate explosions and flying debris.
As a general rule, in films when bullets are shown hitting something, the particles projected after impact are made of cork. Such techniques were used in Hollywood productions and other cinema industries worldwide, such as *Captain America 3*, *Transformers 4*, *Pirates of the Caribbean 4*, *The Knowing*, *Terminator Genisys*, *Killer Elite*, *Total Recall*, *I Frankenstein*, *Bait 3D*, *Don*, *Gangster Squad*, *Mission: Impossible 2*, *Volcano*, *Dante's Peak*, *Ghostbusters*, among many others. Also several TV series have used the same solution, such as *The Pacific*, *Narcos season 2*, *NCIS: Los Angeles* or *Castle*. The lightweight and soft-touch properties of cork make it an ecological and friendly protagonist in movies and TV series.



Wind Power Energy

Cork type agglomerated cork
Cork Characteristics thermal insulation, lightweight, anti-vibration

Wind power energy equipment can also improve performance levels by using cork in the turbines' large blades. Cork is a lightweight material, capable of absorbing vibration, with a natural capacity for thermal insulation and damping, that helps to minimize condensation on the blades, thus enhancing their rotation performance.



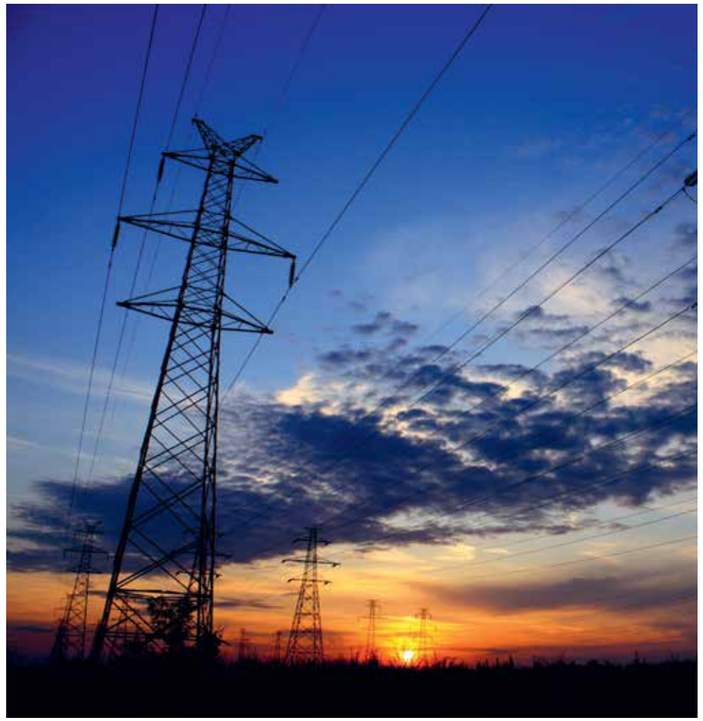
Transmission & Energy Distribution, Vibration Control and Techseal

Cork type agglomerated cork
Cork Characteristics insulation, anti-vibration, elasticity

Amorim has been manufacturing materials and gaskets for the transformer industry over the last four decades. Specific products are designed and tested for the energy power transmission and distribution market, providing engineered solutions in Sealing, Noise and Vibration Control for this industry. These products are performance-driven and recognized worldwide, with a long and successful history in transformers, reactors, bushings and other components.

Vibration isolation and damping is important to control unwanted vibration so that its adverse effects are kept within acceptable limits. The products and components developed ensure high levels of performance, comfort and durability. The Vibration Control solutions are made out of cork rubber materials, made using recycled tyres, waste rubber and virgin rubber, saving energy, reducing oil consumption and keeping an astonishing quantity of tyre waste out of landfills. Amorim offers customised products in the following fields: Railway Infrastructure; Construction Industry; OEM Equipment; Transformers and Reactors.

Techseal is the soft gasket technology providing a range of products that are designed to withstand a wide variety of application needs. Its unique features have made it the preferred material used across multiple applications and industries, ranging from marine, gas, industrial, heavy duty and automotive, keeping up with an ever changing market with specific solutions for ethanol and biodiesel fuel blends.



Project

Quiet Motion

Milan, Italy

Benoit Jacob, Erwan and Ronan Bouroullec

Typology Design installation
Cork type agglomerated cork
Outputs The leading brands BMWi and Bouroullec design are aware of cork's technical and green credentials
Participants Ronan & Erwan Bouroullec (FR)
Commissioned by BMWi
Date 2013

Cork was the fundamental material used in the design of the Quiet Motion installation, by the renowned French designers Ronan & Erwan Bouroullec for BMWi. It was presented at the Milan International Furniture Fair 2013 and has travelled to several world capitals, arranged by BMWi. Using Amorim's cork, as well as a series of blue fabric strips, the dynamic allegory of contemplation and sustainable mobility is represented by the carousel-like, slowly rotating cork-made platforms that quietly twirl. It substantiates the silent use of energy as an analogy to the electric propulsion that makes vehicles more environmentally friendly and will increasingly be integrated in the new generation of BMWi vehicles.

"Through Ronan & Erwan Bouroullec's Quiet Motion installation, I have been rediscovering cork from a totally new perspective. When used wisely, the natural properties of this authentic material, such as its warmth, acoustic insulation and of course unique aesthetic, are truly supporting our BMWi Next Premium design philosophy."

Benoit Jacob, Head of Design BMWi

Feel

Experiencing cork

As a natural product, cork has its own “fingerprint”, making each object unique. It gives a seal of distinction and originality to the items into which it is incorporated, making them more valuable.
Cork’s characteristics of comfort, lightness, warm feeling and soft touch rank it amongst the leading materials used by product and fashion designers.

International Fashion Showcase

London Fashion Week by Miguel Bento

Cork type expanded insulation corkboard, composite cork agglomerates, Wicanders wall coverings
Cork Characteristics aesthetic versatility, thermal and acoustic insulation, soft touch
Date 2016

The International Fashion Showcase (IFS) is a key event of London Fashion Week. In 2016, Amorim supported Bloom, the Portuguese representation that chose cork for the spatial scenography of the IFS, a project curated by Miguel Flor and designed by Miguel Bento. Totalling one tonne of cork, Amorim has supplied several cork solutions for this initiative, that have deeply influenced the avant-garde lines of the space. The solutions include expanded insulation corkboard and composite cork agglomerates – both of which are dark-coloured – and a wall-covering range made of cork, with a natural look, by Wicanders. A sense of comfort was added, as a result of the thermal and acoustic insulation that cork provides. Innovation and sophistication were once again the key to success and confirmed the versatility of natural cork.

"In Portugal, Amorim is the best in working in a sustainable and eco-friendly environment and so it made perfect sense to challenge them."

Miguel Flor, curator of Bloom Portugal Fashion project

"Through a cork installation, we aim to draw attention to ecologically and socially sustainable creation, since this natural raw material has unrivalled sustainability credentials and does not interfere with the balance of ecosystems."

Miguel Flor

Onion Pinch
by Caterina Tiazzoldi and Eduardo Benamor Duarte

Cork type composite cork
Cork Characteristics resilience, soft touch, durability
Date 2009

Curiosities In 2010, the installation was the set for a dance performance by Arke Danza

Onion Pinch is a cork structure designed by the architects Caterina Tiazzoldi and Eduardo Benamor Duarte. It was produced by Amorim for EXD'09, the Lisbon design and architecture Biennial. For this playful sculpture-like "resting area", cork was the ideal choice, not only for the flexibility it offers, but also because of its soft touch and natural feel when in contact with the body. Onion Pinch was presented in several European cities, allowing a vast audience to experiment and experience this harmonic natural material.

"The choice of cork has proven to be critical not only in terms of touch, but also in terms of the structural behaviour of the material. The richness of this raw material and the way how it expresses its flexibility and variability, revealed the spatial potential of the project developed in conjunction with Amorim."

Eduardo Benamor Duarte

Anthropologie store window display

Cork type used cork stoppers
Cork Characteristics natural, recyclable, reusable
Date 2011

Curiosities During its useful life, a cork stopper has the ability to retain 112 grams of CO_2

Anthropologie chain stores collected more than two million cork stoppers that were used in a special creative window display project to celebrate Earth Day 2011. More than 150 Anthropologie stores in the USA displayed different visuals using this product, raising awareness on the environmental causes and the importance of natural cork, educating about this sustainable resource. The remaining corks were returned to the Cork Forest Conservation Alliance (CFCA) and recycled through its Cork ReHarvest programme.

Wallpaper's Handmade exhibition
by Todd Bracher

Cork type natural cork leather
Cork Characteristics comfortable, lightweight, soft touch
Date 2014

Curiosities the Cork Jacket was part of a short selection of Handmade pieces that were presented in New York, an initiative hosted by British car manufacturer, Jaguar, from 16-31 May

Handmade – a ground-breaking exhibition dedicated to the marriage of craftsmanship and design that presents about 100 innovative pieces in Milan every year – was launched by Wallpaper magazine in 2010. The exhibition's motto is "developing new partnerships that will culminate with the launch and presentation of unique pieces challenging the design limits". In the 2014 edition, Amorim was invited to participate in this prestigious initiative, presenting an innovative cork object during Salone del Mobile. As a result of a partnership with the US designer Todd Bracher, a Cork Jacket was presented.

"It's not like wood, it's not even like fabric, it's not like anything we know, it's got its own life."
"It is like furniture that came alive, furniture that had movement inside. (...) Cork is actually quite technical in its applications."

Todd Bracher, industrial designer

"Using cork's natural pattern and texture as a starting point, acclaimed US designer Todd Bracher offers a new twist to the classic material's applications. Teaming up with Portuguese cork manufacturing giant Amorim and using the international company's high-quality product, sourced straight from the country's cork forests, Bracher created a minimalist two-tone jacket out of different cork composites."

Wallpaper, August edition, 2014

© Wallpaper

Garments

Cork in the haute-couture

A natural, comfortable, lightweight and soft-touch material, cork is progressively being chosen by fashion designers, especially those looking for singular and unconventional fabrics.
With its own digital fingerprint, cork offers an image of quality, sophistication and originality for each article, making it unique.
Maybe that's why it is the choice of an impressive list of luxury brands, including Christian Louboutin, Diane von Furstenberg, Stella McCartney, Prada and Chloé.

Cork dress in the film *The Hunger Games: Catching Fire*

Cork is not only a special effects star in Hollywood movies, but it also plays another role in front of the cameras – specifically as a protagonist in *The Hunger Games: Catching Fire*.
It was the material chosen for a bold dress, showing-off flaring cork applications, worn by the actress Jena Malone, who played Johanna Mason in this trilogy. The prominent couture fashion brand, Alexander McQueen, was partially responsible for the film's wardrobe.

Lady Gaga wears Cork

Lady Gaga is a well-known singer not only for her amazing voice, but also her eccentric outfits. In the "You and I" music video, the famous pop singer wears an unconventional and amazing cork dress, designed by Jan Taminiau, one of world's leading fashion designers.

Project

Hannover World Expo

Portuguese Pavilion, Germany
Álvaro Siza (PT)
Eduardo Souto de Moura (PT)

Typology Architecture project
Cork type expanded insulation corkboard (MDFacade)
Outputs The project is at the basis of the development of the MDFacade product; the pavilion moved to Coimbra (PT) in 2002
Participants Álvaro Siza (PT), Eduardo Souto de Moura (PT)
Date 2000

Perhaps the first time that the world ever saw a building covered with cork was the result of the surprising design taken by Portuguese architects Álvaro Siza and Eduardo Souto de Moura, at the Expo 2000 Portugal Pavilion, in Hannover. Panels of pure expanded insulation corkboard and high-density cork (around 160 kg/m^3) covered part of the Pavilion's façades.
An important innovation in the field of construction was made by using cork as an exterior coating material for a building, assuming it as a distinctive visible element. Nowadays, this specific solution is one of the main products in Amorim's portfolio for the building industry. Currently, the pavilion is located in Coimbra, Portugal, and accommodates cultural activities, such as exhibitions and concerts, sponsored by the city council.

"It is a natural material of unique properties. The application and research on its possibilities now generate very favourable expectations, recovering and expanding on the drive of decades ago."
Álvaro Siza

Shanghai World Expo

Portuguese Pavilion, China

“It's a pleasure to receive this award. It represents an acknowledgement and is particularly meaningful due to the material used in the construction of the pavilion, that has a great deal to do with Portugal.”

Carlos Couto, architect

Typology Architecture project
Cork type expanded insulation corkboard, agglomerated cork (acoustic core materials), Wicanders flooring with cork and wood visuals
Outputs Design Award by the International Exhibition Bureau
Participants Carlos Couto (PT)
Commissioned by Parque Expo
Date 2010

Embodying the theme of the Shanghai World Expo 2010 "Better City, Better Life", the Portuguese Pavilion was entirely covered with cork. Intimately linked to the country's identity, this raw material was supplied by Amorim. Over 5,500m² was used for this project. 3,640m² of expanded insulation corkboard (more than 28,000kg), covered the façades. 1,100m² Wicanders flooring were applied in the public and official areas. 780m² of ACM (Acoustic Core Materials, part of Amorim's range of cork and rubber solutions), was used in the pavilion construction, providing excellent thermal and acoustic insulation. In total, 73 million people visited the Pavilion. Cork played a prominent role in this success, enhancing the building's aesthetics and arousing the curiosity of visitors, many of whom smelled, scratched and even picked up pieces of this raw material to take home as a souvenir.

Venice Art Biennale

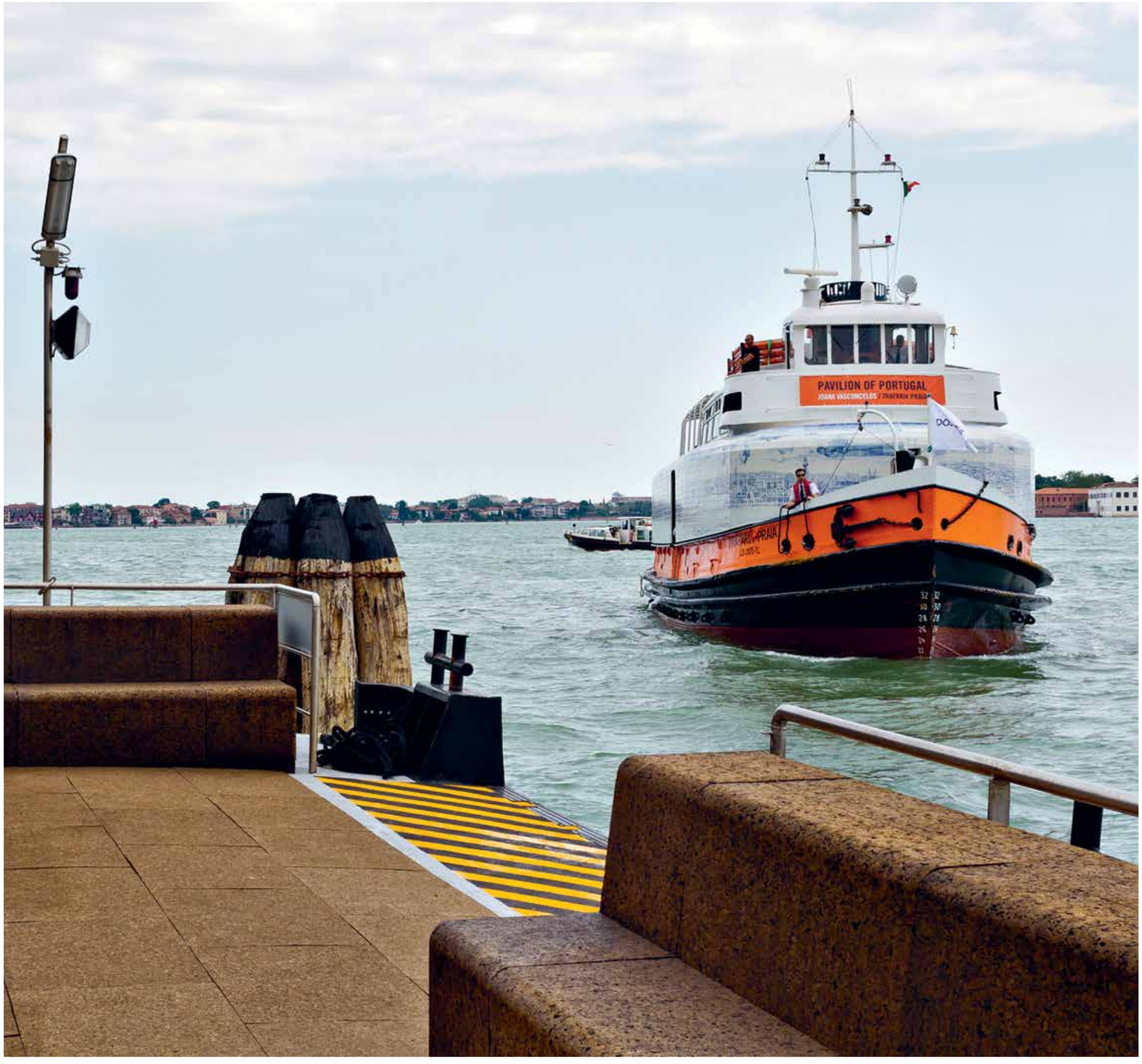
Portuguese Pavilion, Italy

“The support of Amorim to the Portuguese Pavilion brought cork, a natural product, to the project; cork has an extraordinary potential and is also a distinguishing feature of Portugal in the world.”

Joana Vasconcelos

Typology Art project
Cork type expanded insulation corkboard; composite cork
Outputs 100,000 visitors had the opportunity of experiencing the material in Venice; the ferryboat then sailed to Lisbon and is available for Tejo river cruises
Participants Joana Vasconcelos (PT)
Curated by Miguel Amado
Date 2013

Marking Portugal's participation in the 55th Venice Art Biennale, a project created by visual artist Joana Vasconcelos transformed Lisbon's ferryboat, the Trafaria Praia, ('cacilheiro') using materials supplied by Amorim. Cork has a historical link to the sea as a traditional material valued for its waterproofing and capacity to float. This, combined with the artist's desire for using materials strongly connected with Portuguese culture, made Amorim's cork the obvious choice. With a large visibility, 100 blocks of high-density insulation corkboard have been placed in the pier that provides access to the ferryboat. This structure was used as a bench, providing seating for visitors as they waited for the next boat. The vessel's deck and overhead were also covered with cork, including the ship's rail and its exterior. The areas most prone to moisture – such as the outside deck – were covered with a cork rubber composite material. Cork's versatility and technical performance, together with its decorative flair, were a precious addition to the artwork.



Building

World class benchmark solutions for sustainable construction

Cork totally complies with the goals of sustainable development and contemporary society. As a product which combines ecology with performance, cork is increasingly one of the most popular choices in the building industry, offering advantages in regard to the quality of buildings, interior atmosphere and comfort. On the economic side, it is the only raw material that can guarantee the same level of technical performance throughout the building's useful life.

MDFacade

Cork type expanded insulation corkboard
Cork Characteristics natural, thermal
and sound insulation, durability, impermeability

Quinta do Portal

Douro, Sabrosa,
Portugal, 2010
by Álvaro Siza

Curiosities "Best of Wine Tourism 2011" prize (Architecture and Landscapes category) by Great Wine Capitals Global Network; "Douro Architecture Prize 2010/2011", encouraging good practices in architecture in this UNESCO World Heritage site

A sophisticated warehouse for ageing wines at Quinta do Portal, now further praises the centuries-old connection between cork and wine. This space, that is used to store Porto and Douro wines, is made of steel and concrete and uses materials such as shale and cork to blend into the vineyard setting, joining tradition with innovation, and thus embracing the landscape. After the experience of designing the Hannover Pavilion, Álvaro Siza decided to once again use cork on the façade of a building. The architect chose MDFacade expanded insulation corkboard, produced by Amorim.

"Architecture and design can benefit from cork's unique set of properties by being aware of them and being imaginative."

Álvaro Siza, architect

School Pedro Arrupe

Lisbon, Portugal
by GJP Arquitectos

Ecorkhotel

Évora, Portugal
by José Carlos Cruz

Construction Infrastructures

ExpandaCork

Cork type agglomerated cork
Cork Characteristics natural, acoustic and thermal insulation, resilient, durability, vibration absorption

Major concrete constructions, such as bridges, aqueducts or airports, need to ensure that expansion and contraction due to temperature variations does not damage the material. Amorim developed ExpandaCork – products that are especially formulated for the expansion joints of these concrete constructions.

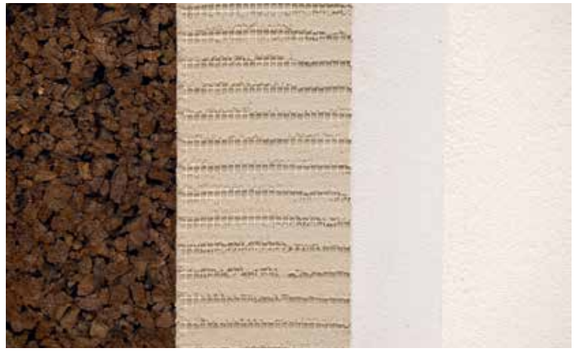
Construction Infrastructures
Expanded Insulation Corkboard

Cork type expanded insulation corkboard
Cork Characteristics natural, acoustic and thermal insulation, resilient, durability, vibration absorption

Curiosities expanded insulation cork products have been included on the 2013 BuildingGreen Top-10 Product list, the largest US directory of sustainable construction products

Construction quality, interior atmosphere and comfort dictate the increased use of cork in the construction industry. It helps to save and economise resources, both in the production process – since cork requires low energy consumption – and from the user's perspective – it is the only raw material that can guarantee an identical level of technical performance throughout the product's working life. Amorim's know-how led to the development of optimal solutions for acoustic and thermal insulation, both for new construction and rehabilitation.

100% natural, expanded insulation corkboard is produced entirely from raw cork. It is well known for being one of the most sustainable construction solutions – with unlimited durability and excellent technical performances.
Its aesthetic properties are also very appealing for architects to apply in exterior façades.



BUILDING

Project

Milan World Expo

Brazilian Pavilion, Italy

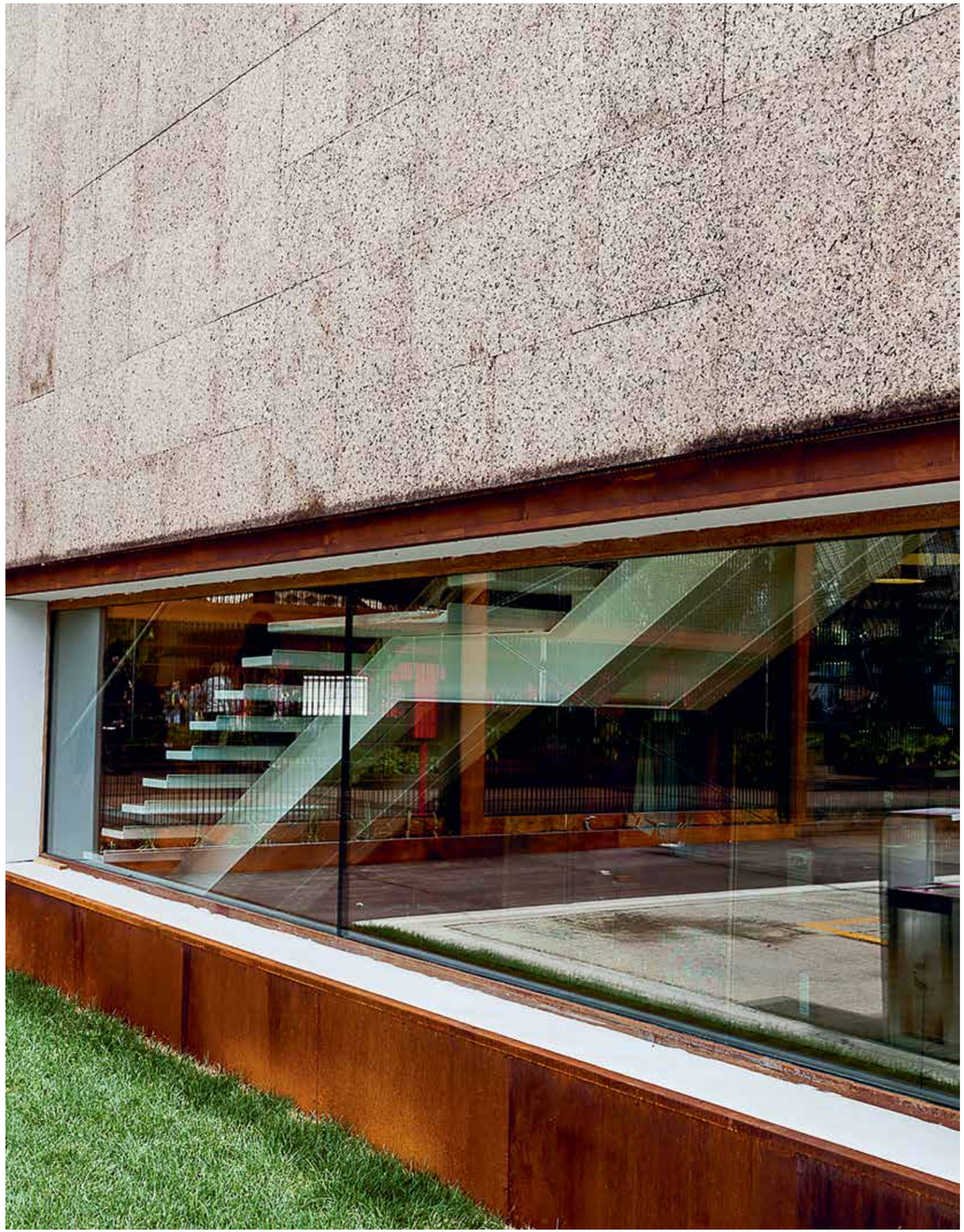
“The choice of expanded insulation cork board – MDFacade allows us to offer an innovative solution, which is only 80mm thick, but provides a good level of thermal insulation. In addition, this is a 100% natural raw material, whose use has no negative impact in terms of greenhouse gas effect.”

Dario Pellizzari, architect from Mosae Studio

Typology Architecture project
Cork type expanded insulation corkboard (MDFacade)
Participants Arthur Casas Studio (BR) and Marko Brajovic Atelier (BR), with Mosae Studio (IT)
Date 2015

The Brazilian Pavilion, at the Expo Milan 2015, used 1,000m² of expanded insulation corkboard, manufactured by Amorim. It was designed by Arthur Casas Studio and the Marko Brajovic Atelier, with the collaboration of Italy's Mosae Studio. Cork was selected to fit in with the project's profile – a temporary building under the Expo's theme "Feeding the Planet, Energy for Life". Two main reasons dictated its use: its sustainability (of primary importance in a building of transient nature), and its ability to ensure the insulation of a temporary pavilion.

It was composed of two adjacent structures with distinctive features: an open steel gallery and a closed building, entirely covered with expanded insulation corkboard. Cork was also used for indoor furniture, resulting in a set of cork modular sofas with headrests designed by the Mosae Studio, in which the modules are placed side-by-side, creating a sofa measuring more than 20 meters long.
The Brazilian Pavilion was one of the most popular attractions at the event and seen as an example of sustainability throughout, showing that it is possible to design good quality buildings that also have a reduced environmental impact.



You Make the Park

Expo Milan, Italy

“While designing the outdoor pieces, we realised that cork was the perfect material for this project and of course Amorim is the perfect company to collaborate with, as a strong player in the sector. We are delighted to demonstrate how recyclable materials, savoir-faire and ideas, while combining respect for nature, can generate unique design.”

Sam Baron, Fabrica’s Head of Design

Typology Furniture collection
Cork type agglomerated cork
Outputs located at Piazza dei Tigli within the Italian representation; more than 20 million people visited Expo Milan (Euronews)
Developed by Fabrica, the Benetton Research Center
Date 2015

You Make the Park is a project for Expo Milan 2015, where Fabrica designed an innovative set of outdoor furnishings made of cork, wood and Galestro terracotta. It consists of a collection of 60 innovative pieces with modular characteristics: benches, stools, daybeds and tables; easily movable and versatile, that fosters interaction and challenges visitors to constantly and continually create their own personal area in the exhibition site and enjoy a comfortable and unique sensorial experience.

It was developed by Fabrica, Benetton Group’s communication research centre, in line with the Expo’s theme "Feeding the Planet, Energy for Life". The concept "what comes from the earth returns to the earth" lies at the heart of this range of sustainable outdoor furnishings, which supports the use of 100 % recyclable natural materials, with cork standing as the essence of these properties.

© Fabrica

Ideas

As endless as our imagination

Highly committed to research and innovation, Amorim seeks to capitalise on cork's tremendous potential, leveraging its use far beyond today's applications. The company is constantly driven by the need to materialize new ideas and projects with cork, in partnership with individuals, universities and other organizations, thus strengthening its use in unexpected areas.

Domaine de Boisbuchet

Cork Competition

Cork type agglomerated cork, cork fabrics, cork granules, expanded insulation corkboard
Cork Characteristics sustainable and natural material, comfort, soft-touch, thermal and sound insulation
Date 2012

Curiosities considering the designs' and prototypes' quality, five honourable mentions were awarded

Vitra Design Museum and Domaine de Boisbuchet, in partnership with Amorim, launched a competition challenging the international community of designers and architects to come up with new and innovative uses for cork products or improve the existing portfolio. From an impressive range of 367 proposals submitted, 20 international designers were invited to participate in a specialised workshop at Domaine de Boisbuchet, aiming to develop 20 different prototypes. Cork Beehive, by Anna Loskiewicz, was considered the best project proposal, based on its clear relevance and design: a modern beehive model that fits within the spirit of a sustainable urban landscape such as New York or London, cities where beekeeping is becoming increasingly popular. The well-known Japanese architect Sou Fujimoto has also participated in this contest and was awarded with a honourable mention for his Cork Chair project.

© Vitor de Castro Lopes

© Vitor de Castro Lopes

“With this one material, it is possible to create a whole architecture. I could not help but to aspire, someday, to creating a house entirely made of cork. It must generate a fusion of new material, space, function and experience. It occurred to me that this might become a dream for an architect; to create a living environment around us with various forms of only one specific material.”

Sou Fujimoto, architect

“I never throw away a cork and my hands as well as my feet in many ways enjoy the soft and warm comfort of this natural product. But my intuitive affection is also matched by convictions: its outstanding ecological qualities make cork one of the most obvious basic materials to develop the future of our environment.”

Alexander von Vegesack, Domaine de Boisbuchet

© Mauricio Freyre

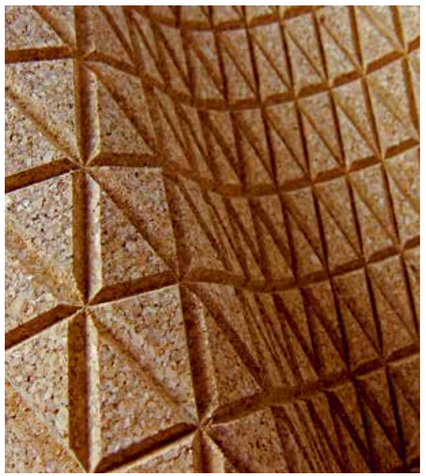
Cork in the Royal College of Art's Design Products MA Programme

Cork type agglomerated cork, cork granules and cork fabrics
Cork Characteristics sustainable and natural material, comfort, soft touch, thermal and sound insulation

The inclusion of a dedicated module on cork represents the first phase of a project developed in cooperation with the Royal College of Art. Under the motto "I am 7 billion", the students of the Design Products MA Programme were challenged to design a cork-based product or application that is useful, relevant, with refined aesthetics and that can be mass produced and marketed anywhere in the world.
The project allowed the students to discover cork's properties, capabilities and features. The first prototypes presented clearly reflected the students' high level of technical and theoretical knowledge and enthusiasm for cork, using it for interesting solutions for a wide range of industries, as the automotive, aquaculture, construction and interior design.

"In many ways, cork is a perfect starting place for considering products of the future, having such a wide range of desirable properties that allow for so many imaginative solutions. Excitingly, much of the research produced ideas and products that are not only innovative and well suited to their function but which offer a vision of sustainable production too."

Harry Richardson and Max Lamb,
tutors in the Design Products programme and coordinators of Platform 15



Lunch Box project

NABA – Nueva Academia Belle Arti di Milano
Curated by T12Lab

Cork type agglomerated cork, cork granules and cork fabrics
Cork Characteristics natural, thermal insulation, recyclable
Date 2015

The Lunch Box project focuses on the international phenomenon of "takeaway" lunches, presenting new models of cork lunch boxes. The project explores a concept broader than the mere production of a Lunch Box, raising awareness of the need to reduce the amount of household waste – one of the greatest challenges facing contemporary Western societies – by using a natural material with exceptional insulation properties and that is 100% recyclable.
Created by TRANSIT design for the city, and curated by T12 Lab, the project was devised by design students at NABA (Nueva Academia Belle Arti di Milano), and presented at the 2015 Milan Design Week.

Horseshoes

Cork type composite cork
Cork Characteristics shock absorber, lightweight, comfortable, bacterial resistant

Over the years, Amorim has been developing special materials to be used in an innovative horseshoe. It withstood intensive tests both in the lab and in the field, before the launch of Dynamic – a unique composite horseshoe. Especially designed for trotting race horses, it should be fitted the day before the race to give the maximum advantage. Dynamic is a technical composite with 5 layers, combining the best of cork's nature with modern technology.

Archer skateboards

Cork type CoreCork
Cork Characteristics natural, soft touch, lightweight, durability, vibration absorption, impact resistance

The kick-off for the development of this skateboard was the need to reduce the typical vibrations of traditional skateboards. Initially the test was to add cork 'spacers' between the deck and the 'trucks' [axel] but its success paved the way to the creation of an entire skateboard made from cork, that also shifted away from conventional construction methods. Cork's flexibility combines perfectly to the flax reinforcement, which also has similar characteristics. The green epoxy resin used kept the VOC's to a minimum, as it has a high content of bio-based ingredients. The combination of elements results in a smooth ride for the skater, displaying an extraordinary reduction in vibration, a higher impact resistance and better performance. In partnership with Amorim, the leading Australian manufacturer Lavender Composites/ Archer Cork Skateboards developed this innovative cork skateboard that was awarded the prestigious JEC Innovation Award in the "Sustainability" category during JEC Asia, an international trade fair dedicated to composite materials.

"By using these specific materials, we have proven that environmentally responsible composite materials are not a sacrifice in performance, and can in this particular circumstance be an improvement in performance. By using the CoreCork and flax's natural ability to absorb vibration, we are shifting away from the traditional construction methods."

Lavender and Archer Cork Skateboards

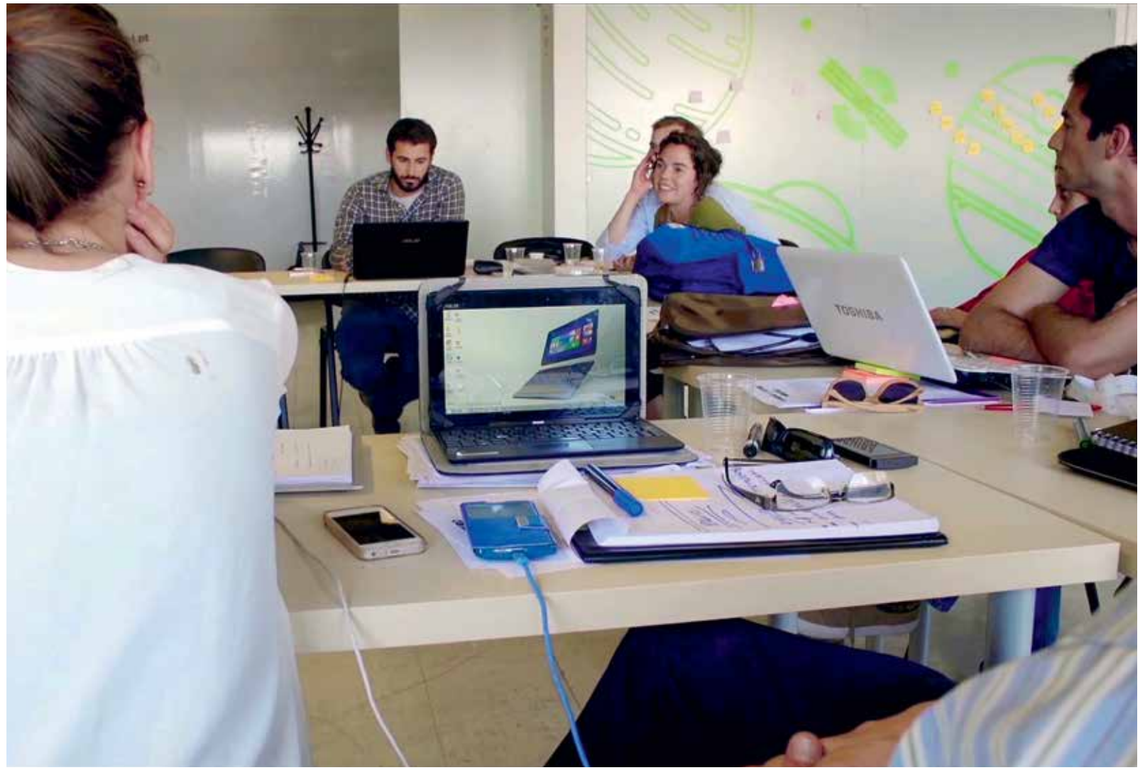
Ready to innovate in the cork industry?

Amorim Cork Ventures has been established with the purpose of supporting entrepreneurs to launch their projects and exploring innovative ideas for the different uses of cork. This initiative represents a natural step in the ongoing evolution of the company and seeks to create value for cork-related businesses and for the development of new cork-based products and applications. Thus, ACV is focused in promoting the design and project, and structuring business plans, mainly targeted to foreign markets.

The selected proposals have access to the ACV's business incubator, where national and international entrepreneurs, and also existing small businesses, transform ideas into prototypes and strengthen their business plans. In addition to financial support, they have access to facilities, technical support and assistance from Amorim, such as managing skills, human resources know-how or accessing an international network in different sectors.

“Innovation is a cornerstone of Amorim's business. Setting up Amorim Cork Ventures is, therefore, a natural step in the ongoing evolution of Amorim that, as a world leader, is in a specially privileged position to support entrepreneurs who want to join Amorim in its mission to add value to cork. We believe that this path will lead us to achieve sustainable cork export growth and development for the entire industry.”

António Rios de Amorim



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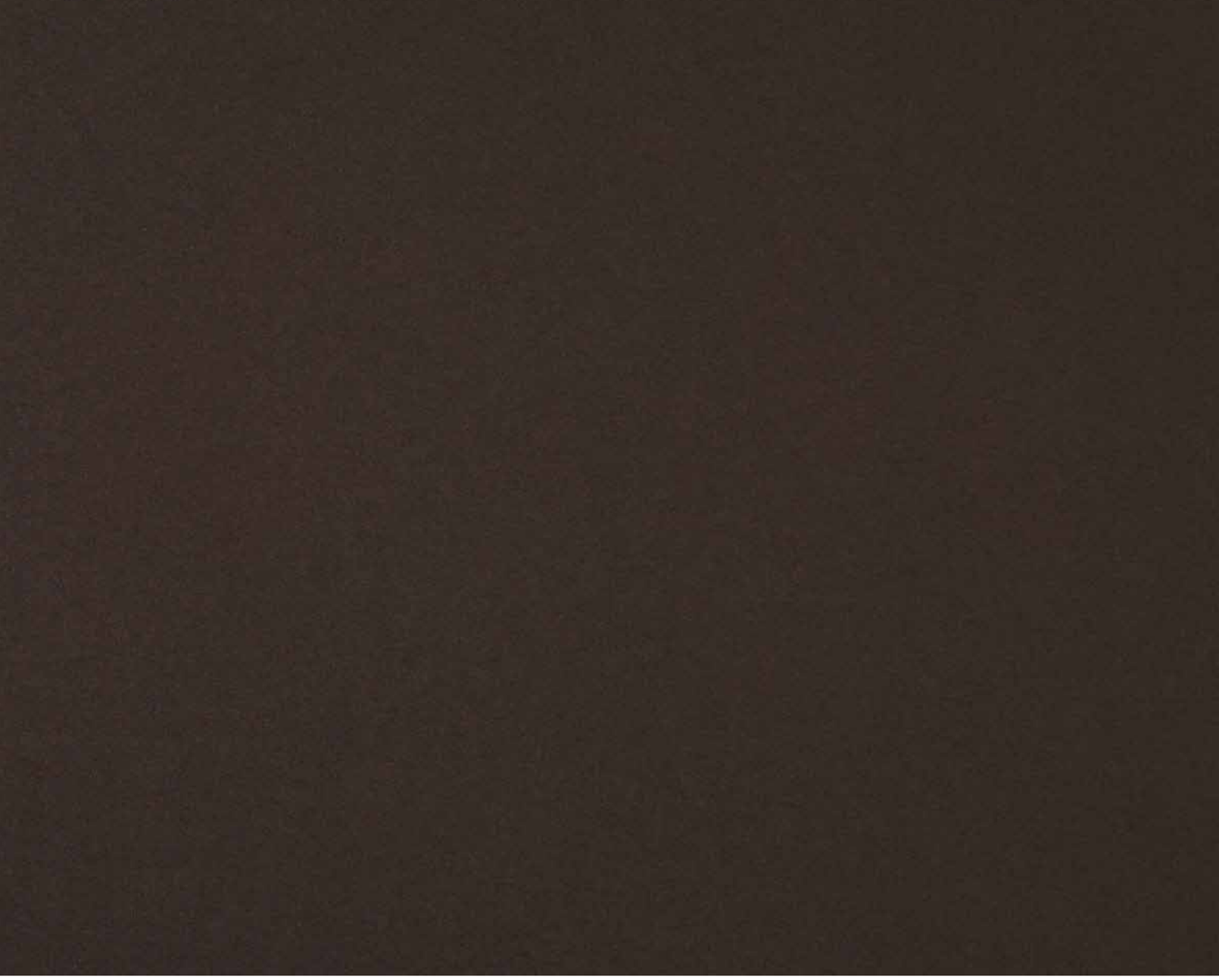


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