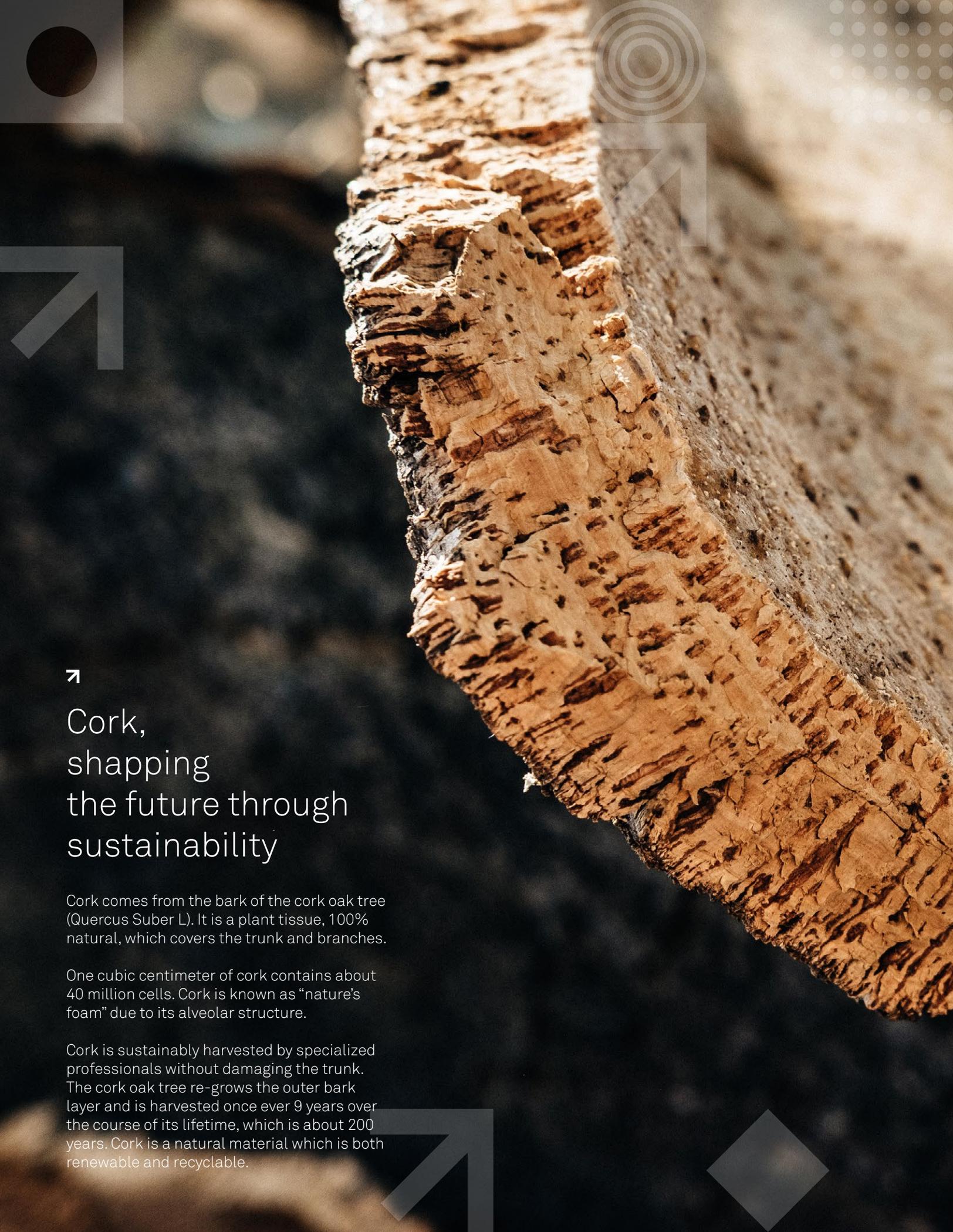




UNDERLAYS



↗

Cork, shapping the future through sustainability

Cork comes from the bark of the cork oak tree (*Quercus Suber L*). It is a plant tissue, 100% natural, which covers the trunk and branches.

One cubic centimeter of cork contains about 40 million cells. Cork is known as “nature’s foam” due to its alveolar structure.

Cork is sustainably harvested by specialized professionals without damaging the trunk. The cork oak tree re-grows the outer bark layer and is harvested once ever 9 years over the course of its lifetime, which is about 200 years. Cork is a natural material which is both renewable and recyclable.



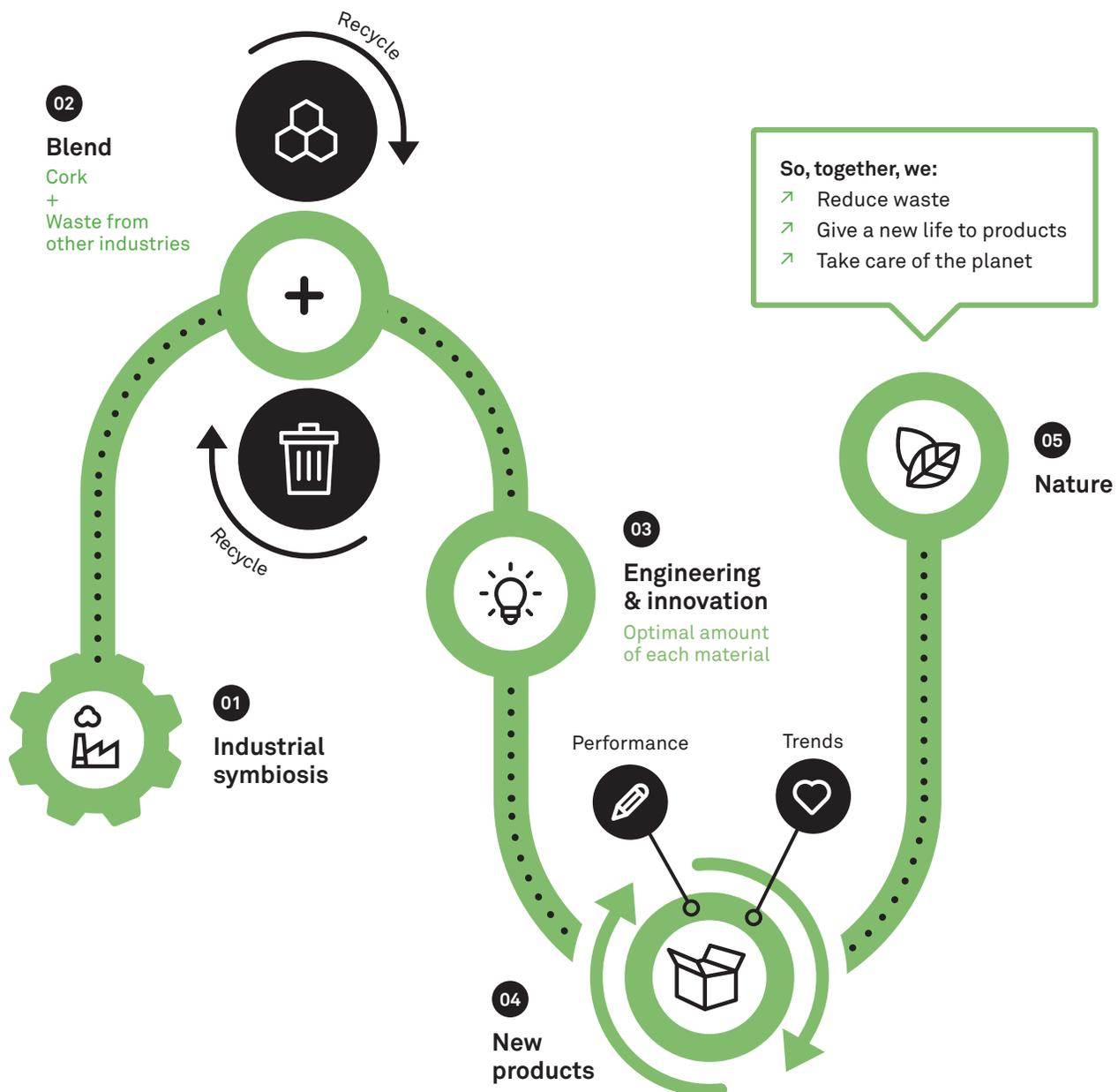


We have always been circular.

Amorim Cork Composites - a Corticeira Amorim company - was founded in 1963 to add value to cork not used in the cork stoppers industry and to cork stoppers at the end of their life.

Since then, in the framework of our innovation culture, we have discovered and identified other materials from other industries (industrial symbiosis) to blend with cork and leverage its attributes.

For this purpose, we use different materials from the footwear, automotive and packaging industries. We give a new life to materials that otherwise would be wasted.





Underlays

Recycled and sustainable accessories for flooring systems

Cork is a common denominator in the production of our accessories and supporting materials for floorings, such as, underlayment. When applied under a floor, an underlayment provides more comfort, protection and longevity to the final floor, guaranteeing even greater energy efficiency and acoustic insulation.

Underlayment may consist only of cork agglomerate or contain other recycled materials, such as PU, Recycled Rubber or EVA.

Compared to synthetic materials, cork is the right choice when looking for a solution that guarantees performance but is also sustainable from an environmental point of view.

TYPE OF FLOOR	RECOMMENDED UNDERLAY	MAIN FEATURE	
Laminate	Nature	<ul style="list-style-type: none"> ➤ Green ➤ 100% cork, 100% natural. Ecological, sustainable and recyclable. ➤ High durability anti-slip underlay. Suitable for heated floors. 	
	Nature Vapour Barrier	<ul style="list-style-type: none"> ➤ 2 in 1 solution: Pre-attached vapour barrier for moisture protection. ➤ Recommended for floating installations. 	
	Plus	<ul style="list-style-type: none"> ➤ Acoustic ➤ The most versatile underlay with high durability and good performance. ➤ Excellent acoustic performance and load absorption capacity. ➤ Suitable for heated floors. Anti-slip. 	
	Plus Vapour Barrier	<ul style="list-style-type: none"> ➤ 2 in 1 solution: Pre-attached vapour barrier for moisture protection. ➤ Recommended for floating installations. 	
Vinyl	Unique	<ul style="list-style-type: none"> ➤ Vinyl ➤ Helps to protect LVT flooring from damage to the click-system joints. ➤ Maximize the service level of the joining system connecting the laminate boards. ➤ Anti-slip underlay with long-term physical properties and excellent load absorption capacity. ➤ Excellent for heated floors. 	
Ceramic	LC+	<ul style="list-style-type: none"> ➤ Compensation ➤ Excellent compensating ability on uneven surfaces and made to prevent crack supression on ceramic. ➤ Provides cushioning underfoot as well as reducing sound transmission and impact sound, such as footsteps. ➤ Anti-slip underlay with excellent load absorption capacity. ➤ Suitable for heated floors. 	
Wood	Profile	<ul style="list-style-type: none"> ➤ Thermal ➤ Anti-slip underlay with excellent thermal performance. ➤ High comfort when walking because of the profile format. 	



Reduction of impact noise



Reduction of footfall noise



Thermal resistance



Compensates for uneven floor



Protection from damage from falling objects



Resistance to diffusion of water vapour



Load resistance



Antislip





NATURE

Density	160–280 Kg/m ³
Tensile Strength	≥ 200 kPa
Thickness	2 mm
Acoustic Performance	
Impact Sound (IS) ¹	17 dB
Thermal Performance	
Thermal Resistance (TR)	0.039 (m ² .°C/W)
Floor Durability	
Punctual Conformability (PC)	≥ 1 mm
Compressive Strength (CS)	≥ 200 kPa
Compressive Creep (CC)	> 100 kPa
Dynamic Load (DL)	≥ 100 000



PLUS

Density	250–300 Kg/m ³
Tensile Strength	≥ 200 kPa
Thickness	2 mm
Acoustic Performance	
Impact Sound (IS) ¹	20 dB
Thermal Performance	
Thermal Resistance (TR)	0.031 (m ² .°C/W)
Floor Durability	
Punctual Conformability (PC)	≥ 1.3 mm
Compressive Strength (CS)	≥ 200 kPa
Compressive Creep (CC)	> 50 kPa
Dynamic Load (DL)	≥ 10 000



UNIQUE

Density	550–650 Kg/m ³
Tensile Strength	≥ 500 kPa
Thickness	1.6 mm
Acoustic Performance	
Impact Sound (IS) ²	21 dB
Thermal Performance	
Thermal Resistance (TR)	0.015 (m ² .°C/W)
Floor Durability	
Punctual Conformability (PC)	≥ 1 mm
Compressive Strength (CS)	≥ 400 kPa
Compressive Creep (CC)	> 50 kPa
Dynamic Load (DL)	≥ 100 000



PROFILE

Density	150–200 Kg/m ³
Tensile Strength	≥ 200 kPa
Thickness	2.5 mm
Acoustic Performance	
Impact Sound (IS) ³	20 dB
Thermal Performance	
Thermal Resistance (TR)	0.066 (m ² .°C/W)
Floor Durability	
Punctual Conformability (PC)	≥ 0.5 mm
Compressive Strength (CS)	≥ 160 kPa
Compressive Creep (CC)	> 50 kPa
Dynamic Load (DL)	≥ 100 000



LC+



Density	560–650 Kg/m ³
Tensile Strength	≥ 500 kPa
Thickness	2 mm
Acoustic Performance	
Impact Sound (IS) ⁴	18 dB
Thermal Performance	
Thermal Resistance (TR)	0.016 (m ² .°C/W)
Floor Durability	
Punctual Conformability (PC)	≥ 1.7 mm
Compressive Strength (CS)	≥ 200 kPa
Compressive Creep (CC)	> 50 kPa
Dynamic Load (DL)	≥ 100 000



Negative carbon balance

Underlay Nature, has a negative carbon balance up to -12,4 kg CO₂/m², when considering the CO₂ sequestration of the cork oak forest and the CO₂ emissions associated with the industrial process.

- Has **23 times less** environmental impacts than average polyethylene foam materials in typical impact categories.
- Generates over **36 times less** GHG emissions than average polyurethane foam materials



NATURE VAPOUR BARRIER*



Density	220–280 Kg/m ³
Tensile Strength	≥ 450 kPa
Thickness	2 mm
Acoustic Performance	
Impact Sound (IS) ¹	19 dB
Thermal Performance	
Thermal Resistance (TR)	0.039 (m ² .°C/W)
Floor Durability	
Punctual Conformability (PC)	≥ 1.3 mm
Compressive Strength (CS)	> 200 kPa
Compressive Creep (CC)	> 50 kPa
Dynamic Load (DL)	≥ 100 000
Water Vapour Resistance (SD)	> 75 m



PLUS VAPOUR BARRIER*



Density	250–300 Kg/m ³
Tensile Strength	≥ 450 kPa
Thickness	2 mm
Acoustic Performance	
Impact Sound (IS) ¹	20 dB
Thermal Performance	
Thermal Resistance (TR)	0.031 (m ² .°C/W)
Floor Durability	
Punctual Conformability (PC)	≥ 1.3 mm
Compressive Strength (CS)	> 200 kPa
Compressive Creep (CC)	> 50 kPa
Dynamic Load (DL)	≥ 10 000
Water Vapour Resistance (SD)	> 75 m



* Recommended for floating installations

- 1 Tested under a laminate floor
- 2 Tested under a vinyl floor
- 3 Tested under a wood floor
- 4 Tested under a ceramic floor



The **Cork Inside** seal guarantees that this product contains, in its cork formulation, a 100% natural and recyclable material with unique technical properties.

Cork Inside formulations combine cork with other materials and are developed and rigorously tested by Amorim Cork Composites' innovation and engineering teams. **Cork Inside** responds to stringent requirements and guarantees the performance required for its application.

The data provided in this brochure refers to typical figures. This information is not intended to be used as a purchasing specification and does not imply suitability for use in any specific application. Failure to select the proper product may result in either product damage or personal injury. Please contact Amorim Cork Composites regarding recommendations for specific applications. Amorim Cork Composites expressly disclaims all warranties, including any implied warranties of merchantability or of fitness for any particular purpose. Amorim Cork Composites shall not be liable for any indirect, special, incidental, consequential or punitive damages as a result of using the information listed in this brochure, any of its material specification sheets, its products or any future use or re-use of them by any person or entity. For contractual purposes, please request our Product Specifications Sheet (PDA).

AMORIM CORK COMPOSITES



Nature

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Plus

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