



**AcoustiCORK®**  
by Amorim

# **BUILDING COMFORT WITH SUSTAINABILITY**

FLOORING SOLUTIONS FOR WOOD BASED FLOORS

AMORIM CORK SOLUTIONS

## CORK, AN EXCEPTIONAL RAW MATERIAL

Cork is the outer bark of the cork oak tree (*Quercus Suber* L.), the 100% natural plant tissue covering the trunk and branches.

### KEY FEATURES



Excellent  
acoustic insulator



Excellent  
thermal insulator



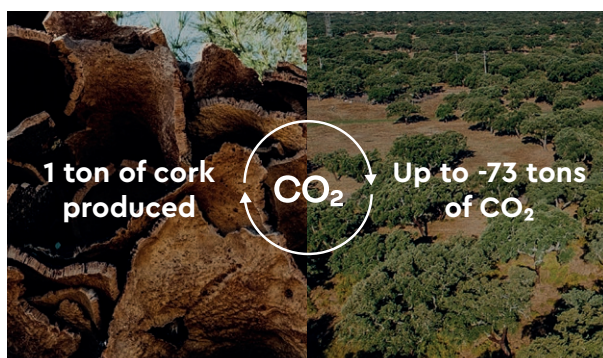
Good resilience  
Excellent compressibility  
and recovery



Extremely light



Natural, reusable  
and recyclable



### FLOORING ACCESSORIES FOR A SUSTAINABLE FUTURE

The Negative Carbon Balance seal certifies that when taking into account the carbon sequestration from cork oak forests, the manufacture of Acousticork products sequesters more CO<sub>2</sub> than it emits.\*

T56 Endurance has - 5.2 kg/eqCO<sub>2</sub> per m<sup>2</sup>\*\*.



## THE COMMITMENT TO CREATE A POSITIVE IMPACT ON THE PLANET

Cork retains CO<sub>2</sub> throughout his life cycle, which makes possible to reduce the carbon footprint of cork-based underlayments.

With cork at the core, blended with other materials that are by-products from other industries (industrial symbiosis), we give materials a new life by creating new products leveraging cork's attributes while taking care of the planet.

At the i.cork factory, our innovation hub, we achieve the perfect match between performance and sustainability. New, innovative and high performance products from circular economy are arising.

### CORK INSIDE

When cork isn't so visible, this seal assures that cork is present in the optimal amount - guaranteeing the performance of the material.

Cork Inside formulations combine cork with other materials from other industries and are developed and rigorously tested by Amorim Cork Solutions' innovation, quality and engineering teams. Cork Inside responds to stringent requirements and guarantees the needed performance required for the application.



\* Source: [https://apcor.pt/uploads/Media/Brochura/1-%20brochura%20ambiente/Brochura\\_Ambiente\\_\\_EN.pdf](https://apcor.pt/uploads/Media/Brochura/1-%20brochura%20ambiente/Brochura_Ambiente__EN.pdf)

\*\* EY Study: Underlayment Acousticork Carbon Footprint Analysis, 2021 (cradle to gate).

## WHY ACOUSTICORK?

Ensuring peace and quiet isn't a mere luxury. It's already a human need  
- to guarantee quality of life and work in our fast-moving era.

### FAST-MOVING TIMES REQUIRE ACOUSTIC COMFORT FOR ALL FLOORING TYPES

Growing urbanization, higher life quality standards and rising populations in urban areas are leading to more stringent noise and vibration standards and norms. As a result, is higher demand for high-quality and efficient sound insulation and vibration isolation (from internal or external sources in each building).

### ACOUSTICORK NATURAL BASE MATERIALS FOR DEMANDING APPLICATIONS

Cork absorbs energy due to its unique compressibility and recovery characteristics, yielding higher loss factors that are essential for the damping function. Cork's extremely low Poisson Ratio improves the behaviour of such materials in dynamic loading applications. Cork also brings durability along the time to the applied solution.

## LONG-TERM DURABILITY CORK VS FOAM UNDERLAYMENTS

When compared to other solutions, our underlayments perform better over time. Cork has higher compressive creep, due to its inherent resilience.

This means that cork does not completely lose its thickness after being compressed and preserves the technical properties where it is applied.

By contrast, the cells of several standard foams suffer damage when subjected to the same loads.



T56 Endurance



T51 Shield

- T56 ENDURANCE** ▶ Agglomerated cork and recycled EVA underlayment for impact, noise and flooring protection.  
▶ LVT/Laminates floor/Engineered Wood.



LVT / Laminate		
1.8 mm		
Density	kg/m <sup>3</sup>   lb/ft <sup>3</sup>	320-430   20-27
Tensile Strength	kPa	> 550
<b>Acoustic Performance ①</b>		
Impact Sound (IS) ②	dB (ISO)	17
Impact Insulation IIC   ΔIIC ③	dB (ASTM)	52   22
Sound Transmission (STC) ④	dB (ASTM)	51
<b>Thermal Performance</b>		
Thermal Resistance (TR)	m <sup>2</sup> ·°C/W	0.024
<b>Floor Durability</b>		
Punctual Conformability (PC)	mm	> 1
Compressive Strength (CS)	kPa	> 200
Compressive Creep (CC)	kPa	> 100
Water Vapor Resistance (SD)	m	> 75
Vapor Barrier		●

- T51 SHIELD** ▶ Agglomerated cork and recycled rubber underlayment for impact, noise and flooring protection.  
▶ LVT floor.



LVT		
2.0 mm		
Density	kg/m <sup>3</sup>   lb/ft <sup>3</sup>	690-790   43-49
Tensile Strength	kPa	> 700
<b>Acoustic Performance ①</b>		
Impact Sound (IS) ②	dB (ISO)	16
Impact Insulation IIC   ΔIIC ③	dB (ASTM)	75   36
Sound Transmission (STC) ④	dB (ASTM)	77
<b>Thermal Performance</b>		
Thermal Resistance (TR)	m <sup>2</sup> ·°C/W	—
<b>Floor Durability</b>		
Punctual Conformability (PC)	mm	> 0.7
Compressive Strength (CS)	kPa	> 200
Compressive Creep (CC)	kPa	TBD
Water Vapor Resistance (SD)	m	—
Vapor Barrier		O

① MDS available for further test details and additional acoustic results ② Standard ISO 717-2:2013

③ Standard ASTM E413 ④ Standard ASTM E989-89 ● Yes ○ No



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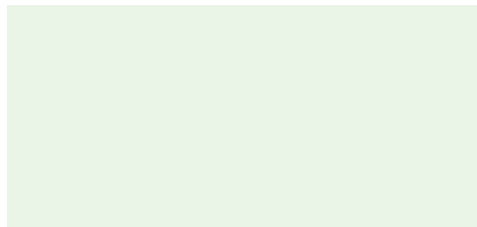
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Representative



Acousticcork solutions are tested at highly qualified laboratories.

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