



Reinventing flooring technology

Noise reduction
and walking comfort



Flooring

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.

It consists of a honeycomb-like structure of microscopic cells filled with an air-like gas and coated mainly with suberin and lignin. One cubic centimetre of cork contains about 40 million cells.

Cork is also known as “nature’s foam” due to its alveolar cellular structure. It has a closed-cell structure making it lightweight, airtight and watertight, resistant to acids, fuels and oils, and impervious to rot.

It is sustainably harvested by specialised professionals without damaging the trunk, thus enabling the tree to grow another layer of outer bark that, in time, will be re-harvested. Over the course of the cork oak tree’s life, that lasts 200 years on average, the cork may be stripped around 17 times. This means that cork is not only a natural raw material, it is also renewable and recyclable.



Cork cell microscopic view



Excellent thermal insulator



Walking comfort



Good resilience, excellent compressibility and recovery



Hypoallergenic



Easy to maintain



Noise reduction



100% natural, reusable and recyclable



Freedom of design



Full experience
in the flooring industry

Amorim Cork Composites is able to supply all the components of the floor, except the floor itself!

Our experience has led to the development of unique technical components for flooring industry – **Noise Reduction Technology (NRT)**.

Amorim Cork Composites is able to produce sheets, panels or rolls to be used as: **top layer, inlay, core layer and pre-attached**.

With the **Double Belt Press (DBP)** technology, we are able to produce high-density rolls with a maximum width of 2.1 meters.

We have the capability to supply products specifically designed for the customer's process.

Amorim Cork Composites tries to be aware of consumer trends expecting innovation and to correspond to their expectations, as well as to the flooring manufacturers' expectations in terms of their industrial needs. We have a vision based on innovation, uniqueness and technology.

NRT Noise Reduction Technology

Innovative solutions fulfilling the market requirements



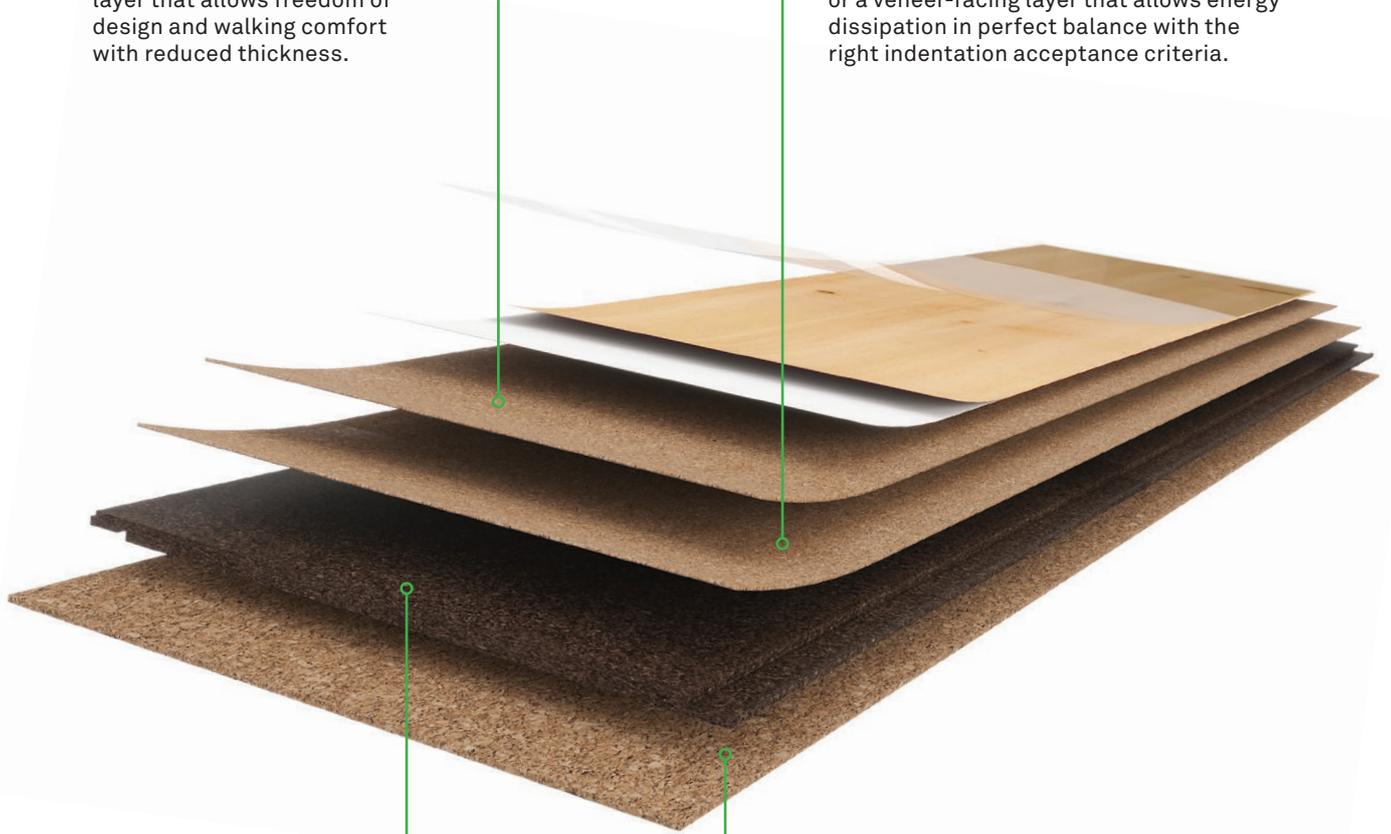
NRT Top Layer

High density and printable layer that allows freedom of design and walking comfort with reduced thickness.



NRT Inlay

Layer placed underneath a paper, a vinyl or a veneer-facing layer that allows energy dissipation in perfect balance with the right indentation acceptance criteria.



NRT Core Layer

Waterproof cork based that finds the perfect balance between technical market requirements and the final customer's value perception.



NRT Pre-Attached Underlayment

Attached layer that acts like the traditional underlayment, preventing the transmission of mechanical energy through the slab (improving impact noise reduction).

NRT CORE LAYER

	Units	Test Method	NRT 94
Density	kg/m ³	ISO 7322	450 - 550
Compressibility at 0.7MPa	%		< 20
Recovery at 0.7MPa	%		> 70
Tensile Strength	kPa		> 1400
Availability	-		Rolls & Sheets
Width (minimum - maximum)	mm		100 - 2100
Length (minimum - maximum)	mm	-	sheets: 600 - 3000 rolls: 600 - equivalent to Ø1200
Thickness (minimum - maximum)	mm		0.8 - 8
Finish	-		GR180

NRT INLAY

	Units	Test Method	NRT 96
Density	(kg/m ³)	ISO 7322	450 - 550
Compressibility at 0.7MPa	%		< 20
Recovery at 0.7MPa	%		> 70
Tensile Strength	kPa		> 1400
Availability	-		Rolls & Sheets
Width (minimum - maximum)	mm		100 - 2100
Length (minimum - maximum)	mm	-	sheets: 600 - 3000 rolls: 600 - equivalent to Ø1200
Thickness (minimum - maximum)	mm		0.8 - 8
Finish	-		GR80

NRT CORE LAYER

	Units	Test Method	NRT 3D
Density	kg/m ³	ISO 7322	800 - 920
Availability	-		Sheets
Width (minimum - maximum)	mm		100 - 2100
Length (minimum - maximum)	mm	-	600 - 3000
Thickness (minimum - maximum)	mm		3
Finish	-		GR80

NRT PRE-ATTACHED UNDERLAYMENT

	Units	Test Method	NRT 49	NRT 45	NRT 62
Density	kg/m ³	ISO 7322	200 - 270	150 - 210	360 - 450
Compressibility at 0.7MPa	%		15 - 35	30 - 50	10 - 30
Recovery at 0.7MPa	%		≥ 70	≥ 70	> 70
Tensile Strength	kPa		≥ 200	≥ 300	> 600
Availability	-		Rolls & Sheets		
Width (minimum - maximum)	mm		100 - 1250	100 - 2100	
Length (minimum - maximum)	mm	-	sheets: 600 - 3000 rolls: 600 - equivalent Ø1000	sheets: 600 - 3000 rolls: 600 - equivalent to Ø1200	
Thickness (minimum - maximum)	mm			0.8 - 8	
Finish	-		NA	Calibrated 1 side	



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