



# Underlay NATURE VAPOUR BARRIER

UNDERLAY FOR THERMAL AND ACOUSTIC INSULATION  
WITH PRE-ATTACHED VAPOUR BARRIER

10m<sup>2</sup>



Dimension  
1x10 m

Thickness  
2 / 3 / 4 / 5 mm

## TECHNICAL PROPERTIES



★★★★★

Moisture protection



★★★★☆

Reduction of impact noise



★★★★☆

Reduction of footfall noise



★★★★☆

Thermal resistance



★★★★★

Compensates for uneven floor



★★★★☆

Protection from damage from falling objects



★★★★☆

Load resistance



★★★★★

ANTISLIP

## Material Description & Properties

Agglomerated cork underlay for acoustic and thermal insulation.

### KEY FEATURES

- 2 in 1 solution: Pre-attached vapour barrier for moisture protection
- 100% natural, reusable and recyclable.
- Excellent acoustic performance.
- Excellent thermal resistance capacity.
- Flexible and adaptable.
- High durability.
- Tested according to MMFA/EPLF higher requirements groups 1 and 2.

## TECHNICAL DATA

TEST	REQUIREMENT	UNIT	RESULT
Punctual conformability (PC)	≥ 0,5	mm	1,3
Compressive strenght (CS)	≥ 400	kPa	470
Compressive creep (CC)	≥ 35	kPa	100
Impact sound (IS)	≥ 18	dB	19
Reflected walking sound (RWS)	–	%	TBD
Thermal Resistance (R)*	≤ 0,15	m <sup>2</sup> C/W	0,039
Dynamic load (DL)	≥ 100 000	cycles	≥ 100 000
Moisture Protection (SD)	≥ 75	m	150

\* Suitable for underfloor heating and cooling

## THERMAL INSULATION

Thermal Conductivity <sup>(1)</sup>	0,0516 W/mK
Thermal Resistance	0,0388 (m <sup>2</sup> °C/W)

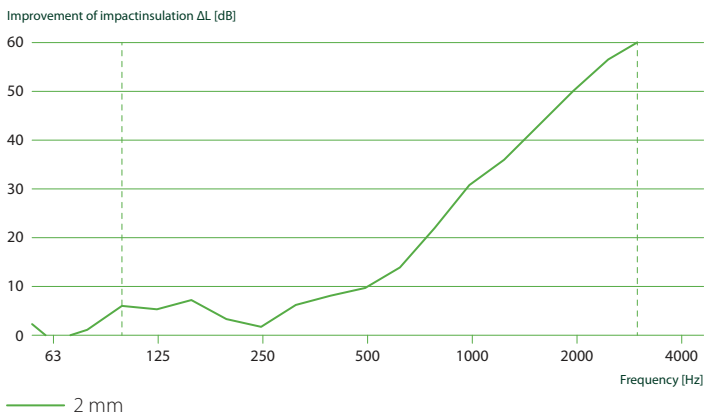
<sup>(1)</sup> EN 8301

## ACOUSTICAL RESULTS

Flooring	Laminate
Thickness (mm)	2
$\Delta L_w$ (dB) <sup>(1)</sup>	19

<sup>(1)</sup> ISO 10140-3 and ISO 717-2

### REDUCTION OF IMPACT NOISE



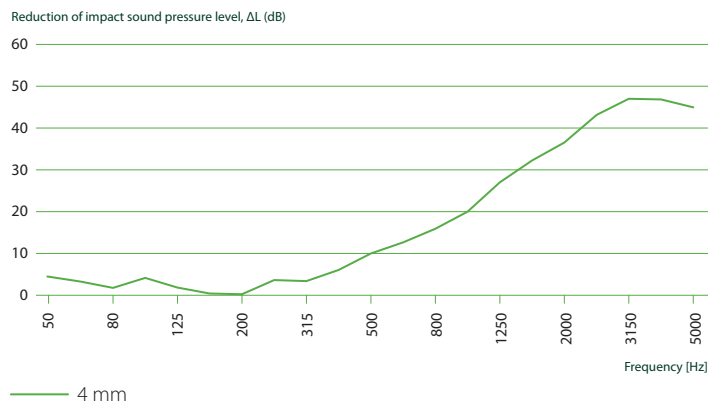
Rating according to ISO 717-2

$\Delta L_w$  19 dB  $C_{i,\Delta}$  = -11 dB  $C_{i,r}$  = 0 dB

Flooring	Floating wood floor
Thickness (mm)	4
$\Delta L_w$ (dB) <sup>(1)</sup>	18

<sup>(1)</sup> ISO 10140-3 and ISO 717-2

### REDUCTION OF IMPACT NOISE



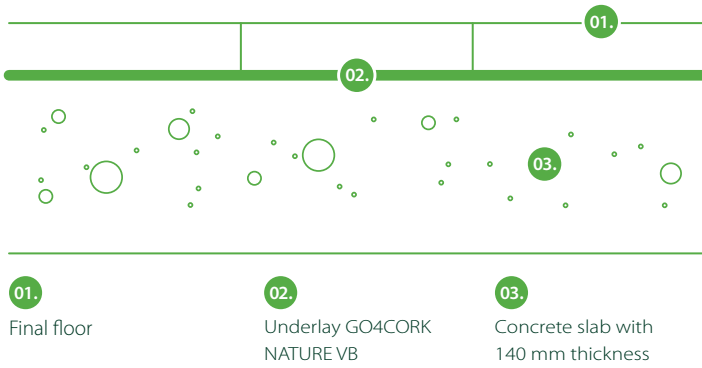
Rating according to EN ISO 717-2

$\Delta L_w$  18 dB  $C_{i,\Delta}$  = -14 dB  $C_{i,r}$  = 3 dB  $C_{i,r,50-2500}$  = 3 dB

- $L_{n,r,0}$  – Normalized impact sound pressure level of the Lab reference floor.
- $L_{n,r}$  – Normalized impact sound pressure level of the reference floor with the floor covering under test.
- $\Delta L_w$  – Impact sound pressure level reduction index of the covering under test, on a normalized floor.

The results are based on test made with an artificial source under laboratory conditions (engineering method).

### TEST APPARATUS ( $\Delta L_w$ )



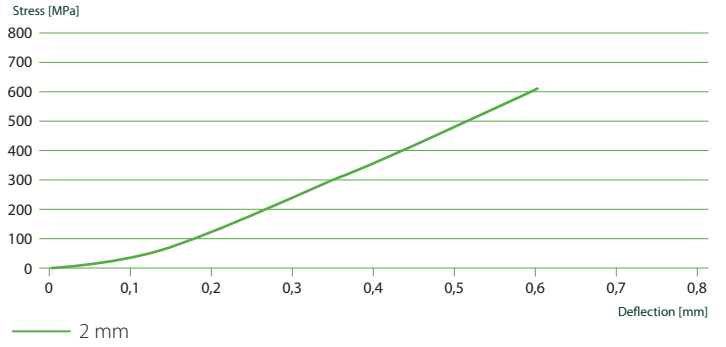
01.  
Final floor

02.  
Underlay GO4CORK  
NATURE VB

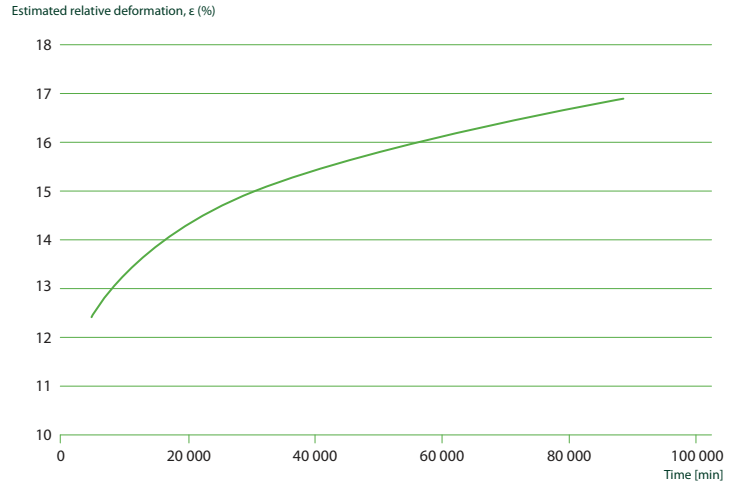
03.  
Concrete slab with  
140 mm thickness

### PHYSICAL AND MECHANICAL PROPERTIES

#### COMPRESSIVE STRENGTH



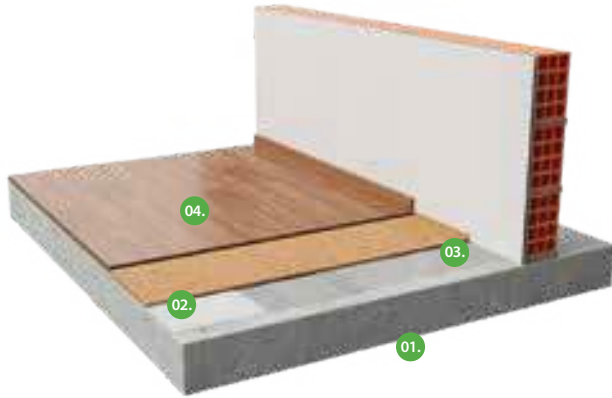
#### CREEP DEFLECTION @ 100 kPa (% OF START HEIGHT)



Note: Following ISO8013-1998 measured in Cantilever Test System.

## APPLICATION SCHEMES

### NON-GLUED FLOORS



01.

Reinforced concrete slab

02.

Underlay GO4CORK NATURE VB

03.

Perimeter insulation barrier

04.

Floor covering composed by non glued laminate floor

## NEGATIVE CARBON BALANCE

Underlay Go4Cork Nature VB has a negative carbon balance of -11.98 kg/eqCO<sub>2</sub> per m<sup>2</sup>, when taking into account the CO<sub>2</sub> sequestered by cork oak forests and the emissions associated with the industrial process.



Up to **36 times less** Greenhouse gas emissions than PU Foam (Polyurethane) solutions\*\*

Consumes up to **23 times less** Energy than any solution made of PU Foam\*\*

\* EY study: Underlay Go4Cork Nature Carbon Footprint Analysis, 2020 (cradle-to-gate)

\*\* These Amorim Cork Composites conclusions (outside the scope of the EY study) were based on the ecoinvent version 3.5 database (2018), but have not been verified by a third party

## GENERAL INSTALLATION INSTRUCTIONS

### GENERAL INSTALLATION INSTRUCTIONS

The following installation instructions are recommended by Amorim Cork Composites, and are not intended to be a definitive project specification. They should be interpreted and applied taking into account the recommendations of the manufacturers of the flooring to be installed.

#### 1. PREPARATION OF THE SUBFLOOR

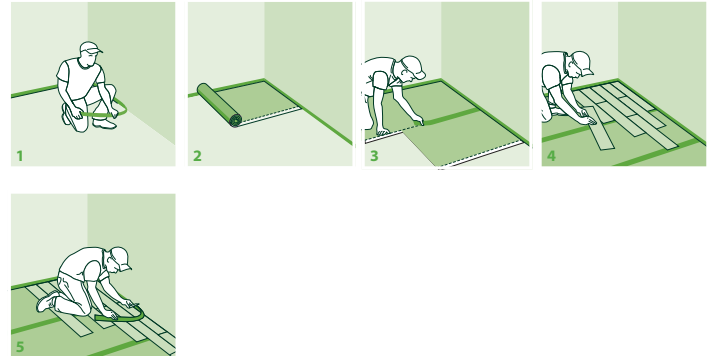
- The subfloor must be level, dry, clean and in good structural conditions. A floor is considered level if the deviation height is less than 2mm over a distance of 2.5 linear meters. Deviations above this value must be leveled out before underlay installation.
- The humidity content of the concrete substrate must not exceed 2.5 % (MC) by weight. Any moisture problems need to be solved before installation. New concrete slabs need to cure for at least 120 days before installation.
- The environmental conditions during the installation should be: temperature >10°C and humidity <75%

#### 2. INSTALLATION OF THE UNDERLAY

This underlay must be installed with the vapour barrier facedown on the subfloor. Place one roll of the underlay parallel to the wall and in the opposite direction you plan to install the final floor to reduce seams. Cut the underlay material roll to the desired length and install it directly, covering the entire surface of the room. This underlay comes with an overlap of the plastic foil. When unrolling your rolls, install the next row immediately next to the previous one, covering the foil overlap. However, be sure to not overlap the underlay edges nor leave any gaps. Using the attached overlap creates a seamless moisture seal between rows when properly installed. Use a tape to securely seal the rows together. Never mechanically secure the underlay with screws, nails or staples as this may compromise its effectiveness. Install the final floor perpendicularly to the underlay. Always follow the flooring manufacturer's recommended installation instructions.

## APPLICATION PROCESS

### FLOATING INSTALLATION WITH PRE ATTACHED VAPOUR BARRIER



1. Installation of perimeter barrier; 2. Installation of underlay; 3. Installation of the tape; 4. Installation of final flooring; 5. Cutting perimeter barrier.



**AMORIM  
CORK  
COMPOSITES**

The data provided in this Material Data Sheet represents typical values. This information is not intended to be used as a purchasing specification and does not imply suitability for use in a specific application. Failure to select the proper product may result in either equipment damage or personal injury. Please contact Amorim Cork Composites regarding specific application recommendations. Amorim Cork Composites expressly disclaims all warranties, including any implied warranties or merchantability or of fitness for a particular purpose. Amorim Cork Composites is not liable for any indirect special, incidental, consequential, or punitive damages as a result of using the information listed in this MDS. 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).

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