







T61

Material Data Sheet

NON GLUED LAMINATE FLOORS		$\Delta L_w = 20\text{dB}$	100% Natural and Sustainable Product Impact Noise Reduction and Thermal Insulation Properties High Durability and Long Term Resilience High Performance with Reduced Thickness Tested according to MMFA/EPLF requirements Group 1
GLUED DOWN WOOD FLOORS		$\Delta L_w = 26\text{dB}$	
GLUED DOWN WOOD FLOORS PERFORATED		$\Delta L_w = 18\text{dB}$	
CERAMIC OR NATURAL STONE FLOORS		$\Delta L_w = 16\text{dB}$	


 **PRODUCT DESCRIPTION**
Agglomerated cork underlay for impact noise and thermal insulation.

 **THERMAL PROPERTIES**
Thermal Conductivity: 0,04 W/mK ⁽¹⁾
⁽¹⁾ISO 8301

 **PHYSICAL AND MECHANICAL PROPERTIES**


Specific Weight ⁽¹⁾	Tensile Strength ⁽¹⁾	Compression at 0,7MPa ⁽¹⁾	Recovery after 0,7MPa ⁽¹⁾
150 - 200 Kg/m ³	> 200 KPa	30%	> 70%

⁽¹⁾ISO 7322

 **ACOUSTICAL RESULTS**

Flooring	Thickness (mm)	ΔL_w (dB) ⁽¹⁾	IIC (dB) ⁽²⁾
Non Glued Laminate	2	20	54
Glued Down Wood	3	26	59
	3 perforated	18	51
Ceramic (or Natural Stone)	5	16	50

⁽¹⁾ISO 10140-3 and ISO 717-2 • ⁽²⁾ASTM E492-09 & ASTM E989-06

 **STANDARD DIMENSIONS**

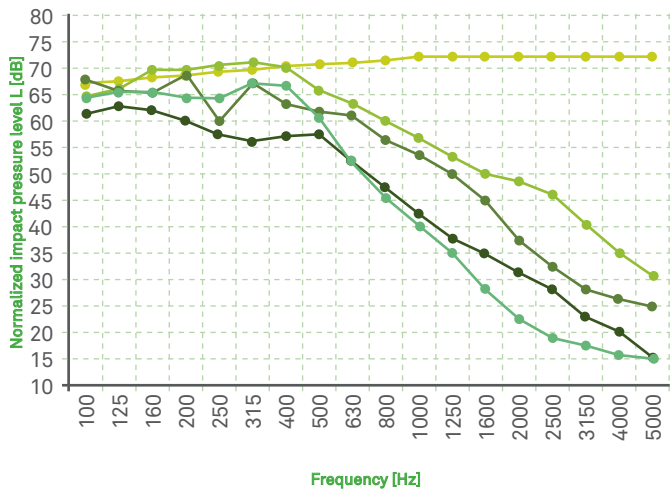
Thickness (mm)	2	3	3 perforated	5
Width (m) x Length (m)	1 x 10	1 x 10	0,5 x 10	1 x 10



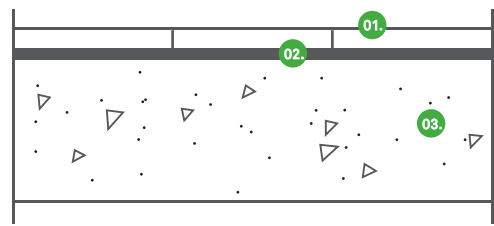


ACOUSTICAL RESULTS

Test procedure according to ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013 standards.



TEST APPARATUS (ΔL_w & IIC)



- 01. Floor covering composed by glued down wood, non glued laminate floor or ceramic or natural stone tiles
- 02. Agglomerated cork resilient layer - T61
- 03. Reinforced concrete slab of thickness 140mm

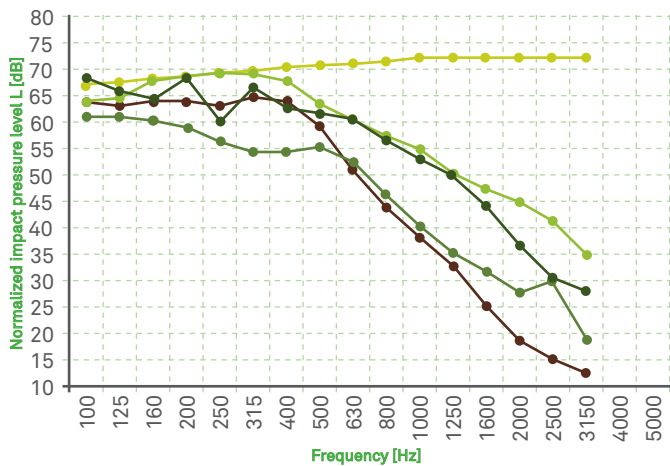
$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;

Ref. Test Report	Thickness	Flooring	$L_{n,r,w}(C_{l,r})$	$\Delta L_w(C_{l,\Delta})$
SRLC/06/5L/3676/1a	2 mm	Non Glued Laminate	58 (0) dB	20 (-11) dB
SRLC/06/5L/3676/1a	3 mm	Glued Down Wood	52 (1) dB	26 (-12) dB
ACL034/16	3 mm perforated	Glued Down Wood	60 (0) dB	18 (-11) dB
SRLC/06/5L/3676/1a	5 mm	Ceramic (or Natural Stone)	62 (0) dB	16 (-11) dB



ACOUSTICAL RESULTS

Test procedure according to ISO 10140-1:2010; ISO 1040-3:2010 and ISO 10140-4:2010 standards. Normalized impact sound pressure level and IIC rating determined according ASTM E492-09 and ASTM E989-06 standards.



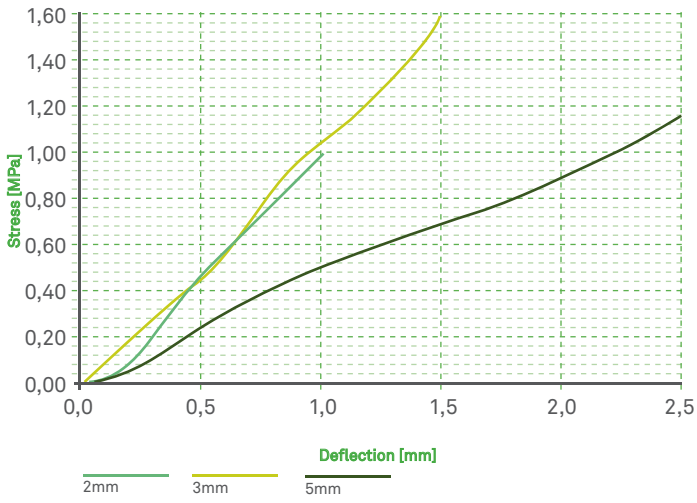
L_{ref} - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{ref,c}$ - Normalized impact sound pressure level of the Lab reference floor;

Thickness	Flooring	IIC _c
2 mm	Laminate	54 dB
3 mm	Glued Down Wood	59 dB
3 mm perforated	Glued Down Wood	51 dB
5 mm	Ceramic (or Natural Stone)	50 dB

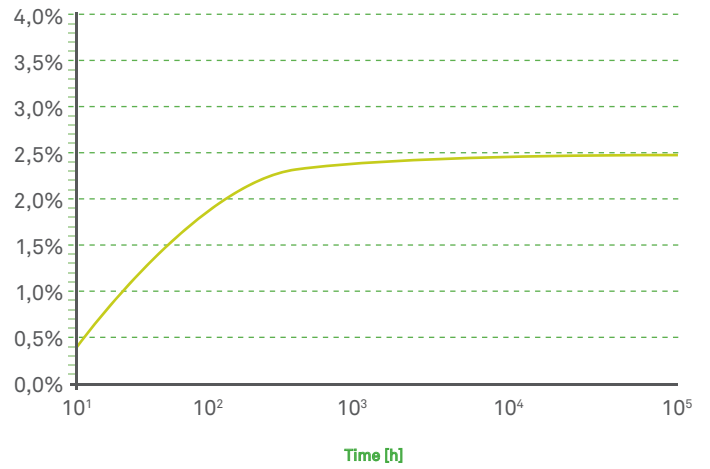


PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION



CREEP DEFLECTION @ 0,0045MPa (% OF START HEIGHT)



Note: Following ISO8013-1998 measured in Cantilever Test System

DYNAMIC STIFFNESS

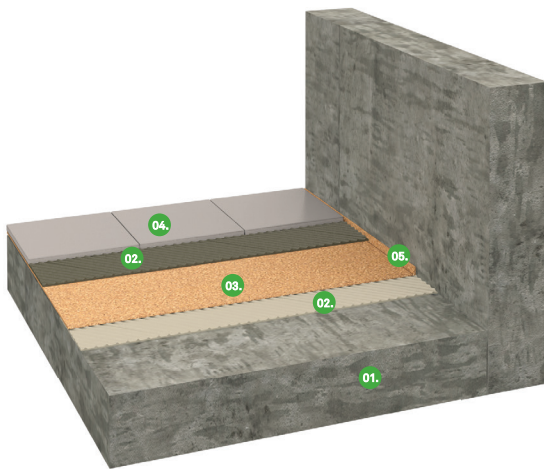
Test procedure according ISO 9052-1 and ISO 7626-5 standards.

Thickness (mm)	Dynamic Stiffness (MN/m ³)
2	98
3	96
5	93



INSTALLATION

GLUED FLOORS



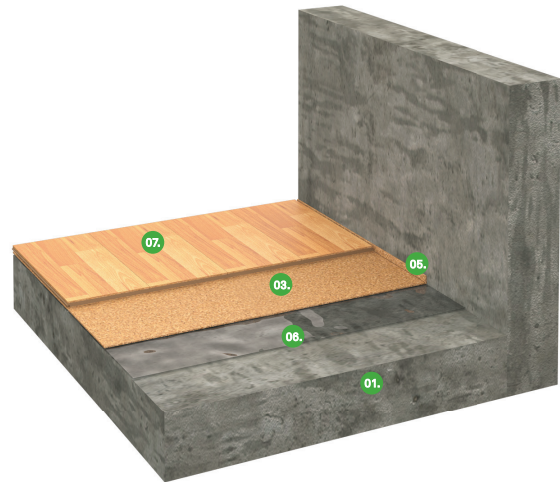
01.
Reinforced concrete slab

02.
Adhesive

03.
Agglomerated cork resilient layer - T61

04.
Floor covering composed by glued down wood, ceramic or nature stone

NON GLUED FLOORS



05.
Perimeter insulation barrier

06.
Vapor barrier

07.
Floor covering composed by non glued laminate floor

NON GLUED LAMINATE FLOORS



$\Delta L_w = 20\text{dB}$

GLUED DOWN WOOD FLOORS



$\Delta L_w = 26\text{dB}$

GLUED DOWN WOOD FLOORS PERFORATED



$\Delta L_w = 18\text{dB}$

CERAMIC OR NATURAL STONE FLOORS



$\Delta L_w = 16\text{dB}$ 

T61

UNDERLAY

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers.

Room Conditions

Temperature > 10°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Vapor Insulation Barrier (only for Non Glued Floors)

PE (Polyethylene) vapor insulation barrier covering the entire flooring area, minimum 50mm wide vertically around the perimeter of the entire floor MUST be installed prior to the Acousticork T61.

Install by overlapping (minimum 100mm) the PE foil, and use an adequate tape to adhere/fix it, if necessary. After completion, PE foil should cover the entire concrete area without gaps. Never mechanically fasten the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Installation Instruction for Acousticork T61

Unpack the Acousticork T61 at least 24h before the installation and store it in the room where the installation will take place. Cut the T61 to desired length and install directly over the entire floor pulled 30mm up the walls with crown of the rolled materials up (Acousticork label side down), removing all trapped air. After completion, the T61 should cover the entire flooring area without gaps and with joints butted tight and preferably taped.

Tested according to MMFA/EPLF requirements Group 1

Final Flooring

Always follow manufacturers recommended installation instructions.

Recommended Adhesives:

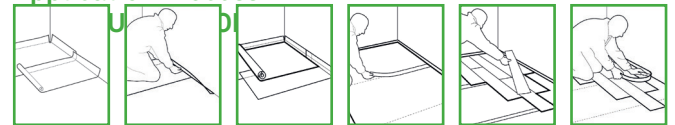
Wood floor to Acousticork: Water-Based Emulsion/ Polyurethane Glue;

Vinyl and linoleum to Acousticork: Water-Based Emulsion/ Synthetic Resin Glue;

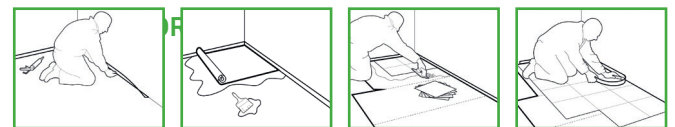
Ceramic to Acousticork: Flexible Cement Glue;

Acousticork to slab/screed: Water-Based Emulsion/ Acrylic Adhesives;

Application Process



1. Vapor insulation barrier application; 2. Perimeter barrier application; 3. Underlay application; 4. Tape application in joints between rolls; 5. Final floor application; 6. Perimeter insulation barrier cut.



1. Perimeter barrier application; 2. Underlay application (glued); 3. Final floor application (glued); 4. Perimeter insulation barrier cut.

Important Notes

Never mechanically fasten the Acousticork T61 to the flooring floor as this will severely diminish its acoustical value.

For detailed installation instructions, please contact us.

Amorim ECO21dB

LVT underlay



Produced from Recycled and Natural Materials
Impact Noise Reduction and
Thermal Insulation Properties
High Durability and Long Term Resilience
High Performance with Reduced Thickness
Tested according to MMFA requirements Group 1+2



PRODUCT DESCRIPTION

Resilient layer for installation immediately below floor finish, consisting of an agglomerated cork and recycled EVA with PU elastomer bonding agent.



PHYSICAL AND MECHANICAL PROPERTIES

Specific Weight ⁽¹⁾	Tensile Strength ⁽¹⁾	Compression at 0,7MPa ⁽¹⁾	Recovery after 0,7MPa ⁽¹⁾
600 - 700 Kg/m ³	> 500 KPa	15%	> 65%

⁽¹⁾ISO 7322



THERMAL INSULATION

Thermal Conductivity ⁽¹⁾	Thermal Resistance	Tog Rating
0,1036W/mK	0,015m ⁽²⁾ K/W	0,15

⁽¹⁾EN 8301



ACOUSTIC RESULTS

Flooring	Thickness (mm)	ΔL_w (dB) ⁽¹⁾
LVT	1,6	21 dB

⁽¹⁾ISO 10140-3 and ISO 717-2



STANDARD DIMENSIONS

Thickness (mm)	1,6
Width (m) x Length (m)	1 x 15

Others sizes available upon request





PROTECTION AGAINST LOADS AND USAGE

Dynamic Load (DL) ⁽¹⁾	Compressive Strength (CS) ⁽²⁾	Compressive Creep (CC) ⁽³⁾	Residual Indentation ⁽⁴⁾
≥ 10.000 cycles	≥ 200 KPa	≥ 10 KPa	≤ 0,2 mm

⁽¹⁾ EN 13793 ⁽²⁾ EN 826 ⁽³⁾ EN 1606 ⁽⁴⁾ ISO 24343-1



WATER VAPOR DIFFUSION RESISTANCE (SD)

>75 m

Achieved with an additional water vapour control layer (PE foil) EN 12086 Method A



PUNCTUAL CONFORMABILITY (PC)

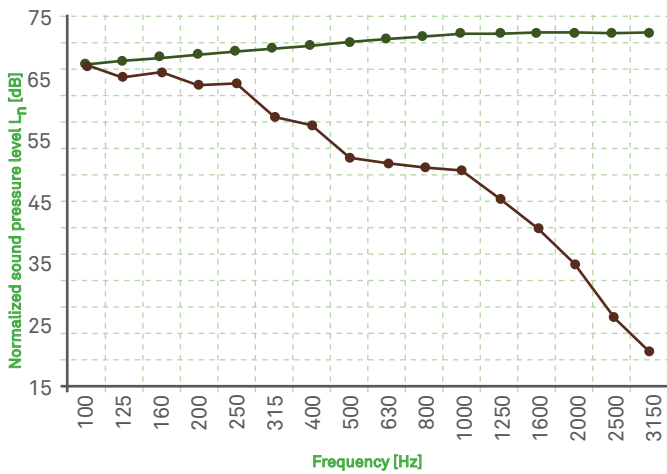
≥0,5 mm⁽¹⁾

⁽¹⁾ ISO 868



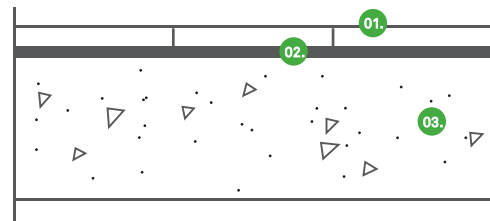
ACOUSTIC RESULTS

Test procedure according to ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013 standards.



$L_{n,r,0}$ (dB)
 $L_{n,r,w}$ (dB) - 1,6 mm + LVT

TEST APPARATUS (ΔL_w & IIC)



- 01.** Floor covering composed by loose-lay or click system LVT
- 02.** Agglomerated cork and recycled EVA resilient layer - Amorim ECO21dB
- 03.** Reinforced concrete slab of thickness 140mm

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

Ref. Test Report	Thickness	Flooring	$L_{n,r,w}(C_{i,r})$	$\Delta L_w(C_{i,\Delta})$
ACL 047/17	1,6 mm	Hydrocork (6 mm)	57(1) dB	21(-12) dB



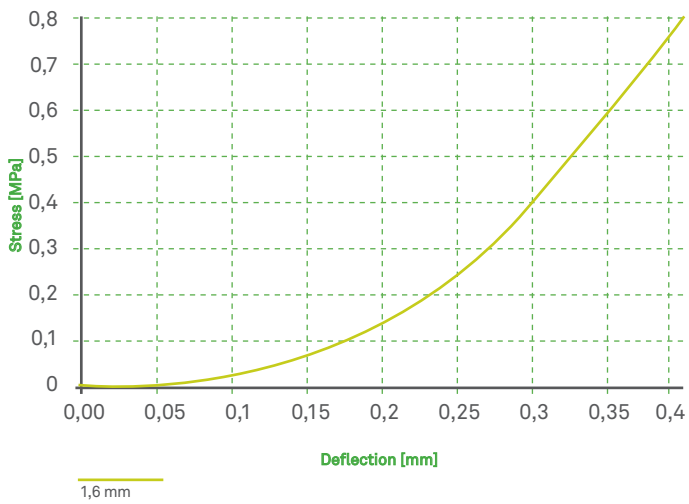
PHYSICAL AND MECHANICAL PROPERTIES

DYNAMIC STIFFNESS

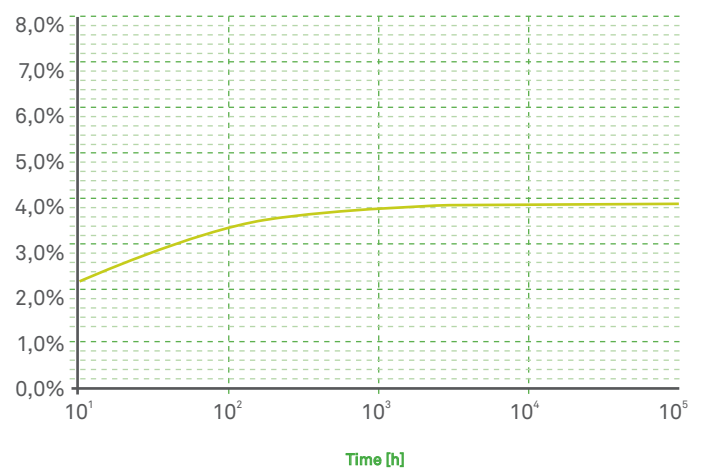
Test procedure according to ISO 9052-1 and ISO 7626-5 standards.

Thickness (mm)	Dynamic Stiffness (MN/m ³)
1,6	134

LOAD DEFLECTION



CREEP DEFLECTION @ 0,0045MPa (% OF START HEIGHT)

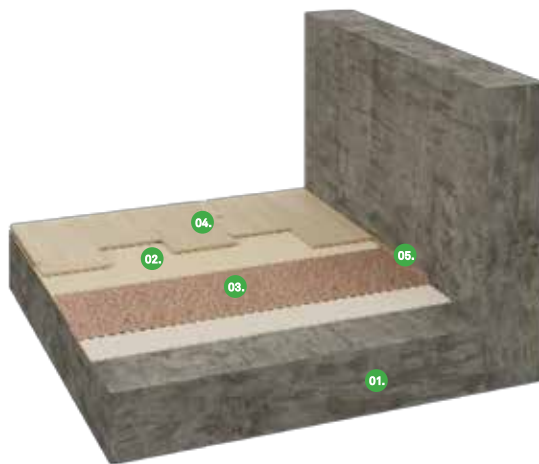


Note: Following ISO8013-1998 measured in Cantilever Test System

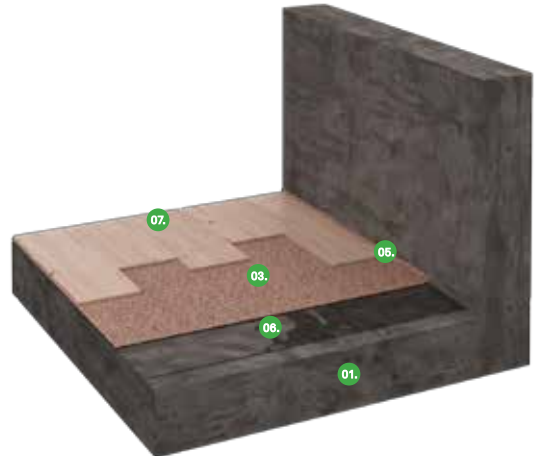


INSTALLATION

STICK DOWN FLOORS



FLOATING FLOORS



01.

Reinforced concrete slab

02.

Adhesive

03.

Agglomerated cork and recycled EVA resilient layer - Amorim ECO21dB

04.

Floor covering composed of glued LVT

05.

Perimeter insulation barrier

06.

Floating floors

07.

Floor covering composed of a non glued LVT

General Installation Instructions

Before installation make sure that all rolls are as per your order and that there has been no damage in transit, obviously let us know straight away if there are any issues. It is important to allow the product to acclimatize to room temperature for a minimum of 24 hours, the room temperature should be at least 18°C and the relative humidity should not exceed 75%. The Amorim **ECO21dB** underlay should be loose laid in the installation area and cut at least 50mm over the required length and allowed to relax. During the installation period the room temperature should ideally be at least 18°C.

In general the working practices should be as described below and conform with the code of good practices.

Please also refer to the specific instructions of the manufacturer of the finished floor and (when applicable) the manufacturer of the adhesive.

Air tightness

Air tightness is one of the keys to effective sound insulation. Sound is carried in the air and sound will leak through any gaps or holes in an installation. So it is very important that all gaps and holes between floors and also floors and walls are filled and properly sealed, this can be done using proprietary gap filling products and sealants. Ensure that all products used are suitable for the specific installation and if in doubt seek the advice of the manufacturer of the sealant or gap filler.

Perimeter Isolation/Flanking

Another common problem which affects the acoustic performance of a floor is flanking. Flanking occurs when sound bypasses the main separating elements of the construction and finds acoustically weak paths. Ideally flanking sound paths formed by the junctions between separating wall and floor constructions will have been treated in the subfloor and wall construction, thereby isolating the individual elements. However, where noise has become a problem it may be that the correct flanking treatment for the building has not been followed. With this in mind, and for best acoustic results it may be necessary to install a perimeter isolation strip to minimize any potential flanking to the other parts of the building structure (Amorim **ECO21dB** can be turned up the wall if perimeter isolation strips are not available), this includes walls and columns as well as exposed pipes, ducting or any other component protruding from the floor.

When the flooring application is completed, the exceeding part of the perimeter isolation strip must be cut.

If flanking is thought to be a specific problem it may be necessary to seek further specialist acoustic advice.

Sub Floor conditions and Floor Preparation

In general sub floor conditions should comply with the requirements of the code of good practices and specific instructions from the manufacturer of the finished floor.

Basically, this means that all sub floors should be clean, dry, level and structurally sound and free from any cracks and contamination. All cracks and holes should be adequately repaired to ensure a smooth finished appearance, patching and levelling compounds must be suitable for the end use application and must be compatible with the adhesives to be used (when applicable). The moisture content

of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Vapour Insulation Barrier (only for Non Glued LVT)

PE (Polyethylene) vapour insulation barrier covering the entire flooring area, minimum 50mm wide vertically around the perimeter of the entire floor MUST be installed prior to Amorim **ECO21dB**.

Install by overlapping (minimum 100mm) the PE foil, and use an adequate tape to adhere/fix it, if necessary. After completion, PE foil should cover the entire concrete area without gaps. Never mechanically fasten the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Installation – General

Amorim **ECO21dB** must be bonded to the subfloor. It is not essential to commence installation in the centre of the room, it is generally more practical to commence along the longest wall running the rolls in parallel. Wherever possible the product should be installed at 90° to the finished floor so that the chance of coinciding joints is minimized. The Amorim **ECO21dB** should be dry laid into workable areas and cut at least 50mm over the length required and allowed to relax for the acclimatization period as advised above. The product should then be cut using a straight edge utility knife and a gap of around 3mm should be left around the perimeter to allow for any expansion. The Amorim **ECO21dB** should not be in direct contact with any wall, column or skirting board that has not been isolated using a perimeter isolation strip. It should be adhered to the subfloor using a recommended adhesive (please refer to the latest list of recommended adhesives) strictly in accordance with the installation instructions of the adhesive manufacturer. It is particularly important to refer to the adhesive manufacturer's advice in respect of trowel sizes, application rates/coverage and open times. Only spread enough adhesive to cover a workable area, and after the required open time lay the Amorim **ECO21dB** into the adhesive and smooth out from the centre using a carpet glider or hand roller to ensure that the product is fully into the adhesive and all air bubbles are released. The Amorim **Eco21dB** should then be fully rolled into the adhesive using a 68kg articulated flooring roller to ensure full adhesion along the entire length and width of the product. All edges should be butt jointed ensuring that all seams and joints are smooth without any voids but not too tight.

Final Flooring

Always follow the manufacturer's recommended installation instructions.

Recommended Adhesives:

LVT to Amorim **ECO21dB**: Water-Based Emulsion/Synthetic Resin Glue Amorim **ECO21dB** to slab/screed: Water-Based Emulsion/Acrylic Adhesives

Important Notes

Never mechanically fasten the Amorim **ECO21dB** to the flooring floor as this will severely diminish its acoustical value.



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 equipments 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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