

T61

Material Data Sheet



Material Description & Properties

Agglomerated cork underlay for impact noise and thermal insulation.

PRODUCT SPECIFICATION

"___mm resilient acoustic underlay made of agglomerated cork with PU (polyurethane) elastomer bonding agent for impact noise insulation for different types of flooring, with a density of 175kg/m³ and an impact noise reduction ΔL_w of ___dB"

KEY FEATURES

- 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

THERMAL PROPERTIES

Thermal Conductivity: 0.04 W/mK ⁽¹⁾

⁽¹⁾ ISO 8301

PHYSICAL AND MECHANICAL PROPERTIES

Specific Weight ⁽¹⁾	150 - 200 Kg/m ³
Tensile Strength ⁽¹⁾	> 200 KPa
Compression at 0.7MPa ⁽¹⁾	30%
Recovery after 0.7MPa ⁽¹⁾	> 70%

⁽¹⁾ ISO 7322

ACOUSTICAL RESULTS

Flooring	Laminate
Thickness (mm)	2
ΔL_w (dB) ⁽¹⁾	20
IIC (dB) ⁽²⁾	54

Flooring	Glued Down Wood	
Thickness (mm)	3	3 perforated
ΔL_w (dB) ⁽¹⁾	26	18
IIC (dB) ⁽²⁾	59	51

Flooring	Ceramic (or Natural Stone)	
Thickness (mm)	5	
ΔL_w (dB) ⁽¹⁾	16	
IIC (dB) ⁽²⁾	50	

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

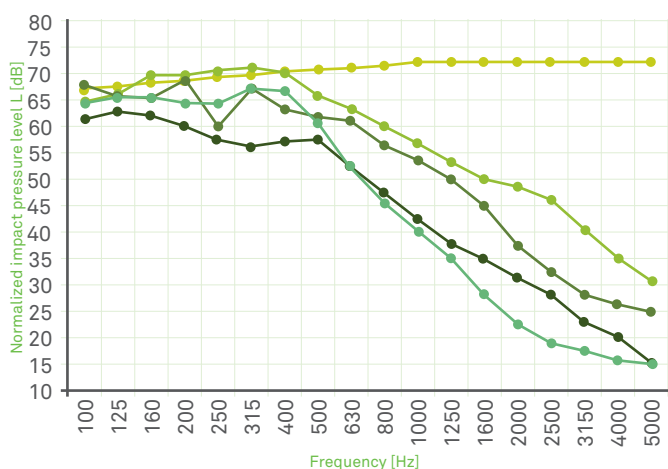
STANDARD DIMENSIONS

Thickness (mm)	2	3	3 perforated	5
Width (m) x Length (m)	1x10	1x10	0.5x10	1x10

Others sizes available upon request

ACOUSTICAL RESULTS

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



$L_{n,r0}$ (dB) $L_{n,r}$ (dB) - 3mm - GDW* $L_{n,r}$ (dB) - 5mm - Ceramic
 $L_{n,r}$ (dB) - 2mm - Laminate $L_{n,r}$ (dB) - 3mm perforated - GDW*

*Glued Down Wood

$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r0}$ - 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	SRLC/06/5L/3676/1a
Thickness	2 mm
Flooring	Non Glued Laminate
$L_{n,rw}(C_{l,r})$	58 (0) dB
$\Delta L_w(C_{l,\Delta})$	20 (-11) dB

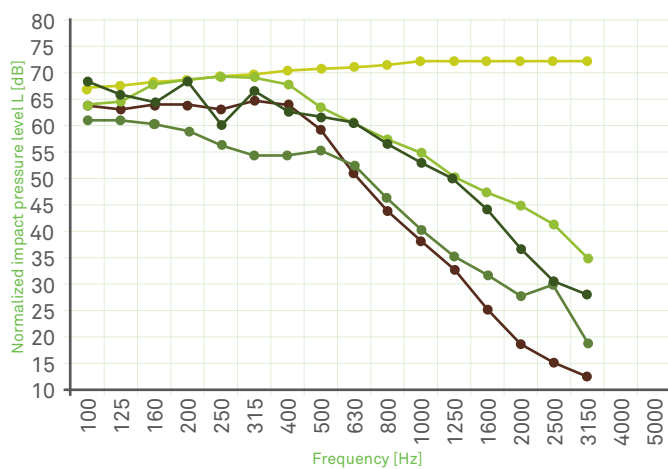
Ref. Test Report	SRLC/06/5L/3676/1a
Thickness	3 mm
Flooring	Glued Down Wood
$L_{n,rw}(C_{l,r})$	52 (1) dB
$\Delta L_w(C_{l,\Delta})$	26 (-12) dB

Ref. Test Report	ACL034/16
Thickness	3 mm perforated
Flooring	Glued Down Wood
$L_{n,rw}(C_{l,r})$	60 (0) dB
$\Delta L_w(C_{l,\Delta})$	18 (-11) dB

Ref. Test Report	SRLC/06/5L/3676/1a
Thickness	5 mm
Flooring	Ceramic (or Natural Stone)
$L_{n,rw}(C_{l,r})$	62 (0) dB
$\Delta L_w(C_{l,\Delta})$	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.



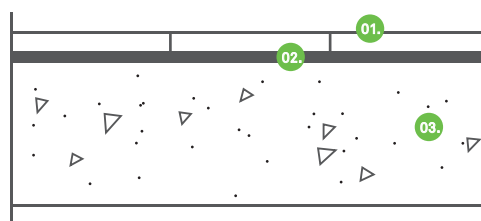
$L_{n,r0}$ (dB) $L_{n,r}$ (dB) - 3mm - GDW* $L_{n,r}$ (dB) - 5mm - Ceramic
 $L_{n,r}$ (dB) - 2mm - Laminate $L_{n,r}$ (dB) - 3mm perforated - GDW*

*Glued Down Wood

$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r0}$ - 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

TEST APPARATUS (ΔL_w & IIC)



01.

Floor covering composed by glued down wood, non glued laminate floor or ceramic or natural stone tiles

02.

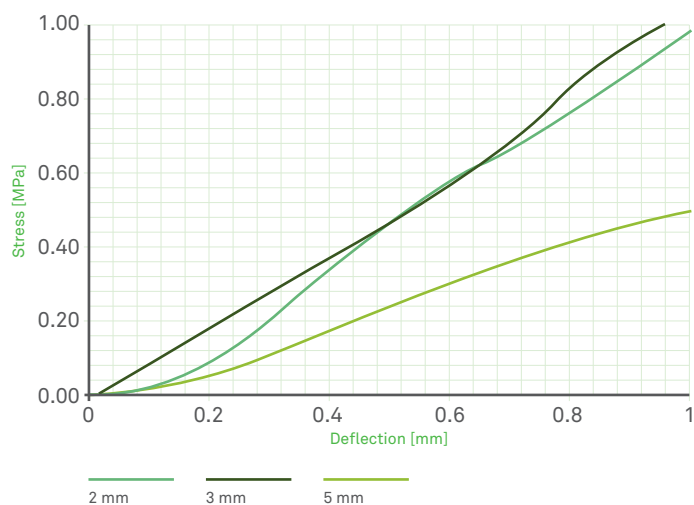
Agglomerated cork resilient layer - T61

03.

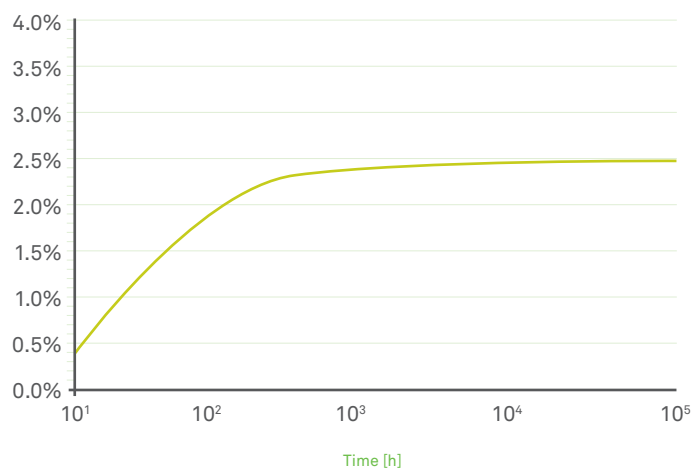
Reinforced concrete slab of thickness 140mm

PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION



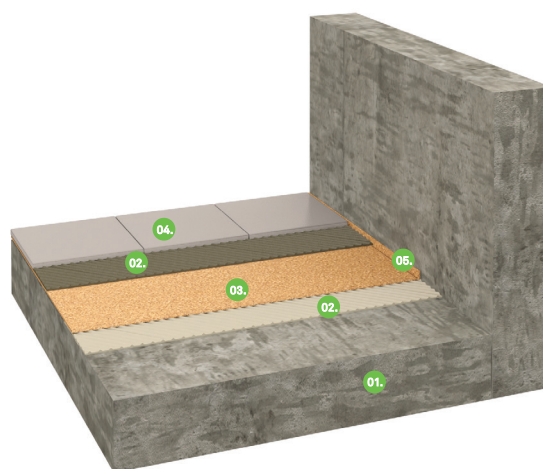
CREEP DEFLECTION @ 0.0045MPa (% OF START HEIGHT)



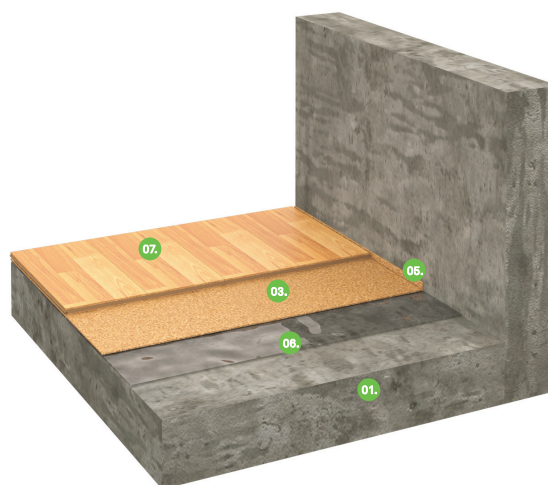
Note: Following ISO8013-1998 measured in Cantilever Test System

INSTALLATION

GLUED FLOORS



NON 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
- 05. Perimeter insulation barrier
- 06. Vapor barrier
- 07. Floor covering composed by non glued laminate floor

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, removing all trapped air.

An independent perimeter insulation barrier can be installed around the entire perimeter of the room with width equal to that of the floor build up.

Both solutions are valid, the most important is to avoid lateral propagation of impact noise. The barrier must also be applied in the perimeter of pipes, ducts or any other component protruding from the floor. Spot adhere the strips to the wall using acrylic glue or a bead of silicone sealant.

After completion, the T61 should cover the entire flooring area without gaps and with joints butted tight and preferably taped.



Mini-rolls of perimeter barrier (PB T61) available upon request.

Tested according to MMFA/EPLF requirements Group 1

Final Flooring

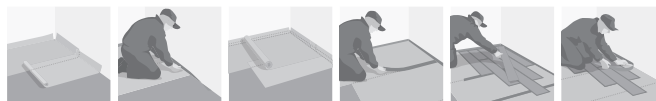
Always follow manufacturers recommended installation instructions.

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

NON GLUED FLOORS



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.

GLUED FLOORS



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.