ACOUSTICORK

AMORIM
CORK COMPOSITES

T22

Material Data Sheet

Material Description & Properties

Agglomerated recycled rubber underlay for impact noise and thermal insulation.

PRODUCT SPECIFICATION

"4 mm resilient acoustic underlay made of agglomerated recycled SBR (Stirene Butadiene Rubber) with PU (polyurethane) elastomer bonding agent for impact noise insulation for glued down wood, with a density of 700kg/m³ and an impact noise reduction ΔLw of 20dB."

KEY FEATURES

- Produced from post consumer recycled rubber
- High durability and long term resilience
- High performance with reduced thickness

THERMAL PROPERTIES

Thermal Conductivity: 0.140 W/mK(1)

(1) ISO 8301

PHYSICAL AND MECHANICAL PROPERTIES

Specific Weight (1)	650 - 750 Kg/m³
Tensile Strength (2)	> 350 KPa
Compressibility at 0.7MPa (3)	20%
Recovery after 0.7MPa (3)	> 80%

(1)ASTM F1315 • (2)ASTM F152 • (3)ASTM F36

ACOUSTICAL RESULTS

Flooring	Glued Down Wood
Thickness (mm)	4
ΔL_w (dB) (1)	20
IIC (dB) (2)	49

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

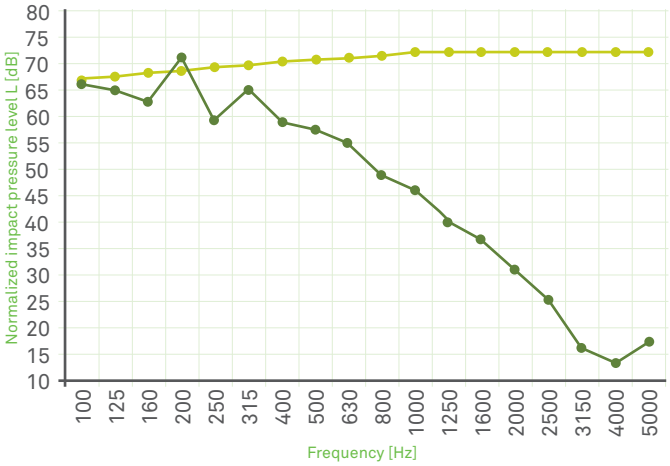
STANDARD DIMENSIONS

Thickness (mm)	4
Width (m) x Length (m)	1x15

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)

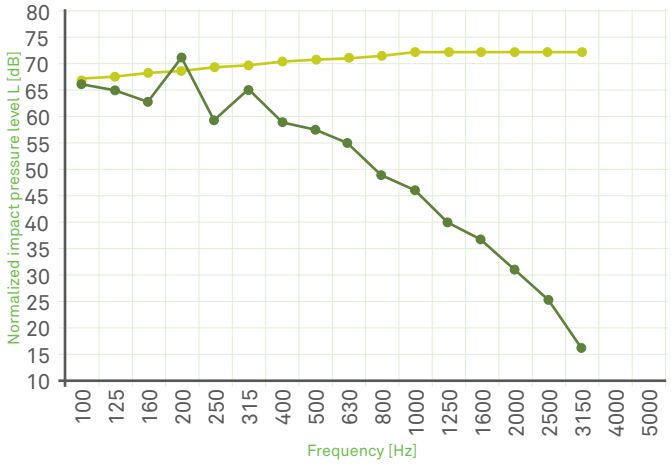
$L_{n,r}$ (dB) - 4mm

$L_{n,r}$ - 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	ACU 128/10
Thickness	4 mm
Flooring	Glued Down Wood
$L_{n,r,w}$ ($C_{I,r}$)	58 (1) dB
ΔL_w ($C_{I,\Delta}$)	20 (-12) 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.



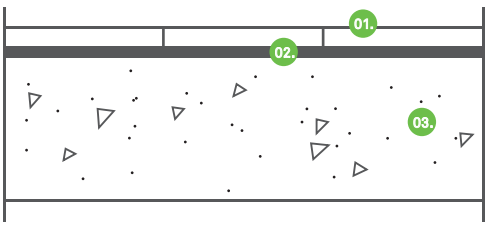
L_{ref} (dB)

$L_{ref.c}$ (dB) - 4mm

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
4mm	Glued Down Wood	49dB

TEST APPARATUS (ΔL_w & IIC)



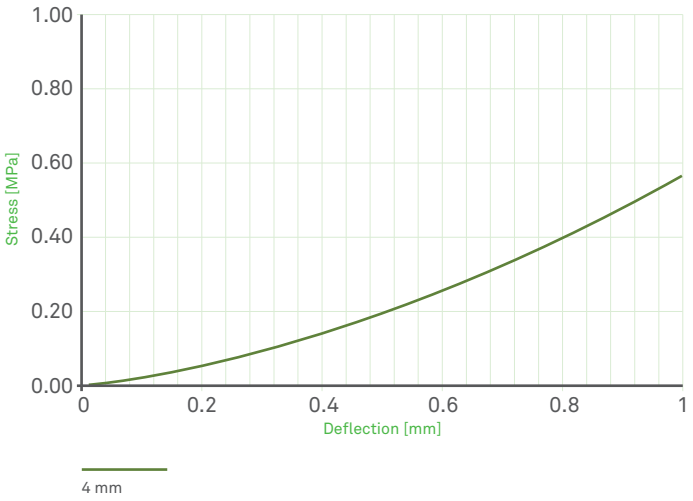
01. Floor covering composed by glued down wood

02. Agglomerated recycled rubber resilient layer - T22

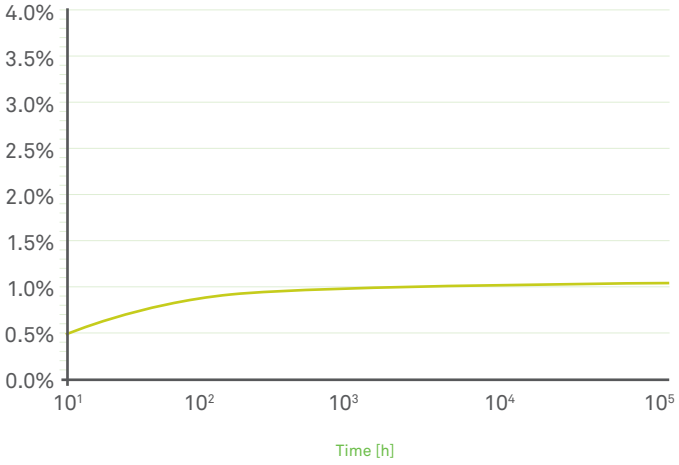
03. Reinforced concrete slab of thickness 140mm

PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION



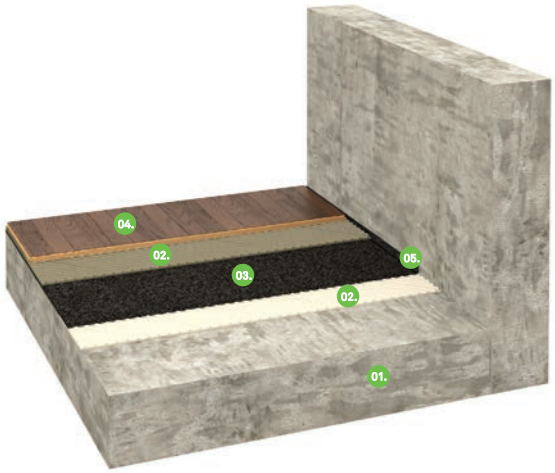
CREEP DEFLECTION @ 0.0045MPA (% OF START HEIGHT)



Note: Following ISO8013-1998 measured in Cantilever Test System

INSTALLATION

GLUED FLOORS



01. Reinforced concrete slab

02. Adhesive

03. Agglomerated recycled rubber resilient layer - T22

04. Floor covering composed by glued down wood

05. Perimeter insulation barrier

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 > 10ºC / 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.

Installation Instruction for Acousticork T22
Unpack the Acousticork T22 at least 24h before the installation and store it in the room where the installation will take place. Cut the T22 to desired length and install directly over the entire floor pulled 30mm up the walls with crown of the rolled materials up, removing all traped 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 T22 should cover the entire flooring area without gaps and with joints butted tight and preferably taped.

Mini-rolls of perimeter barrier (PB T22) available upon request.

Final Flooring
Always follow manufacturers recommended installation instructions.

Recommended Adhesives
Wood floor to Acousticork: Water-Based Emulsion/Polyurethane Glue
Acousticork to slab/screed: Water-Based Emulsion/ Acrylic Adhesives.

Application Process

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 T22 to the flooring floor as this will severaly diminish its acoustical value.

For detailed installation instructions, please contact us.

CERTIFICAÇÃO apcer ISO 9001 ISO 14001 OHSAS 18001 — CERTIFIED IQNet MANAGEMENT SYSTEM

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