

U36



Agglomerated natural cork blended with high density PU foam and EVA for impact noise and thermal insulation

PRODUCT SPECIFICATION

"___mm resilient acoustic underscreed made of agglomerated cork and polyurethane foams (PU) with EVA for impact noise insulation of floating screeds, with a density between 370 and 500kg/m³ and an impact noise reduction ΔL_w of ___ dB."

KEY FEATURES

- ▶ Impact noise reduction and thermal insulation properties
- ▶ Long-term resilience
- ▶ Produced from recycled and natural materials
- ▶ Light and flexible material, easy to handle
- ▶ Environmental Product Declaration (EPD), that will benefit building certifications

THERMAL PROPERTIES

Thermal Conductivity (W/mK) 0,0751 ①

① ASTM D297

PHYSICAL AND MECHANICAL PROPERTIES

Specific Weight (Kg/m³) ① 370–500

Tensile Strength (KPa) ② ≥200

Cp level (mm) ③ <1 ④

① ASTM F1315 ② ASTM F152 ③ ISO 092/19 ④ For both thicknesses 6/3 and 8/4
① ② ③ as per ISO 7322



NEGATIVE CARBON BALANCE

Acousticork U36 has a negative carbon balance of -13.6kg CO₂ eq/m²*, when considering the CO₂ sequestration of the cork oak forest and the CO₂ emissions associated with the industrial process.



ACOUSTICAL RESULTS

Thickness (mm)	6/3	8/4
ΔL_w (dB) ①	25	27
IIC (dB) ②	53	53

① as per ISO 10140-3 and ISO 717-2

② ASTM E2179-03; ASTM E492-09; ASTM E989-18; ASTM E2235-04

STANDARD DIMENSIONS

Thickness (mm)	6/3	8/4
Width (m) x Length (m)	1x10	1x10

Others sizes available upon request

FIRE CLASSIFICATION

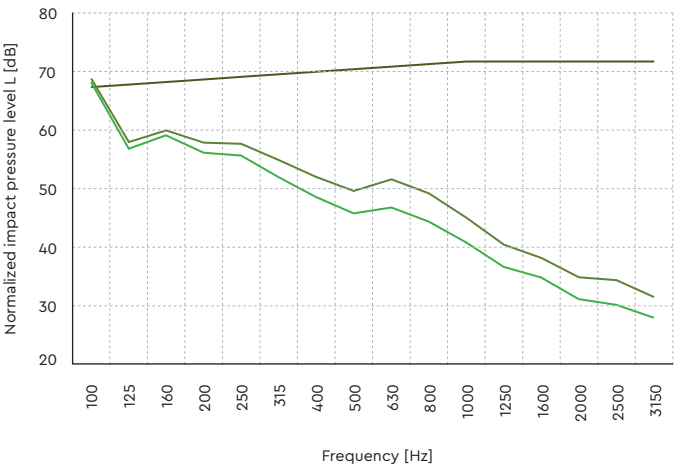
E/Efl ①

① as per EN 13501-1 and ISO 11925

*The Life Cycle Assessment study of the Acousticork U36 underscreed was conducted by Itecons, in order to determine the environmental impact of the U36 [6/3] and U36 [8/4], underscreeds produced by Amorim Cork Solutions. This study considered the following life cycle modules: Extraction and processing of raw materials (A1), Transport to the factory (A2), Production (A3) and End of life (C1-C4). The LCA study was conducted in accordance with international standards EN ISO 14040, EN ISO 14044 and EN 15804, as well as the requirements specified in the RCP (Rules for Product Categorisation) documents. The study also calculated the carbon balance of these products, using a methodology supplied by Amorim Cork Solutions, which takes into account both the carbon sequestered by the cork oak forest and the GHG emissions from the production stage, calculated using the methodology of the EN 15804 standard.

ACOUSTICAL RESULTS

Test procedure as per ISO 10140-1:2016; ISO 10140-3:2010; ISO 10140-3:2010/Amd.1:2015; ISO 10140-4:2010; ISO 717-2:2013



$L_{n,r,0}$ (dB) $L_{n,r}$ (dB) - 6/3mm $L_{n,r}$ (dB) - 8/4mm

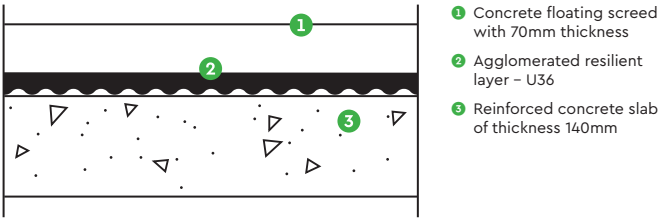
$L_{n,r}$ Normalized impact sound pressure level of the reference floor with the floor covering under test

$L_{n,r,0}$ Normalized impact sound pressure level of the Lab reference floor

Ref. Test Report	ACL 156/20
Thickness (mm)	6/3
$L_{n,r,w}$ ($C_{l,r}$) (dB)	53 (3)
ΔL_w ($C_{l,\Delta}$) (dB)	25 (-14)

Ref. Test Report	ACL 150/20
Thickness (mm)	8/4
$L_{n,r,w}$ ($C_{l,r}$) (dB)	51 (4)
ΔL_w ($C_{l,\Delta}$) (dB)	27 (-15)

TEST APPARATUS (ΔL_w)



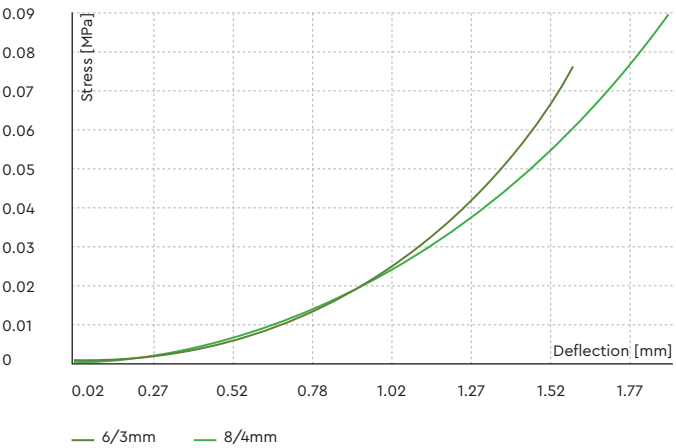
DYNAMIC STIFFNESS

Thickness (mm)	6/3	8/4
Dynamic Stiffness (MN/m ³) ①	42	29

① as per ISO 9052-1:1989; ISO 7626-5:1994

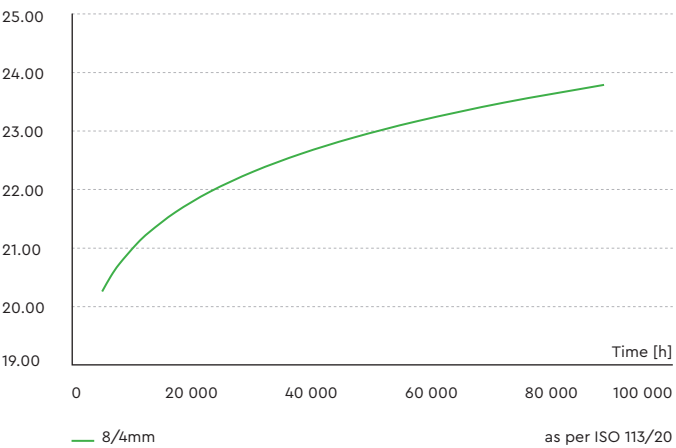
PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION



Note: Following ISO8013-1998 measured in Cantilever Test System

CREEP DEFLECTION



as per ISO 113/20

INSTALLATION



- ❶ Reinforced concrete slab
- ❷ Agglomerated cork blended with high density PU foam and EVA – U36
- ❸ Concrete floating screed
- ❹ Perimeter insulation barrier
- ❺ Adhesive tape
- ❻ Foil

PB U36

Mini-rolls of perimeter barrier available upon request.



GENERAL INSTALLATION INSTRUCTIONS

The following installation instructions are recommended by Amorim Cork Solutions, 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 and screed.

Room Conditions

Temperature > -5°C / Roommoisture 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.

Perimeter Insulation Barrier

Install a perimeter insulation barrier vertically around the entire perimeter of the room with width equal to that of the floor build up. This is highly recommended in order 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.

Installation Instruction for Acousticork U36

Unpack the Acousticork U36 at least 24h before the installation and store it in the room where the installation will take place. Cut and trim the Acousticork U36 to the desired size to fit the installation. Apply directly over the subfloor with the dimpled side down. Always ensure that material is installed to fit the application avoiding the creation of waves in the material. Dimple side of the product should face down.

Place the Acousticork U36 directly against the insulation perimeter barrier already installed. Proceed to cover the entire floor making sure that the joints are butted tight and use an adequate tape to fix it. After completion, the Acousticork U36 should cover the entire flooring area without gaps and with joints securely taped. An waterproof membrane (ex.: Polyethylene foil) minimum 0,2 mm covering the entire flooring area MUST be installed prior to the screed. Install it, minimum 150 mm wide vertically and overlapping it, minimum 100mm. The vapour barrier should cover the entire Acousticork U34C without gaps. Never mechanically fasten the Acousticork U36 with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Screed and Final Flooring

Cast a suitable screed over U36 previously installed.

Always follow manufacturers recommended installation instructions.

For detailed installation instructions, please contact us.



MATERIAL DATA SHEET U36

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 Solutions regarding specific application recommendations. Amorim Cork Solutions expressly disclaims all warranties, including any implied warranties or merchantability or of fitness for a particular purpose. Amorim Cork Solutions 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).