ACOUSTICORK



U38 Material Data Sheet



Material Description & Properties

Agglomerated cork blended with recycled PU based foam for high impact noise insulation in floating screed applications.

PRODUCT SPECIFICATION

"... mm resilient acoustic underscreed made of agglomerated cork and recycled polyurethane foams (PU) with PU elastomer bonding agent for impact noise insulation of floating screeds, with a density of 274KG/m³ and an impact noise reduction $\Delta L_{\rm m}$ of ... dB."

KEY FEATURES

- Impact noise reduction and thermal insulation properties
- · High load capacity with low deflection
- · Long-term resilience
- Produced from recycled and natural materials
- Very light and flexible material, easy to handle

THERMAL PROPERTIES

Thermal Conductivity: 0,0546 W/(m.°C) - as per ISO 8301

PHYSICAL AND MECHANICAL PROPERTIES

Specific Weight (1)	274Kg/m³
Tensile Strength (2)	207 KPa
Cp level ⁽³⁾	2 ⁽⁴⁾

(1)ASTM F1315 • (2)ASTM F152 • (3)ISO 092/19 • (4)For both thicknesses 12/6 and 17/8

STANDARD DIMENSIONS

Thickness (mm)	12/6	17/8
Width (m) x Length (m)	1X11	1X8

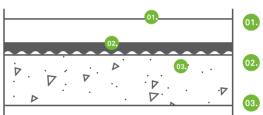
Others sizes available upon request

FIRE CLASSIFICATION

E/Efl - as per EN 13501-1 and ISO 11925

ACOUSTICAL RESULTS Thickness (mm) 12/6 17/8 ΔL_w(dB) (1) 29 31

TEST APPARATUS (ΔL,,,)



Concrete floating screed with 70mm thickness

Agglomerated resilient layer - U38

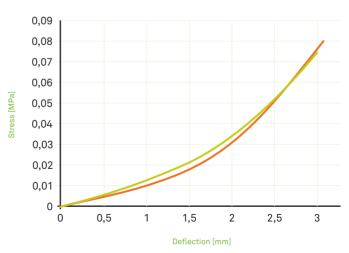
Reinforced concrete slab of thickness 140mm

DYNAMIC STIFFNESS

Thickness (mm)	12/6	17/8
Dynamic Stiffness (MN/m3)	14	12

PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION @ 0.0045MPA (% OF START HEIGHT)

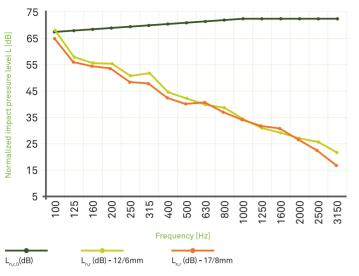


12/6mm 17/8mm

Note: Following ISO8013-1998 measured in Cantilever Test System

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_{nr0} - Normalized impact sound pressure level of the Lab reference floor;

 $L_{n,r}^{-n,r,0}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test.

Ref. Test Report	ACL 183/19	ACL 182/19
Thickness (mm)	12/6	17/8
$L_{n,r,w}\left(C_{l,r'}\right)$	49 dB	47 dB
$\Delta L_{_{ m W}}$ ($C_{_{ m l},\Delta}$)	29 dB	31 dB

INSTALLATION





Reinforced concrete slab

02.

Agglomerated cork blended with recycled foam, with pre-attached PE foil - U38



Concrete floating screed



Perimeter insulation barrier



Adhesive tape

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 and screed.

Room Conditions

Temperature > -5°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.

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.



Mini-rolls of perimeter barrier (PB U38) available upon request.

Installation Instruction for Acousticork U38

Unpack the Acousticork **U38** at least 24h before the installation and store it in the room where the installation will take place. Cut and trim the Acousticork **U38** 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.

Place the Acousticork **U38** 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 **U38** should cover the entire flooring area without gaps and with joints securely taped. Never mechanically fasten the Acousticork **U38** 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 U38 previously installed.

Always follow manufacturers recommended installation instructions.

For detailed installation instructions, please contact us.







The mark of responsible forestry



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.

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