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making the world a quiter place

ACOUSTICORK

U38 MDS

MATERIAL DATASHEET

iac-acoustics-thailand.com

U38 MDS \ ACOUSTICORK

Material Data Sheet

Material Description & Properties

Agglomerated cork combined with recycled foam for high impact noise insulation in flooring 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/m 3 and an impact noise reduction LIlw of ... dB."

KEY FEATURES

- Impact noise reduction and thermal insulation properties
- High load capacity wit h 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 & 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 DIMENSION

Thickness (mm)	12/6	17/8
Width x Length (M)	1x11	1x8

Other sizes available upon request

FIRE CLASSIFICATION

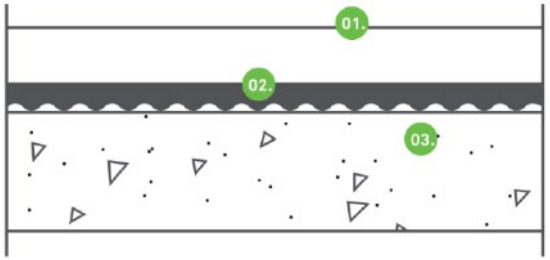
E/Efl as per EN 13501-1 and ISO11925

ACOUSTICAL RESULTS

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

(1) as pe r ISO 10140- 3 and ISO 717- 2

TEST APPARATUS (ΔL_w)



01. Concrete floating screed with 70mm thickness

02. Agglomerated resilient layer - U38

03. Reinforced concrete slab of thickness 140mm

DYNAMIC STIFFNESS

Thickness (mm)	12/6	17/8
Dynamic Stiffness(MN/m3) (1)	14	12

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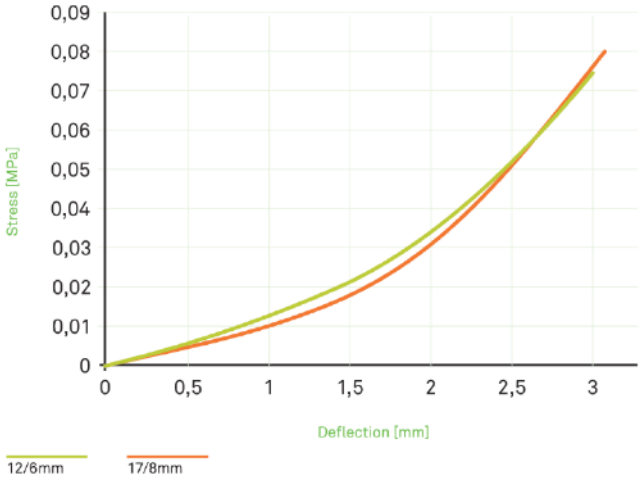
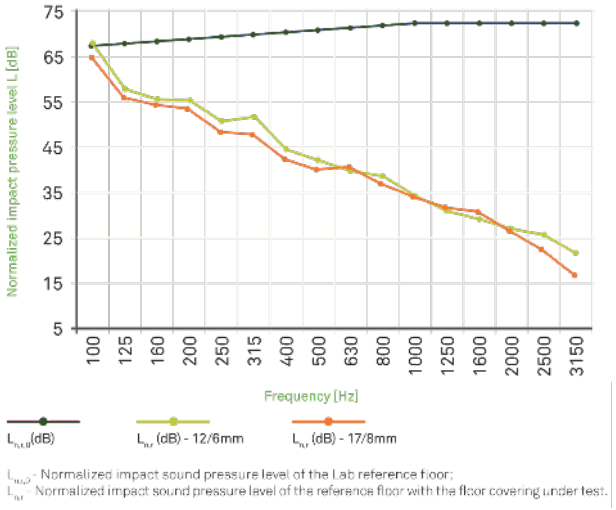
LOAD DEFLECTION



Note: Following ISO8013-1998 measured in Cantilever Test System

ACOUSTICAL RESULT

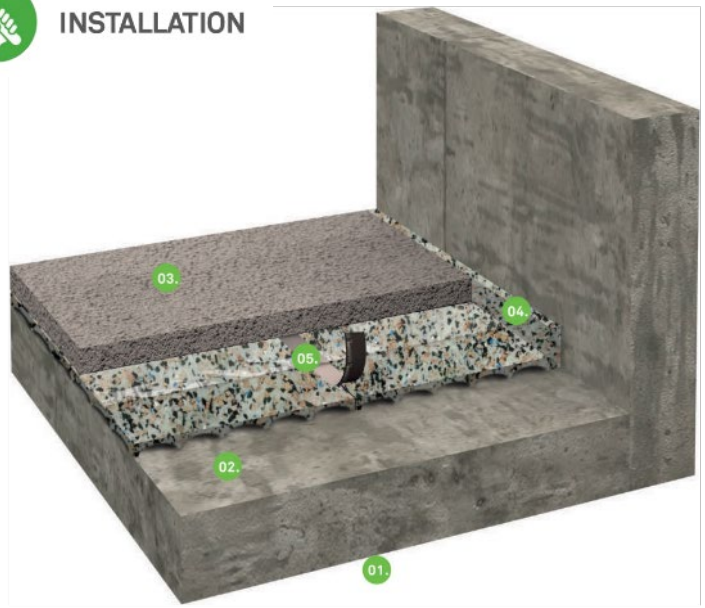
Test procedure as per ISO 10140-1:2016; ISO 10140-3:2010; ISO 10140-3:2010/ Amd.1:2015; ISO 10140-4:2010; ISO 717-2:2013



$L_{n,0}$ - Normalized impact sound pressure level of the Lab reference floor;
$L_{n,r}$ - 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
$L_{n,r,w}$ (C_I)	49 dB	47 dB
ΔL_w ($C_{I,\Delta}$)	29 dB	31 dB

INSTALLATION



1. Reinforced concrete slab
2. Agglomerated cork combined with recycled foam, with vapour barrier U38
3. Concrete floating screed
4. Perimeter insulation barrier
5. Adhesive Tape

GENERAL INSTALLATION INSTRUCTION

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.

Rooms 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 the Acousticork U38 to desired size to fit the installation. Apply directly over the subfloor, with the dimple 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 and / or the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Screed & Final Flooring

Cast a suitable screed over U38 previously installed over the product.

Always follow manufacturers recommended installation instructions.

For detailed installation instructions, please contact us.

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

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PEFC

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IAC has worldwide offices and manufacturing plants in the UK, Australia, Canada, China, Malaysia, Indonesia, Thailand, Philippines Denmark, France, Germany, Italy, Spain, UAE - Dubai, USA Houston, USA Lincoln, USA - New York.

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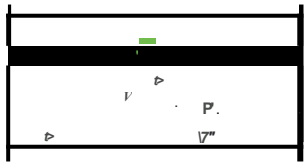
t.L (dB)([1]	29	31

([1] asper ISO 10140-3 and ISO 717-2

TEST APPARATUS (Lw)



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DYNAMIC STIFFNESS

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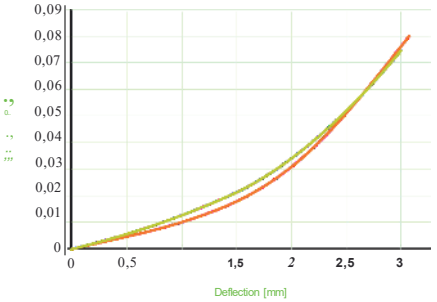
Dynamic Stiffness (MN/m3)	14	12

PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION@ O.0045MPA (% OF START HEIGHT)



1216mm 17/Bmm

Note: Following ISO8013-1998 measured in Cantilever Test System

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