

# U85



## Agglomerated cork with recycled polyurethane foam and recycled rubber layer for impact noise insulation of floating screed

### PRODUCT SPECIFICATION

"\_\_\_mm resilient acoustic underscreed made of agglomerated cork, recycled polyurethane foam and recycled rubber with PU elastomer bonding agent for impact noise insulation of floating screeds, with a density between 280 and 400 kg/m<sup>3</sup> and an impact noise reduction  $DL_w$  of \_\_\_dB."

### KEY FEATURES

- ▶ Impact noise reduction and thermal insulation properties
- ▶ Very easy to handle and long term resilience
- ▶ Produced from recycled and natural materials
- ▶ Very light and flexible material

### THERMAL PROPERTIES

Thermal Conductivity (W/mK) 0,0692 ①

① EN 12664:2001; ISO 8302:1991

### PHYSICAL AND MECHANICAL PROPERTIES

Specific Weight (Kg/m<sup>3</sup>) ① 280-400

Tensile Strength (KPa) ② > 150

Recovery after 0.7MPa (%) ③ > 75

① ASTM F1315 ② ASTM F152 ③ ASTM F36



### ACOUSTICAL RESULTS

Thickness (mm) 3

$\Delta L_w$  (dB) ① 21

IIC (dB) ② 50

Thickness (mm) 4/2

$\Delta L_w$  (dB) ① 23

IIC (dB) ② 52

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

### STANDARD DIMENSIONS

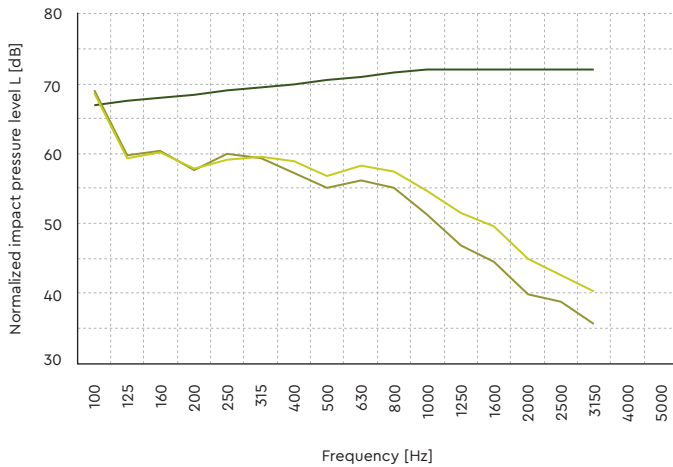
Thickness (mm) 3 4/2

Width (m) x Length (m) 1X22 1X11

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.



—  $L_{n,r,0}$  (dB)    —  $L_{n,r}$  (dB) - 3mm    —  $L_{n,r}$  (dB) - 4/2mm

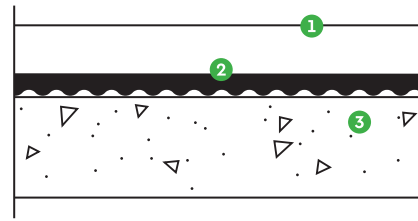
$L_{n,r}$  Normalized impact sound pressure level of the reference floor with the floor covering under test

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

$\Delta L_w$  Impact sound pressure level reduction index of the covering under test, on a normalized floor

Ref. Test Report	ACL-040-20
Thickness (mm)	3
$L_{n,r,w}$ ( $C_{i,r}$ ) (dB)	57 (0)
$\Delta L_w$ ( $C_{i,\Delta}$ ) (dB)	21 (-11)
Ref. Test Report	ACL039-20
Thickness (mm)	4/2
$L_{n,r,w}$ ( $C_{i,r}$ ) (dB)	55 (2)
$\Delta L_w$ ( $C_{i,\Delta}$ ) (dB)	23 (-11)

## TEST APPARATUS ( $\Delta L_w$ & IIC)



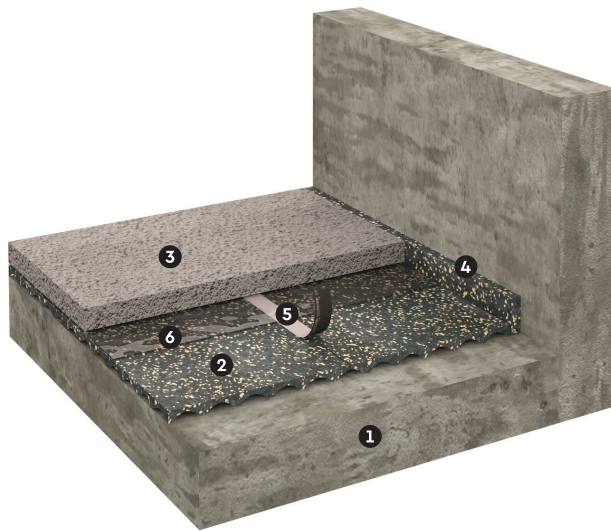
- ① Concrete floating screed with 70mm thickness
- ② Agglomerated cork, PU and rubber resilient layer with one face dimpled - U85
- ③ Reinforced concrete slab of thickness 140mm

## DYNAMIC STIFFNESS

Thickness (mm)	3	4/2
Dynamic Stiffness ( $MN/m^3$ ) ①	109 ②	55 ③

① as per ISO 9052-1:1989; ISO 7626-5:1994 ② VBR015/20 ③ VBR007/18

## INSTALLATION



- 1 Reinforced concrete slab
- 2 Agglomerated cork, PU and rubber resilient layer with one face dimpled - U85
- 3 Concrete floating screed
- 4 Perimeter insulation barrier
- 5 Adhesive tape
- 6 Foil

### PB U85

Mini-rolls of perimeter barrier available upon request.



## 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.

### Installation Instruction for Acousticork U85

Unpack the Acousticork U85 at least 24h before the installation and store it in the room where the installation will take place. Cut and trim the Acousticork U85 to the desired size to fit the installation. Apply directly over the subfloor. Always ensure that material is installed to fit the application avoiding the creation of waves in the material. In case of profile material, dimple side must face down.

Place the Acousticork U85 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 U85 should cover the entire flooring area without gaps and with joints securely taped. An waterproof membrane (ex. Polyethylene foil) minimum 0.2mm covering the entire flooring area MUST be installed prior to the screed. Install it, minimum 150mm wide vertically and overlapping it, minimum 100mm. After completion, the insulation vapour barrier should cover the entire Acousticork U85 area without gaps. Never mechanically fasten the Acousticork U85 and/or the PE foil barrier 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 the loose laid PE foil previously installed over the product.

Always follow manufacturers recommended installation instructions.

For detailed installation instructions, please contact us.

## MATERIAL DATA SHEET U85

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. For contractual purposes, please request our Product Specifications Sheet (PDA).