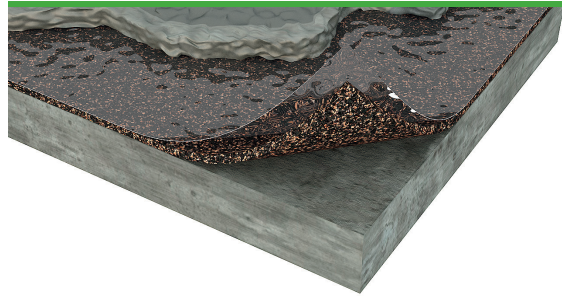


## U85

### Material Data Sheet



#### FLOATING SCREED

Impact Noise Reduction and Thermal Insulation Properties  
Very Easy to Handle and Long Term Resilience  
Produced from Recycled and Natural Material  
Very Flexible



#### PRODUCT DESCRIPTION

Agglomerated cork with recycled polyurethane resilient layer for impact noise insulation of floating screed.



#### THERMAL PROPERTIES

Thermal Conductivity: 0,055 W/mK <sup>(1)</sup>

<sup>(1)</sup>ISO 8301



#### PHYSICAL AND MECHANICAL PROPERTIES

Specific Weight <sup>(1)</sup>	Dynamic Stiffness <sup>(2)</sup>	Tensile Strength <sup>(3)</sup>	Recovery after 0,7MPa <sup>(4)</sup>
230 - 300 Kg/m <sup>3</sup>	27 MN/m <sup>3</sup>	> 100 KPa	> 70%

<sup>(1)</sup>ASTM F1315 • <sup>(2)</sup>ISO 9052-1 & ISO 7626-5 • <sup>(3)</sup>ASTM F152 • <sup>(4)</sup>ASTM F36



#### ACOUSTICAL RESULTS

Thickness (mm)	$\Delta L_w$ (dB) <sup>(1)</sup>	IIC (dB) <sup>(2)</sup>
4	19	51
4/2	23	52
6	20	51
6/3	23	52
8/4	25	52
10/5	27	52

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



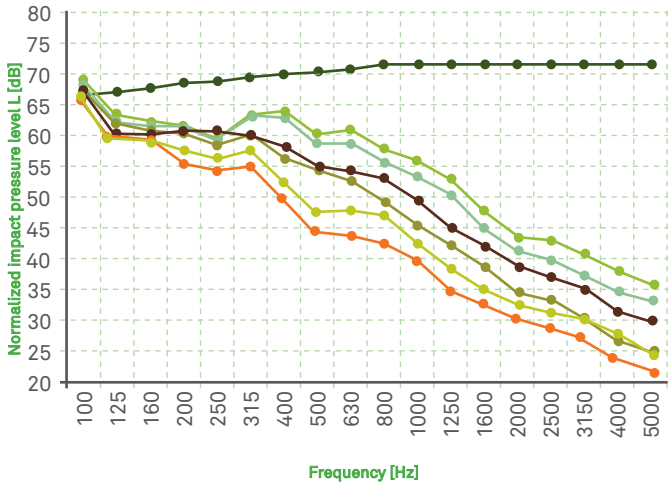
#### STANDARD DIMENSIONS

Thickness (mm)	4	4/2	6	6/3	8/4	10/5
Width (m) x Length (m)	1 x 15	1 x 30	1 x 10	1 x 20	1 x 15	1x10

Others sizes available upon request

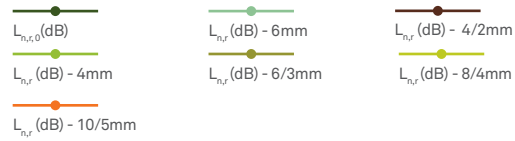


**ACOUSTICAL RESULTS**  
 Test procedure according to ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013 standards.

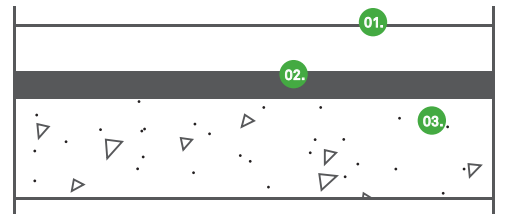


$L_{n,r}$  - Normalized impact sound pressure level of the reference floor with the floor covering under test;  
 $L_{n,r,0}$  - Normalized impact sound pressure level of the Lab reference floor;  
 $\Delta L_w$  - Impact sound pressure level reduction index of the covering under test, on a normalized floor;

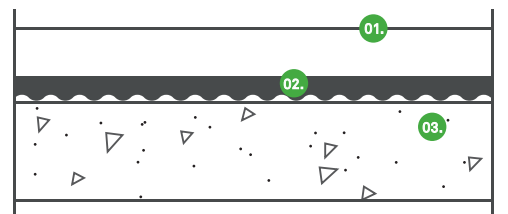
Ref. Test Report	Thickness	$L_{n,r,w}(C_{l,r})$	$\Delta L_w(C_{l,r})$
ACL219/14	4 mm	59 (0) dB	19 (-11) dB
ACL311/15	4/2 mm	55 (1) dB	23 (-12) dB
ACL220/14	6 mm	58 (0) dB	20 (-11) dB
ACL171/15	6/3 mm	55 (1) dB	23 (-12) dB
ACL122/15	8/4mm	53 (2) dB	25 (-13) dB
ACL121/15	10/5mm	51 (3) dB	27 (-14) dB



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

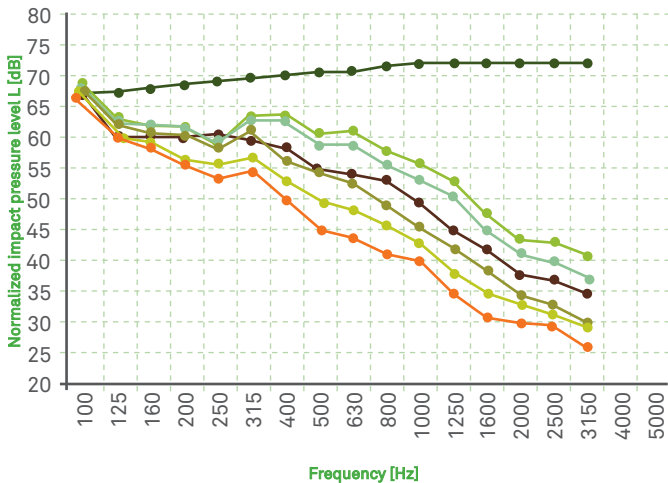


- 01. Concrete floating screed with 70mm thickness
- 02. Agglomerated cork and PU resilient layer - U85
- 03. Reinforced concrete slab of thickness 140mm

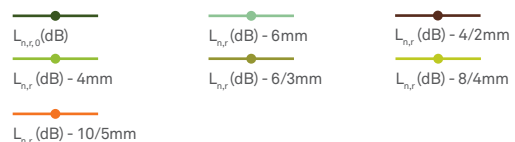


- 01. Concrete floating screed with 70mm thickness
- 02. Agglomerated cork and PU resilient layer with one face dimpled - U85 Profile
- 03. Reinforced concrete slab of thickness 140mm

**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.



$L_{ref}$  - 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;

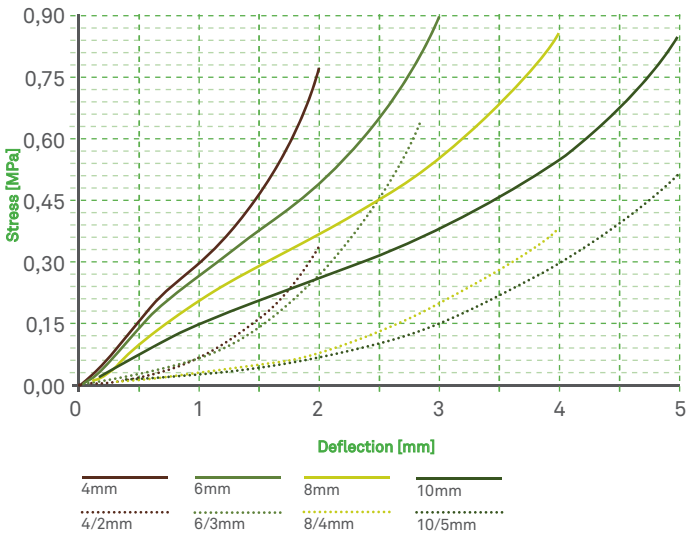


Thickness	IIC <sub>c</sub>
4 mm	51 dB
4/2 mm	52 dB
6 mm	51 dB
6/3 mm	52 dB
8/4mm	52 dB
10/5mm	52 dB

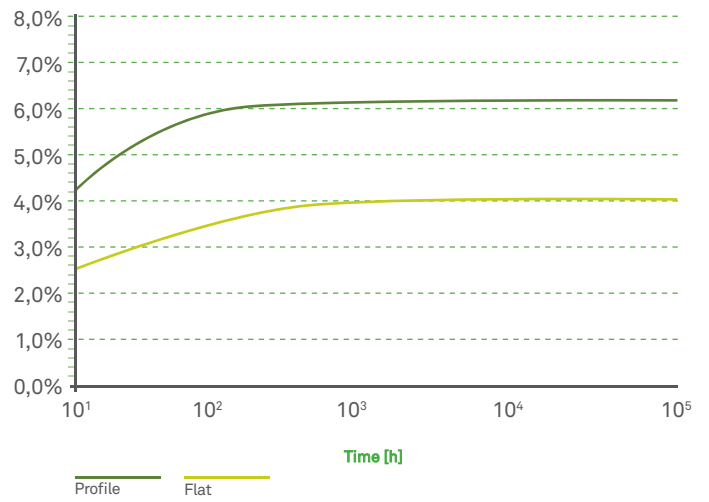


## PHYSICAL AND MECHANICAL PROPERTIES

### LOAD DEFLECTION



### CREEP DEFLECTION @ 0,0045MPa (% OF START HEIGHT)



Note: Following ISO8013-1998 measured in Cantilever Test System

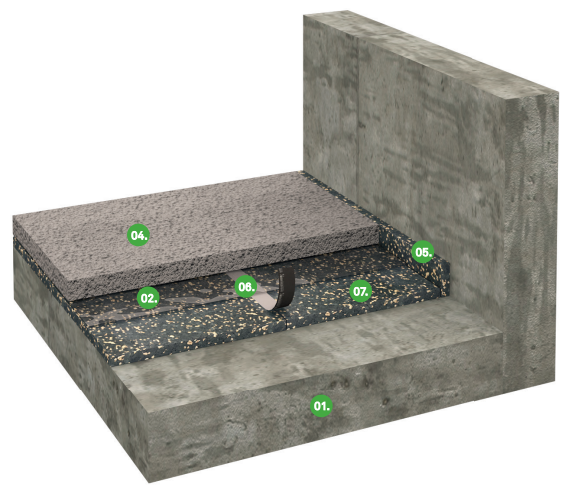
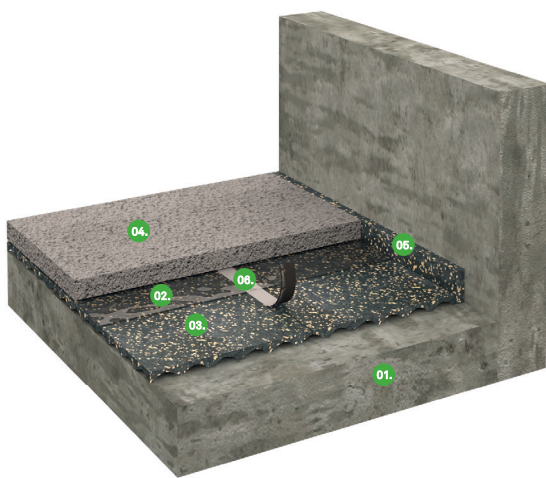
### DYNAMIC STIFFNESS

Test procedure according ISO 9052-1 and ISO7626-5 standards.

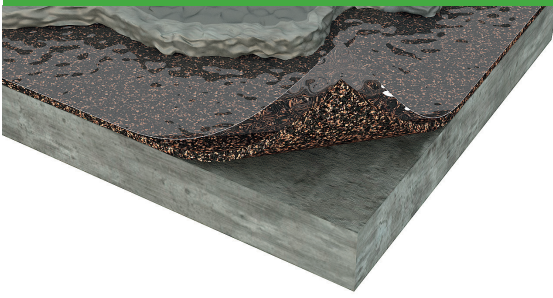
Thickness	4mm	4/2mm	6mm	6/3mm	8mm	8/4mm	10mm	10/5mm
Dynamic Stiffness (MN/m <sup>3</sup> )	85	52	82	50	72	32	60	27



## INSTALLATION



- 01.** Reinforced concrete slab
- 02.** Vapor barrier
- 03.** Agglomerated cork and PU resilient layer with one face dimpled - U85 Profile
- 04.** Concrete floating screed
- 05.** Perimeter insulation barrier
- 06.** Adhesive tape
- 07.** Agglomerated cork and PU resilient layer - U85



## FLOATING SCREED

# U85 UNDERSCREED

### 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.