Material Description & Properties

Agglomerated cork and recycled rubber underlay for impact noise and thermal insulation.

PRODUCT SPECIFICATION

“___mm resilient acoustic underlay made of agglomerated cork and recycled SBR (Styrene Butadiene Rubber) with PU (polyurethane) elastomer bonding agent for impact noise insulation for different types of flooring, with a density of 650kg/m³ and an impact noise reduction \( \Delta L_w \) of ___dB”

KEY FEATURES

- Homogenous material produced from cork and recycled rubber granules with the same size (0.5-1mm).
- High durability and long term resilience
- High performance with reduced thickness
- Low residual indentation and free of migration of plasticizes

THERMAL PROPERTIES

Thermal Conductivity: 0.08 W/mK (1)

(1) ISO 8301

PHYSICAL AND MECHANICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Weight (1)</td>
<td>600 - 700 Kg/m³</td>
</tr>
<tr>
<td>Tensile Strength (1)</td>
<td>&gt; 800 KPa</td>
</tr>
<tr>
<td>Compression at 0.7MPa (1)</td>
<td>15%</td>
</tr>
<tr>
<td>Recovery after 0.7MPa (1)</td>
<td>&gt; 75%</td>
</tr>
</tbody>
</table>

(1) ISO 7322

ACOUSTICAL RESULTS

<table>
<thead>
<tr>
<th>Flooring</th>
<th>Laminate</th>
<th>Glued Down Wood</th>
<th>Ceramic (or Natural Stone)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness (mm)</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>( \Delta L_w ) (dB) (1)</td>
<td>19</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>IIC (dB) (2)</td>
<td>47</td>
<td>50</td>
<td>51</td>
</tr>
</tbody>
</table>

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

STANDARD DIMENSIONS

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness (mm)</td>
<td>3</td>
</tr>
<tr>
<td>Width (m) x Length (m)</td>
<td>1x15</td>
</tr>
</tbody>
</table>

Others sizes available upon request

CASTOR CHAIR RESISTANCE

Pass (1)

(1) EN425-2002
ACOUSTICAL RESULTS


**Normalized Impact Sound Pressure Level**

<table>
<thead>
<tr>
<th>Ref. Test Report</th>
<th>Thickness</th>
<th>Flooring</th>
<th>IIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACU 337/11</td>
<td>3 mm</td>
<td>Laminate</td>
<td>47 dB</td>
</tr>
<tr>
<td>ACL 127/15</td>
<td>3 mm</td>
<td>Glued Down Wood</td>
<td>50 dB</td>
</tr>
<tr>
<td>ACL 203/14</td>
<td>3 mm</td>
<td>Ceramic (or Natural Stone)</td>
<td>51 dB</td>
</tr>
<tr>
<td>ACL 072/17</td>
<td>4.5 mm</td>
<td>Ceramic (or Natural Stone)</td>
<td>52 dB</td>
</tr>
<tr>
<td>ACL 199/14</td>
<td>3 mm</td>
<td>LVT</td>
<td>51 dB</td>
</tr>
</tbody>
</table>

**Impact Sound Pressure Level Reduction Index**

- $L_{n,r,0}$ - 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;
- $\Delta L_{w}$ - Impact sound pressure level reduction index of the covering under test, on a normalized floor.

*Glued Down Wood

**Test Apparatus (ΔL_{w} & IIC)**

- 01. Floor covering composed by glued down wood, non glued laminate floor or ceramic or natural stone tiles
- 02. Agglomerated cork and recycled rubber resilient layer - T66
- 03. Reinforced concrete slab of thickness 140mm
**PHYSICAL AND MECHANICAL PROPERTIES**

**LOAD DEFLECTION**

![Graph showing load deflection](image)

**CREEP DEFLECTION @ 0.0045MPA (% OF START HEIGHT)**

![Graph showing creep deflection](image)

Note: Following ISO8013-1998 measured in Cantilever Test System

**INSTALLATION**

**GLUED FLOORS**

![Diagram of glued floors](image)

**NON GLUED FLOORS**

![Diagram of non-glued floors](image)

01. Reinforced concrete slab
02. Adhesive
03. Agglomerated cork and recycled rubber resilient layer - T66
04. Floor covering composed by glued down wood, ceramic or nature stone
05. Perimeter insulation barrier
06. Vapor barrier
07. Floor covering composed by non-glued laminate floor
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.

**Room Conditions**
Temperature > 10ºC / 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.

**Vapor Insulation Barrier (only for Non Glued Floors)**
PE (Polyethylene) vapor insulation barrier covering the entire flooring area, minimum 50mm wide vertically around the perimeter of the entire floor MUST be installed prior to the Acousticork T66.

Install by overlapping (minimum 100mm) the PE foil, and use an adequate tape to adhere/fix it, if necessary. After completion, PE foil should cover the entire concrete area without gaps. Never mechanically fasten the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

**Installation Instruction for Acousticork T66**
Unpack the Acousticork T66 at least 24h before the installation and store it in the room where the installation will take place. Cut the T66 to desired length and install directly over the entire floor pulled 30mm up the walls with crown of the rolled materials up, removing all trapped air.

An independent perimeter insulation barrier can be installed around the entire perimeter of the room with width equal to that of the floor build up.

Both solutions are valid, the most important is 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.

After completion, the T66 should cover the entire flooring area without gaps and with joints butted tight and preferably taped.

**Final Flooring**
Always follow manufacturers recommended installation instructions.

**Recommended Adhesives:**
- Wood floor to Acousticork: Water-Based Emulsion/Polyurethane Glue;
- Vinyl and linoleum to Acousticork: Water-Based Emulsion/Synthetic Resin Glue;
- Ceramic to Acousticork: Flexible Cement Glue;
- Acousticork to slab/screed: Water-Based Emulsion/Acrylic Adhesives;

**Application Process**

**NON GLUED FLOORS**

**GLUED FLOORS**
1. Perimeter barrier application; 2. Underlay application (glued); 3. Final floor application (glued); 4. Perimeter insulation barrier cut.

**Important Notes**
Never mechanically fasten the Acousticork T66 to the flooring floor as this will severely diminish its acoustical value.

For detailed installation instructions, please contact us.

---

Mini-rolls of perimeter barrier (PB T66) available upon request.