Material Description & Properties

Agglomerated recycled rubber underlay for impact noise and thermal insulation.

PRODUCT SPECIFICATION

"4 mm resilient acoustic underlay made of agglomerated recycled SBR (Stirene Butadiene Rubber) with PU (polyurethane) elastomer bonding agent for impact noise insulation for glued down wood, with a density of 700kg/m³ and an impact noise reduction $\Delta L_w$ of 20dB."

KEY FEATURES

- Produced from post consumer recycled rubber
- High durability and long term resilience
- High performance with reduced thickness

THERMAL PROPERTIES

Thermal Conductivity: 0.140 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>650 - 750 Kg/m³</td>
</tr>
<tr>
<td>Tensile Strength(^{(2)})</td>
<td>&gt; 350 KPa</td>
</tr>
<tr>
<td>Compressibility at 0.7MPa(^{(3)})</td>
<td>20%</td>
</tr>
<tr>
<td>Recovery after 0.7MPa(^{(3)})</td>
<td>&gt; 80%</td>
</tr>
</tbody>
</table>

\(^{(1)}\)ISO 10140-3 and ISO 717-2 • \(^{(2)}\)ASTM E492-09 & ASTM E989-06 • \(^{(3)}\)ASTM F1315 • \(^{(4)}\)ASTM F152 • \(^{(5)}\)ASTM F36

ACOUSTICAL RESULTS

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flooring</td>
<td>Glued Down Wood</td>
</tr>
<tr>
<td>Thickness (mm)</td>
<td>4</td>
</tr>
<tr>
<td>$\Delta L_w$ (dB)(^{(1)})</td>
<td>20</td>
</tr>
<tr>
<td>IIC (dB)(^{(2)})</td>
<td>49</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>4</td>
</tr>
<tr>
<td>Width (m) x Length (m)</td>
<td>1x15</td>
</tr>
</tbody>
</table>

Others sizes available upon request
ACOUSTICAL RESULTS


Normalized impact sound pressure level and IIC rating determined according ASTM E492-09 and ASTM E989-06 standards.

**Ref. Test Report**

ACU 128/10

**Thickness**

4 mm

**Flooring**

Glued Down Wood

**$L_{n,r,w}$ (C_l) (dB)**

58 (1) dB

**$\Delta L_{w}$ (C_l) (dB)**

20 (-12) dB

**Thickness**

4mm

**Flooring**

Glued Down Wood

**IIC**

49dB

**TEST APPARATUS ($\Delta L_{w}$ & IIC)**

01. Floor covering composed by glued down wood

02. Agglomerated recycled rubber resilient layer - T22

03. Reinforced concrete slab of thickness 140mm
LOAD DEFLECTION

CREEP DEFLECTION @ 0.0045MPa (% OF START HEIGHT)

INSTALLATION

GLUED FLOORS

01. Reinforced concrete slab
02. Adhesive
03. Agglomerated recycled rubber resilient layer - T22
04. Floor covering composed by glued down wood
05. Perimeter insulation barrier

Note: Following ISO8013-1998 measured in Cantilever Test System
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.

**Installation Instruction for Acousticork T22**
Unpack the Acousticork T22 at least 24h before the installation and store it in the room where the installation will take place. Cut the T22 to desired length and install directly on the entire floor pulled 30mm up the walls with crown of the rolled materials, 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 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 T22 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
Acousticork to slab/screed: Water-Based Emulsion/ Acrylic Adhesives.

**Application Process**

**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 T22 to the flooring floor as this will severely diminish its acoustical value.

For detailed installation instructions, please contact us.

---

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 equipment damage or personal injury. Please contact Amorim Cork Composites regarding specific application recommendations. Amorim Cork Composites expressly disclaims all warranties, including any implied warranties of 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).

www.amorimcorkcomposites.com