**MS-RO** - a Wall Bearing material - is part of the Amorim Cork Composites range and it represents an excellent solution for acoustical and vibration issues.

MS-RO is manufactured from recycled rubber and granulate cork and it has been developed to effectively interrupt the transmission of footstep noise vertically through the masonry. If wall bearings are used consistently throughout a building, and other sound transmission vectors are eliminated, this can significantly improve the quality of living conditions. The product is suitable for acoustic insulation in loadbearing.

**LOAD RANGE**

- **WORKLOAD**  
  0,3 - 1,4* MPa (43,5 - 203* psi)
- **MAXIMUM LOAD**  
  8 MPa (1160 psi)**  

**E-MODULE**

- **STATIC**\(^{(1)}\)  
  3,6-9 MPa (522,14 - 1305 psi)
- **DYNAMIC**\(^{(2)}\)  
  6,5-28,0 MPa (942,75 - 4061,06 psi)

\(^{(1)}\) DIN 53513 (ADAPTED) - TANGENTIAL MODULUS  
\(^{(2)}\) DIN 53513 (ADAPTED) - DEPENDING ON LOAD AND FREQUENCY  
** AT 25% DEFLECTION  
** AT <50% DEFLECTION

**CORK & RECYCLED RUBBER**

- **Compress Set (%)**\(^{(1)}\)  
  <15
- **Tensile Strength (MPa)**\(^{(2)}\)  
  >0,6 (>87psi)
- **Elongation at break (%)**\(^{(2)}\)  
  >15
- **Density (kg/m³)**\(^{(3)}\)  
  600 (40lb/ft³)
- **Shore Hardness (Shore A)**\(^{(4)}\)  
  60-70
- **Natural Frequency (Hz) for 10mm thickness**  
  21,5*
- **Natural Frequency (Hz) for 5mm thickness**  
  26,5*

\(^{(1)}\) DIN 53572 - MEASURED 30MIN AFTER DECOMPRESSION WITH 50% DEFORMATION / 23°C AFTER 72H  
\(^{(2)}\) DIN 53571  
\(^{(3)}\) ASTM D2097  
\(^{(4)}\) ASTM D 2240  
*AT 1,4MPa STRESS

**ADVANTAGES**

- High resistance to compression  
- Low dynamic stiffness  
- Resistance to contact with liquids  
- Sustainable and recyclable

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**ELASTIC MODULUS [MPa]**

<table>
<thead>
<tr>
<th>Stress [MPa]</th>
<th>E(Static) 10mm</th>
<th>E(Static) 5mm</th>
<th>E(Dyn) 10mm 10Hz</th>
<th>E(Dyn) 10mm 5Hz</th>
<th>E(Dyn) 10mm 40Hz</th>
<th>E(Dyn) 5mm 10Hz</th>
<th>E(Dyn) 5mm 5Hz</th>
<th>E(Dyn) 5mm 40Hz</th>
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<tbody>
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<td>20.0</td>
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<td>10.0</td>
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<tr>
<td>1.40</td>
<td>30.0</td>
<td>25.0</td>
<td>20.0</td>
<td>15.0</td>
<td>10.0</td>
<td>5.0</td>
<td>2.5</td>
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</table>

**DYNAMIC STIFFNESS [N/mm³]**

<table>
<thead>
<tr>
<th>Stress [MPa]</th>
<th>K(Stat) 10mm</th>
<th>K(Stat) 5mm</th>
<th>K(Dyn) 10mm 10Hz</th>
<th>K(Dyn) 10mm 5Hz</th>
<th>K(Dyn) 10mm 40Hz</th>
<th>K(Dyn) 5mm 10Hz</th>
<th>K(Dyn) 5mm 5Hz</th>
<th>K(Dyn) 5mm 40Hz</th>
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<tr>
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<td>2.5</td>
<td>1.5</td>
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<td>0.5</td>
<td>0.25</td>
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<tr>
<td>1.40</td>
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<td>1.0</td>
<td>0.5</td>
<td>0.25</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Before the MS-R0 wall bearing is installed, check the floor for surface irregularities. If it is uneven (with projections, surface roughness or similar), apply a smooth mortar layer;

After the surface layer has been allowed to dry, lay the wall bearing. Make sure that it projects by approx. 15mm on the side on which the wall is to be plastered;

Sections of wall bearing are butt-jointed together, and the joint secured with adhesive tape for concrete.

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).

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