Cork & recycled rubber

MS-R0 - a Wall Bearing material - is part of the Amorim Cork Composites range and it represents an excellent solution for acoustical and vibration issues.

MS-R0 is manufactured from recycled rubber and granulated 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 (MPa): 0.3–1.4 (43.5–203 psi) ➀
- Maximum load (MPa): 8 (1160 psi) ➁
  ➀ at 25% deflection
  ➁ at <50% deflection

**Technical Features**

- Compression Set (%): <15
- Tensile Strength (MPa): >0.6 (>87psi)
- Elongation at break (%): >15
- Density (kg/m³): 600 (40lb/ft³)
- Shore Hardness (Shore A): 60–70
- Natural Frequency (Hz) for 10mm thickness: 21.5 ➄
- Natural Frequency (Hz) for 5mm thickness: 26.5 ➄

**Advantages**

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

**Benefits**

- High load bearing capacity
- Low thermal conductivity
- Lasting elasticity
- Easy to cut
- Stable creep behavior
- Block flanking

**E-Module**

- Static (MPa) ➃: 3.6–9 (522.14–1305 psi)
- Dynamic (MPa) ➃: 6.5–28.0 (942.75–4061.06 psi)

  ➃ DIN 53513 (adapted) – tangential modulus
  ➃ DIN 53513 (adapted) – depending on load and frequency

**Material Data Sheet**
### Material Data Sheet MS-R0

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 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).

www.amorimcorkcomposites.com

---

#### Standard Dimensions

- 10mx5cmx10mm or 5mm
- 10mx10cmx10mm or 5mm
- 10mx15cmx10mm or 5mm
- 10mx20cmx10mm or 5mm

* Other dimensions available

#### Installation

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.

---

#### Physical and Mechanical Properties

**Load Deflection**

**Elastic Modulus [MPa]**

![Elastic Modulus Graph](Image)

**Dynamic Stiffness [N/mm²]**

![Dynamic Stiffness Graph](Image)

**Creep Deflection @ 0.7MPa (% of Start Height)**

![Creep Deflection Graph](Image)

---

Note: Creep over 20 years less than 10%