

VC1001

Material Data Sheet

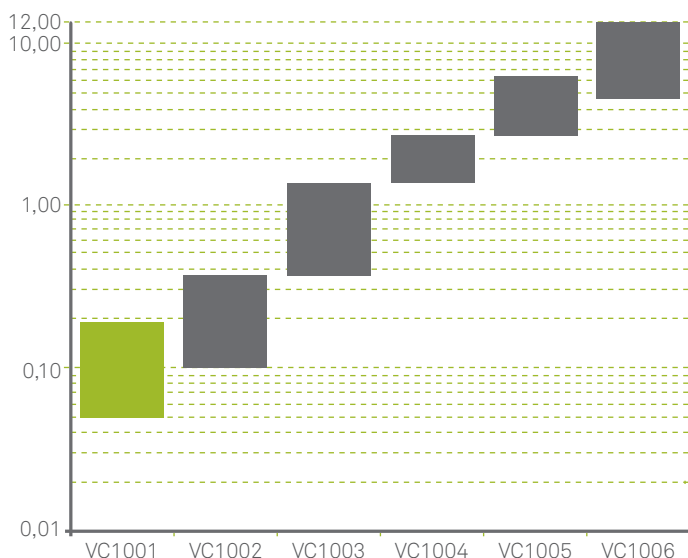


CORK & NATURAL RUBBER

VC1001 Vibration Control material is an engineered compound with Cork and Natural Rubber.

This product is suitable for vibration control applications in need of very high isolation levels, used as discrete isolators (pads/strips) with a low resonance frequency and low load.

WORK LOAD RANGE [MPa]



FEATURES

- Long term durability
- Low natural frequency / High vibration isolation
- Low water absorption
- Low creep rate

STANDARD DIMENSIONS*

915x915x10mm

915x915x20mm

915x915x30mm

915x915x50mm

* Other dimensions (like pads) available under request

LOAD RANGE

- **STATIC** 0,05 - 0,20 MPa (7 - 29 psi)
- **TOTAL** 0,25 MPa (36 psi)
- **OCCASIONAL** 0,60 MPa (87 psi)

E-MODULE (@ stable load)

- **STATIC** ⁽¹⁾ 0,8 - 1,5 MPa (116 - 217 psi)
- **DYNAMIC** ⁽²⁾ 1,2 - 3,6 MPa (174 - 522 psi)

TEMPERATURE

- **RANGE** -10 / +100°C (+14 / 212 °F)

(1) DIN 53513 (ADAPTED) - TANGENTIAL MODULUS
(2) DIN 53513 (ADAPTED) - DEPENDING ON LOAD AND FREQUENCY

Density (kg/m ³) ⁽¹⁾	500 (31 lb/ft ³)
Shore hardness (Shore A) ⁽²⁾	20 - 35
Elongation at break (%) ⁽³⁾	> 80
Tensile strength (MPa) ⁽³⁾	> 0,25 (>36 psi)
Compression set 50%/23°C/70h (%) ⁽⁴⁾	< 20
Loss Factor ⁽⁵⁾	0,15

(1) ASTM D297
(2) ASTM D2240
(3) ASTM F152

(4) DIN EN ISO 1856
(5) DIN 53513 (Temperature, frequency and load dependent)

RoHS Compliant
AMORIM CORK COMPOSITES

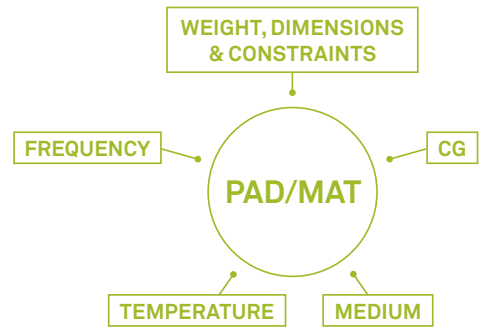


The mark of responsible forestry

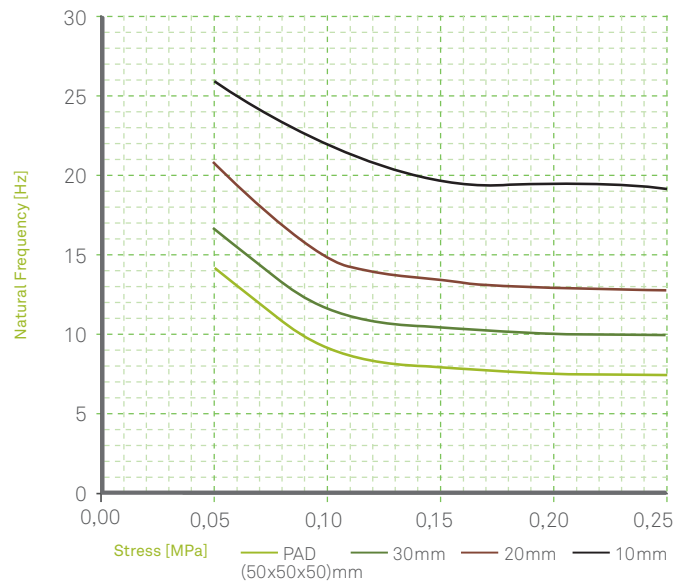
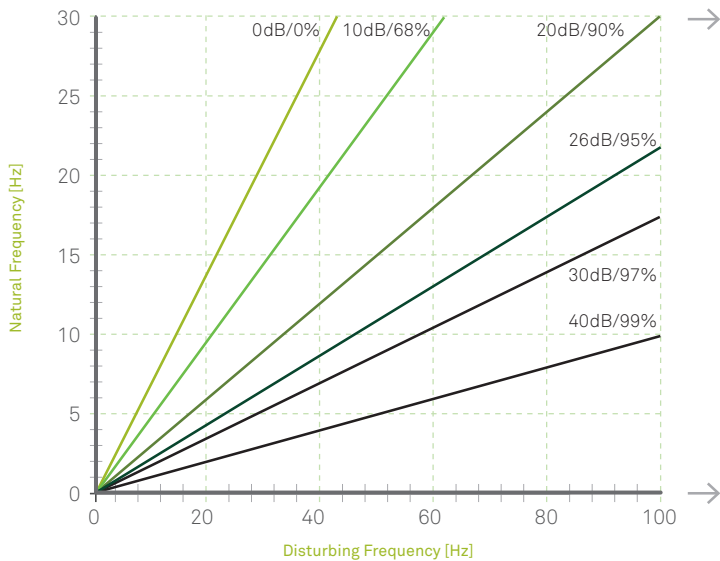
Selection Guideline

Material selection can be made using the Static/Dynamic E-Module in the respective load range or using the Vibration Isolation Level Abacus below:

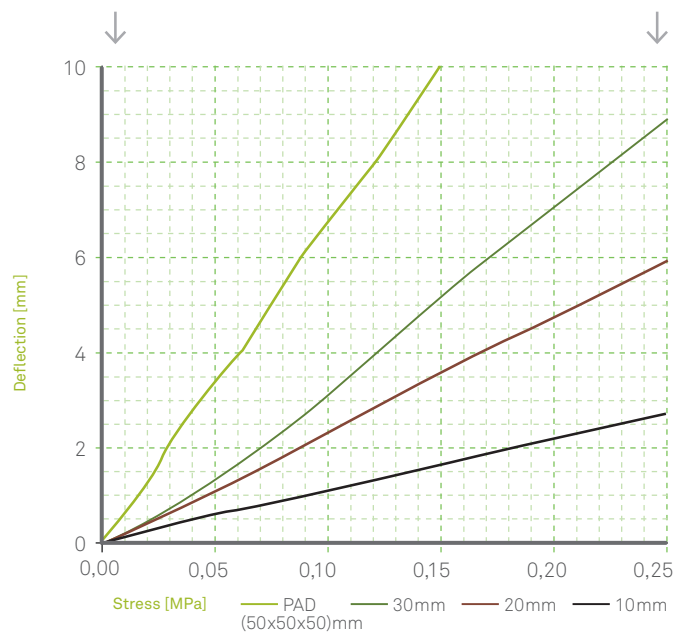
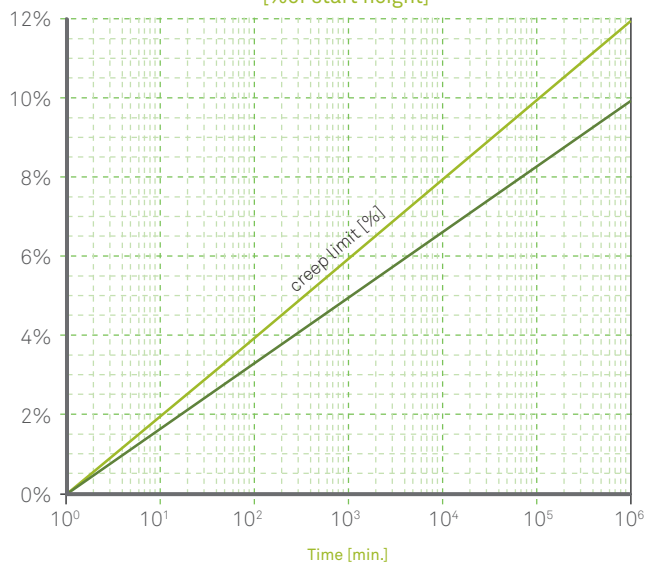
- Based on the machine/system disturbing frequency select the desired isolation level based on the material thickness and respective natural frequency for the specific load/ stress.
- Determine the material compression from the deflection curve at the specific load/ stress.
- Creep effect can be added to the above deflection via the Creep deflection graph calculating the additional deflection and adding.



Vibration Isolation Level



Creep Deflection @ 0.25 MPa [%of start height]



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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