

VC-PAD-5015



Resin bonded cork & recycled rubber

VC-PAD-5015 is an engineered composite with cork and polymeric matrix structure.

This product is suitable for vibration control in construction, used in the form of a cube, as discrete isolators in the decoupling of floating floors.

LOAD RANGE

Static 0,30-0,85 MPa (43-123 psi)

E-MODULE (@ STABLE LOAD)

Static 2,9-4,4 MPa (420-640 psi)

Dynamic 13-27 MPa (1885-3920 psi)

TEMPERATURE

Range -10 / +100°C (+14 / 212 °F)

TECHNICAL FEATURES

Density (kg/m³) ① 600 (40 lb/ft³)

Shore hardness (Shore A) ② 60-70

Elongation at break (%) ③ > 15

Tensile strength (MPa) ④ > 0,7 (>102 psi)

Compression set 50%/23°C/70h (%) ⑤ < 15

Compressibility at 0,7 MPa (%) ⑥ 35-50

Recovery at 0,7MPa (%) ⑦ > 70

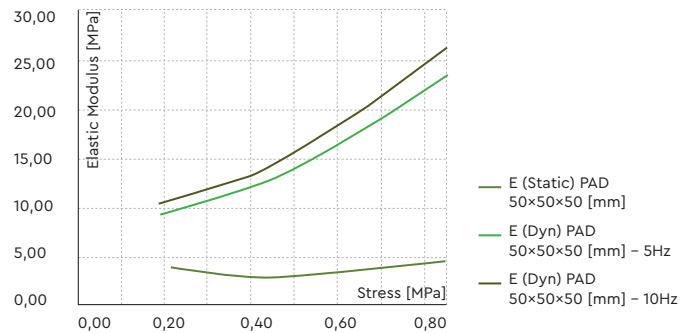
① ASTM D297 ② ASTM D2240 ③ ASTM F152 ④ DIN 53572 ⑤ ASTM F36



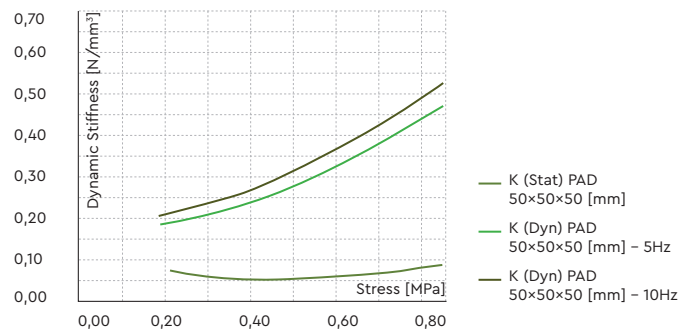
FEATURES

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

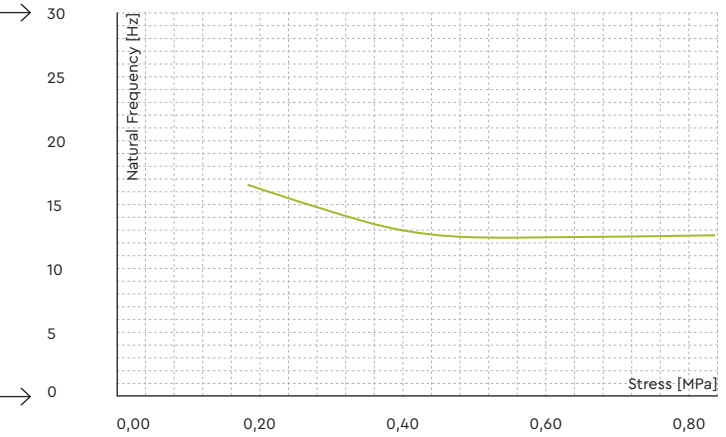
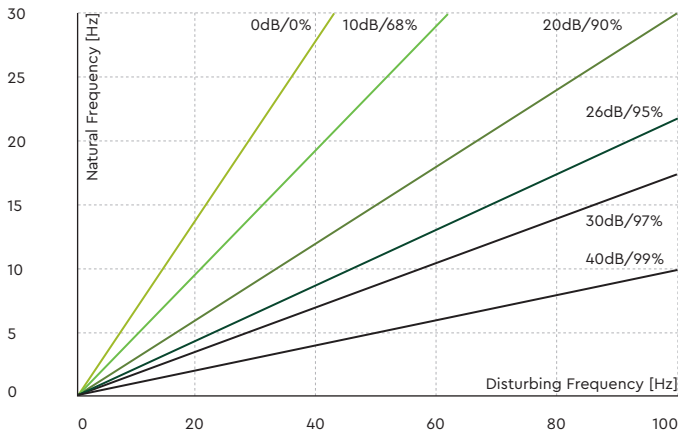
MODULUS OF ELASTICITY [MPa]



DYNAMIC STIFFNESS [N/MM³]

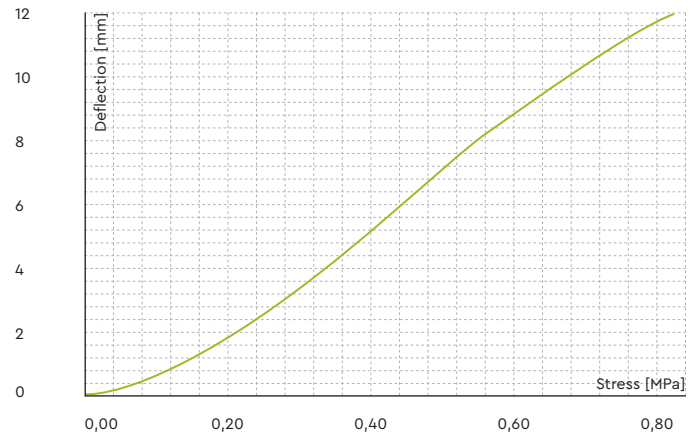
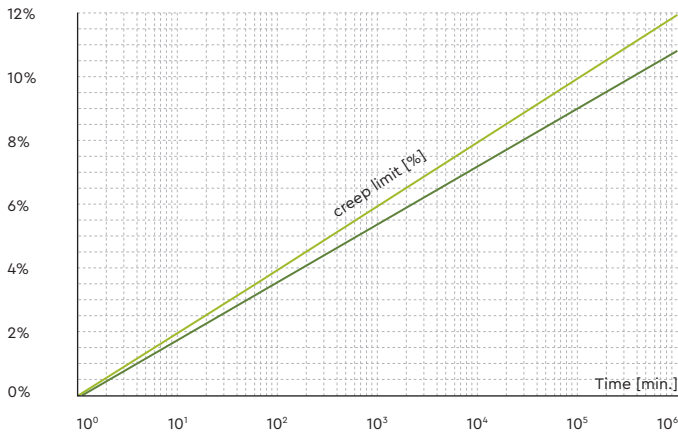


VIBRATION ISOLATION LEVEL



— PAD 50×50×50 (mm)

CREEP DEFLECTION @ 0.425 MPa [%OF START HEIGHT]



— PAD 50×50×50 (mm)

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.

MATERIAL DATA SHEET VC-PAD-5015

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).