ACOUSTICORK

AMORIM CORK COMPOSITES

VC-PAD-5015

Material Data Sheet

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)

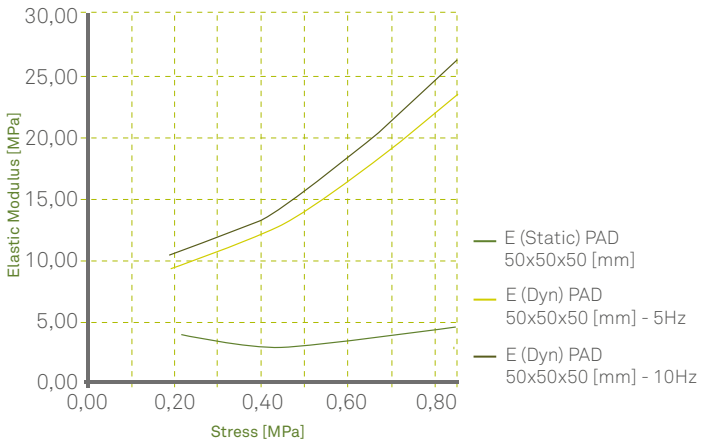
E-MODULE (@ stable load)

- **STATIC** 2,9 - 4,4 MPa (420 - 640 psi)
- **DYNAMIC** 13 - 27 MPa (1885 - 3920 psi)

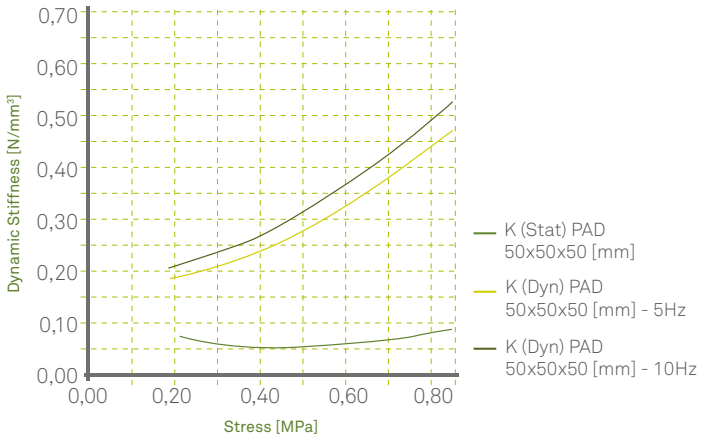
TEMPERATURE

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

MODULUS OF ELASTICITY [MPa]



DYNAMIC STIFFNESS [N/MM³]



Density (kg/m³) (1)	600 (40 lb/ft³)
Shore hardness (Shore A) (2)	60 - 70
Elongation at break (%) (3)	> 15
Tensile strength (MPa) (3)	> 0,7 (>102 psi)
Compression set 50%/23°C/70h (%) (4)	< 15
Compressibility at 0,7 MPa (%) (5)	35 - 50
Recovery at 0,7MPa (%) (5)	> 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

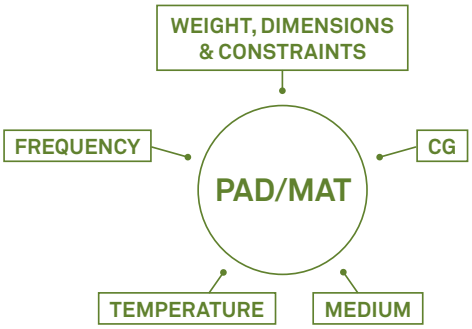
Selection Guideline

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

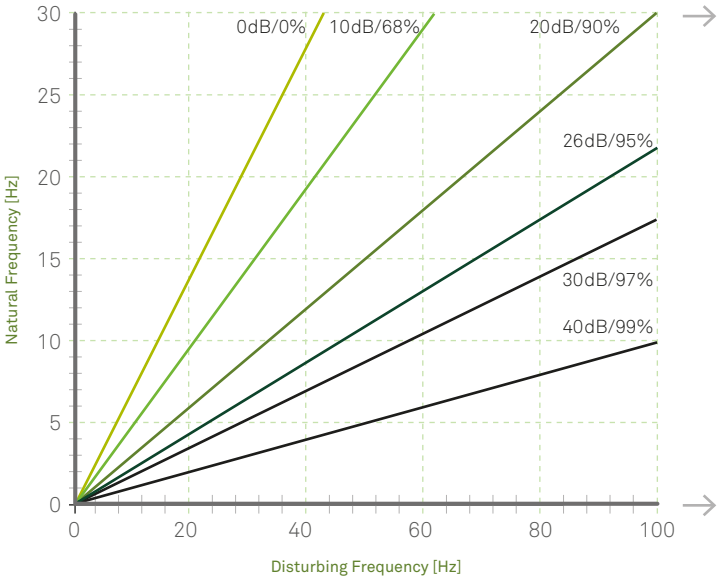
• Based on the machine/system disturbing frequency select the desired isolation level based on the material thickness and respective natural frequency for the specific load/ stress.

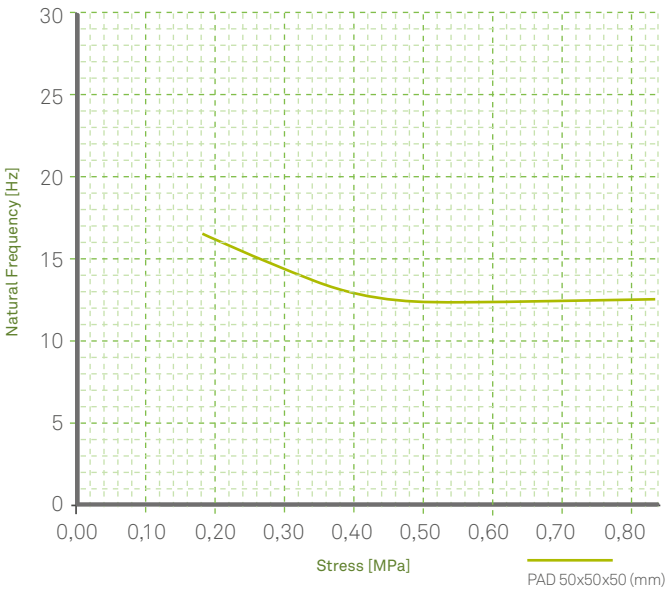
• Determine the material compression from the deflection curve at the specific load/ stress.

• Creep effect can be added to the above deflection via the Creep deflection graph calculating the additional deflection and adding.

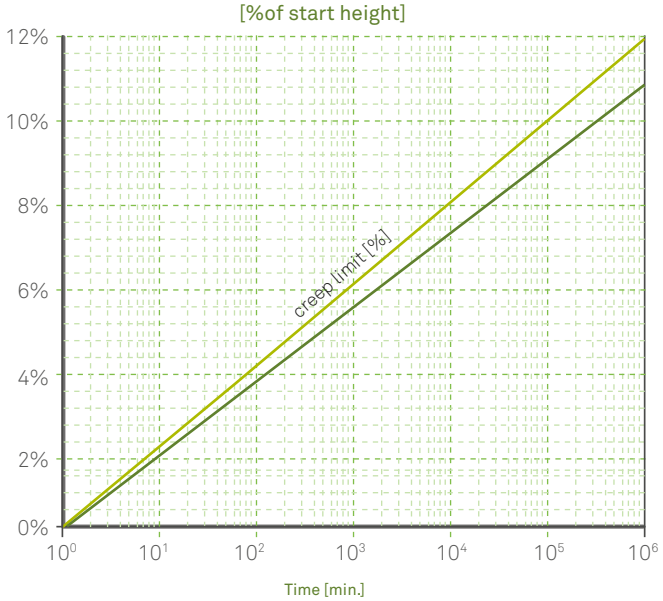


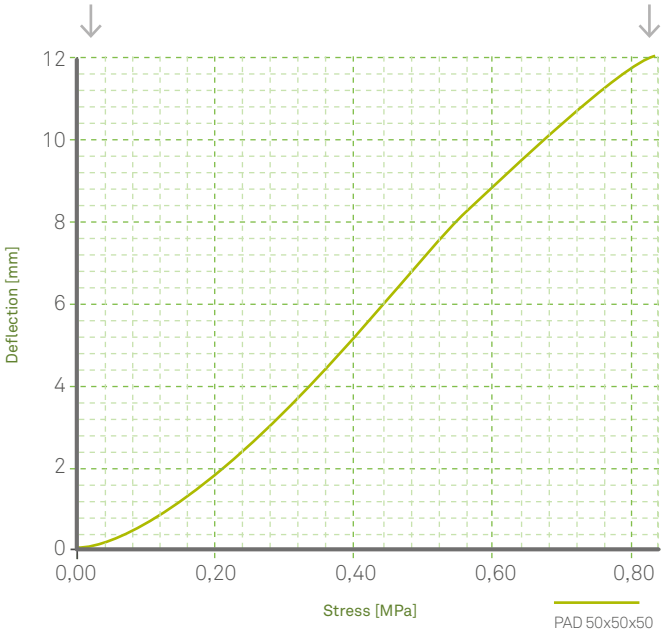
Vibration Isolation Level





Creep Deflection @ 0.425 MPa
[%of start height]





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