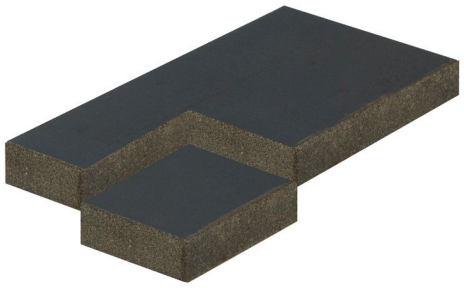
ACOUSTICORK

AMORIM
CORK COMPOSITES

VC1005

Material Data Sheet

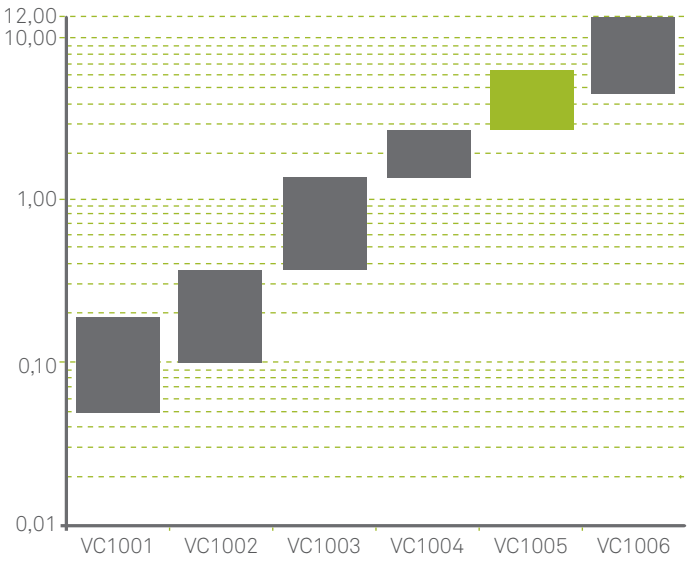
CORK & NATURAL RUBBER



VC1005 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 ressonance frequency and high load, such as: building bearings, separation of individual building parts, two-tier construction or crane runway bearings.

WORK LOAD RANGE [MPa]



LOAD RANGE

• **STATIC**	3,0 - 7,0 MPa (435 - 1015 psi)
• **TOTAL**	8,0 MPa (1160 psi)
• **OCCASIONAL**	15,0 MPa (2176 psi)

E-MODULE (@ stable load)

• **STATIC** (1)	40,0 - 50,0 MPa (5802 - 7252 psi)
• **DYNAMIC** (2)	80,0 - 155,0 MPa (11603- 22481 psi)

TEMPERATURE

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

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

FEATURES

- Long term durability
- High dynamic effectiveness
- Simple handling and processing
- Excellent long-term creep behaviour
- High mechanical resistance
- High load decoupling with bearings in minimal space

Density (kg/m³) (1)	1125 (70 lb/ft³)
Shore hardness (Shore A) (2)	70 - 85
Elongation at break (%) (3)	> 100
Tensile strength (MPa) (3)	> 10,0 (> 1450 psi)
Compression set 50%/23°C/70h (%) (4)	< 15

(1) ASTM D297
(2) ASTM D2240
(3) ASTM F152
(4) DIN EN ISO 1856

RoHS Compliant
AMORIM CORK COMPOSITES

FSC www.fsc.org FSC® C022338

PEFC PEFC/13-32-014 Promoting Sustainable Forest Management www.pefc.org

CERTIFICAÇÃO apcer ISO 9001 ISO 14001 OHSAS 18001

CERTIFIED IQNet MANAGEMENT SYSTEM

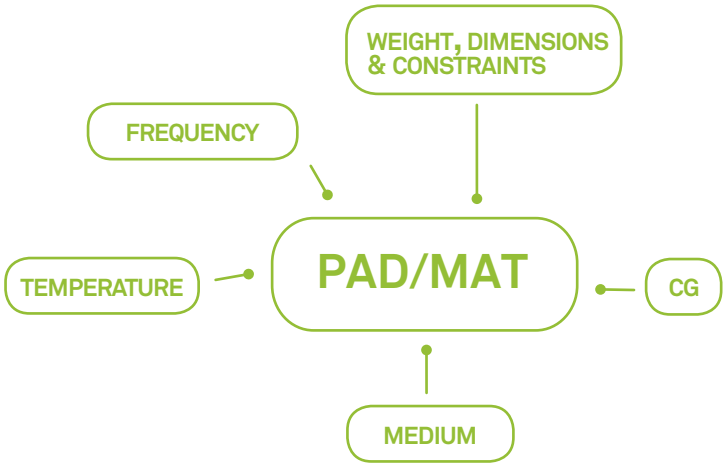
Selection Guideline

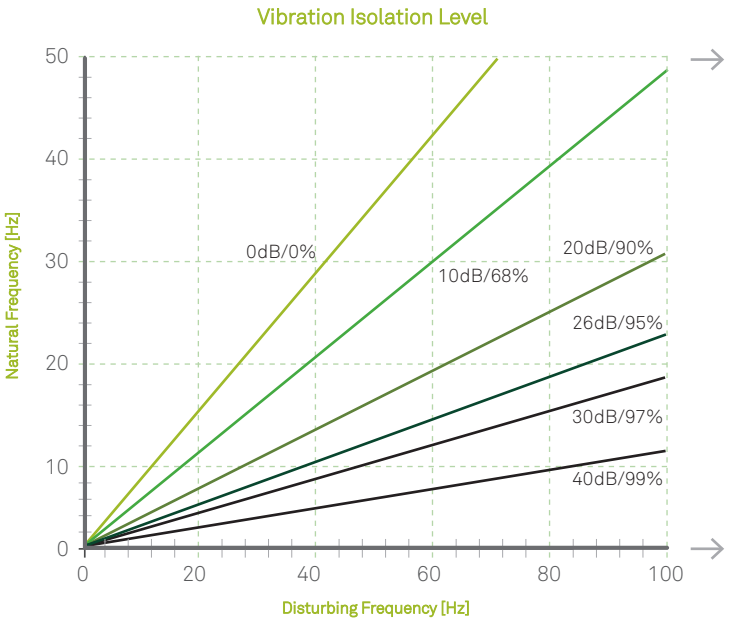
Material selection can be made using the Static/Dynamic E-Module in the respective load range or using the Vibration Isolation Level Abacus below:

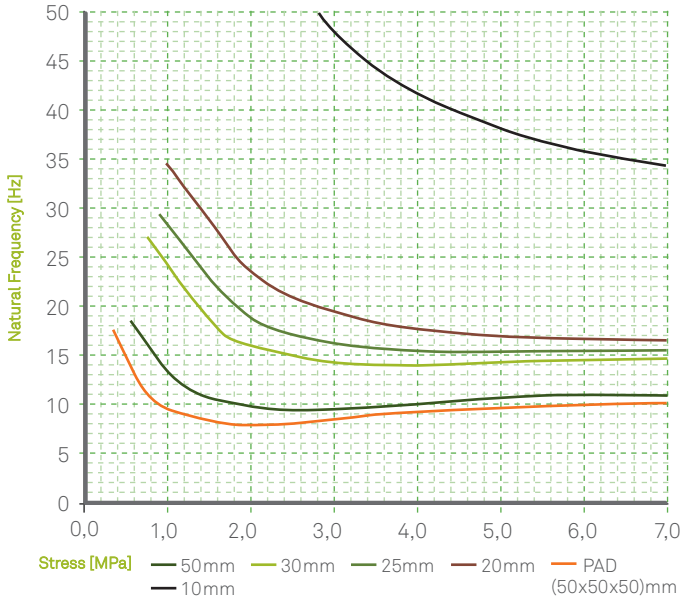
• Based on the machine/system disturbing frequency select the desired isolation level based on the material thickness and respective natural frequency for the specific load/ stress.

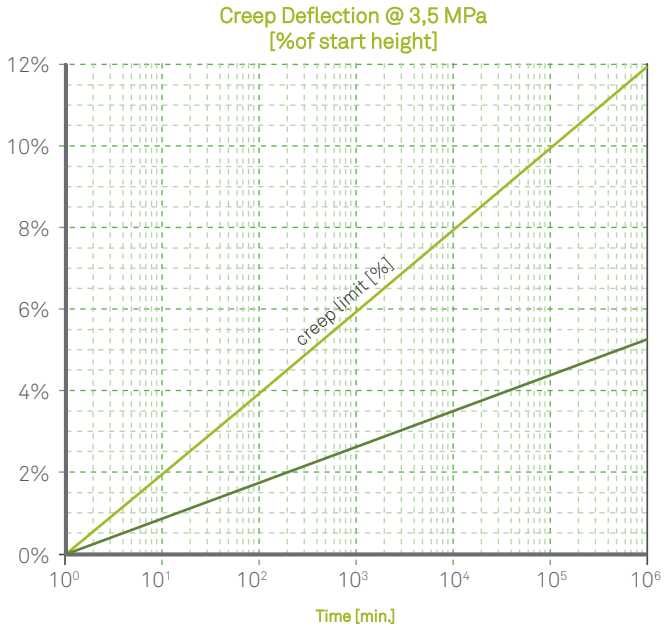
• Determine the material compression from the deflection curve at the specific load/ stress.

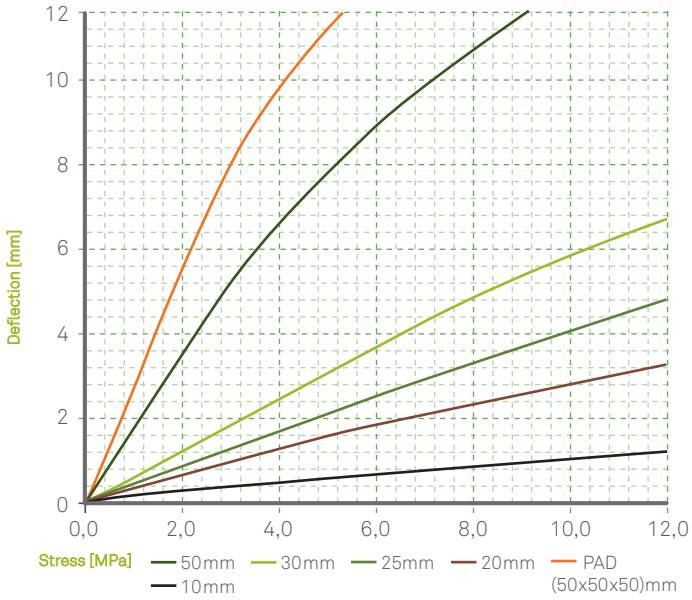
• Creep effect can be added to the above deflection via the Creep deflection graph calculating the additional deflection and adding.











Note: When length and width are not listed, consider PAD's with 150x150 [mm]

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