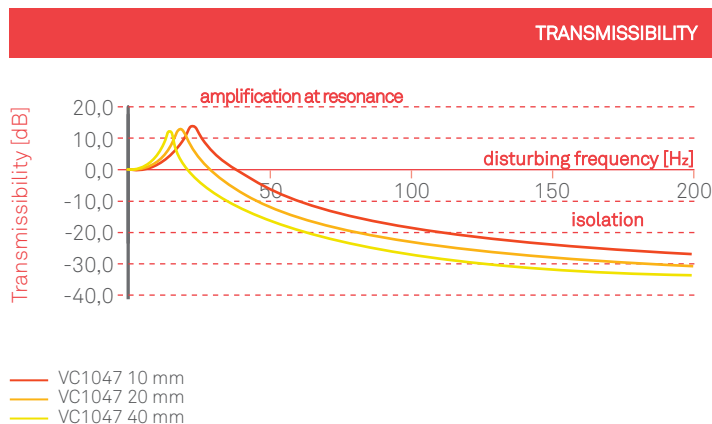


VC1047

Material Data Sheet

Material Description & Properties



Transmissibility Analysis, for a 150 x 150 pad

Read the Transmissibility by projecting a vertical line from the disturbing frequency to intercept the curve.

FEATURES

- Reduce vibration, absorb shock and structure borne noise
- Chemical resistance
- Wide range of sheet thicknesses up to 150 mm
- One layer material avoiding de-lamination issues
- Easy to fabricate into pads
- Retains original length and width under compression due to cork's low poisson's ratio
- Rapid installation

VC1047 Vibration Control material is a compound engineered with Cork and Nitrile rubber.

This product is a general purpose industrial vibration control pad material, specifically formulated to perform over the long haul in the industrial environment when subjected to application conditions such as the presence of oils, greases and cleansing agents.

- **MAXIMUM LOAD** _____ 1.5 MPa
- **WORK LOAD RANGE** _____ 0.25 to 1.0 MPa
- **TEMPERATURE RANGE** _____ -25° C to 120° C (-13° F to 248° F)

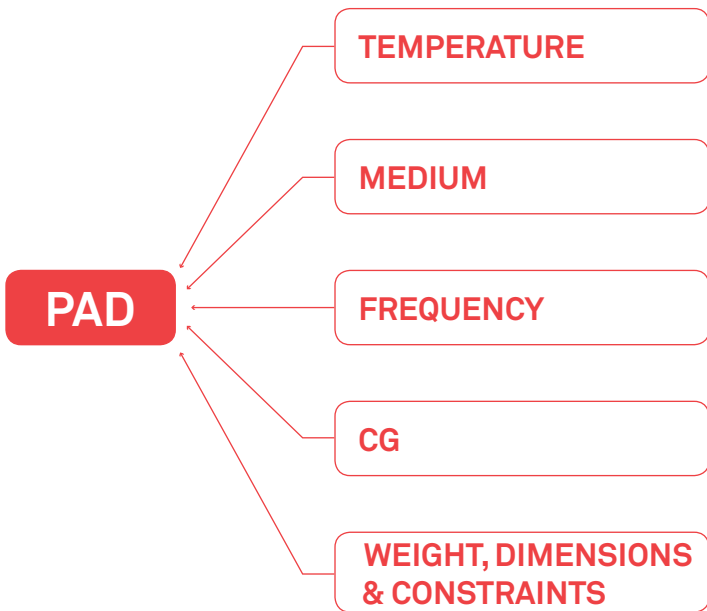
Specially designed to isolate the transmission of vibrations; to be used as external pads:

- Hvac ventilation equipment - AHU; CHRV; Chillers
- Industrial Machinery - Saws; lathers; drills; guillotines and presses etc.
- Power generator systems (gen sets)
- Pumps and compressors
- Textile manufacturing equipment

DENSITY (kg/m ³) ¹	780
HARDNESS (SHORE A) ²	70
TENSILE STRENGTH (MPa) ³	2.5
CREEP RATE (%) ⁴	1.7
(1) ASTM D297 (2) ASTM D2240 (3) ASTM D412, DieC (4) ISO 8013	

VC1047 IS FREE OF

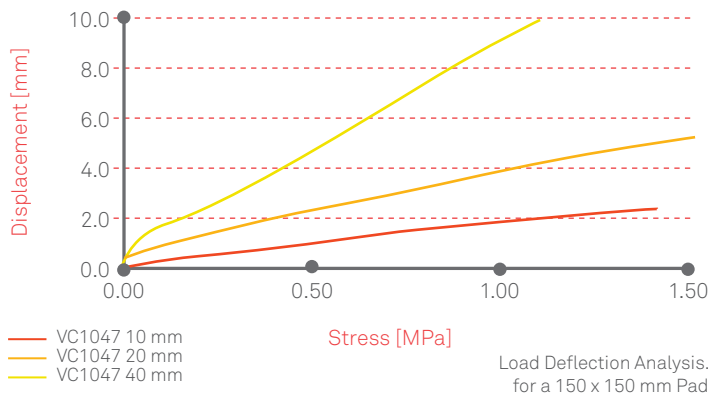
- Polycyclic Aromatic Hydrocarbons (PAH)
- Heavy Metals (Pb, Cd, Hg and Cr (VI))
- Asbestos



PAD DESIGN GUIDELINES

In order to have the best design approach, there are key factors to consider:

- Equipment (type and size), dimensional constraints and total weight
- Center of gravity (CG) to calculate the weight distribution between the mounting points
- Disturbing/ Excitation frequency and required isolation efficiency
- Operating temperature
- Environmental conditions (Medium)

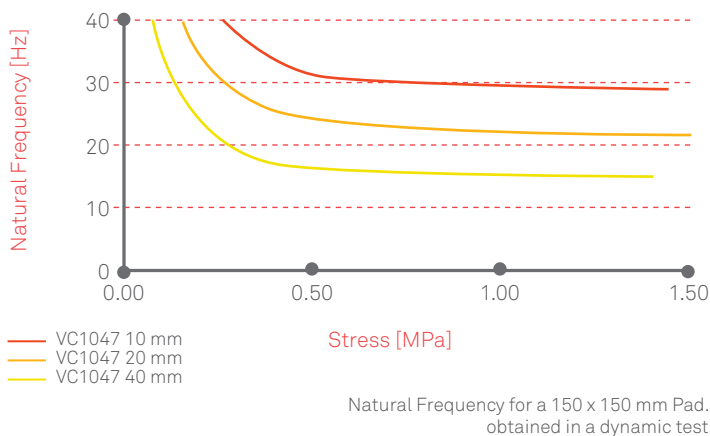


PAD STRESS

Calculate Pad Stress in MPa (or N/mm²):

$$\text{Stress in MPa} = \frac{\text{Weight of machine in kg} \times 9.8}{\text{Total Pad area in mm}^2}$$

- Project vertical line from calculated stress to intercept the curve
- Read deflection (mm) of vertical axis of graph
- Total Pad area = number of Pads x Pad area



PAD NATURAL FREQUENCY

Natural frequency of Pad:

- Calculate stress on Pad in MPa (see above)
- Project vertical line from calculated stress to intercept the curve
- Read natural frequency (fn) on vertical axis