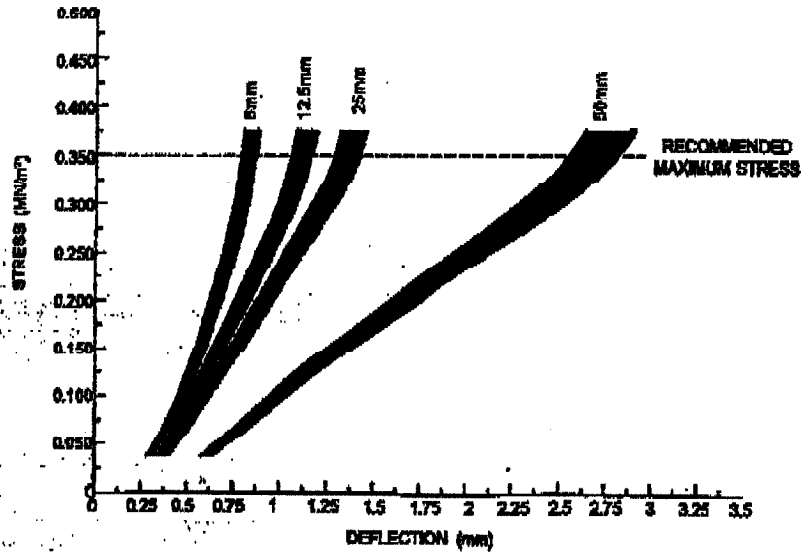


To use graph:

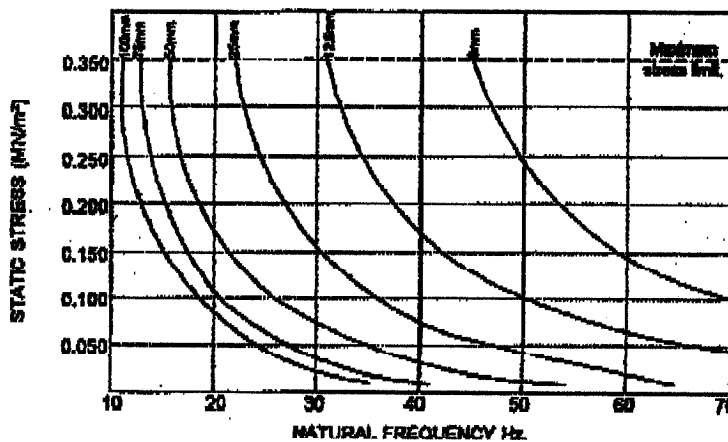
1. Calculate Stress on pads in  $\text{MN/m}^2$  using formula:

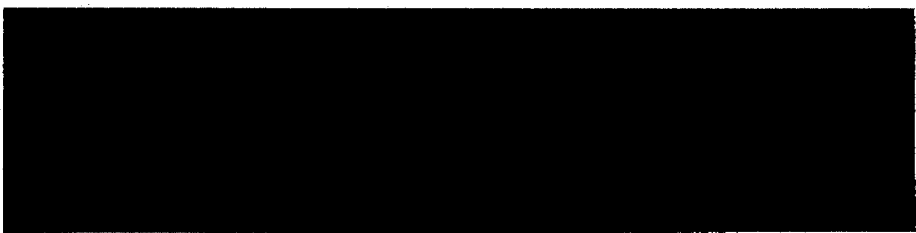
$$\text{Stress in MN/m}^2 = \frac{(\text{Weight of machine in ko} \times 9.81) \div 1,000,000}{\text{Area of pad in m}^2}$$

2. Project horizontal line from calculated stress to intercept desired thickness. Read deflection off horizontal axis of graph.



1. Calculate Stress on pad in  $\text{MN/m}^2$ .
2. Read from vertical axis across to desired pad thickness.
3. Read natural frequency ( $f_n$ ) off horizontal axis.





**Description**

Tico S is a high performance machinery mounting material. It matches today's fast changing manufacturing environment, where ease of machine mounting and flexibility of plant layout are prime factors.

Tico S is manufactured from a blend of carefully selected cork particles and polychloroprene/acrylonite elastomers.

This Technical Information Sheet is designed to be used in conjunction with the brochure "TICO Resilient Pads for Industrial Installation". It provides the user with the following information:

- Dimensions
- Typical Properties
- Pad Static deflection for a given load
- Pad Natural frequency for a given load
- Isolation efficiency for given load and disturbing frequency

Code	Product	Standard Thickness (mm)	Standard Size (mm)
TICO S	Cork/Elastomer Pad	6 12.5 25	1200 x 50 1200 x 75 1200 x 100 1200 x 150 1200 x 600 1200 x 1200
TICO ACE	General Purpose Adhesive	Area Coverage	1.5 m <sup>2</sup> 15 m <sup>2</sup> 500 ml can 5 ft can

		Explanation
<b>Recovery properties</b>		A TICO Pad 150 mm square, 12.5 mm thick was compressed to 85% of original thickness under a static load of 1.05 MN/m <sup>2</sup> and on release exhibited these recovery characteristics.
Immediately		
1 minute	96.1%	
3 minutes	96.9%	
5 minutes	97.7%	
10 minutes	98.3%	
30 minutes	98.5%	
(after release of load)	98.6%	
<b>Lateral flow (average)</b>		A TICO Pad exhibited these flow characteristics under compression.
Load:		
5 kN/m <sup>2</sup>	0.43%	
1.05 MN/m <sup>2</sup>	0.83%	Initial thickness: 12.5 mm Initial lateral dimension: 150 mm





**Chemical Resistance**

EXPOSURE	TICO S/PA RESISTANCE	EXPOSURE	TICO S/PA RESISTANCE
Acetone	C	Methane	B
Acetic Acid	C	Methyl Ethyl Ketone	C
Air	A	Methylated Spirit	A
Amyl Acetate	D	Naphtha	C
Asphalt	C	Natural Gas	A
Benzene	C	Oils (Vegetable and Mineral)	A
Brine	B	Oxygen	A
Butane	B	Ozone	B
Butyl Alcohol	A	Paraffin	B
Borax (Sodium Borate)	A	Petroleum Spirit	B
Carbolic Acid	D	Pitch	C
Carbon Tetrachloride	D	Propane	B
Caustic Soda	B*	Stearic Acid	B
Citric Acid	A	Silver Nitrate	A
Detergent	B	Soap Solution	A
Diesel Oil	B	Sodium Chlorate	B
Diethylene Glycol	A	Sulphonated Fatty Alcohols	D
Ethyl Alcohol	A	Tartaric Acid	A
Formaldehyde	B	Tallow	B
Glue	A	Tar	C
Glycerine	A	Turpentine	C
Isopropyl Alcohol	A	Tannic Acid	B
Kerosene	B	Vinegar	B
Lactic Acid	A	Water	B
Latex Solution	A	White Spirit	B
Lime Water	A	Whisky	A
Methyl Alcohol	B	Wines	A

\* This rating is based on the type of exposure found in the food and beverage industries.

Explanation of code: A - Excellent  
 B - Good  
 C - Suitable for splash conditions or intermittent contact  
 D - Unsuitable





<p><b>Effect of heat ageing on compression and recovery</b></p> <p>A. Deflection of heat aged pad at (load):            70 kN/m<sup>2</sup>                    1.5%            210 kN/m<sup>2</sup>                    2.9%            350 kN/m<sup>2</sup>                    8.3%            700 kN/m<sup>2</sup>                    19.7%            1.05 MN/m<sup>2</sup>                   31.4%</p> <p>B. Recovery of heat aged pad:            After 5 minutes                99.2%            After 30 minutes              99.5%</p>		<p>TICO Pads of nominal dimensions 150 mm x 150 mm x 25 mm were aged for 90 days at 70°C in an air circulating oven. Micrometer measurements on recovery intervals established the percentage figures shown.</p>
<p><b>Tensile strength</b></p>	<p>2.1 MN/m<sup>2</sup> minimum</p>	<p>Tested in accordance with BS 903</p>
<p><b>Elongation at break</b></p>	<p>50 to 80%</p>	
<p><b>Hardness</b></p>	<p>69 ± 5°</p>	<p>International Rubber Hardness Degrees</p>
<p><b>Thermal conductivity</b></p>	<p>0.101 0.7</p>	<p>W/m°C Btu x in/ft<sup>2</sup> x h x °F</p>
<p><b>Coefficient of friction</b></p>	<p>0.65 0.5</p>	<p>TICO to concrete TICO to bright mild steel</p>
<p><b>Temperature range</b></p>	<p>-40°C to +100°C</p>	<p>TICO S will operate satisfactorily over the indicated range and is suitable for both arctic and tropical climates.</p>
<p><b>Load bearing capacity</b></p> <p>Recommended maximum load</p>	<p>0.35 MN/m<sup>2</sup></p>	<p>TICO S will withstand very high dynamic and static loads without physical breakdown. In machinery mounting applications, however, the recommended maximum static load should not be exceeded without consultation.</p>
<p><b>Dimensional stability</b></p>	<p>TICO S material is dimensionally stable under widely varying atmospheric conditions.</p>	

