

ISOMAT NR50

High Performance Vibration Isolation Material

Why Choose Farrat Isomat NR50?

Farrat Isomat is a range of natural, neoprene and nitrile rubbers moulded into innovatively designed, constant shape-factor sheets to provide load bearing vibration isolation. It is used regularly in both structural and industrial applications around the world as full sheets, strips and individual pads.

Isomat NR50 exploits the properties of the highest grade of 50-IRHD natural rubber to provide very high levels of noise and vibration isolation with minimal damping, and a low dynamic to static ratio.

Features

- ▶ Materials tested and approved to BS 6177:1982 and BS EN 1337-3:2005
- ▶ Very high resilience and low damping qualities
- ▶ Low level of creep
- ▶ Long working lifetime (>60 years)
- ▶ Also available as neoprene CR (for enhanced chemical resistance) and nitrile rubber BR (for enhanced damping).

Can be supplied as full sheets, cut to size pads and strips (including holes and slots if required) according to the customer's requirements.

Applications

Farrat Isomat NR50 can be used in a wide range of vibration isolation applications, such as:

Full Area

- ▶ Full building isolation (raft-slab)
- ▶ Heavyweight partition support

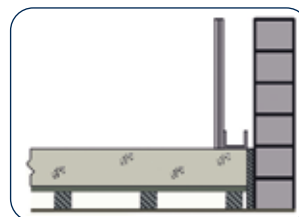
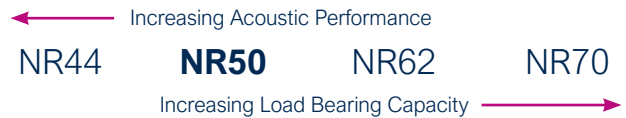
Strips

- ▶ Light/Medium weight partition support
- ▶ Pre-cast concrete supports

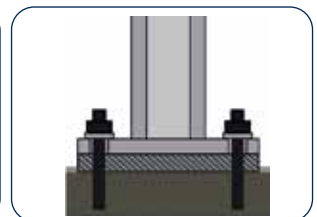
Pads

- ▶ Acoustic floating floor isolators
- ▶ Anti-vibration pads
- ▶ Steel/timber frame isolation
- ▶ Vibration isolation for machinery/plant
- ▶ Isolated foundations for sensitive or high impact machinery

FARRAT ISOMAT NR RANGE:



Isomat NR50 used as floating floor isolators



Isomat NR50 used as steel column isolation

Isomat NR50 site applications:



For more information on using Isomat NR50 (including standard details), please see the following Farrat Technical Brochures:

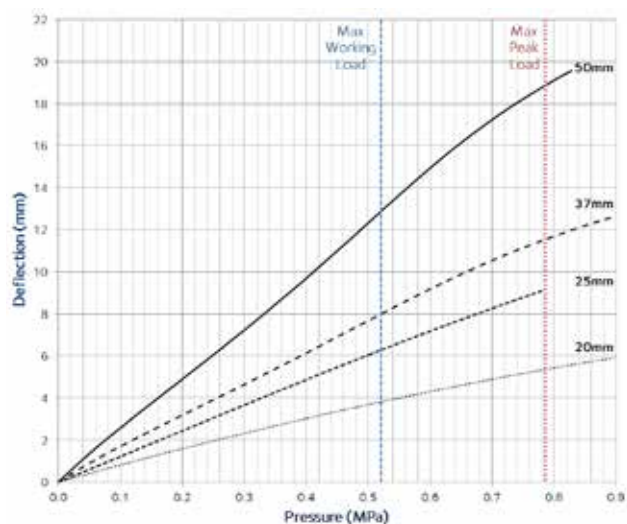
- ▶ **Floating Floors**
- ▶ **Full Building Isolation**

Available to download at: www.farrat.com

CHARACTERISTICS	TEST STANDARD	PROPERTIES	UNIT
Hardness	BS ISO 48:2010	50 (+/- 3)	IRHD
Density	BS EN ISO 845	750	Kg/m ³
Tensile Strength	BS ISO 37:2011	25.1	N/mm ²
Elongation at Break	BS ISO 37:2011	636	%
Compression Set (24hrs@70°C)	ISO 815-1:2008	21	%
Tear Resistance Trouser Method A	ISO 34-1:2010	12.0	kN/m
Static Shear Modulus	BS ISO 1827:2011	0.67	N/mm ²
Creep	ISO 8013 : 2006	2.0	% per decade

CHARACTERISTICS	TEST STANDARD	PROPERTIES	UNIT
Static Compression Modulus, E _c	Varies with load/thickness – see graphs		
Dynamic to Static Ratio	Determined using in-house test methodology Test pad dimensions: 75 x 75mm	1.6	N/A
Damping Ratio, C/C _c @ f _n		2.2	%
Max Static Pressure [Overload]		0.52 [0.79]	N/mm ²
Max Residual Compression After Overload		2.0	%
Standard Sheet Size	+/-5%	1005x505	mm
Operating Temperature	N/A	-30 to +60	°C
Operational Life	N/A	60	Years

Static Deflection



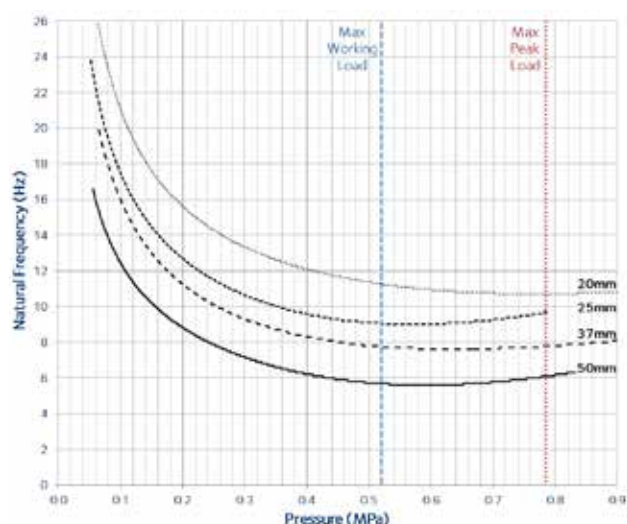
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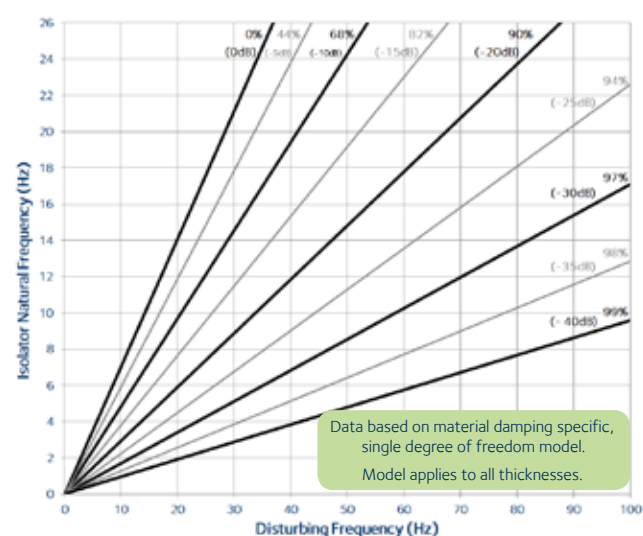
AVAILABILITY		
THICKNESS	TREAD (Bottom/Top)	STOCK
20 mm	Isomat/Plain	Non-Stock
25 mm	Isomat/Treaded	Stock
37 mm	Isomat/Plain	Non-Stock
50 mm	Isomat/Treaded	Stock

TYPICAL LEAD TIMES		
STOCK	NON-STOCK	BESPOKE
2-3 working days	2-3 working weeks	4-6 working weeks
If cutting is required add +5 days		

Natural Frequency



Isolation Efficiency (Transmissibility)



All information in this datasheet is for guidance only based on current knowledge and may be subject to change and correction.