Why Choose Farrat Isomat NR44?

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 NR44 exploits the properties of the highest grade of 44-IRHD natural rubber to provide very high levels of noise and vibration isolation with negligible damping, and a very low dynamic to static ratio.

Features

- Materials tested and approved to BS 6177:1982
- 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 NR44 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

For more information on using Isomat NR44 (including standard details), please see the following Farrat Technical Brochures:

- Floating Floors
- Full Building Isolation

Available to download at: [www.farrat.com](http://www.farrat.com)
All information in this datasheet is for guidance only based on current knowledge and may be subject to change and correction.

### CHARACTERSISTICS | TEST STANDARD | PROPERTIES | UNIT
--- | --- | --- | ---
Hardness | BS ISO 48:2010 | 44 (+/- 3) | IRHD
Density | BS EN ISO 845 | 700 | Kg/m³
Tensile Strength | BS ISO 37:2011 | 27.2 | N/mm²
Elongation at Break | BS ISO 37:2011 | 711 | %
Compression Set (24hrs@70°C) | ISO 815-1:2008 | 20 | %
Tear Resistance Trouser Method A | ISO 34-1:2010 | 6.31 | kN/m
Static Shear Modulus | BS ISO 1827:2011 | 0.52 | N/mm²
Creep | ISO 8013-2006 | 1.3 | % per decade

| CHARACTERSISTICS | TEST STANDARD | PROPERTIES | UNIT |
--- | --- | --- | ---
Static Compression Modulus | Varies with load - see graphs |
Dynamic to Static Ratio | Determined using in-house test methodology | 1.3 | N/A |
Damping Ratio @ f_s | Test pad dimensions: 75 x 75mm | 2.0 | % |
Max Static Pressure (Overload) | 0.42 | N/mm² |
Max Residual Compression (Overload) | EN ISO 1856 | 2.0 | % |
Standard Sheet Size | +/- 10% | 1000x500 | mm |
Operating Temperature | N/A | -30 to +60 | °C |
Operational Life | N/A | 60 | Years |

### KEY

<table>
<thead>
<tr>
<th>THICKNESS</th>
<th>TREAD (Bottom/Top)</th>
<th>STOCK</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 mm</td>
<td>Isomat/Plain</td>
<td>Non-Stock</td>
</tr>
<tr>
<td>25 mm</td>
<td>Isomat/Treaded</td>
<td>Stock</td>
</tr>
<tr>
<td>37 mm</td>
<td>Isomat/Plain</td>
<td>Non-Stock</td>
</tr>
<tr>
<td>50 mm</td>
<td>Isomat/Isomat</td>
<td>Stock</td>
</tr>
</tbody>
</table>

### Availability

| STOCK | 2-3 working days |
| NON-STOCK | 2-3 working weeks |
| BESPOKE | 4-6 working weeks |

If cutting is required add +5 days

### Typical Lead Times

- **Static Deflection**

- **Natural Frequency**

- **Isolation Efficiency (Transmissibility)**

Data based on natural damping specific, single degree of freedom model. Model applies to all thicknesses.

Farrat Isolevel Ltd, Balmoral Road, Altrincham, Cheshire, WA15 8HJ, England, UK
T: +44 (0) 161 924 1600  F: +44 (0) 161 924 1616
E: sales@farrat.com  www.farrat.com