

## High precision machine foundation vibration isolation

### Description

ISOMAT foundation isolators used in conjunction with FVF Farrat Base Void Filler and LVI and/or ISF Sidewall Vibration Isolation materials provide highly predictable performance characteristics over many years of service.

### ISOMAT is produced in three rubber types

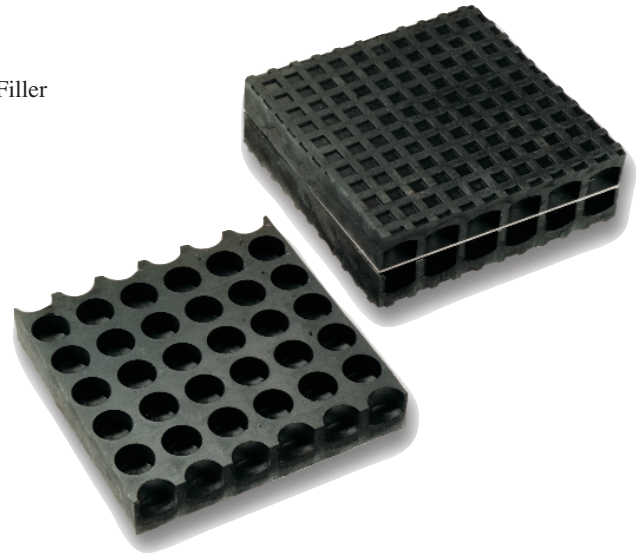
- IM CR** Neoprene for high elasticity, moderate damping and self extinguishing properties. Conditional oil and chemical resistance
- IM NR** Natural Rubber for maximum elasticity and low damping (passive isolation) Poor oil and chemical resistance
- IM BR** Nitrile Rubber for excellent combination of elasticity, damping and excellent oil and chemical resistance.

**Working Temperature Range:** °C: -30 to +120

**Creep:** Very Low

**Building materials class:** B2

Complete chemical resistance tables available on request.  
Farrat would advise on most suitable ISOMAT grade for each application and provide full specification, predicted natural frequencies, damping, layout drawings and installation instructions.



### Description of Diagram

- 1) Polymeric Sealant (eg Sikaflex Pro-3WF) or rubber sealing strip to prevent moisture ingress.
- 2) Top strip Vidam VM or ISF.
- 3) Reinforced concrete foundation block.
- 4) Sidewall Isolation: ISF, FVF 15-50 or LVI.
- 5) JLT Joint line tape to all joints.
- 6) Reinforced impermeable concrete forming tank
- 7) Damp proof membrane DPM. Minimum 1000gsm.
- 8) ISOMAT Isolators.
- 9) Base void filler, FVF-10-50.
- 10) Consolidated hardcore to firm ground.

\* Reinforced concrete foundation blocks and associated structures to be designed by qualified consulting engineers and constructed by contractors of proven ability and experience.

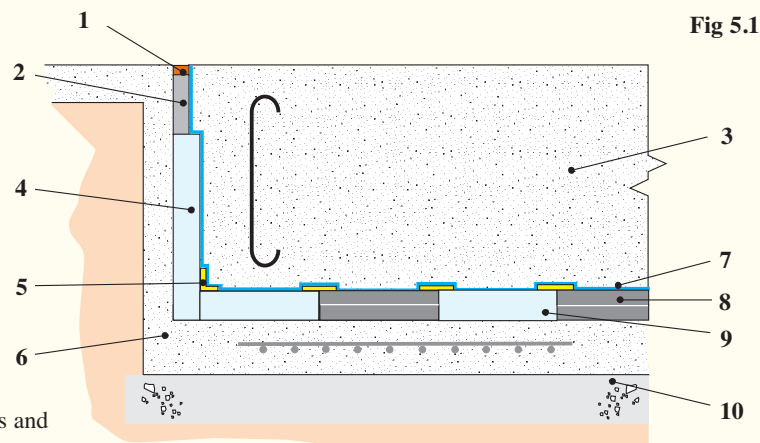


Fig 5.1

Isomat Foundation Shock and Vibration Isolators				ISOMAT Isolator Standard Sizes							Static Deflection Max load $\delta$	Damp- ing C/Cc	Vert. Nat. Freq. Static $f_{sv}$	Vert. Nat. Freq. Dynamic $f_{dv}$
Product	Thick- ness mm	Comp. Modulus Ec N/mm <sup>2</sup>	Isomat Length mm	Units mm	Other sizes available to suit application									
					Width mm	150	200	250	325	500	500			
					Area m <sup>2</sup>	0.0225	0.04	0.0625	0.08125	0.125	0.25			
Maximum Static Loadings per ISOMAT					mm		Hz		Hz					
ISOMAT IM CR 40	25	2.7	0.35	kN	6	10	16	21	33	66	2.4	0.05	10.2	12.5
	50	2.7	0.35								4.9	0.05	7.2	8.8
ISOMAT IM NR 45	25	3.7	0.45	kN	8	14	21	27	42	84	2.3	0.01	10.5	10.5
	50	3.7	0.45								4.6	0.01	7.5	7.5
ISOMAT IM BR 40	25	3	0.4	kN	7	12.0	19	24	38	75	2.5	0.1	10.0	15.0
	50	3	0.4								5.0	0.1	7.0	10.5
ISOMAT IM BR 50	25	3.7	0.5	kN	8	15	23	30	47	94	2.5	0.1	9.7	14.5
	50	3.7	0.5								5.1	0.1	6.8	10.0
ISOMAT IM BR 70	25	6	1.2	kN	20	36	56	73	112	225	3.8	0.1	9.3	14.0
	50	6	1.2								7.5	0.1	6.6	10.0