AIRENG
INDUSTRIAL &
COMMERCIAL FANS

10 turbo Drive
Bayswater Vic 3153
Tel: (03) 9738 1999
Fax: (03) 9738 1766
E-mail: fans@aireng.com.au

ISOLATOR MOUNT SELECTION SHEET

Static Deflection Guide

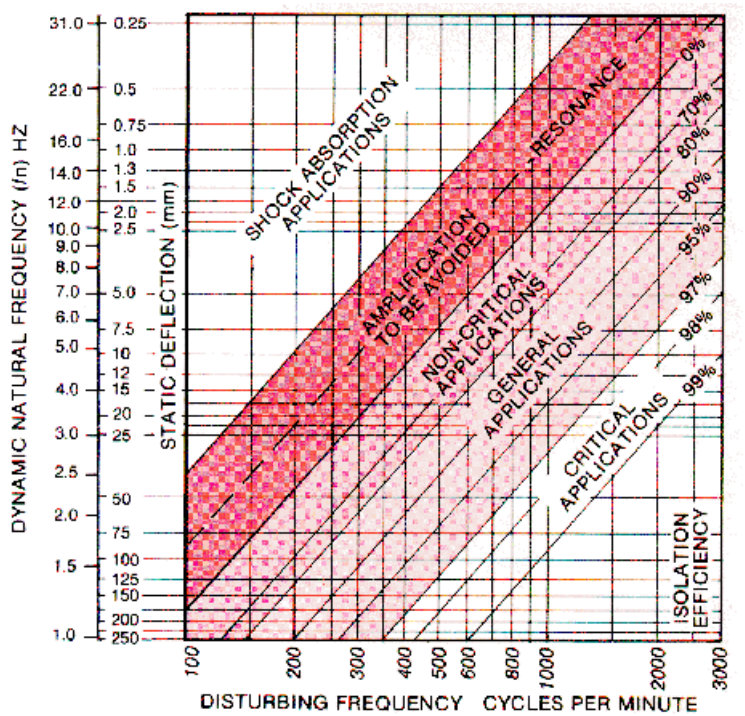
This table provides a guide to the isolator type and necessary static deflection for given values of operating speed and isolation efficiency. It also suggests appropriate levels of isolation efficiency for various operating locations.

Read the minimum static deflection directly against machine disturbing frequency (operating speed) and required isolation efficiency.

Two static deflection figures appear, one for basement or on-grade installations; the other for upper level installations where some allowance is made for flexibility of the supporting structure. Select the appropriate figure.

For rubber and pad mounts, static deflections have been corrected for average rubber hardness to approximate selections based on dynamic frequency.

	DISTURBING FREQUENCY		ISOLATION EFFICIENCY 80%		ISOLATION EFFICIENCY 90%		ISOLATION EFFICIENCY 95%		ISOLATION EFFICIENCY 98%	
			Ground Floor	Upper Floor	Ground Floor	Upper Floor	Ground Floor	Upper Floor	Ground Floor	Upper Floor
	RPM	Hz	ISOLATOR STATIC DEFLECTION (mm)							
High deflection Springs	200	3.3	125	-	-	-	-	-	-	-
	300	5.0	60	90	110	150	-	-	-	-
25mm Deflection Springs	500	8.3	20	35	40	50	70	90	-	-
	700	11.7	11	18	20	27	40	50	100	120
Rubber Mountings	1000	16.7	6	10	10	15	18	25	50	60
	1500	25.0	3	5	5	8	8	11	20	25
Pad Mountings	2000	33.3	2	4	4	6	6	8	11	15
	3000	50.0	0.8	1.5	1.5	3	4	5	7	10
			NON-CRITICAL AREAS		GENERAL AREAS		CRITICAL AREAS			
			Factories Workshops Garages Warehouses Laundries Basements		Schools Dept. Stores Supermarkets Telephone Exchanges Hotels		Multi-Storey Buildings Offices Hospitals - Service Areas Churches Schools Restaurants		Multi-Storey Buildings Hospitals - Ward Areas Broadcasting Studios Theatres Auditoriums Libraries	



Isolation Efficiency Chart

This chart illustrates the theoretical relationship between isolation efficiency and static deflection (or dynamic natural frequency) for a simple isolation system on a rigid foundation. It is also grouped into zones suggesting isolation efficiency ranges appropriate to different conditions.

To use the chart, determine ths lowest rotation speed of the equipment and consider this to be the disturbing frequency. Move vertically to intersect the diagonal line corresponding to the percentage isolation required; then move horizontally left and read the dynamic natural frequency or static deflection required of the mounting.

It is sufficient to use static deflection to select the correct isolator for spring mounted systems; but for rubber and pad mounts, selection should be made on the basis of dynamic natural frequency.