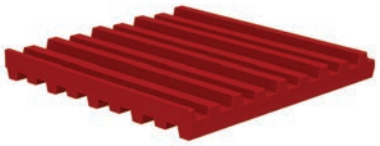
Isolation Pad, Shearflex

For Loads 130 to 750 kPa

APPLICATION

Embelton Shearflex is used where a low cost pad is required for effective isolation of noise and vibration from equipment with speeds down to the order of 2,000 RPM. Typically used on airconditioners, business machines, transformers, pumps, machine tools, cooling towers, etc.



SHEARFLEX PAD

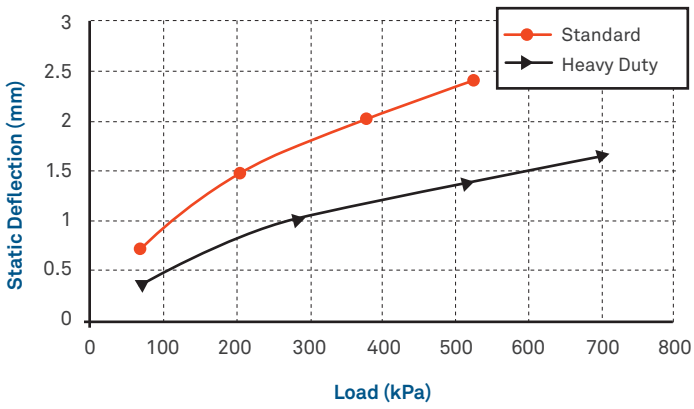
FEATURES

- Unloaded thickness 10.5mm
- Cross-ribbed, non-skid faces which usually eliminate the need for bolting down
- Alternately raised ribs
- Maybe used in multiple layers with steel or aluminium shim spacers to increase isolation efficiency
- Two load ratings available - standard (red) and heavy duty (black)

OPTIONS

- Available in alternative elastomers, including nitrile, for special order
- Available in pre-assembled sizes in multiple layer or Flexplate configurations

Static Deflection



LOAD RANGE

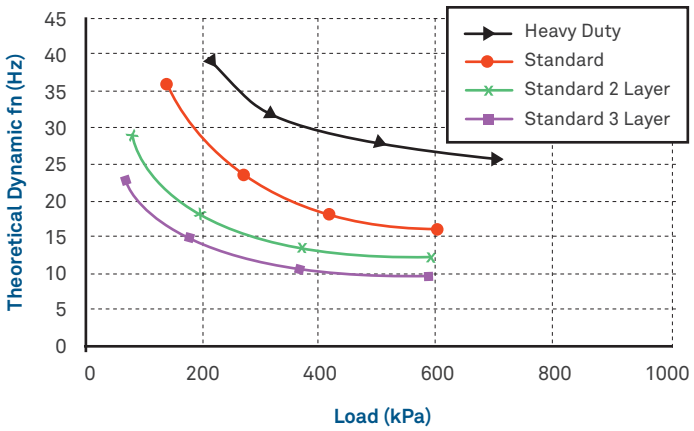
Standard Shearflex pads will provide effective noise and vibration isolation though a load range of 130 to 500kPa. Recommended load for most applications is 250 to 450kPa. Heavy duty Shearflex pads have a useful load range of 200 to 750kPa.

DYNAMIC CHARACTERISTICS

Rubber pads differ from spring mounts in that the isolation efficiency is a function not only of deflection, but also of the rubber hardness (durometer). Isolation efficiency is usually less than indicated by static deflection alone.

For effective assessment of theoretical isolation efficiency, the graph showing dynamic frequency against load should be used at all times.

Natural Frequency



ALTERNATELY RAISED RIBS

This feature provides effective vibration isolation over the entire load range. Only the alternate ribs are engaged under light loads, allowing improved isolation.

ALTERNATELY RAISED RIBS

MANUFACTURED SIZE

Standard size sheets (of all types): 450x450x10.5mm. Shearflex can be supplied cut to specific sizes on request; or it can be easily cut with a sharp knife, heavy scissors or a saw.

Shearflex pads are available as standard in 50x75mm with a 12mm centre hole.

MULTIPLE LAYERS

Shearflex can be used in multiple layers to increase deflection, each layer separated by a 1.5mm metal shim plate. Up to six layers can be used, provided that the height of the stack is not greater than either the length or width. If more than six layers are needed, contact Embelton for technical advice.

SHEARFLEX PAD LAYERED

FLEXPLATE APPLICATION

Flexplates are used in applications where high point loads necessitate some load spreading; or where the machine base is provided with leveling screws.

FLEXPLATE DESIGN

Three designs are available:

TYPE A: Used where no bolting is required. Combines a layer of Shearflex bonded to a load-spreading steel plate topped with a non-skid layer of oil-resistant, ribbed rubber.

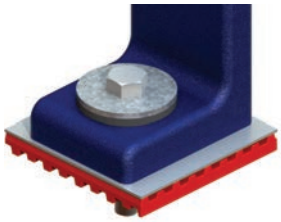
TYPE B: Used if bolting is required. A 19mm hole is drilled through the centre of the assembly and an isolation washer supplied. Other hole sizes and locations are available on request.

TYPE C: Used on machines with leveling screws, making use of the machine's own leveling facility. It has an extra thick steel plate and a counterbored hole in the centre of the plate to locate the screw.

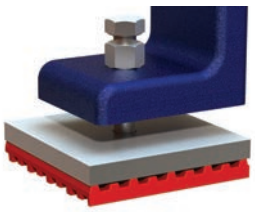
TECHNICAL ASSISTANCE

All Embelton offices can provide detailed technical assistance on the use of this product in specific applications.

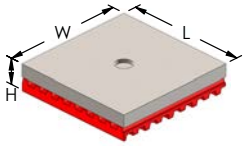
FLEXPLATE TYPE A



FLEXPLATE TYPE B



FLEXPLATE TYPE C



FLEXPLATE DIMENSIONS

Shearflex Flexplate

Type	Recommended Load kg		Dimensions mm **				
	Steady	Impact *	L	W	H		
					A	B	C
A, B, C-25	125	80	50	50	22	16	20
A, B, C-56	280	190	75	75			
A, B, C-100	500	335	100	100			
A, B, C-150	760	500	150	100	22	16	23
A, B, C-225	1,150	770	150	150			
A, B, C-300	1,500	1,000	200	150			
A, B, C-400	2,000	1,330	200	200	26	20	26
A, B, C-500	2,500	1,650	250	200			

* Used for hammers, shears, punch presses, mills, etc.
** Special sizes available on request.

CONDITIONS OF SALE

These products are sold subject to the published Embelton General Conditions of Sale, copies of which maybe inspected on request.

SPECIFICATION

Vibration isolation pads shall be cross-ribbed, oil-resistant elastomer 10.5mm thick with alternately raised ribs. The pads shall be type Shearflex as supplied by Embelton.