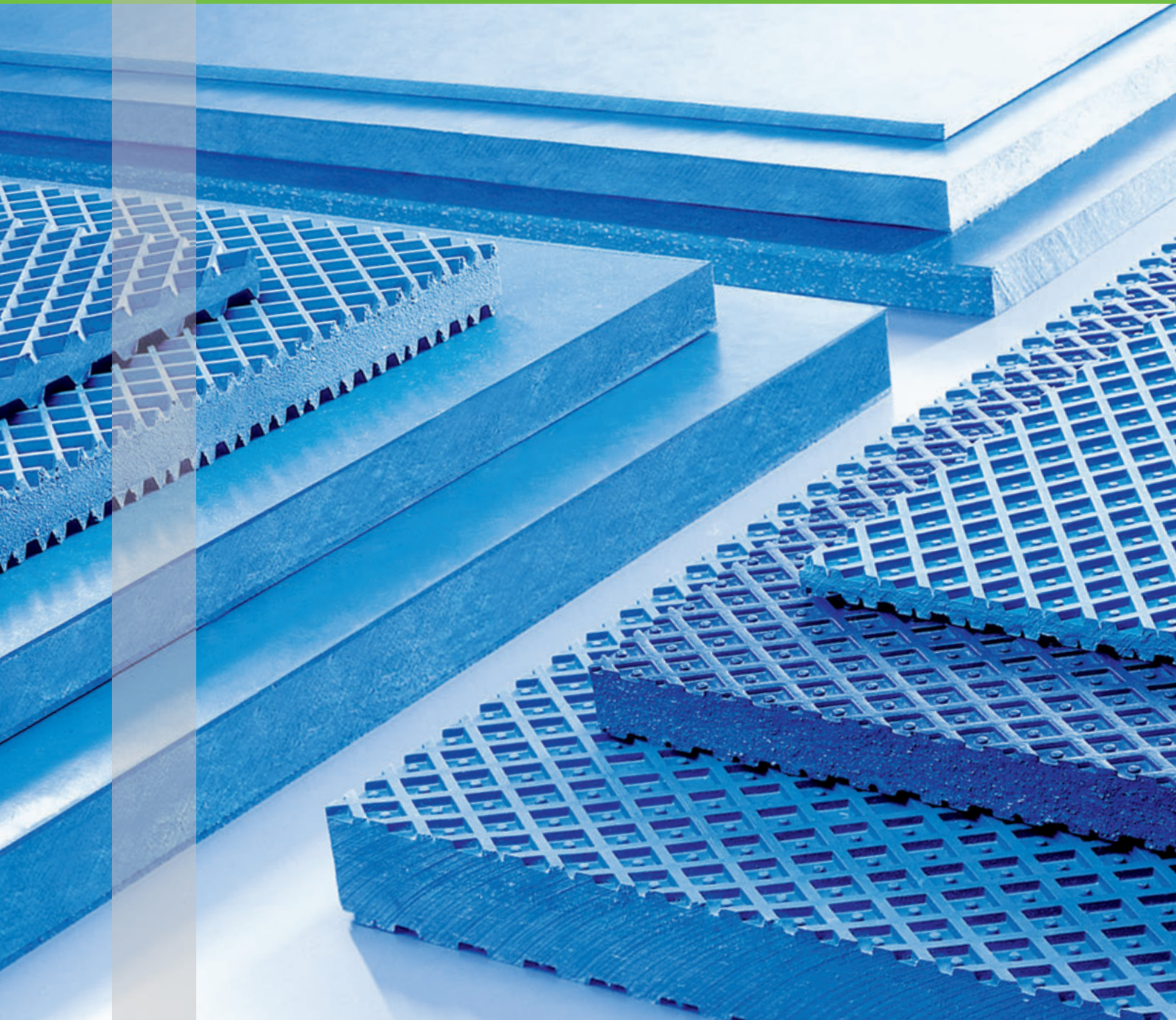


Insulation pads

Bilz insulation pads have been used successfully for many years in a variety of industries as an economical solution in the fight against problems caused by vibration and structure-borne noise.

Made from a precisely defined combination of nitrile rubber and cork particles embedded in a composite of cotton fibres, the physical and mechanical properties of this high-quality composite material meet all of the current requirements for various industrial applications depending on type of pad. Very good damping properties ensure optimum deflection and level consistency both under static and under dynamic loading.

The material composition used ensures secure anti-slip protection on conventional industrial floors. It has high resistance properties particularly to modern cooling lubricants.



Avoiding vibration and structure-borne noise problems has always been in our focus during the development of Bilz insulating pads. As, depending on the type of machine, the requirements can be very different because of the dynamic particularities, there are numerous different types of pads available for almost any vibration problem. Especially noteworthy are the excellent compression set values of our insulation pads. This property is particularly important in vibration-isolated mounting of modern machines because the geometric accuracy must remain unchanged and stable for years.

Structure-borne noise

Effective noise insulation

Ageing resistant

Virtually unlimited service life with adherence to load values. No permanent changes in shape.

Chemical resistance

Exceptionally good resistance to oils, grease, acids and cooling emulsions used in industry.

Temperature resistance

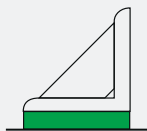
-20 °C to +120 °C

Damping properties

Very high degree of damping of up to 30 %

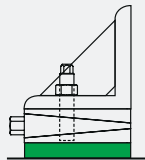
FOUR POSSIBLE OPTIONS FOR THE USE OF INSULATION PADS FOR MACHINE INSTALLATION

1



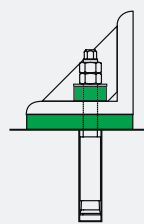
Free-standing machine foundations using Bilz insulation pads with low demands on alignment. The uneven floor is compensated for with pads, etc. The arrangement of the pads is usually a pattern of points, not over the full surface. Number and size of the required insulation pads is given by the weight of the machine and the existing support surface.

2



Stable connection to the machine bed using **bolt-on installation fittings** that remain in place when the machine is lifted. Specifically for machines with high dynamic forces (injection moulding machines, stamping equipment, etc.).

3



Bolt-through ground anchoring using insulation pads and insulation washers. The use of insulation washers prevents vibrations being transmitted through the bolt.

4



Highly effective shock and vibration insulation by **Bilz insulation pad sets**. Different Bilz pads are combined into pad sets offering significantly improved insulation.

Bilz insulation pads are resistant to the following substances:

Lubricants

Greases for plain and roller bearings, gear greases

Synthetic lubricants

Polyalkylene, carboxylic acid esters, antifreeze

Combustibles and fuels

Petrol, diesel fuel, heating oil, aviation fuel, special fuels

Fire resistant hydraulic fluids

Oil-in-water emulsions, water-in-oil emulsions, aqueous polymer solutions

Mineral oils

Common water-miscible cooling lubricants, ATF (Automatic Transmission Fluid), cooling lubricants, water-miscible anti corrosive oils, slideway oils, compressed air oils, lubricating oils, heat transfer oils, filter oils, rolling oils, automotive gear oils, brake fluids based on mineral oil

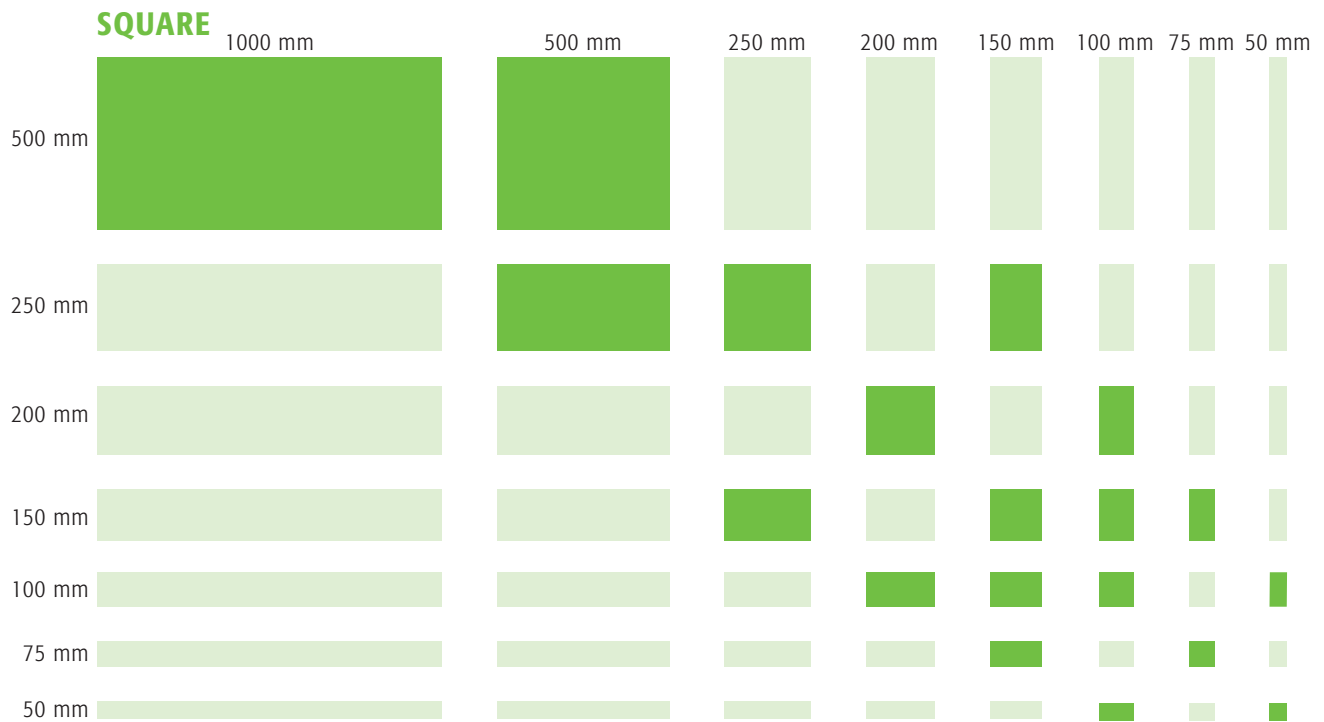
Cleaning agents

Hydro-chlorofluorocarbons, benzene, cold cleaner

Cleaning agent (aqueous solutions)

Washing and cleaning agents, wetting agents, dilute acids, dilute alkalis, salt solutions

ITEM NUMBERS AND STANDARD SIZES



- Available standard formats square
- Special and other formats are individually made on request

SQUARE	B4	B0	B6	B5	B50	B32	B32W	B30	B30W	B13W	BS1	BS	BN	BR7	B8
mm															
1000 x 500	01-0202	01-0005	01-0323	01-0260	01-0291	01-0139	01-0175	01-0057	01-0087	01-0038	01-0462	01-0441	01-0371	01-0391	01-0350
500 x 500	01-0223	01-0027	01-0342	01-0280	01-0310	01-0158	01-0194	01-0079	01-0106	01-0051	01-0473	01-0458	01-0384	01-0406	01-0365
500 x 250	01-0222	01-0026	01-0341	01-0279	01-0309	01-0157	01-0193	01-0078	01-0105	01-0050	01-0472	01-0457	01-0383	01-0405	01-0364
250 x 250	01-0217	01-0020	01-0337	01-0274	01-0305	01-0153	01-0189	01-0072	01-0101	01-0048	01-0470	01-0453	01-0380	01-0402	01-0361
250 x 150	01-0216	01-0019	01-0336	01-0273	01-0304	01-0152	01-0188	01-0071	01-0100	01-0047	01-0469	01-0452	01-0379	01-0401	01-0360
200 x 200	01-0214	01-0016	01-0334	01-0271	01-0302	01-0150	01-0186	01-0069	01-0098	01-0046	01-0468	01-0450	01-0378	01-0400	01-0359
200 x 100	01-0213	01-0015	01-0333	01-0270	01-0301	01-0149	01-0185	01-0068	01-0097	01-0045	01-0467	01-0449	01-0377	01-0399	01-0358
150 x 150	01-0210	01-0012	01-0330	01-0267	01-0298	01-0146	01-0182	01-0065	01-0094	01-0043	01-0465	01-0446	01-0375	01-0397	01-0356
150 x 100	01-0209	01-0011	01-0329	01-0266	01-0297	01-0145	01-0181	01-0064	01-0093	01-0042	01-0464	01-0445	01-0374	01-0396	01-0355
150 x 75	01-0211	01-0013	01-0331	01-0268	01-0299	01-0147	01-0183	01-0066	01-0095	01-0044	01-0466	01-0447	01-0376	01-0398	01-0357
100 x 100	01-0204	01-0006	01-0324	01-0261	01-0292	01-0140	01-0176	01-0058	01-0088	01-0039	01-0463	01-0442	01-0372	01-0392	01-0351
100 x 50	01-0205	01-0007	01-0325	01-0262	01-0293	01-0141	01-0177	01-0060	01-0089	01-0040	-	-	01-0373	01-0393	01-0352
75 x 75	01-0228	01-0034	01-0346	01-0284	01-0313	01-0162	01-0198	01-0083	01-0110	01-0053	-	-	01-0388	01-0409	01-0369
50 x 50	01-0224	01-0029	01-0343	01-0281	01-0311	01-0159	01-0195	01-0080	01-0107	01-0052	-	-	01-0385	01-0407	01-0366

Note

- Bilz insulation pads can be cut with any circular or band saw.
- We are happy to supply special sizes on request.
- The specified maximum load is composed of static and dynamic loading of the machine.
The best insulation effect is achieved at approximately 80-90 % of the specified maximum load.
- Selected insulation pads can also be supplied with a profile on one side (designated for example B4-1).
- The stated coefficient of friction refers to conventional industrial screed.
- Cutting tolerance is according to DIN 7715/T5, class P3.
- **W**: Waffle structure designs for compensation of uneven floors (B32W, B30W, B13W)

Right to make technical changes is reserved.

ROUND



Ø 300 mm



Ø 238 mm



Ø 200 mm



Ø 150 mm



Ø 110 mm



Ø 75 mm



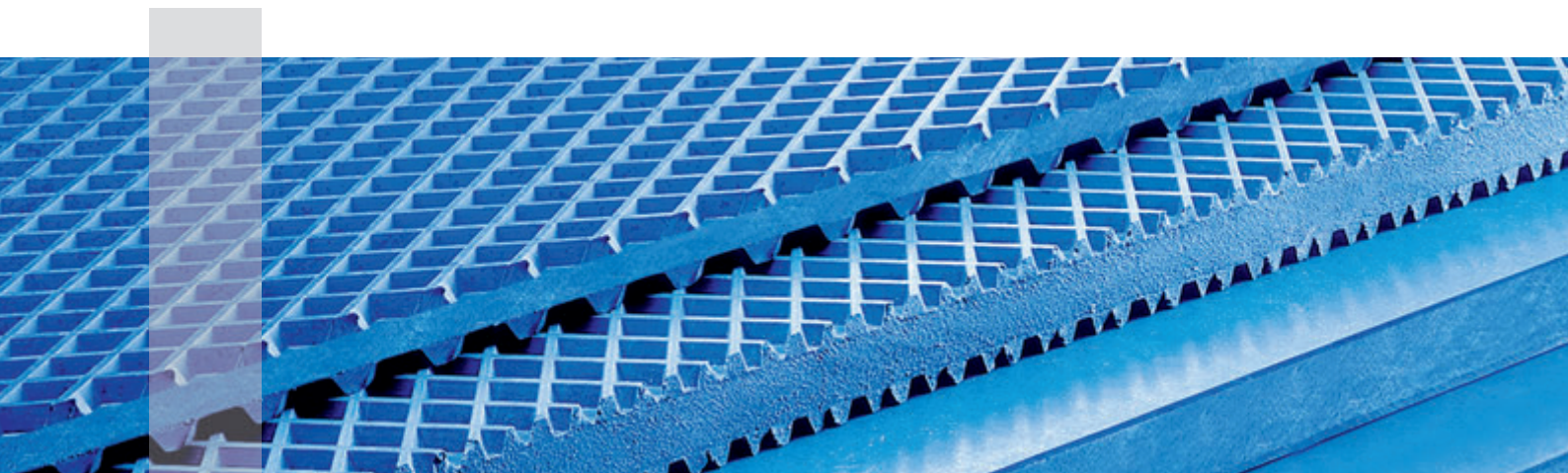
Ø 50 mm

● Available standard formats round

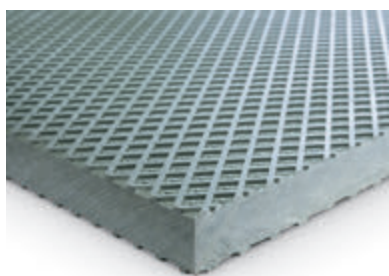
ROUND	B4	B0	B6	B5	B50	B32	B32W	B30	B30W	B13W	BS1	BS	BN	BR7	B8
Ø mm															
50	01-0220	01-0024	01-0339	01-0277	01-0307	01-0155	01-0191	01-0076	01-0103						
75	01-0227	01-0033	01-0345	01-0283	01-0312	01-0161	01-0197	01-0082	01-0109						
110	01-0206	01-0008	01-0326	01-0263	01-0294	01-0142	01-0178	01-0061	01-0090						
150	01-0208	01-0010	01-0328	01-0265	01-0296	01-0144	01-0180	01-0063	01-0092	These types of pads are available on request.					
200	01-0212	01-0014	01-0332	01-0269	01-0300	01-0148	01-0184	01-0067	01-0096						
238	01-0215	01-0018	01-0335	01-0272	01-0303	01-0151	01-0187	01-0070	01-0099						
300	01-0218	01-0021	01-0338	01-0275	01-0306	01-0154	01-0190	01-0073	01-0102						

SELECTION OF THE APPROPRIATE TYPE OF PAD

Application	B4	B0	B6	B5/B50	B32/B32W	B30/B30W	B13W
Metal processing							
Machining centre		■	■				
Drilling machine	■						
Boring mill			■				
Lathe		■					
Lathe, long bed			■				
Milling machine	■	■					
Press					■	■	
Saw	■						
Guillotine shear				■	■		
Grinding machine		■	■				
Punching/nibbling machine				■	■	■	
Transfer line			■				
Plastic processing							
Granulator	■	■					
Mills and boring mill				■	■		
Injection moulding machine	■			■		■	
Printing and paper industry							
Book binding-/printing machine, folder	■						
Shearing, packing systems	■				■		
Measuring and inspection							
Measuring machines, scales, microscope						■	
Plate sets							
Foundation							■



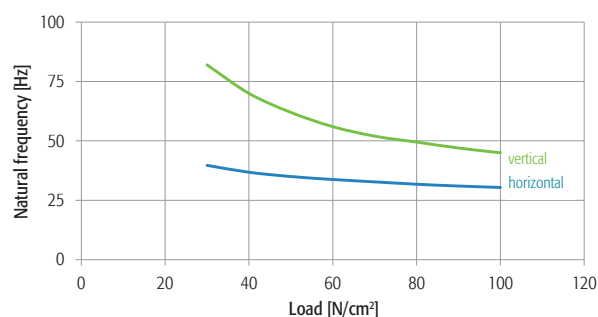
PAD TYPE B4⁽²⁾



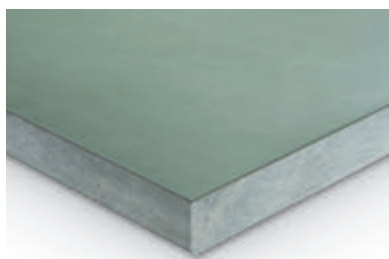
High universal variant. Can be used for machine tools, plastic machines and printing machines. Very well suited for machines with a tendency to "wander".

Type	Load ⁽¹⁾ N/cm ²	Height mm	Coefficient of friction ⁽³⁾
B4	30-100	15	0.8

DYNAMIC NATURAL FREQUENCY



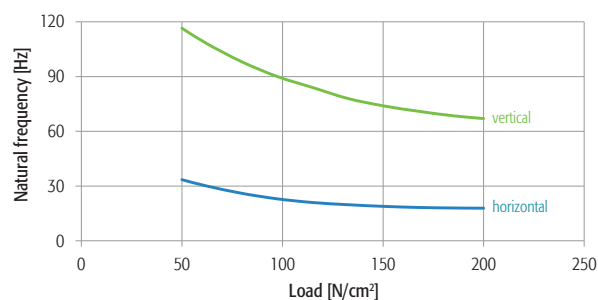
PAD TYPE B0



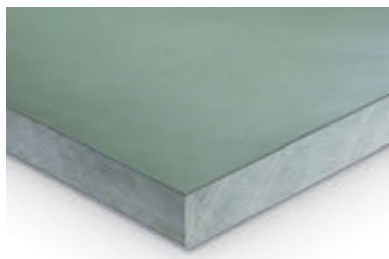
Variant without profiles. Very good level consistency. Specifically for machines with low intrinsic rigidity such as machining centres, lathes and grinding machines, etc.

Type	Load ⁽¹⁾ N/cm ²	Height mm	Coefficient of friction ⁽³⁾
B0	50-200	15	0.6

DYNAMIC NATURAL FREQUENCY



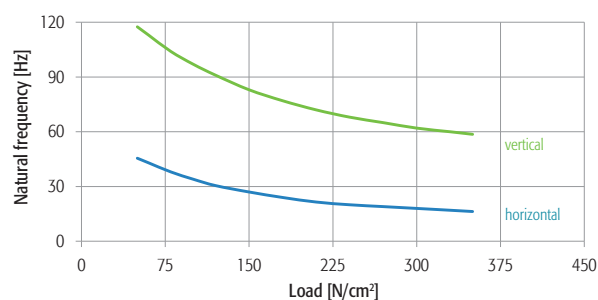
PAD TYPE B6

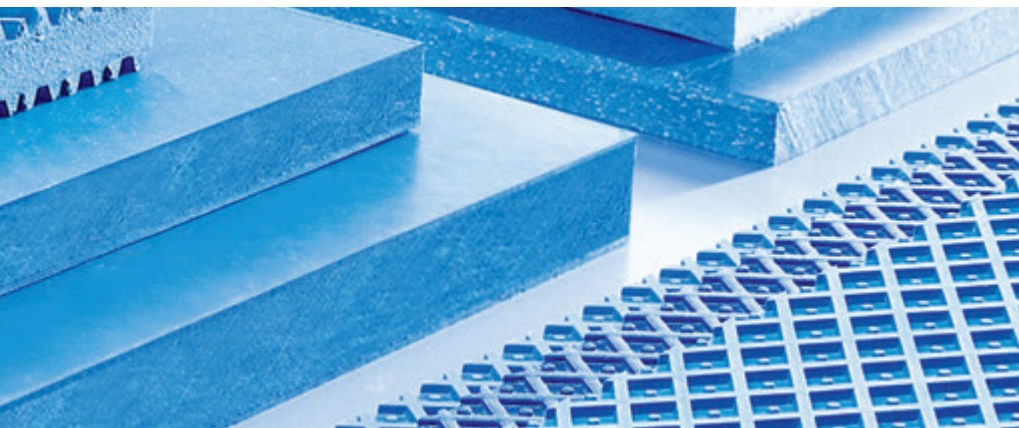


Variant without profiles. Extremely high load capacity with the highest level consistency. For very heavy and long-bed machines.

Type	Load ⁽¹⁾ N/cm ²	Height mm	Coefficient of friction ⁽³⁾
B6	50-350	15	0,6

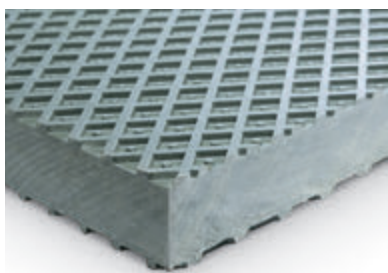
DYNAMIC NATURAL FREQUENCY





PAD TYPE B5

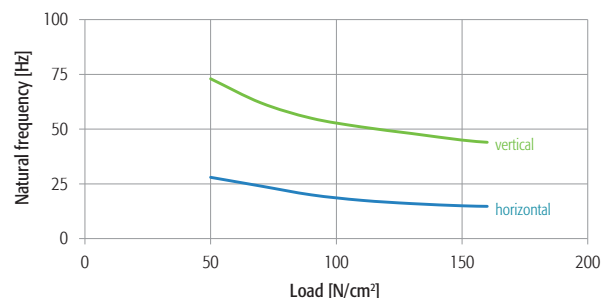
DYNAMIC NATURAL FREQUENCY



For machines subject to very highly dynamic disturbing force, such as presses, punches, shears, etc.

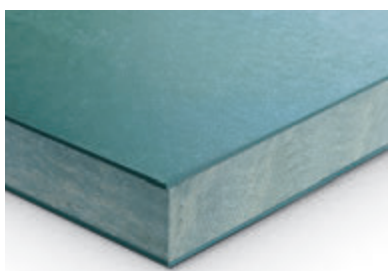
With a profile for compensating uneven floors.

Type	Load ⁽¹⁾ N/cm ²	Height mm	Coefficient of friction ⁽³⁾
B5	50-160	25	0.8



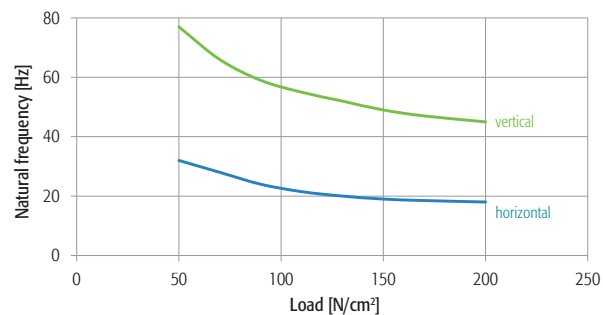
PAD TYPE B50

DYNAMIC NATURAL FREQUENCY



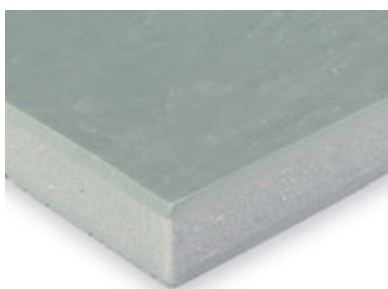
For machines subject to very highly dynamic disturbing force, such as presses, punches, shears, etc.

Type	Load ⁽¹⁾ N/cm ²	Height mm	Coefficient of friction ⁽³⁾
B50	50-200	25	0.8



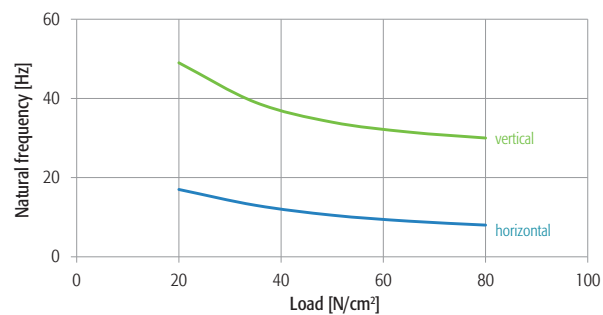
PAD TYPE B32

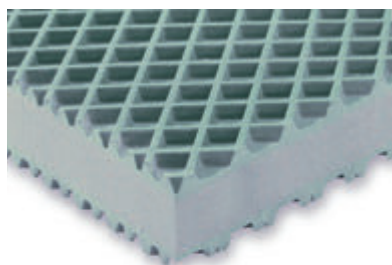
DYNAMIC NATURAL FREQUENCY



Soft variant without a profile. Excellent insulation effect for mid-sized presses, punches, etc.

Type	Load ⁽¹⁾ N/cm ²	Height mm	Coefficient of friction ⁽³⁾
B32	20-80	25	0.8

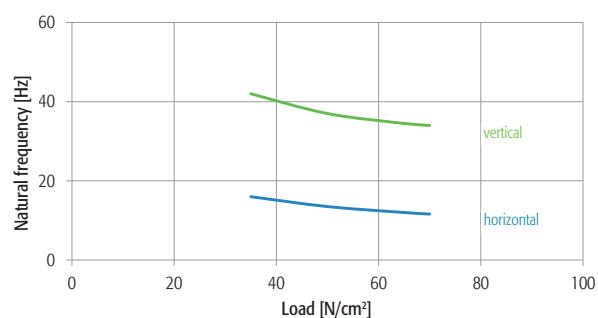


PAD TYPE B32W⁽²⁾

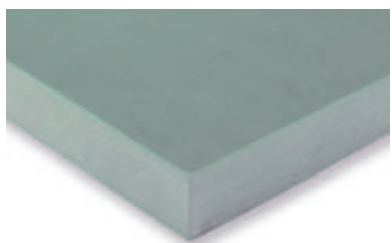
Very soft variant, comparable with B30, but with improved insulation effect.

Type	Load ⁽¹⁾ N/cm ²	Height mm	Coefficient of friction ⁽³⁾
B32W35-70	25	25	0.8

DYNAMIC NATURAL FREQUENCY



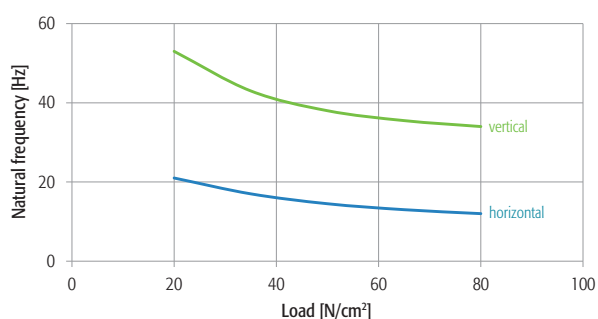
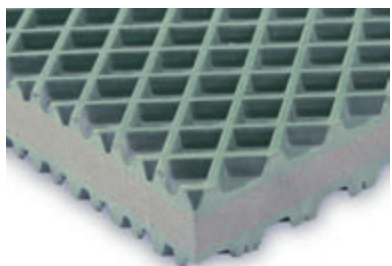
PAD TYPE B30



Soft variant without a profile. Particularly suitable for effective insulation when installing on upper floors.

Type	Load ⁽¹⁾ N/cm ²	Height mm	Coefficient of friction ⁽³⁾
B30	20-80	18	0.8

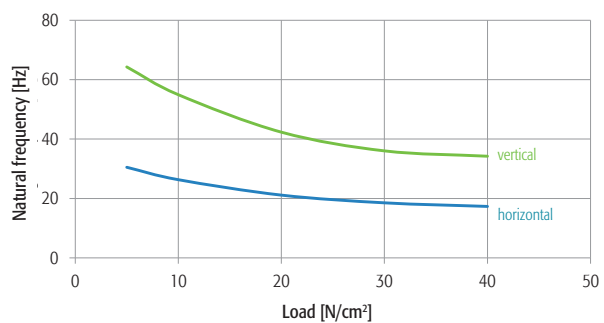
DYNAMIC NATURAL FREQUENCY

PAD TYPE B30W⁽²⁾

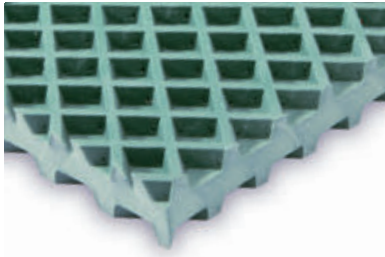
Very soft variant for optimum insulation through low-frequency matching, such as for measuring machines and inspection machines, scales and microscopes.

Type	Load ⁽¹⁾ N/cm ²	Height mm	Coefficient of friction ⁽³⁾
B30W 5-40	18	18	0.8

DYNAMIC NATURAL FREQUENCY



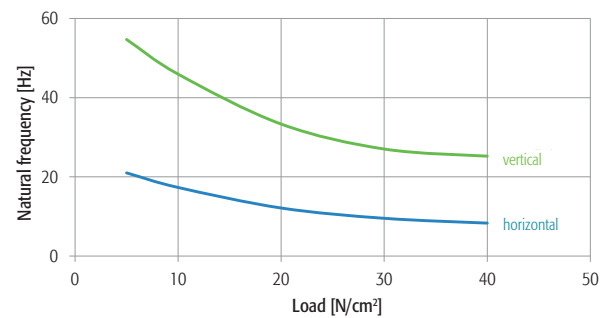
PAD TYPE B13W



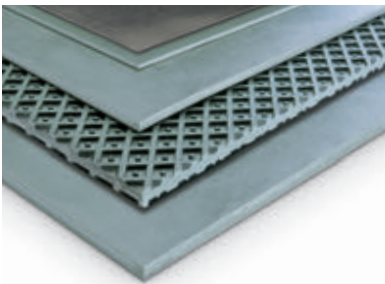
Special variant for the highest insulation values. Can be stacked up to 5 times. Matching up to approximately 8 Hz. Perfectly suited as a pad set for foundation insulation.

Type	Load ⁽¹⁾ N/cm ²	Height mm	Coefficient of friction ⁽³⁾
B13W 5-40		13	0.8

DYNAMIC NATURAL FREQUENCY



PAD TYPE BS1, BS, BN, BR7⁽²⁾, B8



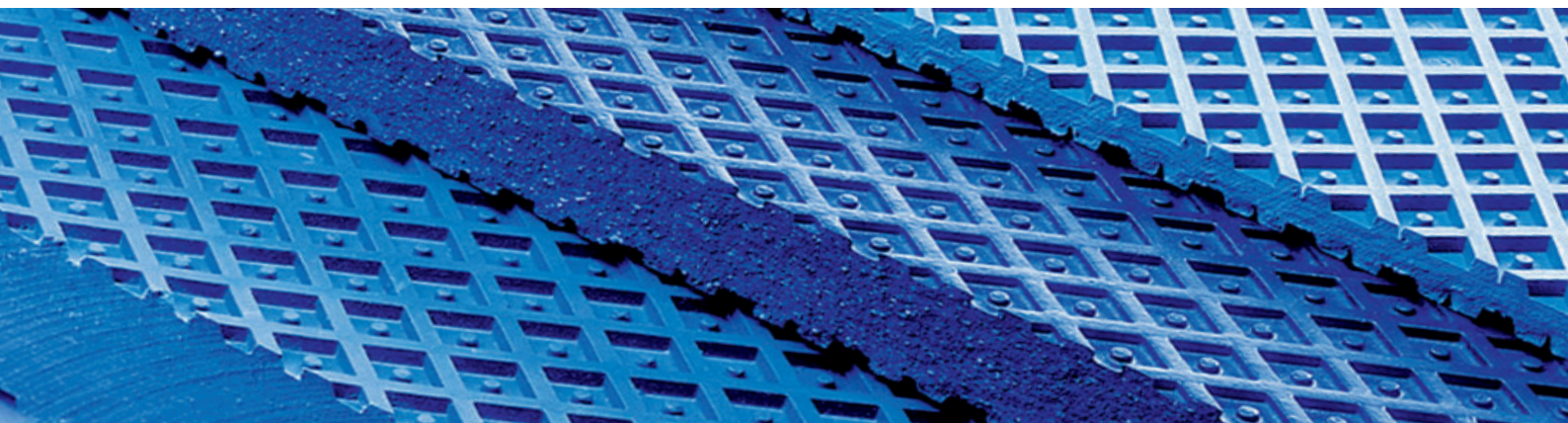
Bilz anti-slip and distance pads. No vibration insulation!

Type	Load ⁽¹⁾ N/cm ²	Height mm	Coefficient of friction ⁽³⁾
BS1	10-400	1	0.9
BS	10-400	2	0.9
BN	10-300	5	0.6
BR7	10-160	7	0.8
B 8	5-40	8	0.8

ANTI-SLIP PADS

Note

- Bilz insulation pads can be cut with any circular or band saw.
- We are happy to supply special sizes on request.
- (1) The specified maximum load is composed of static and dynamic loading of the machine. The best insulation effect is achieved at approximately 80-90 % of the specified maximum load.
- (2) Can also be supplied with a profile on one side (designated for example B4-1).
- (3) The stated coefficient of friction refers to conventional industrial screed.
- Cutting tolerance is according to DIN 7715/T5, class P3.

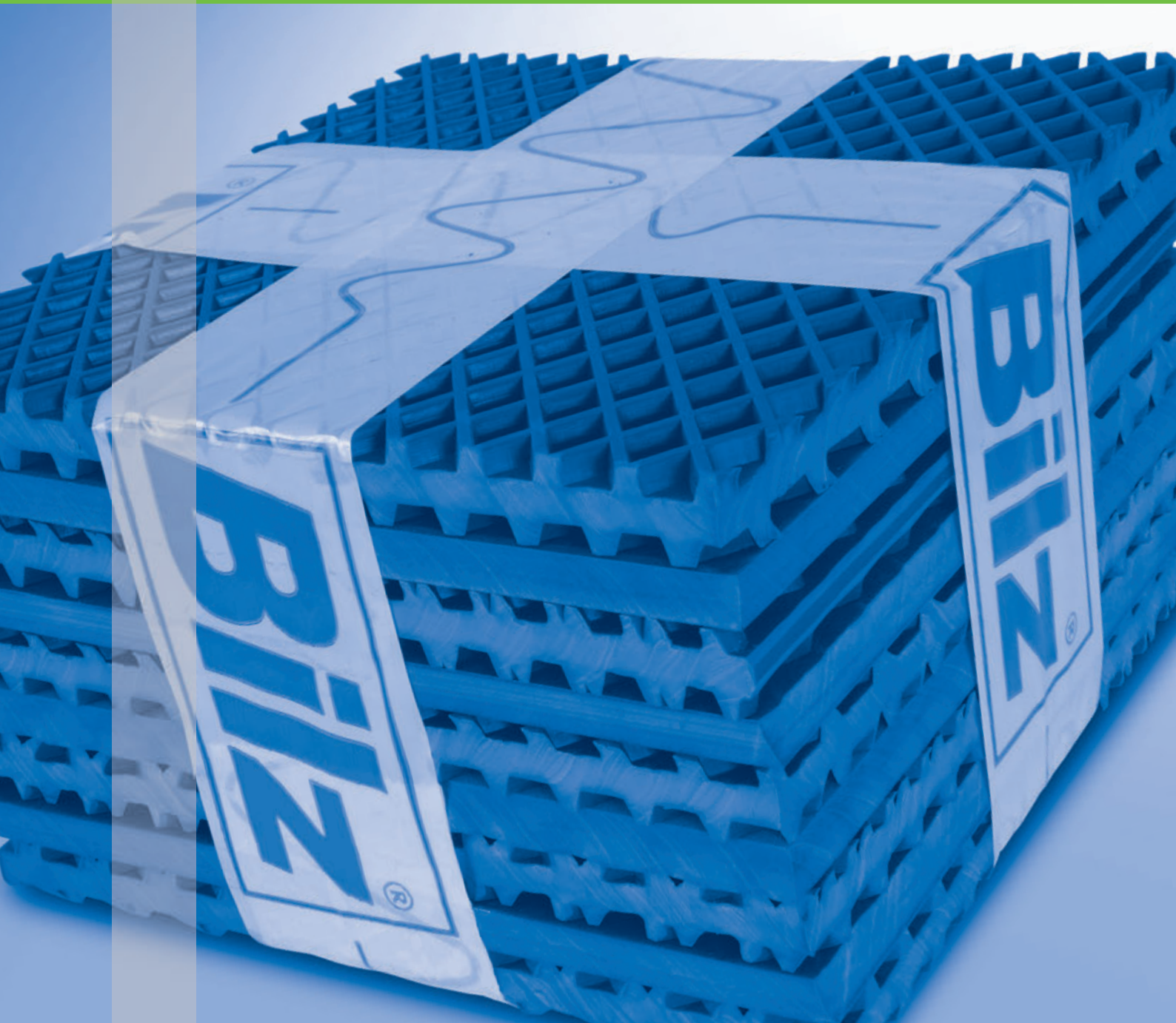


Insulation pad sets

Multiple layering of Bilz insulation pads can achieve significantly reduced natural frequencies and therefore considerably increase the insulation effect compared with a single layer of insulation pads.

These pad sets are particularly suitable for large machines and sprung foundations. The vibration insulation and damping properties of these insulation pads remain unchanged even after years of dynamic loading.

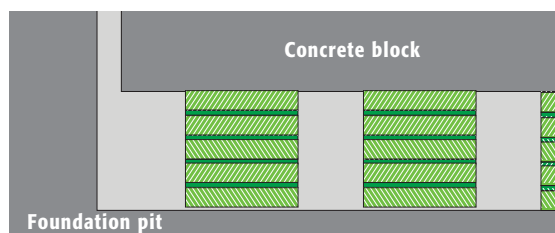
Bilz insulation pads are resistant against the most common greases, oils, coolants, cleaning agents as well as acids and alkalis.



Insulation pad sets

Application

- Effective insulation pads for highly dynamic machines and foundations.
- The permissible load capacity of a pad lies between 5 and 40 N/cm² depending on the application. The number and size of the insulating layers and the required distribution of the pad sets is determined specifically for the application by Bilz.

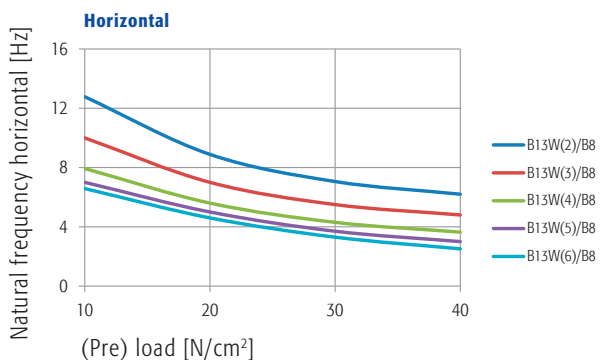
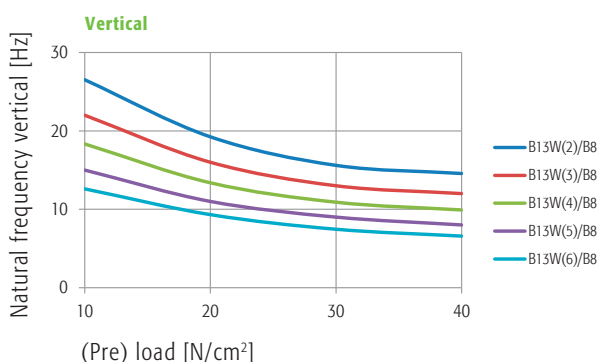


For further information contact us to arrange a personal consultation.



Foundation pit with Bilz insulation pads laid out

NATURAL FREQUENCY



STANDARD SIZES

Standard Item no. 01-0476 | When ordering please state the desired size.
 Special sizes Item no. 01-0475

SQUARE

Width mm	Length mm				
	500	250	200	166	150
500	■	■			
250	■	■	■	■	
200		■	■	■	
166		■	■	■	
150					■

Type	Thickness unloaded mm	Natural frequency vertical Hz	Natural frequency horizontal Hz
B13W/B8, 2-layer	34	14.5 - 26.5	5.5 - 12.5
B13W/B8, 3-layer	55	12.0 - 22.0	4.5 - 10.0
B13W/B8, 4-layer	76	10.0 - 18.5	3.5 - 8.0
B13W/B8, 5-layer	97	8.0 - 15.0	3.0 - 7.0
B13W/B8, 6-layer	118	6.5 - 12.5	2.5 - 6.5