

TYPE W, WMW, NK, FLATBACK & SUPER W PADS



Type W, WMW, NK & Flatback Rubber Pads

Rubber pads are convenient for reducing vibration and noise in non-critical areas, usually ground floors and basements in applications that do not require the extra efficiency of rubber or spring mounts. They are inexpensive and useful for providing a friction grip that eliminates the need for bolting equipment down.

In the early days of vibration control cork pads were the most popular material. Cork has now been largely displaced by rubber which is more durable and versatile and is available with alternative hardness.

The Type W, Flatback, WMW and NK Rubber Pads are manufactured locally by ARNOT Vibration Solutions.

In general we recommend natural rubber for anti vibration pads, because it has better dynamic properties than any synthetic rubber. The grades of natural rubber that we use are compound with additives to enhance resistance to oxidation, ozone and sunlight

Of course rubber pads cannot be just flat sheets of rubber. They must have a pattern that leaves spaces into which the resilient elastomer can flow or distort. This is the Waffle design. This design confines dirt or contaminations to the perimeter,



does not collapse when overloaded and provides more friction grip. The waffle squares are at 12.5 mm centres which makes it easy to cut off any required size without measuring.

Type W Waffle Pad is 12 mm thick and is available in sheets of 300 mm x 450 mm, or can be supplied cut to any smaller size. It is stocked in 40 and 60 shore hardness natural rubber. Other hardnesses and other elastomers can be quoted. In 40 hardness the load capacity is 3 to 5 kg/cm2, in 60 hardness 6 to 10 kg/cm2. Select the softer material for vibration efficiency, the harder material for economy.

Load Capacities Type W Pad

Size (mm)	Max Load (kg)	
	40 Hardness	60 Hardness
100 x 100	500	1000
150 x 150	1100	2200
300 x 450	6750	13500

300 mm x 450 mm x 12 mm sheets 40 hardness rated at 3 to 5 kg/cm² 60 hardness rated at 6 to 10 kg/cm²

Type WMW Pads are made by bonding Waffle Pads to steel plates. The Type WMW sandwiches a steel plate between two Waffle Pads (60 Shore) when bolting down is not required.

Load Capacities Type WMW Pad

Size (mm)	Load (kg) 60 Hardness
100 x 100	840
150 x 150	1890

Rated at 4,2 to 8,4 kg /cm²



Type WMW

Type NK Pads comprises a 12 mm thick cork layer sandwiched between two rubber pads. While not efficient for reducing vibration they have a useful acoustical performance.



NK Pads, 25 mm thick, are available cut to any size up to a maximum of 300 mm x 450 mm. They are rated for loading at 3.5 kg/cm²

Load Capacities Type NK Pad

Size (mm)	Load (kg)
100 x 100	350
150 x 150	800

Rated at 3.5 kg/cm²



Type Flatback Waffle Pad is 6 mm thick and is available in sheets of 450 mm x 300 mm, or can be supplied cut to any smaller size. It is stocked in 60 shore hardness natural rubber. Other hardness's and other elastomers can be quoted. In 60 hardness 3.5 kg/cm².

Load Capacities Type Flatback Pad

Size (mm)	Load (kg)
100 x 100	350
150 x 150	787.5
450 x 300	4725

Rated at 3.5 kg/cm²



Type Flatback Waffle Pad



Type Super W Rubber Pads



The problem with conventional rubber pads is that on the one hand you want a thick pad to achieve more deflection and therefore more vibration isolation efficiency. On the other hand you are limited to a relatively thin pad that is not too difficult to cut to size.

Cutting a rubber pad thicker than 10 mm is difficult and even

dangerous with an open knife. That limits deflection to about 1 ½ mm without overstraining the rubber.

The Type Super W pads are moulded in sheets of 81 modules, each one is a "mini-waffle", 50 mm square. The modules are separated by a thin web that is easy to cut, making it practical to increase the pad thickness to over 20 mm and increase deflection to 3 mm. Sheet sizes are 450 x 450 x 20 mm.

Type Super W Pad is stocked in 40 and 50 hardness natural rubber or chloroprene (neoprene). Choose the softer rubber for extra efficiency, the harder rubber for economy. Choose Neoprene for superior oil resistance.

Type Super W Pad is the most versatile and efficient rubber available.

Load Capacities Type Super W

Hardness	Max Load Per module 50 x 50 mm (kg)
40	50
50	75

We can also supply a special grade of chloroprene called "Bridge Bearing Neoprene" for architectural and structural applications (rubber used for bridge bearings must last for the entire life of the structure).

It is easy to work out the number of modules you need and to cut them off in a convenient shape.

For example, if you have a machine mass of 1200 kg your choice is between 24 modules of 40 hardness and 16 modules of 50 hardness. If you decided on 24 modules and if the loading were uniformly distributed, you would put 6 modules in each corner. You could order them, or cut them off from a sheet yourself, in several shapes (see below).

Load Capacities Type Super W

Hardness	Max Load Per sheet 450 x 450 mm (kg)
40	4050
50	6075

Thin web separating the modules for easy cutting

This illustration shows 16 modules cut from a full sheet of 81. Above is a single module.