MASON INDUSTRIES, Inc.
Manufacturers of Vibration Control Products
350 Rabro Drive
Hauppauge, NY 11788
631/348-0282
FAX 631/348-0279
2101 W. Crescent Ave., Suite D
Anaheim, CA 92801
714/535-2727
FAX 714/535-5738
Info@Mason-Ind.com • www.Mason-Ind.com

DOUBLE DEFLECTION NEOPRENE MOUNT

ND

BULLETIN ND-26-1

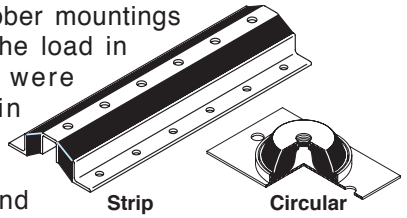
ND Mounts

- All mounts are double deflection
- Offer more than three times the deflection of pads
- Prevent noise and high frequency vibration
- Isolate a wide range of equipment
- Supplied with cap screw and washer

Exclusive Features

- Bottom friction surface makes bolting unnecessary in most installations
- Neoprene covering prevents corrosion of steel parts
- Molded in commercial Neoprene
- Bridge bearing Neoprene, Natural Rubber or other elastomers available

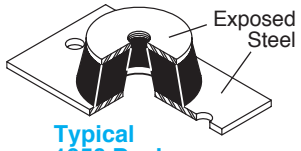
Up until the 1950's most rubber mountings were designed to take the load in shear. Mountings were circular or sold in long strips, so the capacity could be controlled by size and durometer, or durometer and the cut off length.



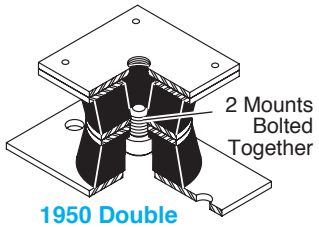
Older style mounts

Shear loading curves are straight line similar to steel springs. The deflection can be used directly in the frequency equation after dynamic stiffness correction. Unfortunately, shear mountings could and did fail because of bond failure between the rubber and metal. When overloaded, the mountings would bottom out. Compression mountings are less expensive for a given capacity and when overloaded, there is still a cushion. When loaded conservatively, the load deflection curve is similar to the straight line shear.

The general configuration of our N mountings was known, but all mountings were manufactured as at the right and seldom taller than 1". Both the base plate and the upper tapped washer were exposed and they corroded. As foolish as it seems now, we cemented a rubber pad to the baseplate to provide friction. Since greater efficiency can only be accomplished by increasing deflection, when double deflection was needed, two mountings were bolted together. This was another makeshift arrangement.

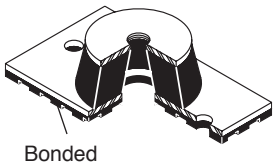


Typical
1950 Design



1950 Double
Deflection Design

Mason started in 1958. When we did not offer a completely new product, we always improved existing designs. The first thought was bonding the bottom rubber pad, so it was always there.



Bonded
Bottom Pad

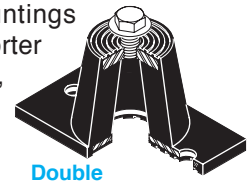
In some applications no bolting would be needed if there were friction on top so we added the top rubber washer too.

Our next concern was corrosion, so bringing the rubber over the baseplate and up over the top insert was the final improvement. This design has been copied all over the world without people knowing the history.

Rubber
Over All Steel

(continued on back page)

Rather than bolting two mountings together, we decided to do this properly and started manufacturing two mountings using the same base and top plates. The shorter Type N for single deflection; the taller ND, double deflection. We include capscrews and washers, to eliminate the nuisance of our customers finding proper bolts.



Double Deflection ND Mount

Since rubber mountings are inexpensive, we now sell only the ND, so there is always the benefit of the better product.

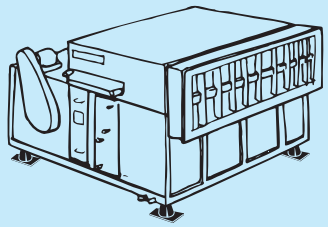
It is not necessary to bolt these mountings to the floor on most installations. They can be used under flat bases that have no bolt holes in much the same manner as rubber pads. When the equipment has a flush drain pan or tank on the bottom, the mounting may be inverted so that the rectangular rubber covered steel base plate provides support over a large area.

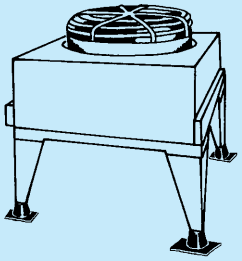
Inverted

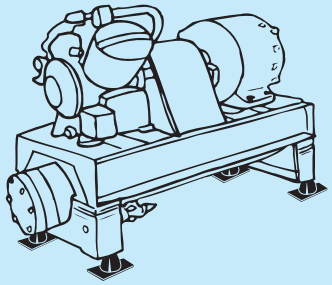
Standard mountings are furnished in oil resistant Neoprene. Since we mold these products ourselves, bridge bearing quality Neoprene, Natural Rubber or other elastomers are readily available to meet your requirements.

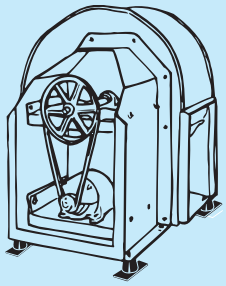
SPECIFICATION

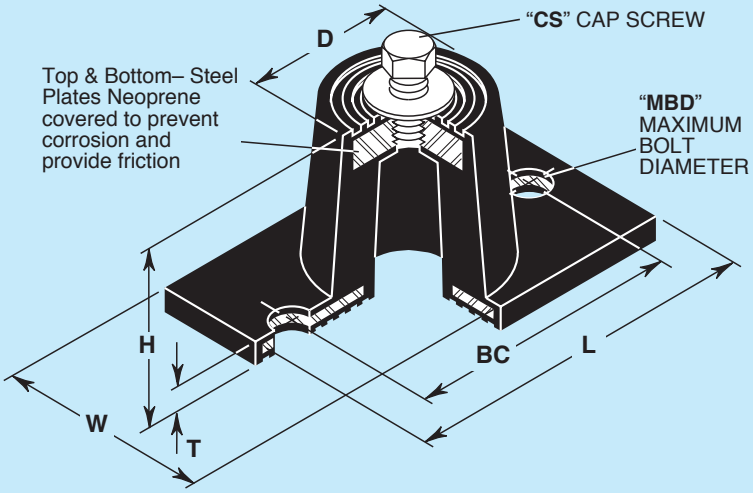
Neoprene mountings shall have a minimum static deflection of 0.35" (9mm). All metal surfaces shall be Neoprene covered to prevent corrosion and have friction pads, both top and bottom. Bolt holes shall be provided on the bottom and a tapped hole with capscrew and washer on top. Mountings shall be Type ND, as manufactured by Mason Industries, Inc.











TYPE ND RATINGS

Size (Color Mark)	Duro-meter	Rated Capacity Range (lbs)	(kgs)	Max Rated Defl (in)	(mm)
ND-A-Black	30	15-45	7-20		
ND-A-Green	40	30-75	13-34	0.35	9
ND-A-Red	50	60-125	27-57		
ND-B-Black	30	50-100	23-45		
ND-B-Green	40	75-150	34-68		
ND-B-Red	50	110-235	50-107	0.40	10
ND-B-White	60	180-380	82-172		
ND-B-Yellow	70	300-600	136-272		
ND-C-Green	40	140-260	64-118		
ND-C-Red	50	200-400	91-181	0.50	13
ND-C-White	60	310-600	141-272		
ND-C-Yellow	70	520-1000	236-454		
ND-D-Yellow	70	1060-2100	481-953	0.50	13
ND-DS-Yellow	70	2200-4300	998-1950	0.50	13

Mounts have straight line deflection curves.

TYPE ND DIMENSIONS (inches mm)

Size	D		H		L		T		W		BC		CS		MBD	
ND-A	13/16	30	1 1/2	38	3 3/16	81	3/16	5	1 5/8	41	2 3/8	60	5/16 -18 x 3/4"	x 19	5/16	8
ND-B	1 3/4	44	1 7/8	48	3 7/8	98	1/4	6	2 5/16	59	3	76	3/8 -16 x 1"	x 25	5/16	8
ND-C	2 9/16	65	2 3/4	70	5 1/2	140	1/4	6	3 5/16	84	4 1/8	105	1/2 -13 x 1"	x 25	1/2	13
ND-D	3 3/8	86	2 3/4	70	6 1/4	159	5/16	8	4	102	5	127	1/2 -13 x 1"	x 25	1/2	13
ND-DS	3 3/8	86	2 3/4	70	6 3/4	171	5/16	8	4 3/8	111	5 1/2	140	1/2 -13 x 1"	x 25	1/2	13